



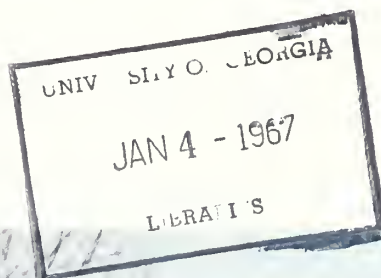
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GAME & FISH





GEORGIA

GAME & FISH

JANUARY 1967

Volume II Number 1

Contents

| | | |
|-------------------------------------|-----------------|----|
| Score on Rabbits | F. R. Vergeer | 1 |
| Powder Puff Parade | Joe Kight | 3 |
| Motor — The Bandit Face | Jim Tyler | 5 |
| Just A Country Cracker | Jim Tyler | 7 |
| Let's Take Nature To The Very Young | Jim Tyler | 8 |
| Apples, Peanuts and 'Possums | Glenn Smith | 10 |
| Meet Your Commissioner | Jim Tyler | 11 |
| Return of the Rockfish | Dean Wohlgenuth | 12 |
| They Were Eating Her Alive | Jim Morrison | 14 |
| Sportsman's Calendar | | 17 |

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We need Georgia's dog-deer law

"Any person may, and it shall be the duty of every wildlife ranger to kill any dog pursuing or killing deer in any locality other than that prescribed by the rules and regulations of the commission permitting such hunting, and no action or damages shall be maintained against the person for the killing."

(Act 1955, pp. 483, 518)

This law was enacted in 1955 with the strong support of the Game and Fish Commission at that time. We feel that it is time some plain facts were brought out concerning the reasons why this law was passed and why it is important to Georgia hunters.

The plain facts of the matter are that without the law quoted above, deer would be extinct in most North and Middle Georgia counties, even though they are now found in all 159 counties with a hunting season in more than half of them. That deer in Georgia have been returned from the ranks of near-extinction to a large part is due to dog control efforts of the Georgia Game and Fish Commission given legal status by this law.

Except for man, the uncontrolled dog is the only serious predator capable of systematically destroying large numbers of deer, especially young fawns and pregnant does. This damage is done for the most part by stray or loose running dogs, rather than the valuable, well-trained hunting dogs of legitimate sportsmen.

Georgia's deer-dog law is not aimed at the quail hunter's pointer, the rabbit hunter's beagles, the squirrel hunter's terrier, the fox or coon hunter's hounds, or thousands of harmless pets. The fact of the matter is that this law has seldom been used to destroy valuable hunting dogs and, then only when dogs were actually caught chasing or killing deer, if the chase could not be stopped. It has never been used as an excuse for wildlife rangers to go on a vendetta of destruction.

Georgia's wildlife rangers have always exercised considerable restraint and discretion in their enforcement of the present deer-dogging law since its passage more than 10 years ago. Even though not required to do so by law, rangers have time and time again broken up deer chases without injuring the dogs involved, whenever possible. Valuable dogs identified with a collar or tag bearing their owners' name and address many times have been returned safely to their owners.

In the overwhelming majority of cases, the law has been used only against homeless stray or wild dogs turned loose to their own devices, preying on anything they can catch and kill. Without the strength afforded wildlife rangers by the existing law, little or nothing can be done to stop their wanton slaughter of Georgia wildlife and livestock, or even their threats to human health and security.

It would be highly unwise to gut the existing dog control authority of the Georgia Game and Fish Commission, and we urge the careful consideration of any such moves. — J.M.

ON THE COVER Leaping eagerly to the chase, a pack of young Georgia beagles picks up the scent of a cottontail rabbit, and the excitement begins. Photo by Jim Morrison.

Photo Credits: Chester Gleason 14; Dan Keever 1, 2, 3, 4, 5, 10, 11, 12, 13, 15; Jim Morrison 8, 9 r.; Jim Tyler 6, 9 l., 16.

By F. R. Vergeer
Game Biologist

Score on Rabbits

No matter what a man's favorite game is after he has been hunting a few years and tried several types of game, there's a better than 50-50 chance that the first game he hunted was the cottontail rabbit.

In later years, more sophisticated game might take the rabbit's place in the heart of the hunter. The cottontail may be forgotten or even scorned by some after a time. Yet most sportsmen never forget the little brown bunny with the ball of bright white cotton for a tail, that taught him some of the basics of his sport.



Beagle music! It's clamorous, and really pretty much unmusical, yet it's a delight to the ears of any rabbit hunter as his pack of dogs yaps, yelps and yowls along the hot trail of a bunny.



Many a good lesson has been learned on rabbit hunts.

Perhaps the feeling for the cottontail is kept well hidden, deep inside some experienced hunters, yet others openly admit he's still a mighty fine adversary in the field, worthy of your challenge. Such sport as he provides in the initial field experiences of the golden days of boyhood are not easily forgotten. Experiences of those days are frequently among the most cherished of many an outdoorsman.

Actually, there are four definite species of rabbits in Georgia, but all are fairly similar and to the hunter, all are known simply as rabbits or cottontails. Basically there are cottontails and swamp or marsh rabbits. Each species, however, is found in a definite habitat or area.

Speaking of all species in general, the cottontail uses a wide variety of cover types. He prefers what may be called "edge-type habitat," such as fence rows, road right-of-ways, open areas adjoining woods and is frequently found in rather open woods. He prefers green succulent vegetation and is most numerous where land is being farmed.

The two swamp rabbit species of Georgia are found most easily by hunting the drier areas of a marsh or islands without a marsh. Swamp rabbits will not hesitate to swim and because of this, it isn't at all unusual to find them in such places.

All species of Georgia rabbits are most active at dawn and dusk. They tend to be inactive during daylight hours and conceal themselves in thicker cover during this time. In colder regions they will dig burrows to escape

the climatic conditions but in warmer regions they tend to rest in a brush pile or often in thick grass in which they hollow out a bed.

Because they like to move about at dawn and dusk, these are the best hours to hunt rabbits. The most productive areas for hunting would have to be the places which they prefer, such as around the edges of woods, brush or rock piles, downed trees and overgrown fence rows.

Because of the type of cover where rabbits are found, the most preferable weapon for hunting them is a shotgun. An open choke, either improved cylinder or modified is best and the gun should be light and short of barrel to allow it to be easily handled and swung fast on target. A heavy gun only tires the hunter unduly, detracting from the pleasure of the sport. A light gun, on the other hand, with an open choke, provides the hunter with the greatest chance of success. A rabbit in thick cover offers a fast, elusive target and often a hunter gets only brief glimpses of a furry blur through the brush. This also means that small shot is best, so the pattern is dense enough for some pellets to find their way through thick vegetation.

In more open areas, hunting with a small caliber repeating rifle can produce great sport. Not only does it put more sport into rabbit hunting, it is excellent practice for the hunter to learn to hit a fast, bouncing target and can help insure success on larger game, such as deer.

The most successful method of rabbit hunting is with dogs. It is almost impossible to attain much success hunting swamp rabbits without dogs. The

areas they inhabit are so thick that a man can hardly get through them. Small, slower dogs are most preferred because they can get in and under thick cover where rabbits are most likely to be found during daylight hours.

The beagle is the type of dog most often chosen for rabbit hunting. Indeed, he was bred for this sport and thus has all the desirable characteristics, such as endurance, a clear voice and small size. He moves fast enough to keep the rabbit moving, yet slow enough to give the rabbit assurance that he is winning the race and therefore often he tends to circle and return to the point where the chase began. This habit of the cottontail can be used to the hunter's advantage if the hunter will choose an open area in the rabbit's path to get a shot as the bunny crosses the opening.

Some success in hunting cottontails without dogs can be had by walking through cover that rabbits like. The best way to do this is to find cover where droppings or nests are present, showing there are rabbits in the area. Then it's best to walk through the area two or even three times before moving on. Rabbits will sometimes allow a person to pass very close without being startled into running, but if a person passes the rabbit several times in a short span of time it will usually run, providing a target.

Annually, rabbits are the most sought-after game in the nation, and Georgia hunters spend a good many hours enjoying this excellent sport. To many a hunter, the thrill of the chase and music of the dogs on the trail of a bunny is all the reward they ask of a day in the field.

Cooped up in their pen mounted on a pickup truck, these beagles are only too happy to see their master's hands unfasten the latch and set them free to seek out the cottontail.



It was a good day, and not just because of that generous string of rabbits these hunters have bagged. The rewards of a rabbit hunt aren't limited to the fine bunnies, such as these hunters admire as the cottontail is dropped into the game back. There's comradeship, fresh air . . . any number of reasons for enjoying the day afield.



Thick cover along the edge of woodlands are a rabbit's delight. He also likes fencerows, old abandoned buildings, piles of rocks and brush and just about anywhere that provides good hiding plus an ample food supply.

Powder Puff Parade

by JOE KIGHT
Game Biologist

Some of the first questions that enter a sportsman's mind when he sees an animal might be: What is it? What kind is it? Male or female? Young or old?

Most people, seeing a rabbit, dismiss it simply as being a "cottontail" and let it go at that. There are, however, different kinds and several ways to identify them.

For example, rabbits are in a group of mammals called Lagomorpha (pronounced lag-o-mor-fa), which have six incisors or front teeth. These teeth are similar to rodents which have four incisors. In the rabbit, two of the teeth are on the bottom and four on top.

There are two large front teeth on top, and two small teeth behind them which may be easily overlooked.

Four species or kinds of rabbits occur in Georgia. The eastern cottontail (*Sylvilagus floridanus*) is the most common rabbit in Georgia and is found throughout the state. This is the cottontail that most Georgia hunters cut their teeth on. The underside of its tail is white and looks like a ball of cotton, hence its name. Its coat may vary from a grayish-buff to buffy brown and has a reddish patch behind each ear.

The swamp rabbit (*Sylvilagus aquaticus*); also known as "cane cutters" or "bucks," are the largest wild rabbits found in Georgia. Their habits are similar to the marsh rabbit but are

usually more common in the northwestern half of the state. Its coat is darker and it is considerably larger than the eastern cottontail.

The marsh rabbit (*Sylvilagus palustris*) inhabits the southern part of the state and is found in swamps and marshes. This rabbit is a little smaller than the eastern cottontail, swims with ease, and can walk like a cat or dog, moving one foot at a time. Its "powder puff" is gray or buff colored.

The New England cottontail, (*Sylvilagus transitionalis*), is found only in the northern part of the state. It prefers brushlands or wooded areas and is distinguished by its pinkish-buff coat and a narrow black patch between its ears. This rabbit is about the same size as the marsh rabbit.

Although there are four different species in Georgia, their life cycles are similar.

A cup-shaped nest is dug in late February or March. The doe, or female rabbit, lines this nest first with grass or leaves and then with fur plucked from her breast. An average litter contains four or five young but may vary from two to eight. These nestlings are completely helpless at birth — blind, deaf, naked, and not much larger than a man's thumb. However, cottontails grow rapidly. Their eyes are open within a week and they are able to leave the nest for short periods within two weeks. They usually leave home for good when they are 15 to 18 days old.

The rabbit's gestation period (pregnancy) is about 28 days and it is possible for the mother to mate again on the same day that her litter is born. Two or three litters are commonly born in a season with a total of 12 to 16 young.

Rabbits are herbivores or plant eaters and eat almost any kind of plant. The bulk of their spring and summer food is made up of the succulent new growth of grasses, leaves, shoots, buds, and sprouts. In the late fall and winter, it must resort to twigs, bark, shoots of woody plants, and waste grain. Young apple trees, willows, hawthorn, sumac, and blackberry shoots seem to be pre-

ferred the summer to prevent undue destruction of nests and young rabbits.

Rabbits, like man and the other animals, have assorted diseases and parasites. One of the more common diseases is fibroma disease, or rabbit horn, which appears on the skin as a black, warty growth. The growth, caused by a virus, may be extremely contagious among rabbits but it is harmless to man. The growth is usually removed when the rabbit is skinned.

Tularemia, or rabbit fever is a different matter. This bacterial disease is transmitted to man and care should be taken to avoid it. The disease is mainly spread among rabbits by ticks. A heavy frost will cause the ticks to drop off animals until the following spring. Since this disease is always fatal to rabbits, the infected ones will die within 6 to 8 days, so it is wise to wait about two weeks after the first heavy frost before going rabbit hunting. The traditional opening day of rabbit season, about November 20, is usually just after this period for most of Georgia.

Whether or not a rabbit's liver is spotted is *not* an indication of a diseased or healthy rabbit. The best protection for the rabbit hunter is to wait until after a heavy frost before going hunting, avoid getting rabbit blood on your hands as much as possible and wash thoroughly with soap

are parasitic on the animal that ate the rabbit. Therefore, rabbit entrails should never be given to dogs as they may become infected with tapeworms.

Intensive management is not necessary to provide good rabbit hunting. About all the rabbit needs is something to eat and a place to hide. He is a "home body" and doesn't like to wander too far away from it. Even when pursued by beagles, he will usually circle back to where he was jumped.

The cottontail prefers "edge" type habitat. This is available along fields, fence rows, cut over lands or any "brushy" area. Perhaps the easiest way of improving rabbit hunting is to build brush piles. Grass and weeds will grow in and around them providing food and more cover. The piles should be 10 to 15 feet in diameter and 4 to 6 feet high. This is an immediate step to improve rabbit habitat, but permanent strips of food and cover should be developed and maintained for continuous good rabbit hunting.

Diversity is the keynote here. Several small patches of food and brush are much more valuable than one large area of each. Strips are perhaps the easiest to provide and are just as valuable to rabbits. Strips left along fence rows, drainage ditches, pond edges, streams, along wood lots and orchards, field roads, or any area that can be allowed to revert to weeds, briars, sumac or other brush, will greatly benefit rabbits.

Strips of food planted beside the strips of cover make life easier for rabbits and also help in erosion control. Lespedezas provide good food during the spring and summer and oats, wheat, and other small grains furnish good winter food. Clovers of all types are excellent rabbit food. Recommended agricultural practices as to when to plant, kind and amount of fertilizer, and other necessary information can be obtained from your county agent.

Heavy hunting does not seem to bother the rabbit population from year to year. As with most animals, rabbits cannot be stockpiled. If the hunter does not harvest them then disease, weather, starvation, and predators will.

So by all means, go rabbit hunting. They are found throughout the state, and are easy to hit. It is an excellent excuse to get out and just loaf around in the out-of-doors, and old B'r'er Rabbit is noble game no matter whether you shoulder a Purdey or tote Grandpa's old single shot. It's high sport for kid or king. And for best results all the way round, take a boy with you.



Here's Mr. Cottontail himself, the most widely sought prize of hunters everywhere. And not only that, he's usually the most easily found in most places. He's tricky, yet not so much so as to make him unduly difficult to hunt.

ferred although oats and winter wheat are always welcome.

Almost any carnivore or meat eating animal will prey on rabbits. This is one of nature's ways to provide food for every creature and keep the rabbit population in check. This balance should not be tampered with very much by man who has a bad habit of doing the wrong thing at the wrong time. The more logical thing to do is to provide proper habitat, especially in regard to food and cover, and let the rabbits take care of themselves as they have been doing for centuries. However, dogs should be watched dur-

ing the summer to prevent undue destruction of nests and young rabbits.

Another parasite, the warble fly larvae or "Wolves" usually drop off rabbits before cold weather sets in. They are the larval or immature state of a small fly and, while they are quite unattractive, are harmless to man.

Most rabbits have small watery-like cysts in their body cavity. These cysts are actually immature tapeworms. They are harmless to man and rabbit, because the worms can never mature while in man or the rabbit. However, if the rabbit should be eaten by a dog, fox, cat, etc., these worms mature and



LOTOR

The Bandit Face

by JIM TYLER

Everyone knows him. The anxious looking face has peered from the pages of books and from the confines of a zoo. And the same face has looked down, from his position in a tree, at the baying hounds and the men who jab beams of light, upward, through the night.

He is the common ringed-tail raccoon.

In Georgia the raccoon has for some time been on the unpopular pelt list (will bring less than two dollars) and not many have been trapped. But the raccoon is hunted by a special breed of hunter, and is indeed popular. It takes a different kind to gather at night with lights, boots, guns, a lungful of air, and most importantly, dogs. Yes, a coon hunt is a dog hunt. The dog hunts — the hunters go along to enjoy the dog's working.

The hunt starts with "Old Blue" (every other coon dog must be named Old Blue) and perhaps another or more dogs turned loose to set his excellent nose to the ground. When a trail of scent is crossed, the dog lets loose a howl that warms a coon hunter's heart. Then, in the darkness, the hunters will settle down to listen to the "chase." And it is grand listening, especially on a chilly, clear, star-studded night.

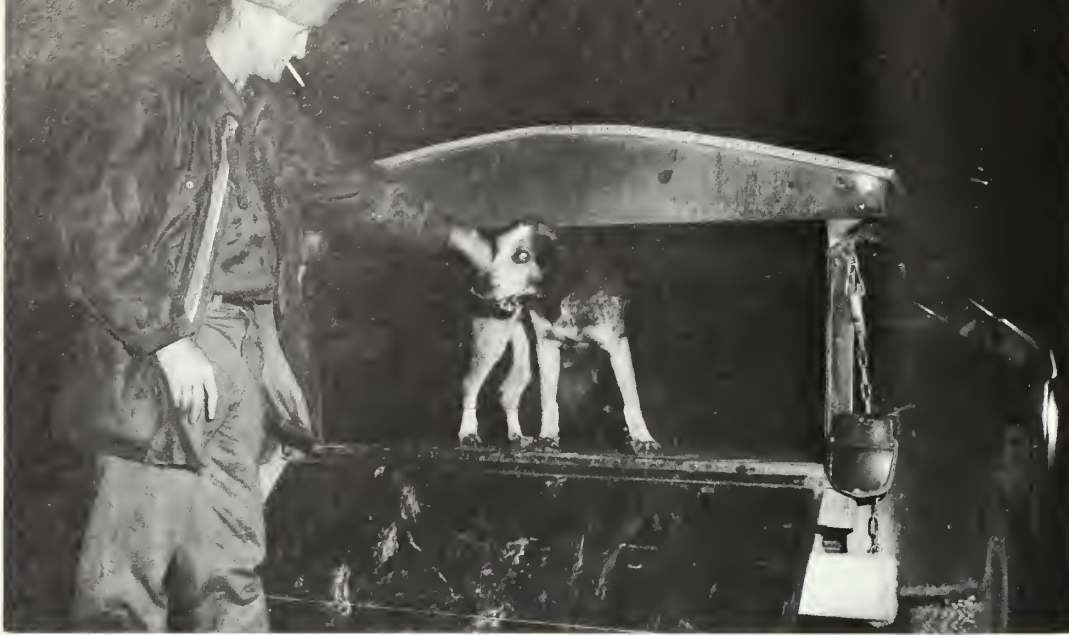
The dog can have a short chase or a long one. When the coon is treed the coon can be brought down with a wounding shot or the tree can be toppled and the dog finishes the coon amid a flurry of fighting.

Coon hunting is not all sitting and listening. Much walking, wading, and fighting briars is necessary, for the hunters can travel much country while the dog ranges close by searching for a raccoon trail.

In the early season, corn fields are the best bet to hunt. Coons love corn. A coon, belly heavy with corn, isn't as cagey and will probably not use such antics as swimming creeks to lose the dog.

Also, in the early season, young coons are plentiful and have not learned all the tricks as they are still traveling in family groups. During this togetherness period, unscrupulous coon hunters have been known to wipe out

Apparently feeling secure behind his mask, this raccoon
peers through the branches as the hunters have him up a tree.



Come on out, Ol' Blue! It's time for the hunt to begin! Bob Russell, a north Georgian who hunts coon as much as anybody, is ready to turn loose his dog, which is only awaiting his master's command.



A corn field is as good a place as any to begin a coon hunt. A raccoon's love for corn is evident to Grady Pearson of Ball Ground, Ga., who is looking for scattered corn to provide him with a sure sign that there is a raccoon around.

an entire family at one tree, unsporty to say the least.

River and creek bottoms and swamps are good areas to hunt. But some, like Bob Russell, a devoted north Georgia coon hunter, prefer the high ridges up where the creeks are trickle small and the briars are not so bad, and coons will take longer runs.

Coons, like all animals, are not distributed evenly throughout the state. Mother Nature says South Georgia is where coons shall grow in numbers. Consequently, South Georgia with its many swamps and streams has many coons, but North Georgia with many small streams and dry ridges does not have as many. For this reason, south of the fall-line there is no closed season.

In addition to the basic natural facts of available food and climate, coon hunters in South Georgia are not as numerous compared to the traditional coon hunting North Georgians; however, they are more numerous than expected. Over a third (36.5%) of the raccoon hunters last year were from South and Coastal Georgia. Interestingly, the South Georgian cooners killed half of the raccoons reported to the Game and Fish Commission. And it took them about half the hunting time to make a kill as their northern counterparts (if statistics are your pie, in North Georgia it took an average of 1.7 hunt days per coon. In South, Coastal, and surprisingly Central Georgia, it took an average of .9 hunt days per coon).

In the past, and even today, coons are being trapped in South Georgia and moved to the north in an attempt to improve hunting. This isn't a smart move. First, it is against the law to transport any game animal without a permit from the Game and Fish Commission. Second, biologists believe

there are enough native coons for the available food supply in North Georgia to populate the area adequately if hunting pressure is controlled. Transporting more into the area could cause an overpopulated situation, that is if they survive. Parasites and diseases could be introduced, too, and could wipe out or seriously reduce the native population.

Third, it is dangerous. Rabies. Dr. John Richardson of the State Health Department is quick to point out that right now an epidemic of rabies carried by raccoons is located in South Georgia. The epidemic stretches from the coast to Alabama and as far north as Wilcox County. He doesn't believe the epidemic will spread northward as the coon population in middle and North Georgia probably is not large enough to support the wide spread epidemic that is now present in South Georgia.

To add punch to this fact, he has figures to show that 77 per cent of the rabid coons reported last year in the United States came from Georgia and Florida. So far this year, in Georgia, there have been 100 cases of rabid animals recorded by the Health Department. Of this number, 70 were coons from South Georgia. And, Dr. Richardson added, these are only the reported cases. This may represent as low as 1 per cent or as high as 10 per cent of the number of actual rabid raccoon cases. This gives some idea of the danger in bringing coons northward. Luckily, no rabid coons have been reported north of the fall line, but luck is a fickle lady.

Regardless of rabies, and natural limitations—last year old *lotor*, properly *Procyon lotor* in scientific talk, was hunted by over 26,000 Georgians. They killed about 219,000 raccoons. Now that's a lot of sniffing, running, and howling. And a lot of fun.

JUST A COUNTRY CRACKER

by JIM TYLER

Standing on the banks of the Satilla River in his beloved Brantley County, Ranger of the Year A. M. Rowell is a devoted wildlife guardian.



Crude methods of finding sport sometimes employ crude means. Rowell shows his supervisor, District Chief Mallory Hatchett, an old shotgun equipped with a crude homemade stock that was taken from a deer poacher.



* * *

In south Georgia where the pine tree is king and the soil is whitish sand, the coffee-black waters of the Satilla River flow softly through Brantley County . . . bass, redbreast, and bream lurk beneath the lazily swirling surface. Along its bank deer prints are found. In the trees, fox squirrels scurry about.

Some 63 years ago, Avery Rowell was born in this country, in the town of Nahunta. Today, a bachelor, he lives in the same house where he was born. This is his country. He knows it. He feels it.

Avery is one of the 151 wildlife rangers of the State Game and Fish Commission. His beat . . . Brantley County. Here, for the last 16 years, he enforces hunting and fishing regulations, helps people enjoy the taking of the wild, does what he can to make the sport a bit better — and besides doing a whale of a job, he receives deep pleasure from his efforts.

The year 1966 marks a high point in his career. He was chosen as the State's "Outstanding Ranger of the Year." This is a yearly honor given by the Game and Fish Commission and the Southeastern Game and Fish Commissioners' Law Enforcement Section. The selection was based on his overall work ability.

He's dedicated. "One of the most dedicated men I know," his supervisor, Chief Mallory Hatchett of Waycross, says with ringing sincerity. "He won't go to bed at night. He patrols all night. Why, one time he found an illegal fish

basket in the Satilla River. This was on a Monday. He camped close by and watched the basket. It wasn't until 4 o'clock on Saturday morning that two men came to look in their fish basket. One of them was stringing up the fish they had caught and said to his partner, "If a game warden would get up early, he would know something."

"I'm up," Avery said from his position at the man's elbow. Dedication . . . beat that!

He has a philosophy on illegal hunting and fishing practices: "It was a goal from the start of my job to see better fishing and hunting for everyone. People breaking the law hurt everyone — but there will be illegal hunting as long as the world stands. We are making progress, though. When I first started, I couldn't walk out of the house without catching a violator. Now I seldom make a case. People are getting educated about the need for wildlife laws."

What does he like best about his job? "I like best just to get out and see the people have a good time, to help them out, and tell them where they will have the best luck."

When there is a quiet sunset or perhaps a break in his work in a peaceful setting, he will settle down, pen in hand, and work thoughtfully at verse about his two loves — the outdoors and his job:

I love the air at twilight
When the heat of day is thru
When sitting in my old arm chair
On the porch — I talk with you.

The mocking bird keeps singing
And the honeysuckles bloom
Seems fishing time in Georgia
Guess we'll be going soon.

There's nothing in the country
That brings such joy to me
For I'm just a country cracker
And I guess I'll always be.

I love the nearby rivers
Its perch, bass, and bream
Where'er there lives a fisherman
It's good enough for him.

With baited hooks they go forth
And from the waters blue
Bring forth in numbers bream and bass
And catfish for a stew.

You can see them cast
And you can see them snatch it
But they are always looking
For Rowell and Hatchett.

The moon beams stealing softly
Through the old magnolia trees
Shines on the country cracker
Who's happy as can be.

When my life's work is ended
I hope his call will be
"Come on you country cracker
You're good enough for me."

"Let's take nature to

Nature study is first hand for Luke Howell, Canton vocational agriculture teacher, and Atlanta science teacher Mrs. Sara Prescott, who was Georgia's STAR teacher for 1966.

Up to his neck in teaching conservation at the Rome workshop was Howard Zeller, assistant director of the State Game and Fish Commission, seining a pond for fish to show teacher-students.



And they will

They, the Georgia Natural Resource Education Council, want the children of Georgia to learn, in their formative years, about nature: the reasons why trees grow tall, why deer roam the forest, and why the once pretty river now runs frothy brown with pollution.

This is an enormous task, to say the least, considering the million plus children in grades one through twelve within the Georgia school system last year.

How do you reach this vast number of children and young adults and tell them about natural resources and the wise-use or mis-use of such resources? The Council decided the best way to get the message to the greatest number of children, would be through the teachers.

Okay . . . but a stumbling block in their scheme had to be met here. Not too many teachers have background or formal education in this area. Therefore, the Council set out to educate the teachers, so the teachers could, in turn, educate their students. This past summer a "teach teachers" program was started and called the Natural Resource Use Workshop.

In fact there were two workshops — one in north Georgia (Rome) and one in south Georgia (Valdosta).

What is a Workshop?

"Work" might not be the proper

title of such a venture, but it does imply a break from a strictly academic approach. In this instance, work might be defined as field work. You know, getting out in the woods and on the water, and actually seeing, feeling, and smelling.

Field trips to net fish out of farm-ponds, gather leaves, watch men fight a mock forest fire, observe how polluted water is treated, see the various layers of soil, leisurely boat through the wonders of swamp land or stop awhile to rest on a Georgia mountain-side — these are just a sprinkling of the three weeks activities the teachers participated in. The field trips were sandwiched between lectures given by experts from the various conservation agencies. Here, the workshop deviated from the normal procedure. Lecturers were not limited to professional educators; many field men and professional administrative men with little teaching background brought their actual working knowledge to the classrooms and were able to talk with authority on the field trips. Every agency went all out to make their portion of the workshop an educational and interesting experience.

At Rome, 21 teachers (elementary through high school) attended the workshop centered on the Berry College Campus under the leadership of

Dr. Philip Greear, chairman of the biology department of co-sponsoring Shorter College.

In Valdosta, 16 teachers (again, elementary through high school) attended the workshop centered on the Valdosta State College Campus under the leadership of Dr. Clyde Connel, chairman of the biology department.

The teachers received five quarter or three and one-third semester college undergraduate credit hours for attending. The 1967 workshop will be worth five undergraduate or graduate quarter credit hours.

What Were the Teachers Taught?

The workshop started with geology (rocks and the like). Scientists say the earth began, after some time, as one huge rock. Later water accumulated and after several million years, soil was formed. Plants and animals came into existence and millions of years later man made his appearance on the planet earth. And this man creature, who has been on earth for just a breath of time, now has the ability to utterly destroy or deplete natural resources that have been created throughout the vastness of time.

So, the course followed this development for a study pattern. First rock, then soil, then vegetation, then water, then fish and wildlife, and then the ways man uses the resources for recre-

e very young"

By Jim Tyler

Controlled burning of wire-grass and pineland to improve the habitat for quail is explained by Dr. Clyde Connel, chairman of the Department of Biology at Valdosta State College.

Wildlife management principles are explained by Dr. Ernie Provost of the University of Georgia's Forestry School, while Rome students enjoy nature's air conditioning.



ation. Most segments of the course went into the basic sciences and all segments illustrated the wise-use and the mis-use to which the resources have been exploited.

What Did the Teachers Think of It?

At the completion of the workshop the teachers were asked to make candid remarks:

"I was left with a feeling that truly I must be about the business of creating through any possible medium, good basic conservation concepts and attitudes in our children — of respect for law and order, a reverence for life, and a sense of responsibility."

"It was just great and worthwhile."

"The workshop will help me tremendously as a teacher."

Of course, nothing is perfect and the teachers made several good suggestions for improving next year's workshop.

Who is in the Council Behind the Workshop?

All state and federal agencies concerned with the natural resources of Georgia make up the Council. Water, forest, land, wildlife, recreation... all are represented. The agencies joined hands and approached the State Education Department with their idea. In due time a working plan evolved; two workshops for the summer of 1966 and two

for the summer of 1967, and the possibility for more in the future.

The Future?

With the encouraging remarks of the teachers who attended the workshops and the pleased remarks of the educators of the three colleges involved, the sky could be the limit for the future. Who knows — maybe, in time, there will be 8, 10, or even 20 workshops every summer.

This depends on the people of Georgia. Many private and civic organizations donated money to make the first two workshops a smashing success. They ran the gamut from women's clubs and garden clubs, to sportsmen clubs, to the Sears Foundation and the Georgia Power Company. But more money will be needed next year. Any contribution by an interested club or group, will help pave the way for one more teacher to attend next year's workshop. Contributions in any amount may be made payable to the Georgia Natural Resource Education Council and mailed to the Council's treasurer, David Almand, care of the Cooperative Extension Service, University of Georgia, Athens, Georgia, or may be sent directly to the host colleges.

And the teachers, really the ones the whole program is balanced upon, need to know about the program.

Teachers attending last summer's workshops did so under individual 100% scholarships of \$150, each provided by the various organizations mentioned. All teachers who successfully apply for the 1967 workshop will receive a full paid scholarship this summer, plus the added incentive of the course being elevated to graduate credit level. Funds for the scholarships will be provided from donations made to the Council, or State grant-in-aid scholarship money may be used. The first three week workshop will be in Rome at Shorter College starting June 12, 1967. The second will start on July 24, 1967 at Valdosta State College, each for three continuous weeks.

Any teacher interested (or if a reader knows any teacher who would profit from this program) — should contact the Registrar of Shorter College or Valdosta State College, and they will gladly forward the application.

The old saying that the future is in the hands of the young was never so true as concerning our natural resources. And the teachers are in the ideal position to reach them, to provide them with weapons to fight for the wise use of our natural resources. Remember, knowledge is surely the biggest weapon man has.

APPLES PEANUTS AND POSSUMS

by Glenn A. Smith



"'Possum's on a limb . . ." A line from a song once popular, that's a likely place to find Mr. Possum, especially after he's been chased across the countryside by a pack of baying hounds.

Ready to go in search of the white-nosed marsupial are eager hunters Bob McCoon, Steve Morgan, Joe Camp, David Morgan, Jerry Banks, Malcolm Leach, and Bruce Banks.



When the 'possums git fat.
And the taters git sweet.
It's time for 'possum eaters to meet.
"You got your Yeats apples and roasted peanuts?"

"No."
"Well, you can't go 'possum huntin' without 'em."

That was the way it all began, and when it was over, I was just as confused about hunting 'possum as when I began, but it was an experience.

Now, when you've never gone 'possum hunting before, you naturally want to make proper preparations, so I asked several experts in the field of game management. They all agreed that a .22 caliber rifle or small pellets in a shotgun was best for shooting treed 'possums down. I drew a hearty laugh when I arrived at Newnan to begin the hunt in what Middle Georgians like to refer to as the "'Possum Capitol of the World." The laugh came from old time hunters who know that you don't shoot 'possums. You climb up the tree and shake them out!

With those ground rules established, we set out on a rainy Veterans Day to hunt 'possum and have a 'possum, rabbit, and tater dinner. The hunters were all experts at their trade and members of the annual Possum Eaters Convention of Newnan and environs.

Conditions being what they were, with wet ground and muddy footing, the dogs weren't able to tree any 'possums, but it didn't matter, since you never eat the ones you just caught anyway. As scavengers, 'possums need to be penned and fattened up on more wholesome food before they taste just right to us less hearty humans.

With the hunt all over for the night, a late supper is in order. And the menu? Why, baked 'possum, what else? And the gourmets are standing by with the 'possum all ready for the table, along with a pot of hot coffee. They are Malcom Leach, J. T. Miller, Albert Powell and Bob McCoon.



Served late at night with fried rabbit, sweet potatoes, "rabbit fillet," 'possum gravy and barbecue sauce, 'possums were a delightful surprise, even to a timid newcomer like myself.

Every January since 1912, the Possum Eaters Convention has held a dinner much like the one I just described with 50 or so 'possums as the main course. The problem in organizing the big dinner is the fact that a date can't be set until all the members have caught enough 'possums.

Now, not all hunters go after 'possums the way we did. In fact, most hunters who want sport alone, or furs, will simply tree their quarry and shoot him down with a .22 rifle or a shotgun.

The 'possum is as unusual an animal as the different ways we hunt them. They are scientifically classed as marsupials, the only ones known on the North American Continent. In Georgia, they can be found everywhere, but particularly above the fall line.

The females give birth a few days after breeding, but the newborn 'possums are in a larval state at birth. They manage to find their way to the mother's pouch, a characteristic of marsupials. The litter, ranging from one to fourteen in number, attaches itself by the mouth to one of mama's mammaries and there they stay for about 60 days. By this time they are an inch long and the diameter of a pencil. Then they leave the pouch and again cling to mother by her fur, using their extremely large mouths. The eyes are open now, and they feed on whole food which the mother finds for them. In three more weeks they are on their own forever.

Everyone knows that Mr. Marsupial plays 'possum. He does it for defensive reasons, hoping predators will leave him alone long enough to slip away to safety. He has "hands" much like ours that give him an unusually good ability to climb around trees to elude predation. He uses his tail mainly for balance in trees, and while it's strong enough to hang by, few hunters can say they ever saw a 'possum family sleeping side by side, hanging by the tail.

Possum hunting is a way of life with many Georgians, which brings us back to Newnan and those apples and peanuts. I asked my host in Newnan why the Yeats apples and peanuts, to which he replied that when he was a boy, the children (boys and girls) went out 'possum hunting and took food with them to nibble on since dinner would be delayed by the hunt. From that a tradition developed, much like the tradition of 'possum hunting in Central Georgia, and, of course, the annual Possum Eaters Convention.

meet your commissioner:

WILLIAM Z. CAMP

William Z. Camp represents the 6th Congressional District in the conservation and development of Georgia's wildlife resources.



by JIM TYLER

Like so many small Georgia towns, the main roads into Newnan lead to the courthouse. There the motorist makes a circle or partial circle around this building, and a short time later is out of the city limits and again on the open road.



A dark night, good companions, good logs... Commissioner Camp is an ardent 'possum hunter.

But, if on one of these trips through Newnan, you happened to stop your car and enter the courthouse, you would find it is about like any other. It's old, cheerless, and somehow seems to give off a stuffy musty odor without really doing so.

Perhaps it was the autumn season when you stopped and you happened to stick your head into the Tax Commissioner's office. If you did, you would immediately take notice of a change of atmosphere. Incongruously, a desk would be laid out with a display of fruit cakes centered around a sign, "Buy a Fruit Cake Here — Proceeds Civitan Charity." And various gourds would sit atop file cabinets or be draped along with ears of black speckled corn in a harvest display of contrast to the business-like color of the office furniture.

If you were his friend, you would walk up to a large man, shake hands and say, "Hello, Bill." For William Z. Camp is the Tax Commissioner of Coweta County. He is also the Game and Fish Commissioner from the sixth congressional district.

The warm atmosphere of Commissioner Camp's place of business reflects his personality. He is down-to-earth. And so much a part of Newnan, it would remind you of a glove fitting a hand. He has been a resident of Newnan all of his 52 years save two days when he journeyed to a job in Dublin, got homesick, and returned.

Besides Civitan, he is a member of the Elks, Moose, and Shrine. He is on the Executive Committee for the Flint River Council of Boys Scouts and in 1962 was awarded the Boy Scouts' highest award, The Silver Beaver. By the way, his oldest son, Tom, is an eagle scout.

Being a Game and Fish Commissioner further brings out his passion for people. He says, "I just enjoy people. I enjoy helping them out." This is a strong reason for his devotion to the Game and Fish Commission. First appointed in 1961 by Governor Ernest Vandiver to fill an unexpired term, he is in his second term which started in 1964 with an appointment by Governor Carl Sanders.

Among his activities within the Commission, he is highly interested in small lakes and ponds, and is a staunch supporter of the State's program of stocking catfish in such waters. He was also instrumental in the transaction whereby the Commission acquired High Falls Lake, now part of a state park.

Naturally, he is a hunter and fisherman, with fishing his favorite. Some of his success stories about bream fishing are fabulous, and if you doubt them, some time in the future he would probably dump an ice chest full of saucer-sized bream at your feet.

This year his eleven-year-old son bagged a four point buck on his first deer hunt. The Commissioner is proud of this, for he spends considerable time in the woods and on the waters with his two sons. He is a firm believer that a hunting and fishing boy will never get into serious trouble.

At his home, you would meet his charming wife, Elizabeth, notice the serenity, and with dogs, boats, guns, and other equipment about, you would know it was an outdoors family.

Amid his devotion to the other fellow, Commissioner Camp is a busy man. And most assuredly, whether it is a Civitan project or a game and fish project, or a hunting trip with his sons, he will be in, elbow deep, giving his best, and enjoying it immensely.

There's nothing more satisfying to Commissioner Camp, right, than landing a fine bream.



Return of the Rockfish



These are the kind of striped bass that have been caught in the Chattahoochee and Flint Rivers in south Georgia, before the days of Lake Seminole. And if things go according to plans, it won't be long until anglers can again land such trophies.

This young striper carries with it the hopes and dreams of fisheries biologists of the Game and Fish Commission, plus those of Georgia anglers, as it is released into Lake Seminole to become part of what the Commission hopes will be the start of a comeback for the striped bass in Georgia waters.

Not so long ago an annual pilgrimage, brought on by inborn instinct, took place from the waters of the gulf up the Appalachicola River in Florida, on up into the waters of the Flint and Chattahoochee Rivers.

Each spring, sea-going stripers would make the trek up these freshwater streams to spawn. By the thousands, they would battle their way upstream to attend to their annual task.

In these days, there was an annual bonanza on the saltwater strippers. The fishing was good in the Flint River, particularly around Radium Springs, near Albany, where an occasional lunker was hauled in. And in the Chattahoochee, stripers were caught as far upstream as Columbus.

But progress stepped in. A dam was built just south of the Florida-Georgia line where the Chattahoochee and Flint rivers combined to form the Appalachicola. Behind the dam was formed a massive freshwater reservoir, shallow Lake Seminole.

Passage was blocked. The stripers congregated at the dam when they found they could go no farther. Within a few years, the stripers no longer came up the Appalachicola, for it was

futile. They couldn't get far enough upstream to spawn. A striper must discharge its eggs in water swift enough, and in a river long enough to carry the eggs afloat for up to 72 hours in order for the eggs to hatch. Once an egg touches bottom, it is soon dead.

For a time, there still remained some stripers in Lake Seminole. Stripers are an unusual breed. While they're a saltwater species, they seem to have an affinity for remaining in freshwater for long periods of time occasionally. Some of these were trapped upstream by the dam, and could return to their briny home.

But little by little the population of the large silvery scrappers disappeared from Seminole. Why? Were they not able to reproduce when landlocked? This was an early theory. But that has been disproved by the Santee-Cooper Reservoirs in South Carolina, where there is a large population of landlocked stripers, or as they are called locally, "rockfish." And they spawn, even though they never taste saltwater.

Apparently, demands of fishermen, and particularly of commercial netters were too much to meet the supply of the spawn, if indeed there was any. The striper disappeared.

Biologists believe that the biggest reason for his disappearance was the special gill netting season allowed in the lake. Until a year ago, nets of two-inch mesh were allowed. The smaller mesh nets took a heavy toll of all game fish. Last year, the limit was raised to a minimum of three-inch mesh for nets, which has long been the statewide requirement for all other lakes.

However, this still catches a lot of big stripers. And a striped bass must reach a size of about five pounds before he can spawn.

In his absence came rough fish, such as gizzard shad. Already these species were present, but now they flourished without the striped bass.

In Santee-Cooper, it was noted that an overabundance of these rough fish was kept under control by the rockfish. It was feared when the shad which provided food for the stripers disappeared, the huge appetite of the striper would devour the game fish.

But rather than harm game fish populations, the stripers themselves reflected the rough fish decline. And fish such as bass, bream and crappie not only maintained high numbers, but attained extraordinary size, regardless of the number of stripers.

In fact, the better the striped bass numbers were, the better was the fishing for freshwater game species, presumably because the high rough fish populations harmed the game fish.

There are several lakes in Georgia with good populations of freshwater game fish, but these populations could be better, and size could be greater if it weren't for the presence of rough fish. These waters seem quite capable of supporting landlocked striped bass, except for one thing — there's no way for the stripers to spawn, and thus sustain themselves.

South Carolina, pioneers in the field of hatching stripers and stocking them in fresh water, began a program a few years back of stocking stripers annually in such waters. The project has met with modest success.

Success probably would have been greater had the stripers been raised to fingerling size, instead of being put out on their own within hours of birth.

So Georgia, with a helping hand from her neighbor state to the east, has begun its own striped bass program. Georgia raised striper fry to fingerling size — three to eight inches — and just this fall has released them.

Some one million fry were obtained originally, and about one in 10 survived to fingerling size. This may sound like a dismally small number to the layman, but as fish populations go, it is exceptionally good. Particularly, it is noteworthy that South Carolina achieved less than one per cent survival of stripers from stockings of fry directly into the lakes.

At the fingerling stage, the striper is pretty well capable of caring for himself in the wild. In fact, if they were not released at that size, survival would be lower since not all would be the same size and the larger ones would eat their smaller cousins.

The Georgia Game and Fish Commission divided the fry they received within a few hours of their birth at Santee-Cooper, between a hatchery pool at Lake Burton, in northeast Georgia, and a specially created pool at Lake Seminole.

The Seminole pool was formed from small pocket of the lake which was blocked off by a dam, cleaned of all fish and insect life, then fertilized in order to provide microscopic plant and animal life for the tiny rockfish.

When the stripers grew large enough, forage fish were added. The forage fish — threadfin shad, golden shiners, fathead minnows, goldfish and freshwater shrimp — were added in order that they could spawn rapidly enough to meet the demands of the stripers' appetites.

The stripers ate, and they grew. And grew. They reached as much as two inches in six weeks, better than anticipated, and in 11 weeks some of them were seven or eight inches long.

However, some of them were only three inches long in that time, and became prey of the larger fish. It was time to turn them loose.

The dam was broken, and the stripers were freed into the huge lake, off to seek their own fortunes.

It was some two months later, in mid-November, when another 10,000 fingerlings were released into the lake. The first 50,000 were those raised at Seminole. The second group were those that had been detoured to Burton, then later transported the long cross-state ride to their new home.

It may still be several years before stripers are present in good numbers in many Georgia impoundments. Everything hangs in the balance on how well the first group does in Seminole.

If the stripers survive well, and are able to reproduce in the Flint and perhaps in the Chattahoochee, Georgia may soon have its own supply of eggs and can form its own hatchery on the shores of Seminole.

Prospects appear good for reproduction in Seminole's tributaries. The Flint, in particular, seems able to support reproduction. The Chattahoochee is something of a question mark. In the first place, it is shortened by more dams upstream. Further, where there is a dam there is usually more pollution. The striper needs relatively clean water in which to spawn.

Before the female striper can spawn, she must reach five or six pounds, perhaps even more. This means at least two more years, maybe more, before Georgia will have striper eggs of its own to put in other waters.

If the project is as successful as hoped, within perhaps three to five years anglers will be pulling the rugged rockfish from lakes all over the state.

While these lakes are unable to support a spawn, the stripers can thrive there and grow to good size. To maintain a good population of the species, the Commission will bolster their numbers with annual stockings of fingerlings, reared in the hatchery.

The lake that will be the first to get a non-spawning landlocked line of stripers will be Blackshear, scheduled to receive a stocking this year. Others to be among the first probably will include Walter F. George and Sinclair. If efforts are successful here, and other lakes appear to have the basic requirements for stripers, they too will be added to the list of Georgia waters where a saltwater king will reign over a new freshwater domain.

The first few stripers placed in the lake were released slowly so their actions could be observed. One cause for concern was the difference in water temperature between the water in the truck and that of the lake. But the ultrasensitive stripers were apparently able to make the adjustment.



Some of the striped bass fry were raised to fingerling size at the Lake Burton Hatchery in northeastern Georgia, then took the long ride across the state to the opposite corner, to their new home in Lake Seminole, by trout hatchery truck. Once there, Commission personnel netted them from the truck and released them.





Free-running dogs each year run down and kill thousands of deer in Georgia, including fawns, does, and bucks. This is a scene from such a chase in the Commission's movie, "Georgia's Whitetail Deer."

They were eating her alive!

Dog Versus Deer: A Losing Contest

It was a rather pleasant early fall day in the North Georgia mountains. Autumn leaves were just beginning to turn, and the babbling mountain stream was flowing low and clear, speckled by an occasional fallen leaf floating on the surface.

The year was 1948, and the young game biologist, one of Georgia's first, was making a deer browse survey in the Blue Ridge Game Management Area near Rock Creek. He was alone in the woods, more than half a mile from the nearest road. Three miles away, that road was blocked to civilization by a locked gate. The only sounds were the constant running rush of water over the stones of the creek.

Intent on his work, the young man was suddenly jarred from his thoughts by the sound of voices talking nearby.

Coming through the thick undergrowth he was startled to find that the "voices" he had heard were actually the barking of two small feist dogs.

"Neither one of them could have weighed more than 20 pounds. They were brown mongrels, standing on one side of the creek."

"They had bayed a handsome eight-point buck. There he was, standing exhausted in the middle of the creek, legs outspread, head down, tongue out, hair bristled up."

"He just couldn't go. I walked up to within 10 feet of him, and he couldn't move. He was a nice, big buck, with hardened antlers, but he was exhausted. They could have killed him in a few minutes, if I hadn't come up."

Now a veteran game biologist with the State Game and Fish Commission, his recollection of loose-running dogs chasing, baying, and killing deer have been repeated in his sight many times.

In 1955, the General Assembly passed a law giving wildlife rangers the power to destroy dogs chasing deer. The new law had the full support of the State Game and Fish Commission at

that time, and was passed at the urging of the Commission. It is still just as strongly supported.

But since that time, game men of the Commission have continued to witness tragic scenes in the forest, such as that recounted by a district law enforcement chief who saw two big hounds run a doe down in the Cooper's Creek section north of Dahlonega after a chase of 15 to 20 minutes.

"When I got there, they were eating her alive. They had already torn out her hams."

Most such chases witnessed by woodsmen end out of their eyesight, but the sound and sight of an exhausted deer limping past a man in the woods, followed by steadily trotting baying dogs, is one that few wildlife rangers or hunters can ever forget.

Wildlife specialists of the Commission say that it usually doesn't take long for the dogs to catch up to a deer in the mountains or Piedmont section,

depending on the size of the dogs and how fast they can run. Most chases they say, last only 20 to 30 minutes. The only way the deer can escape the dogs unassisted is to get to water and lose their scent, since they can't run into a hole in the ground or in a tree like a rabbit or a squirrel. Getting to water is not easy in the mountains or the rolling hills of the Piedmont, unless he can get to one of the few large rivers and swim it before the dogs catch sight of him. But in parts of South Georgia where there's plenty of standing water in the swamps and many river and creek swamps, he has a much better chance of getting away. This is the only reason that deer can be hunted legally with dogs there without being wiped out.

Game management area managers and wildlife rangers find many carcasses in the forest of deer that have been attacked and eaten by dogs, but most such kills go unseen by the eyes of men. It's extremely difficult to be at the end of the chase miles off the nearest road. If the deer is a small doe or a fawn, what the dogs leave is usually quickly finished off by buzzards, opossums, and wood scavengers.

Any breed of dog will chase a deer, usually when he teams up with another dog, either for food, or just for the pure love of hunting and killing anything that jumps up in front of him, specially if he has never been trained to hunt one species exclusively. But Georgia's game managers are quick to point out that most of the trouble with deer is caused by free-running "stray" dogs that apparently have no permanent home, rather than by well-trained and cared for dogs.

Dog owners who value their animals don't let them run loose without knowing where they are, especially if he is an expensive hunting dog. Serious dog owners keep their dogs penned up or on leash at all times, except when exercising or hunting them. During the hunt, they keep them under control hunting the species in which they are interested. If the dog won't accept training, most hunters soon get rid of them for an animal that will.

In the case of valuable hunting or pet dogs whose owner can be identified from a collar or tag, Georgia's dog appreciating wildlife rangers make every possible effort to capture the dog unharmed and return it to its master. Most hunters appreciate this, and usually try to keep their dogs under better control in the future.

As to just how many homeless dogs there are in Georgia is anybody's guess. Based on the national average of one dog to every four to seven



Georgia has an estimated 300,000 unwanted stray dogs, many of which were abandoned by their owners. The State's deer population numbers only one-third this number.

people, health officials place the number of dogs in Georgia at about 800,000. Of this number it is estimated from vaccination tags that 500,000 dogs are owned, leaving from 200,000 to 300,000 ownerless dogs roaming loose over the State. This is two to three times as many as the estimated 100,000 deer in Georgia. Fulton County picks up 9,000 stray dogs a year alone, but most smaller Georgia cities and towns where the wildlife deer problem is greatest simply don't have such facilities to control loose dogs.

Where do these ownerless dogs come from? It's been common practice for years to get rid of those extra female pups or the old sick family dog by taking them off for a one-way trip to the country, dumping the poor animals out to live off the land as best they can. Tenant farmers move off from shacks, leaving three or four

curs behind. Unscrupulous deer hunters gather up a truck load of stray dogs and dump them in deer country, hoping to strike up a chase. After the hunt is over, the unwanted strays are never picked up. Existing laws against abandonment and cruelty aren't strong enough to solve the problem, and enforcement of them is difficult.

Some of these unwanted dogs die of starvation or disease, but many adapt to their wild existence. All such animals for at least a short period of time are quite capable of causing damage in the meantime not only to deer, but also to rabbits, quail nests, young squirrels, and wild turkey nests.

In recent years, Georgia's mushrooming livestock industry has been considerably aroused by the senseless slaughter of valuable calves, pigs, and sheep by wild and free running dogs. Conservative estimates by livestock men place the annual damage figure at more than \$200,000 a year. Many dairy and cattle farmers carry guns with them to kill dogs harassing cattle. Dogs are credited with suppressing what once appeared to be possibilities of a flourishing sheep herding industry in Georgia.

In addition to the livestock threat, loose dogs present a frightening threat to the safety of small children from actual physical attack. Obviously, stray dogs aren't vaccinated for rabies, and their presence is always a potential public health epidemic threat, especially in areas infested by rabies-carrying raccoons, bats, and foxes, all animals that come into contact with dogs, which in turn are the most frequent transmitter of rabies to humans. Dogs also transmit tetanus, miscellaneous infections, and parasites like ringworm to humans and to livestock. More than one million people are attacked and



Many deer killed by dogs are never found. If anything at all is left of the carcass, woods scavengers such as buzzards, opossums, and foxes may finish it off.

Damage to Georgia's important livestock industry by uncontrolled dogs is estimated to exceed \$200,000 a year. Free-running dogs slaughter hundreds of calves, pigs, sheep, and chickens.



bitten by dogs each year in the United States, and the figure for wildlife and livestock is undoubtedly much higher.

Many public health officials would like to see existing laws requiring vaccination of all dogs given some real teeth of their own. Many landowners, humane societies, and animal enthusiasts as well as livestock interests, public health officials, and wildlife conservationists favor adding strength to the law. Many of the western states with important cattle herds already have such laws, along with northern deer states. Virginia is one of the southern states with a stringent dog control law.

All dogs should be vaccinated against rabies by the time they are three months old for the protection of the public, the dog himself, and the dogs and animals of other people. If homeless dogs are not freely running loose, fewer such dogs would be run over and maimed by automobiles or shot and wounded by irate landowners and left to die an agonizing death or require rescue by humane societies.

Many states already have such laws, and the results have been very satisfactory to both dog owners, conservationists, stockmen, public health officials, and humane societies. The serious effect of loose dogs in preventing the spread of deer herds is not just a Georgia problem, but is one which is looked at with a great deal of increasing concern by most Southeastern states, who have similar problems.

Thousands of acres of good deer habitat in Georgia could support deer in large numbers. Because of the dog problem, many Georgia counties have no deer in 60 to 90 per cent of their areas, except in a narrow strip of land up a river or creek swamp where deer can escape from dogs. If the unproductive deer land between these strips

can be protected from uncontrolled free-running dogs, Georgia's deer would rapidly expand into them and the deer harvest would soar within a few years. Hunting success would jump dramatically, and a lot more happy hunters would have venison in their freezers than is the case now.

There is little doubt that the loose dog is the most effective predator on deer that has ever lived in Georgia. At their peak, there were never very many mountain lions or wolves in Georgia, probably not as many as 10 per cent of the estimated 300,000 homeless dogs in Georgia. Wolves had to get along primarily on deer in good and bad times, while many dogs are fed, at least part of the time, at the back door of a human abode. This prevents many of them from starving to death as soon as they otherwise would. Because of this, dogs are not subject to the natural law of survival of the fittest as wolves and mountain lions were. And production in stray female dogs is high, usually two litters or more a year of from six to 12 pups.

That public sentiment favors tighter control of dogs is indicated by a mail survey of hunters just completed by the Game and Fish Commission that showed that more than 90 percent of Georgia's dog owning hunters favor some kind of control over dogs, especially during the spring breeding season when small game nests, fawns, and weakened pregnant does are especially open to predators.

In the control of dogs chasing deer, the Game and Fish Commission does not wish to interfere with legitimate quail, rabbit, squirrel, fox, coon, or possum hunters. The mere existence of the law allowing wildlife rangers to destroy dogs actively pursuing or killing deer simply serves as an effective deterrent to prevent widespread deer

dogging in prohibited areas. Wildlife rangers seldom find it necessary to use that authority on legitimate hunting dogs, even though they may get the blame for the actions of irate landowners or sportsmen who take the law into their own hands by killing dogs. Little if anything can be done to prevent this, especially in the case of dogs turned loose without permission on private land. A contributing problem lies with a handful of deliberate illegal deer doggers who pretend to be hunting other game, such as coon or fox, giving legitimate hunters a bad name.

But in the experience of the Game and Fish Commission, it is usually only the ownerless dog or the deliberate violator that causes trouble. Nine out of 10 dogs taken in dog control programs on State game management areas are "just dogs" without an owner or a home.

Even in areas where dogs do not catch and kill large numbers of deer, studies by game biologists have shown that reproduction drops off sharply in areas where deer are harassed by dogs. In such areas, does frequently have only one or no fawn, compared to the average of two a year. In addition, the presence of the dogs keeps deer from spreading out naturally into thousands of acres of good deer habitat. Instead, they remain crowded together, increasing the risk of starvation, disease, and parasites.

Uncontrolled dogs and their wanton slaughter of wildlife and livestock are serious problems in Georgia, and they are growing more serious. It is the job of the State Game and Fish Commission to protect wildlife, and this cannot be effectively done without control of free-running dogs, especially homeless strays. The present deer-dog destruction law has not been abused by wildlife rangers of the Commission, most of whom are dog lovers themselves. These men have no quarrel with "man's best friend," in his place at man's side. When dogs roaming by themselves threaten Georgia's wildlife, the wildlife ranger must do what he can to protect our wildlife resources from destruction, to insure that hunting will always be a great American form of recreation.

Even though existing Georgia dog control laws may not be as strong as they should be, the law against illegal deer dogging certainly should not be weakened or repealed. It is the only effective tool that the State Game and Fish Commission has in its hands to prevent the wanton slaughter of Georgia's growing deer herd.

(See editorial on inside front cover, "We Need Georgia's Dog-Deer Law.")

Sportsman's



Calendar

SEASONS NOW OPEN

QUAIL, BOBWHITE

Season—Nov. 19, 1966 through Feb. 28, 1967.

Bag Limit—12 Daily, possession limit 36.

GROUSE, RUFFED

Season—Oct. 15, 1966 through Feb. 28, 1967.

Bag Limit—3 Daily, possession limit 6.

SQUIRREL

Season—Oct. 15, 1966 through Feb. 28, 1967.

Bag Limit—10 Daily.

OPOSSUM

Season—Oct. 29, 1966 through Feb. 28, 1967, Exception: Coweta County opens Oct. 1, 1966 through Jan. 21, 1967.

No Bag Limit.

RACCOON

N. Ga. Season—Oct. 29, 1966 through Feb. 28, 1967.

Bag Limit—One (1) per night per person.

S. Ga. Season—No closed season.

No Bag Limit.

RABBITS

Season—Nov. 19, 1966 through Feb. 28, 1967.

N. Ga. Bag Limit—5 Daily.

S. Ga. Bag Limit—10 Daily.

WILD TURKEY

Southwest Ga. Season—Nov. 19, 1966 through Feb. 28, 1967 in the counties of Baker, Calhoun, Decatur, Dougherty, Early, Grady, Miller, Mitchell, Seminole, and Thomas.

Bag Limit—Two (2) per season.

SEASONS CLOSING THIS MONTH

GUN DEER SEASON

Southwest Ga. Season—Nov. 5, 1966 through Jan. 5, 1967 in the following counties:

Baker, Calhoun, Chattahoochee, Decatur, Dougherty, Early, Grady, Lee County west of U. S. 19, Marion, Mitchell, Muscogee, Seminole, Stewart, Terrell, Thomas, Webster and Worth County south of U. S. 32.

Bag Limit—Two (2) Bucks, except in Baker, Calhoun, Grady, Dougherty, and Thomas counties where the bag limit is two (2) bucks or one (1) buck and one (1) doe. Exception: The Worth County bag limit shall be one (1) buck only for the season.

Hunting with dogs will be allowed in all of the counties listed above during the season with the exception of Chattahoochee, Muscogee, and Worth counties, where hunting with dogs will be prohibited in order to prevent over-harvest of deer and to insure continued growth of the deer herd.



You'll be Mad As a Wet Hen

if you miss the February issue of Game & Fish. If you do not send us your subscription before January 15, 1967, we will not be able to send you the February issue, so don't miss the next 12 action-packed issues of Game & Fish. Use the handy envelope, and subscribe now!

Southeast Ga. Season—Oct. 29, 1966 through Jan. 5, 1967 in the following counties:

Brantley, Bryan, Bulloch, Burke, Camden, Candler, Charlton, Chatham, Clinch County south of the Atlantic Coastline Railroad and east of the run of Suwannee Creek, Echols County east of U. S. 129 and south of Ga. 187, Effingham, Emanuel north of U. S. 80, Evans, Glascock, Glynn, Jefferson, Jenkins, Liberty, Long, McIntosh, Pierce County south of U. S. 82 and east of Ga. 121, Screven, Tattnall, Washington and Wayne counties.

Bag Limit—Two (2) Bucks. Hunting with dogs is allowed in all of the above counties.

DUCKS, MERGANSERS, AND COOTS

Season—Nov. 24, 1966 through January 7, 1967.

Bag Limit—Ducks: 4 daily, including no more than 2 wood ducks or 2 canvasbacks. Possession limit 8, including no more than 4 wood ducks or 4 canvasbacks. Mergansers: 5 daily, including no more than 1 hooded merganser. Possession limit is 10, including no more than 2 hooded mergansers. Coots: 10 daily, possession limit is 20. See federal waterfowl regulations available with the required \$3.00 federal migratory bird (duck) stamp at all main U. S. Post Offices. State regulations for waterfowl hunting are the same as the federal regulations.

GEESE

Season—Nov. 7, 1966 through January 15, 1967.

Bag Limit—2 daily, possession limit 4. See federal regulations. Migratory stamp required. Liberty and McIntosh counties closed.

WILD TURKEY

West Central Ga. Season—Nov. 5, 1966 through Jan. 5, 1967 in the counties of Chattahoochee, Marion, Muscogee, Stewart, and Talbot.

Bag Limit—One (1) per season.

Southeast Ga. Season—Dec. 1, 1966 through Jan. 5, 1967 in the counties of Brantley, Bryan, Bulloch, Camden, Charlton, Chatham, Effingham, Evans, Glynn, Liberty, Long, McIntosh, Pierce, Screven, Tattnall, and Wayne.

Bag Limit—One (1) turkey gobbler per season. Hens are protected.

WOODCOCK

Season—Dec. 12 through Jan. 30, 1967.

Bag Limit—5 Daily, possession limit 10. See federal regulations.

DOVES

Season—Dec. 6 through Jan. 14.

Bag Limit—12 daily, possession limit 24.

SNIPE, WILSON'S

Season—Nov. 26 through Jan. 14, 1967.

Bag Limit—8 Daily, possession limit 16. See federal regulations.

SEASONS OPENING THIS MONTH

NONE

SEASONS OPENING NEXT MONTH

NONE



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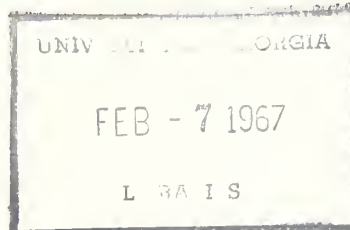
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GAME & FISH

FEBRUARY 1967 Volume II Number 2

Contents

| | | |
|---------------------------|-----------------|----|
| Early Bird Bass | Herb Wyatt | 1 |
| Climb High For Grouse | Scott Fussell | 4 |
| Catch Mr. Tasty | Mike Bowling | 6 |
| Pheasants In Your Future? | Dean Wohlgenuth | 8 |
| Meet Your Commissioner | Jim Tyler | 11 |
| Don't Eat That Record | Jim Morrison | 12 |
| Earn A Wild Dollar | Jim Tyler | 14 |
| Pray For These Predators | Jim Tyler | 16 |
| Sportsman's Calendar | | 17 |

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Restrictive gun laws hurt the hunter

The worst attacks on the future of hunting and target shooting made on the national level, including the infamous "Dodd Bill," have so far been blocked by the active efforts of conservation-minded national groups, local sportsmen's clubs, game and fish commissions, and state legislatures. But now, efforts are being made on the local and state level to enact similar mistaken restrictions on the purchase and lawful use of firearms. Some of these proposals seem less harmful by concentrating on pistols, but the principles of firearms controls remain the same.

Based on national average estimates, it seems safe to assume that there are more than one million firearms now in circulation in Georgia alone. Even if all firearms sales of all types were immediately halted, it would be impossible to stop the use of firearms in crimes by persons who already have such weapons, who could buy them from someone else, or who would steal them. Even if firearms were not readily available to such persons, indications are that the majority of crimes would still be committed, using another weapon if a gun is not available.

Cavemen killed each other with rocks. Cain killed Abel without benefit of a pistol, and Macbeth's Duncan died by the knife. The cause of crime stems from poverty, ignorance, and many diverse socio-economic problems. It cannot be solved by hitting at one of the symptoms of the disease, which will only be replaced by another. The failure of prohibition to achieve its purpose is a notable example. The net effect of additional gun regulations beyond those already in effect will merely be to harass and eventually disarm the honest sportsman and citizen, while leaving guns in the hands of the criminal. The only readily apparent solution to the problem without further infringement on the rights of honest sportsmen as gun owners lies in stricter enforcement by law enforcement officials and judicial officials of the existing 20,000 federal, state, and local laws governing the misuse of firearms in crime.

Few of Georgia's more than a quarter of a million licensed hunters realize that new restrictive anti-gun legislation now being proposed on the city, county, state, and federal level will seriously cripple Georgia's half-million dollar federal aid game management program if they are adopted.

The net effect of such laws and regulations will be to reduce the number and percentage of sportsmen who hunt, especially new hunters. A second effect will be to reduce the sales of firearms and ammunition.

Both events will result in serious future reductions in the amount and relative percent of federal excise tax money on firearms and ammunition that is returned to Georgia. The amount is based on the number of hunting license holders in each state, as well as the amount collected in taxes on firearms and ammunition.

Funds from this program are responsible for the restoration of once-extinct deer to all 159 Georgia counties. It also pays for three-fourths of the cost of the operation of all 21 Georgia public hunting and fishing areas, as well as the salaries of 14 Georgia game biologists engaged in research programs and for the salaries of 21 refuge managers. None of these programs would exist in their present form today without these federal aid funds, which will also be even more sorely needed in the future.

Georgia's game biologists say they can provide good hunting for a million Georgia hunters by the year 2000, four times the current quarter of a million figure, based on the current six percent annual increase in licensed hunters. But if restrictive gun legislation cuts off this increase in hunting license sales and excise taxes on the purchase of arms and ammunition, the full potential of hunting as a wholesome recreational activity in Georgia will never be reached. Thousands of Georgia youngsters will never enjoy the privilege of going hunting with their fathers and learning conservation and sportsmanship first hand, rather than spending their time getting into trouble on the streets. And Georgia's economy could lose more than 35 million dollars a year alone by reduction of hunting activity from equipment sales, gasoline, lodging, food, etc. — J. M.

ON THE COVER: The ruffed grouse surveys his lofty mountain kingdom where few hunters are hardy enough to challenge his swift running and flying abilities. Photo by Dan Keever.

* * *

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*The last fiery rays of the sun on the Seminole sky mark
the last frantic feeding spell of hungry bass.*

Early Bird Bass

By Herb Wyatt, fisheries biologist

It is pretty well agreed that February is a dull month for most sportsmen. The quail have been thoroughly shot over and the survivors are nervous. All in all, February is about the time most of us realize with a sinking feeling of despair that another season has gone by without our getting a deer, a mess of quail or even enough doves for a good supper. After reflecting along these lines, we come to the conclusion that the reasons for not going hunting are difficult to recall. Involved in defying fate, the family budget,

the wife and the boss while resolving to live the good life next fall, we usually work up a pretty good case to compensate for lost hunting opportunities by doing more fishing this coming year. We tell ourselves that come spring we'll catch bream on the bed, bass schooling, float the Suwanee, catch some trout in Lake Lanier, a tarpon in the Altamaha and enjoy ourselves so much fishing this summer that we'll forget all about the recent sadness. Gonna do it this year for sure . . . just wait!



Seminole bass stringers need plenty of strength. Catches like this aren't unusual in February, the best month on Seminole.



Stembridge lays back on a bigmouth, setting the hook hard. This is where the excitement begins.

Sound familiar? You can hardly wait for spring and fishing? Want to make this a year to look back on next February with glowing satisfaction? Then friend, you are wasting time!

These bluebird days coupled with two-day cold snaps are working together to make February one of the best, and frequently the best month to go to Lake Seminole and catch bass. Every year around February, the largemouth bass in Lake Seminole get the jump on spring and provide some of the fastest action for bass fishermen this famous lake has to offer.

Quite a few people know this to be a fact, and you can bet that when they first heard it, they didn't believe it either.

The fisheries people of the Game and Fish Commission didn't know it until 1960. This was the first year of fisheries studies on the lake. In learning about the fishery of a lake, a lot of fishermen are interviewed. Information from these interviews, made on the lake, is recorded and arranged into a form to find out, among other things, just how good fishing is.

After a year or two of interviewing thousands of fishermen, this information can tell some fascinating things. Things like when bass fishing is best.

To prove this point the data from the year's first census is shown in the

graph on the opposite page, giving the comparative catch of bass for each month of the year.

This kind of information should convince most anybody that the chances of catching a bass, or even a bunch of bass during February are pretty good.

Now just why does this happen? Bass are warm water fish, and the water temperatures during February are still hovering between 55 and 60 degrees, even in Lake Seminole. According to almost everybody, this is simply too cold for bass to be the most active. But in Lake Seminole they seem to rouse out a little earlier in the year. The reasons for this slightly unusual behavior are not entirely understood, but by watching the actions of the bass and knowing something of their habits, it appears they are reacting to the universal urge.

Bass form eggs during the summer and fall. By winter these eggs are developed. This is good, because during the winter food is scarce and a bass that didn't already have eggs formed would be hard put to get the nutrition necessary for the job. So the bass have been waiting all winter for the warm spring sun to bring the water temperatures up to where eggs can survive. When this happens, the male will build a nest, or as they say in South Georgia, fan a bed, and the female will lay the eggs in it. All this is triggered by the warming water.

In Lake Seminole country, February can have some days running when you think summer has set in without the preliminaries. These are the days when the weedy shallows surrounding the sprawling Spring Creek, Fishpond Drain, and Saunders Slough arms of the lake will rapidly warm up.

A bass that has been waiting all winter to spawn can be excused for letting these first warm days drive him into a frenzy of activity. It must appear necessary to hurry to the shallows and find a good place to fan out a nest. While cruising around enjoying the warm water or taking up a station at a favored nesting site, they flush out the minnows and small fish that reside in the weeds. Bass eat very little during the cold winter and must be ravenous when the warming trend stimulates them to activity again, for they go on a feeding spree. This also probably is necessary to finish the development of the eggs and to prepare both sexes for the demands of spawning.

For whatever the reasons, the bass are in the shallow water, coming alive after some weeks of cold lethargy. The warming water and activity make them frisky and hungry.

Maybe over the winter they have forgotten to be so careful, or maybe since

food has been so scarce anything looks good. Maybe it is because they are so concentrated or because competition is now so keen for every mouthful of minnow that they blindly charge a bait. Maybe for all these reasons and more besides, while the bass are lying about in the warm February sun, they BITE!

This satisfying situation would prevail only for a few days under normal circumstances. The water would go ahead and warm up, the bass would start to bed and guard their young and refuse almost any lure thrown.

But on Lake Seminole, a February cold spell will move in, the shallow water will cool off and so will the bass. They move back out to the now warmer deep waters and the shallows are deserted. High winds and cold rains lash the weedy flats, mixing cold water in the most protected cove.

However, February cold waves on this southern edge of Georgia only last for two or three days. Spring is pushing up from the Gulf and quickly edges back the arctic air. The sun shines, the air is warm, and in two or three days the bass again stir from the deep holes, drawn back onto the edges and flats to repeat the activity of a few days before.

This cycle of warm days and cold snaps can go on for six weeks or longer, and because bass follow instinct instead of a calendar, they continue to react in the same pattern with each cycle.

This means that they are on the edge to establish nesting territories and feeding not once or twice, but maybe for six or eight times before the water stays warm enough to stimulate spawning. The longer the bass stay on the edge before fanning a bed, the longer they are on the spring feeding spree, concentrated in an area easy to find and fish.

Maybe this works in a small way on other lakes, but it appears to work better in Lake Seminole than anywhere else we've heard of.

The foregoing is not meant to infer that for a month or so around February the bass in Lake Seminole act absolutely foolish. A bass could lose half his mind and still be a lot smarter than most any other fish. So you will need to continue to exercise your deep knowledge of bass fishing lore and remember that in shallow water any fish is spooky. Fish with as much care as any other time and you will likely enjoy more for your efforts than any other time. Let your technique become sloppy and it would be hard to catch bass in a hatchery pond.

As to the lures to use, only one statement can be made with absolute certainty. Don't use deep running plugs

or bottom bumping plugs. Obviously you are fishing the shallow, weedy edges, so use something that runs shallow, on top or is weedless. If you are one of those fishermen who think a top water plug is the only way to catch bass, you will have some fine action. If you are one who thinks topwaters are best unless they are biting something else better, you will probably catch more fish. Most of the time the bass will tear it up on top, but on the other hand they are still a bit sluggish at times and are occasionally slow to take to the top. In such instances the opportunist will have weighted spinner, spoon, plastic worm or some shallow running plug ready to offer.

February or not, the bass still try to act like bass and many times seem to be better in the fleeting moments of risk, especially in the really shallow water.

When the setting sun slants shadows through the water and the shallows become murky, the bass will move into the very shallow water and swim around with only two or three inches of water over their backs, leaving wakes to east to and muddy swirls as they chase a minnow or engage in brief duels over a disputed territory. This happens only at sunset, leaving for 10 or 15 minutes of casting time before dark. But the few minutes of having a top water plug slammed on even cast by a Seminole bass is worth waiting all day for. Put this action in a setting of nippy air, whistling woodpeckers darting through the gaunt, leached dead cypress, water turning the red from the sun's last reflection on a bank of clouds, and it's worth waiting all year for.

The most important point in fishing Lake Seminole in the early spring is timing. If you catch a few warm days, then look out! But if you bring a cold spell south with you, it's back to dredging the bottom for your bass. So check the weather maps in the papers and on TV. Call your local weatherman. If he is a fisherman he might even appreciate knowing why you ask. If he isn't, bring him a big Seminole bass if he gives you the straight dope. A weatherman would be a good friend to have in February.

There are plenty of fishing camps

and lodging facilities around Lake Seminole, with some serving really excellent food. The major fish camps include Dunn's Landing, Reynold's Landing, Toole's Landing, and Wingate's Fishing Lodge.

The Corps of Engineers also maintains some camping grounds complete with water. February and March are good months to camp in this area.

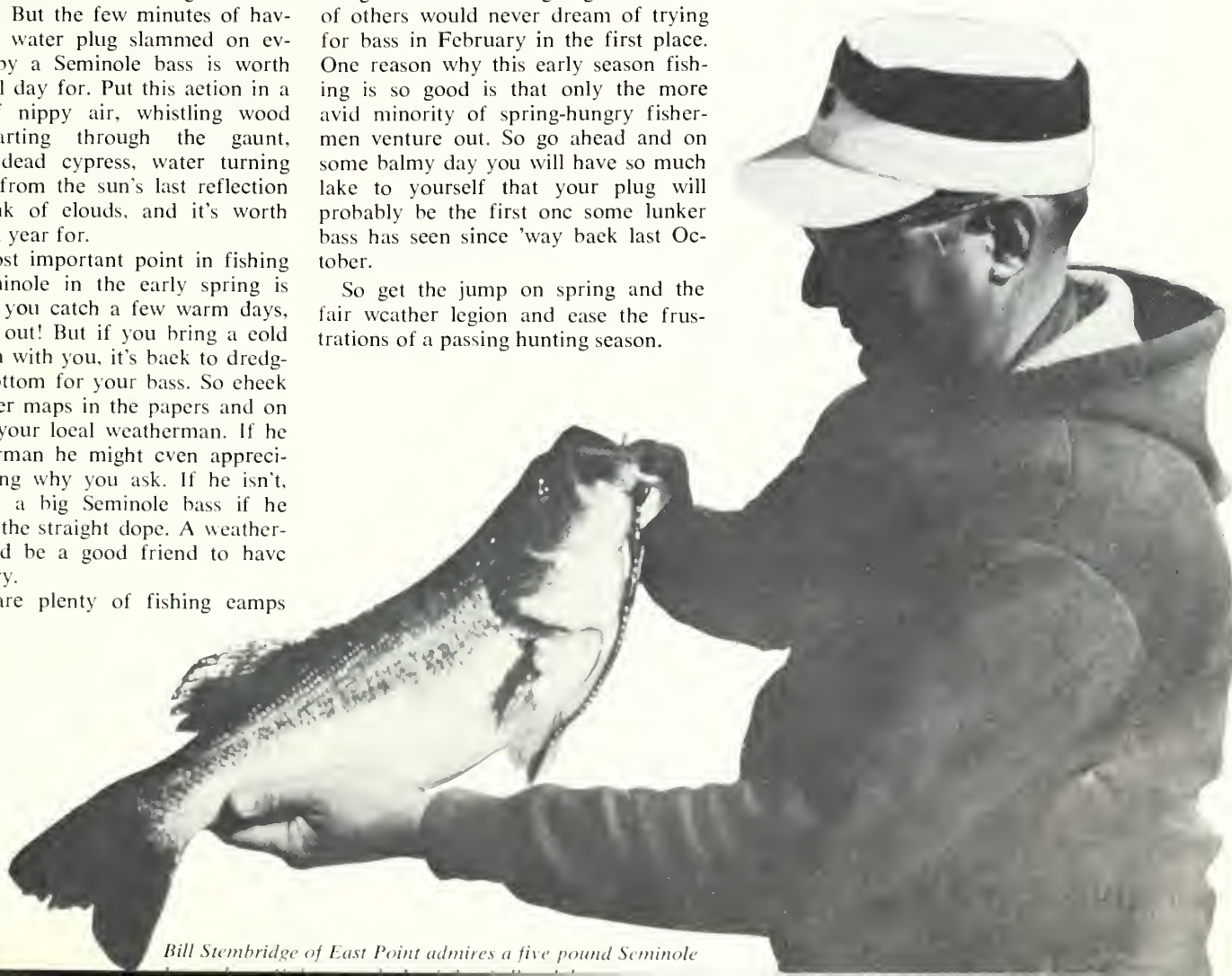
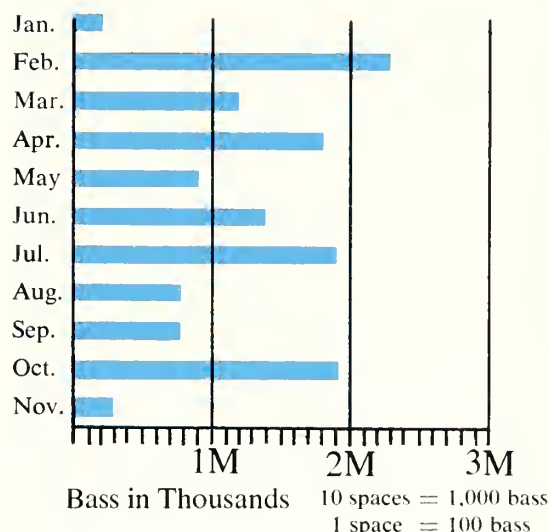
Maps of the lake area can be obtained from any office of the Game and Fish Commission. The most up-to-date information is available from the Reservoir Manager's Office, Corps of Engineers, Chattahoochee, Fla. First-class guide service is available from some of the fishing camps and lodges.

Information on fishing and water conditions can be obtained by contacting Wildlife Rangers Gordon Wilkin, Colquitt, or Harvey Pace, Donaldsonville. Additionally, any of the camp operators can be relied on to give you good information. These people want to see you catch fish, it's good for their business.

Of course February is still February, and it has its share of early spring rain, wind and cold weather. But before deciding the weather is too uncertain to risk the trip, remember that scores of other fishermen are thinking the same thing and won't be going. Hundreds of others would never dream of trying for bass in February in the first place. One reason why this early season fishing is so good is that only the more avid minority of spring-hungry fishermen venture out. So go ahead and on some balmy day you will have so much lake to yourself that your plug will probably be the first one some lunker bass has seen since 'way back last October.

So get the jump on spring and the fair weather legion and ease the frustrations of a passing hunting season.

If you are on the lake in February or early March and it turns cold, you are likely to encounter a fisheries biologist or two stubbornly casting a top water plug to a weedy bank. He knows better, but there just might be a bass or two still on the edge; it might warm up tomorrow, and besides, it's February on Lake Seminole, and this February, I'm going . . . that's a promise!



Bill Stembridge of East Point admires a five pound Seminole

*Skill, cunning, strength, speed, grace
— these are the qualities that place
the ruffed grouse high in the
esteem of Georgia hunters
as an unexcelled game bird.*

climb

HIGH



You can't separate the two in flight very easily, but Trulove points out the difference between the band on the tail of the male and female grouse. He points to the broken band on the female.

The bird gets its name from the ruff of dark feathers on its neck. The familiar drumming of the male in the spring is a sound that is well known to people who live within the range of the ruffed grouse.

The range of the ruffed grouse is quite extensive in North America, yet is limited mostly to the northernmost portion of the continent. The ruffed grouse is found in most of the northeastern states, portions of the northwest, and in the majority of Canada. In the east the range extends southward along the Appalachian section into northern Georgia.

In Georgia the grouse range is limited to the north central and northeastern part of the state. To be more specific, hunting efforts should be confined to an area enclosed by an imaginary line from Toccoa westward through Dahlonega to Jasper then northward through Chatsworth to the state line. A large percentage of the land in this area is Forest Service land and is open to the public for hunting during season. Union, Towns, and Rabun counties are popular among grouse hunters.

The best way to locate grouse is to do some pre-season scouting in August or September. An area where logging operations have been conducted is an ideal place for grouse. The cutover area not only provides brushy cover for grouse but the openings promote the growth of numerous plant species which grouse feed on.

Before starting out, it would be wise to obtain a map that will show roads and streams not ordinarily found on a regular road map. Old logging roads and abandoned house sites are areas where grouse may be found. Grouse usually feed in the mornings and after-



Hunter and dog invade the thick north Georgia mountain woods, native home of the ruffed grouse. Dot, the pointer, has a bird nailed down for her master, Arthur Truelove of Gainesville, one of Georgia's best grouse hunters.

or grouse

By Scott Fussell Game Biologist



peaceful, scenic solitude of the Blue Ridge is one of the big attractions to Truelove and to many grouse hunters. Add that to the beauty of the bird and the habitat to come up with a real sporting combination.



After the shot, Dot brings the bird to bag with a retrieve, in spite of the thick tangles which only make it hard to carry the bird back, but anything but easy to find the downed bird.

noons and are found hidden in laurel thickets along streams during midday.

A knowledge of the food habits of grouse will be helpful in knowing where to find them. In the fall their diet is comprised mainly of seeds, late-ripened fruits such as apple, hawthorn, dogwood, greenbriar, and viburnum. The mast of nut-bearing plants such as acorns and beechnuts also make up a large part of the grouse diet. Winter food is made up of hardwood browse in the form of buds, bark, and twigs. Herbaceous materials such as the green leafy vegetation found along streams also make up a good portion of the winter diet.

Now that we have some idea as to where grouse are found let us determine how they should be hunted. Grouse hunters prefer using a larger gauge shotgun such as a 12 or 16 gauge. Although you don't often get a second shot at a grouse if you miss the first, it would be wise to have a double barrel, pump, or automatic in case you flush more than one bird. A 26- or 28-inch modified or improved cylinder barrel is used more often with grouse hunters. Number 6 or 7½ shot seems to be about average with hunters while one experienced grouse hunter has had good success with high powered number 9 shot.

Remember that most shots will be in thick cover and 20 to 30 yards away; therefore one needs to use the gun and shot size that will give him the best pattern under these conditions. Grouse hunting will prove more successful if a good grouse dog is used. The Springer Spaniel, although not too well known in this area, would be ideal as a grouse dog. The widely known pointer and setter have been trained suc-

cessfully as grouse dogs in some cases. In order to have a good grouse dog, he should be trained to hunt grouse only.

Grouse hunters should limit their parties to two persons since grouse are wily and often flush out of gun range. The less noise made the better. When the dog points a grouse, try to get there as quickly as possible without the grouse seeing you until you are within a good shotgun range.

In the early part of the season grouse can usually be found in groups of three to seven. Later in the season they are usually found in singles or pairs.

When several birds are flushed it will not pay to try and find the remaining singles unless their exact location was noted when they settled again.

In most cases grouse are found at high elevations near the headwaters of streams in the early part of the hunting season and at lower elevations in the latter part of the season. Grouse appear to hold better in cold weather. One successful hunter I know prefers hunting in 5 to 15 degree weather.

One method of hunting is to walk up a stream and back down the other side staying about ten or twenty yards from the center of the stream. With some knowledge of the terrain one might plan a continuous walk from one road over to another; thereby hunting in an area least hunted by others. In this case a good map will come in handy.

Like any other sport, successful grouse hunting can only be accomplished by experience. It is an extremely tiring and trying sport because one may walk several miles through rough country or up steep ridges and never get a shot.

By Mike Bowling
Fisheries Biologist

Catch Mr. Tasty

Wading for walleye in the rocky Tugalo River below Yonah Dam. The far bank is in South Carolina, but the river bed belongs to Georgia.



walleye, a member of the perch family, is a recent addition to Georgia lakes. He is perhaps the tastiest freshwater fish in Georgia, highly prized for his eating qualities.

Walleye are similar in appearance to yellow perch except that they have teeth and the two fins on their back are clearly separated. They are usually gold or brassy olive buff in color, with large "wall" eyes.

The walleye is not a particularly difficult fish to catch if fished for at the right time. The best time for walleye fishing is late winter and early spring when the spawning run is on. The walleye moves upstream to spawn when the water temperature reaches forty-five to fifty degrees. If there is a dam or shoals or other obstruction to limit the current upstream, the walleye will concentrate below this and fishing will be excellent. The spawning run usually occurs in North Georgia from late February or early March.

White and yellow half-ounce jigs are the most productive spawning-run walleye lure when bounced slowly along the bottom rocks. Be sure and take plenty of extra lures.



The largest spawning run takes place in the Tugaloo River with fish moving up from Lake Hartwell to Yonah Dam, where they concentrate in the tail race.

Lake Burton walleye also make a spawning run at this time. However, there is no dam on the Tallulah River to obstruct progress and concentrate them. Hence, the fish are more difficult to locate at Lake Burton since they are scattered up and down the stream at spawning time.

Another popular walleye spawning run occurs in northwest Georgia in the Coosa River system in late January, February and early March. The best places to catch the walleye are the old lock and dam at Rome and below the new Carter's Island Dam south of Chatsworth.

Other streams in this area which have a spring spawning run are Cedar Creek near Cedartown, and the Etowah River up to Allatoona Dam.

The Etowah walleye run should be much better with the planned clearing of silt pollution from industrial strip mining operations below Allatoona Dam. This should greatly enhance the stream for fishing in general and the walleye and white bass fishing in particular. Walleye and white bass are especially sensitive to silt pollution. When this is cleared up, the Etowah should be one of the finest white bass and walleye streams in Georgia.

Walleye on the spawning run may be caught by bank casting or wading in shallow water or from a boat in deeper sections.

Although walleye fishing is best during the spring spawning run, these fish can be caught at other times. The walleye is a night time predator, feeding primarily at night and resting in dark places during the day. Topwater fishing is effective at night, but a deep running plug is essential during the day.

The most effective lure for walleye during the spawning run is the "dolly" or lead headed jig. The large (at least ½ oz.) jig is necessary to break the current found in these streams and get to the bottom. White is the preferred color, but yellow is also very popular.

The jig should be cast out into deep holes, and worked back slowly with a series of jerks or sweeps of the rod. The rod should be jerked or swept back quickly, picking the jig up from the bottom. The lure should then be allowed to sink back to the bottom while the slack in the line is reeled up. This motion should be continued until the lure is returned to the bank.

This method is also most effective for walleye when fishing in a lake.

Lake Blue Ridge has a good population of walleye, and fishing is quite

Below: Walleye are concentrated in their run up stream from Lake Hartwell to spawn by Yonah Dam. Fishing is best on the weekend when generators are not operating and the water flow is low, allowing wading and easier boat operation as well.



Below: Not all walleye fishermen are this lucky, but stringers can be longer than this if conditions are right for a good walleye run.

good during the winter months in water twenty to thirty feet deep. Walleye can be caught in Blue Ridge during January and February around rocky points.

Daytime fishing in the summer is fairly productive trolling along steep rocky banks which afford dark hiding places for the nocturnal walleye. A variety of lures seem to be effective if they run deep enough to get down to the walleye's lair. Heavy jigs with flashing spinners are quite good. As strange as it may seem, mid-morning till mid-afternoon seems to be the best hours to fish for walleye in the daytime.

Jig fishing for walleye can be quite expensive, since many lures will be lost on snags and rocks on the bottom. However, it is quite easy to mold your own jigs and tie them with white hair from deer tails. Jigs made this way cost about five cents each compared with "store boughten" jigs which cost fifty to seventy-five cents apiece.

Walleye fishing can be fun and successful if one is willing to open the fishing season early and brave the cold to fish the spring runs.



pheasants in your future?

By Dean Wohlgemuth

Even though there's plenty of good hunting near home in Georgia, rare is the sportsman who doesn't dream of taking a trip to a far-off country in search of game he's heard a lot about, and always wanted to try.

Few veteran sportsmen will argue that the best place to go hunting or fishing is at home, where you know the terrain and know your quarry and its habits.

Yet there is a wanderlust in all of us. We're adventuresome souls or we wouldn't be the sportsmen we are. This is natural, and hardly could be called a bad trait.

High on the list of game sought by hunters who dream of long trips is the pheasant. And no wonder! He's a wily, tricky, gamy bird with plenty to offer. He's bright colored, a beautiful bird for the bag or for a mount in the den. And on the dinner table, there is nothing to beat him. At times, he'll outsmart you completely. Then again, he makes a mistake and bang! He's in your bag. You may walk a long, long way without seeing one, then suddenly find yourself surrounded by dozens, filling the air with their hoarse crowing and loud wingbeats. When he takes off, he catches you by surprise everytime, and scares you out of your boots with the loud whirring of his wings.

Wouldn't it be nice, you say, if Georgia only had a good pheasant population and there was good hunting for this bird right here at home?

This is a dream of biologists of the Game and Fish Commission. And when these experts have such a dream, they go to work.

Not only pheasants are included in the dream. Experiments have been under way for several years now to find various kinds of exotic game birds which will provide new sport, and more important, fill gaps left by native game.

Just how feasible is it to try to bring in a game bird that is not native to the state? There is always criticism of such efforts. Some comment that if nature wanted these birds here, they would have been here naturally. It just won't work, they say.

Hold on a minute. You've heard of the very fine pheasant hunting in other states. Were those birds native to these regions? Of course not. They were brought from China originally, but took hold and flourished in a new home.

At present there are two types of exotic game birds in existence in Georgia's wilds. However, at the moment, populations amount only to a few birds that were stocked by the Commission to determine whether the birds can adapt to Georgia climate and habitat, and reproduce. The two species already stocked are pheasants and junglefowl.

The jungle cock is similar to the pheasant in that its colors are quite gaudy. He's just about the same size, and looks much the same as a bantam rooster. But he likes a different type habitat, and appears to be very suited to climates and conditions in Middle and South Georgia.

First release of junglefowl in Georgia was in October of 1963, when 15 birds were released. Another release of 30 birds was made in December, 1964.

Both these releases were made in the vicinity of the Bowen Mill Game Farm. Birds have been noted as far as six miles away from the farm.

Since these initial stockings, two other areas were used for releases. Two groups of 50 birds each were planted near Lake Seminole, the first in 1963 and the second in 1965. At Clark Hill, birds were released in 1963 and 1964.

Releases were made in the fall to help the birds become more accustomed to conditions in the wild before the coldest part of the winter.

Since it appears that there is little hope the Chinese ringneck pheasant can adapt to Georgia, the bird stocked here is a cross between this bird and the Iranian blackneck pheasant. Indications so far are that this bird may eventually become established but it will still take some time.

The junglefowl has so far given even more hope to the biologists than has the pheasant. There's good evidence that this species has adapted himself well enough to reproduce and apparently will take hold. When there is proof positive, stockings of both junglefowls and pheasants will be more widespread.

In the case of both birds, experimental stockings were made over a period of three or four years. A few hundred birds at a time were released each year. These birds were watched carefully as possible by the biologists. They sought evidence that the birds were surviving and reproducing.

They depended more on ears than eyes for this evidence. It is good news when a bird, especially with a brood of



This pheasant is just about to enter a new world—a world that the Game and Fish Commission hopes will provide a good home for him and thus provide a new game bird for Georgia hunters. Biologist Scott Fussell holds the bird by its wings as he takes it from the cage and prepares to release it.

young, is sighted. When there are youngsters, that is proof positive that there is at least some reproduction, that the birds survived the transition to life in the wild long enough and well enough to have offspring.

But eyes cannot see as much as ears can hear. These wary birds aren't the type to allow themselves to be seen injudiciously. Yet, especially in the early morning, a pheasant has to crow occasionally. His loud, raspy unmusical call can be heard for quite a distance on a clear, quiet morning! So biologists station themselves in the open, waiting, listening and counting each call they hear, as evidence that the birds are still there. Spring is the best time to count the calls. This is the season when these birds, like all other species of nature, begin to blossom out, and make their presence known.

Pheasant stocking experiments were made in northwest Georgia, where habitat appeared to be more suitable than in other areas of the state. The first group of pheasants were released in 1963 in Gordon County near Calhoun. Since that time, four groups were put out, bringing the total released to more than 1,000 birds.

Of course, the period after a stocking sees a decline in the number of birds. Wild birds cannot be transported very far. They will soon die in captivity. So eggs must be hatched and birds pen raised to produce more eggs. Then the pen raised birds are stocked.

Mortality is high among the stocked birds since they are unaccustomed to having to support themselves. They have to learn to find their own food and how to hide from predators. But those that do survive produce young, and these young that survive are the birds that will begin to bring about a wild population. Eventually, the birds



Game Biologist Joe Kight and Fitzgerald game farm manager, H. J. Sewell, examine a Tinamou, new game bird imported from Argentina, which the Commission hopes will take hold in Georgia and fill a gap occurring now in falling quail populations in the state.

get stronger, wilder and wiser. Then the species is on its way to becoming established.

The jungle fowl story is similar. The habitat that appeared best for them is that around Bowen Mill Fish Hatchery in South Georgia. Like the pheasants, they must be pen raised birds, and must evolve into a wild strain again.

Call counts and sightings indicate jungle fowl are doing very well in this area.

Gradually, after becoming established, populations are certain to flourish and the birds will spread out over a larger area. Already, pheasants have been found 15 miles from the point where they were stocked. But if it were necessary to wait until the birds spread naturally to new areas, you'd never have any hope of getting to hunt them in your lifetime.

So, once it appears certain a particular species can successfully take hold, more pen raised birds will be stocked in other areas, and gradually new areas will have birds. All this, however, is of course no overnight project. It may still be several years until there is an open season in Georgia for exotic birds of these types.

Further, there are places in the state where neither pheasants nor junglefowl will be able to live and reproduce successfully. And there are gaps in such places which need to be filled. So the Commission, aided by the U.S. Fish and Wildlife Service, continues to research new species and new possibilities.

Dr. Gardiner Bump of the Fish and Wildlife Service, has the job of traveling around the world for the Service, investigating new species, and comparing their native habitat with similar habitat in this country that is in need of new game birds.

In his travels, Bump found a bird

in Argentina that has a home similar to much Georgia area. Actually, the bird is divided into eight subspecies, two of which appear to be of the type that can live successfully in this state. These are the Tinamou (pronounced tin-a-mew).

The two species in which Georgia is interested are the grassland and brushland species. A few of these birds were sent here just this past year, and are being raised at the state's game farm. If enough eggs can be obtained and hatched out, initial test stockings can be made to see if these birds can survive in the Peach State.

Biologists encountered an unusual situation with the Tinamou. They found that since the birds are natives of Argentina, where the country is enjoying spring while this hemisphere is having fall, the birds naturally laid eggs in the fall here. It will take some years for the birds to become accustomed to the change in the climatic seasons, and lay their eggs in the spring.

The Tinamou, it is hoped, will fill the niche in nature that is being vacated in many areas by bobwhite quail.

In many areas, land is converting to pasture land, not providing enough food and cover for quail. This is where it is hoped the grassland strain of Tinamou can be introduced. On the other hand, land that was once farmed now is standing in trees, again crowding out the bobwhite. Here's where the brushland species may be able to fill the bill.

Perhaps the Tinamou is the answer to both problems, or maybe to only one. Then again, there is no assurance yet that this bird can or will ever become a Georgia game bird.

Whether it is or not, research will continue, as the Commission will do its best to assure Georgia sportsmen of the best and most diversified hunting possible.



The jungle fowl looks like a bantam chicken and is about the same size and coloration. It has been the most successful in the Okefenokee Swamp near Fitzgerald.

meet your commissioner:

JAMES A. WILLIAMSON

Jimmie Williamson represents the Coastal District in the conservation and development of Georgia's wildlife resources.



By Jim Tyler

James A. Williamson ("all my friends call me Jimmie") is a mover. He is always on the go. Overflowing with nervous energy, he rushes from job to job, county to county, and thought to thought. His mind seems never at rest, and he physically propels his body at the same pace. With this trait and a cigar ever present in his mouth or held between fingers, his distinctive Georgia coast dialect, his humor, and ready smile, he bustles about and has broken into that rare category called "an individual."

The "Georgia Boy," a nickname he picked up while in the services, was appointed game and fish commissioner by Governor Ernest Vandiver in 1962 to represent Georgia's six coastal counties. Being a commissioner for the coastal area is somewhat different from the other inland game and fish commissioners. Besides the sportsmen, he represents commercial fishermen who support a 25 million dollar coastal industry. Shrimp, crab, oysters, fish, you name it, Georgia has it.

This is no small industry, and it is no small job for the Commissioner. Jimmie does the job admirably. He represents the fishermen with firm conviction. These men are his friends and do not hesitate bringing their problems to him. As their commissioner he

doesn't hesitate to try to find a solution.

While he has been on the Commission, the state of Georgia has started significant new scientific investigations of its salt waters. The Game and Fish Department now has a fine marine biology staff. These biologists are scientifically taking a look at the shrimp, crab, clam, and oyster situation. This will certainly help the fishermen and, actually, everyone in Georgia.

Jimmie also does well by the sportsmen. He has taken an active interest in the establishment of duck hunts on Butler Island. And he is pushing to make the Altamaha Waterfowl Management Area an all around recreation area. In about two years a 300 acre freshwater fishing lake on Champney Island will hopefully be ready for the public.

Today at 47, Commissioner Williamson is self employed as a successful timber dealer. He buys standing timber. After purchasing the timber he then, with his own employees or through sub-contractors, goes in and reduces the trees to even cut six-foot sections that are shipped off to pulp mills. His total volume is about 600 cords a week.

Between college and today, Jimmie saw action in World War II as a gunner in the Air Force. With rightful pride he will tell of his 53 missions

over enemy territory. He was mayor of Darien for three consecutive terms. As a legislative aid to Governor Ernest Vandiver, he traveled the globe. And he was sergeant-of-arms for Georgia's caucus to the convention when John F. Kennedy was nominated for the presidency.

Within the gun and rod world, Commissioner Williamson will brag about sport fishing along the coast, but like a true Georgian, he feels a good quail hunt is hard to top. He has been known to drive a goodly distance for the opportunity of a dove shoot, and he enjoys deer hunting.

In the small community of Darien, Jimmie's office fronts the main street. Down the street, around the corner and at the far corner of the same block, he resides in a white house of many windows with his wife Elizabeth (he calls her Lib), daughter Susan, and daughter Sandra when she is home from the University of Georgia. And just two stone throws away, the Altamaha River flows by and nearby empties into the Atlantic Ocean. This is how close Jimmie is to the men who ply the salt water.

The coastal counties are lucky to have him as a Commissioner. Surely, as long as he is able, Jimmie will be a concerned, active commissioner. And, moving right along, he will cut trees, enjoy life, and be an individual.

Commissioner Jimmie Williamson of Darien is an early riser, especially when hunting is the reason.

Deep in a south Georgia forest, Jimmie supervised one of his crews as they section fallen trees to be shipped to the pulp mills.



Nickie Rich of Marietta caught the second largest Georgia bass out of Chastain's lake near Marietta while fishing in the rain with spring lizards. His fish took first prize in the Field & Stream contest for 1965.

DON'T Eat That Record!

By Jim Morrison

"I brung the fish home 'n cleaned 'n eat 'm. I didn't know I had a record. If I'd a knowed that was hit, why I might o' weighed him somewheres or another, I guess."

Do those horrifying words sound familiar to you? If so, chances are you just looked at a man who will never get credit for what might have been a world's record, or at least state record fish.

It's not as impossible as it may sound. Even disregarding the usual collection of fish stories, there are a good number of Georgians around who have either knowingly or unknowingly seen such fish on their way to the frying pan, unheralded by the waiting world.

Ending up in the frying pan isn't as ignominious as it may seem at first, since both of Georgia's two world's record fish ended up that way, along with many of the state record fish. The important thing about these catches was that in most instances they were properly weighed in the presence of witnesses, measurements and photographs taken, and the information notarized before the big banquet.

That something like that could actually happen seems impossible to hundreds of fishermen like myself who have carried a washed-out copy of the entry form for a national fishing contest in their tackle box for the last five or six years, complete with ballpoint pen.

Who knows how many other world's record fish have been caught in Georgia and were eaten without fanfare? One such instance occurred last spring to an employee of the Game and Fish Commission who was fishing in a small private pond just south of Atlanta, when he came across a fisherman who had a huge crappie on his stringer, the largest he had ever seen.

"It weighed five pounds if it weighed

an ounce," declared the observer.

"I told the man that it might be the world's record crappie, but he didn't seem to be too impressed by it. When I checked the next day and found that the record was just a little over five pounds, I went back to see him right away. He seemed a little disturbed at first when I told him he might have the prize fish, but after a minute or so he didn't seem to be bothered much by the idea. He told me he gave it to his brother-in-law to cook that night. He didn't weigh it or make any photographs or measurements."

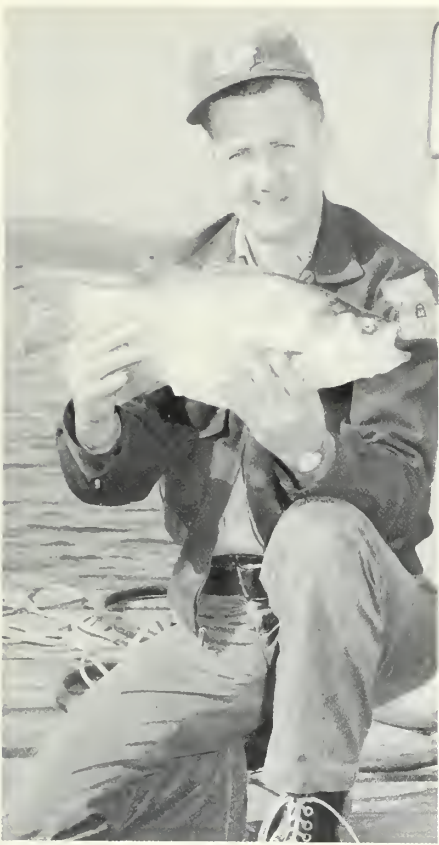
Other instances are reported by wildlife rangers and fishery biologists. One Georgia game biologist caught a two and three-quarter pound bluegill bream himself, taking it home and eating it, only to find later that he could have placed third last year in a national outdoor magazine's fishing contest with his fish!

Needless to say, you need to catch your fish on a rod and reel by legally accepted sporting methods if you expect to win any loot in the national contests, although your catch might be interesting biologically. This can sometimes be heart-breaking, as in the case of a Georgia fish biologist and his biological aid who were engaged in surveying the bass population in a large reservoir when they captured a 17 pound bass. Besides there being no possible way to enter the fish in any contest (a sure winner), the pair saw disaster strike a second time when the monster bass escaped their live basket through a gaping hole in its side before they could show it to anyone!

Another very serious problem concerns the proper identification of the fish. It's often hard for the layman or the expert to tell the exact species, especially if a photograph or a description is all there is to prove the species.



The Georgia record rainbow trout weighing 12 pounds and four ounces was caught in the Coosawattee River near Ellijay last year by John Whitaker, using a 10 pound test line and chicken liver for bait.



Ranger Russell Honea displays the largest white bass caught last year in Georgia and the second largest ever caught in Georgia. Dr. H. L. Taylor of Gainesville landed the whopper on a Little Cleo in the upper end of Lake Lanier.



A record bass? Nobody will ever know after the body was baked and eaten. And identification of the species is difficult from a photograph, even without a body.



The third largest Georgia bass was landed at Lake Lanier by Emory Dunaloo of Gainesville, using a deep-diving white Vaterdog plug. The monster tipped the scales at 17 pounds and 9 ounces.

A ease in point about mistaken identity that occurred a few years ago happened to a new trout fisherman who was fishing with "friends" in the Chatahoochee River below Buford Dam for trout. Some of his companions managed to fasten a saltwater spanish mackerel to his hook, convincing him that he had caught the record! Only after the embarrassed fisherman had brought the fish to a biologist of the Game and Fish Commission did his pals reveal their prank.

On the more honest side, Georgia fish biologists frequently settle heated arguments over the identity of the supposed new world's record "smallmouth bass" by pronouncing it to be a warm-water spotted bass, which has a small mouth but has markings like a largemouth bass.

Many of the current state and national records could easily be beaten, if more anglers would properly record their catches and see that the information is passed on to the proper authorities. For instance, the world's record bowfin or mudfish is probably swimming around somewhere in the Okefenokee Swamp right now. Who knows, the world's record largemouth bass might be in there with him, even though this Georgia record has stood longer than any other. Several close approaches to the world's record white bass of five pounds, two ounces have already been made, and bluegill bream, crappie, and spotted bass records are in reach of Georgia anglers. In many categories, no records have even been recorded, so your catch might be the state record, at least for a few weeks until something bigger comes along.

In order to help encourage anglers to report their record or near record catches, Georgia Game and Fish Magazine will issue a master angler's certificate suitable for framing to fishermen reporting catches which exceed the minimum weights listed for each Georgia freshwater species. Certificates will be issued on fish which break the state record or which might be the national winner of the year only in cases where the fish is weighed, measured, and photographed in the presence of two witnesses and the information notarized.

Arrangements are now being made for a fishing contest for Georgia complete with prizes for the largest fish of the year of the more common species. We'll have more information on the contest in the March issue of *Game and Fish*. In the meantime, to keep you thinking about the big one that didn't get away, here's a list of the current state records on file with the State Game and Fish Commission, along with the minimum certificate weight and the world's records:



| Minimum Weight for Certificate | State Records | World's Record |
|--------------------------------|---|-----------------|
| 10 lbs. | BASS, LARGEMOUTH 22 lbs., 4 oz. George Perry, Brunswick, Montgomery Lake, Ga., June 2, 1932. World's Record Second 17 lbs., 14 oz. Nickie Rich, Marietta, Chastain's Lake, April 27, 1965 Third 17 lbs., 9 oz. Emory Dunaloo, Gainesville, Lake Lanier, December 19, 1965 | Same |
| 5 lbs. | BASS, SMALLMOUTH No Official State Record | 11 lbs., 15 oz. |
| 5 lbs. | BASS, SPOTTED 8 lbs., Al Craver, Atlanta, Upper Chatahoochee River, June, 1960 | No Record |
| 2 lbs. | BASS, REOEYE (COOSA) No Official State Record | No Record |
| 5 lbs. | BASS, FLINT RIVER SMALLMOUTH No Official State Record | No Record |
| 3 lbs. | BASS, WHITE 4 lbs., 14 oz. Albert Pittman, Gainesville, Lake Lanier, Jan. 11, 1966 | 5 lbs., 2 oz. |
| 1½ lbs. | BLUEGILL No Official State Record | 4 lbs., 12 oz. |
| 10 lbs. | BOWFIN No Official State Record | No Record |
| 20 lbs. | CARP No Official State Record | 55 lbs., 5 oz. |
| 20 lbs. | CHANNEL CATFISH No Official State Record | 57 lbs. |
| 3 lbs. | CRAPPIE, BLACK 4 lbs. (Unofficial) Jack Boutelle, Ocatour, Lake Sinclair, 1961 | 5 lbs. |
| 3 lbs. | CRAPPIE, WHITE No Official State Record | 5 lbs., 3 oz. |
| 15 lbs. | GAR, LONGNOSE No Official State Record | 50 lbs., 5 oz. |
| Any weight | MUSKELLUNGE 38 lbs. Rube Golden, Atlanta, Blue Ridge Lake, June, 1957 | 69 lbs., 15 oz. |
| 2 lbs. | YELLOW PERCH No Official State Record | 4 lbs., 3½ oz. |
| 5 lbs. | PICKEREL, CHAIN (JACKFISH) 9 lbs., 6 oz. Baxley McQuaig, Jr. Homerville, February, 1961 World's Record | Same |
| 1½ lbs. | SUNFISH, REDBREAST No Official Record | No Record |
| 2 lbs. | SUNFISH, REDEAR (SHELLCRACKER) No Official State Record | No Record |
| 4 lbs. | SAUGER No Official State Record | 8 lbs., 5 oz. |
| 15" or 5 lbs. | TROUT, BROOK No Official State Record | 14 lbs., 8 oz. |
| 18" or 5 lbs. | TROUT, BROWN 12 lbs., 8 oz. Terrell Gragg, Rabun County, Seed Lake, 1960 | 39 lbs., 8 oz. |
| 24" or 6 lbs. | TROUT, RAINBOW 12 lbs., 4 oz. John Whitaker, Ellijay, Coosawattee River, May 31, 1966 | 37 lbs. |
| 5 lbs. | WALLEYE No Official State Record | 25 lbs. |

earn a wild dollar



By Jim Tyler

When a 15-year-old goes after that all elusive dollar he will, after putting the squeeze on his old man, maybe look around for a part time job. And if he really wants one, he will find it. Chances are he won't be overly happy about it, what with girls, football, hunting, and such. But he needs the extra green.

Surprisingly, there are several jobs waiting just on the outskirts of most any town. It's outside work. With Georgia's rich supply of rivers, streams, creeks, marshes, and ponds, there is money to be had . . . trapping.

Now the fur business isn't exactly in a heyday, but there is money roaming around, and probably more important, a chance for a boy or for that matter, anyone, to be in the midst of Nature, to sharpen his wits against the animals of the wild, and to enjoy it as a sport.

Some boys have made the discovery. Kenny, for example. Kenny Frasard of Lithonia is a trapper. He is fifteen. And he is lucky. His brother, Chuck, traps too. Chuck, for the past two years, has been bringing his kid brother up the trapping learning ladder. Now they don't live in the wilds, nor do they trap wild country. Some of their traps sit waiting under the very concrete bridges which hold the load of an interstate highway's constant swish-swishing traffic. Some are set under and near decadent wooden bridges along dirt roads — stream and river bridges are on right-of-ways that are open to the public. And they have traps set along rivers and streams where landowners will let them. Trappers should be careful here. They have to have written permission. Kenny, with disbelief, will even tell of a landowner with a beautiful house overlooking a farmpond, who actually offered to pay him to trap the growing numbers of muskrat. "Heck," Kenny says, "I just wanted the muskrats I trapped."

They don't make much. Last year \$60 for Kenny, \$150 for Chuck. The two Frasards will not deny that the money is nice, but they do it more for the sport. Surely the more they learn, the more they will earn.

Let's follow Kenny and Chuck and see how they got started in trapping. Chuck moved to Georgia two years ago to join his family who had been in Lithonia for a year. He started out with an advantage and a disadvantage. He had trapping experience, but he didn't know the country or the landowners.

That was two years ago. Now he has an established line spread over quite a distance. He flits from creek to river in a Volkswagen in the dark morning hours before he starts his eight to five job. Kenny joins him on weekends and

sets six or so traps close by his house (he walks across a golf course to reach water) during the school week.

Fran, the brothers' father, trapped in his youth and started Chuck on his way with a couple of books on trapping. Since then experience has been his teacher, along with trapping magazines.

Their Georgia trapping career started last year when Kenny caught a muskrat in a box trap set for rabbit. They didn't even know, at the time, there were animals to trap in Georgia. Chuck dug out his gear. Kenny had a piece of luck, he bought 18 traps for two dollars from a neighbor.

In a shed next to their trailer house, they skin and stretch their pelts on homemade stretchers. Muskrats are their main trappings. And proudly, Chuck recently caught his first mink for this season.

Last year only 407 Georgians bought trapping licenses. So, competition shouldn't be keen for a newcomer. The keenness will be in the individual's effort to trap his quarry.

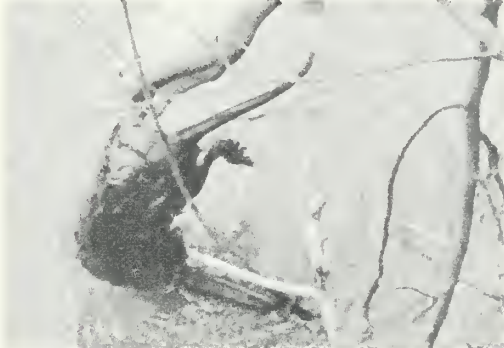
Some people, of course, spend more time trapping than others. Many seasoned trappers do quite well, but of those who reported to the Game and Fish Department last year, the highest amount reported by one man was a little better than \$2000. A check with Atlanta fur dealer Quince Plott will show that a few made 4, 5, and \$6,000 last year. He tells of one college student and his partner who made close to \$15,000 in one season. But these are exceptional trappers.

Georgia's trapping season this year started on November 19, 1966, and ends February 28, 1967. There is no closed season for beaver, fox, mink, muskrat, opossum, otter, raccoon, and skunk are regulated by season. A trapping license costs \$4.25 for those 16 years old and older.

Equipment-wise, traps are naturally the first consideration. A number 1 long spring trap is used for mink and muskrat and sells for \$.65 apiece. A heavier trap, a number 1½, is used for mink and muskrat—it sells for \$1 apiece. Number 2 is quite good for fox and sells for \$1.25 apiece. For the larger animals, beaver and otter, a number 4 can be used and sells for about \$2.50 apiece. Check with a hardware store or a fur dealer for traps. Or better yet, check around and see if a neighbor has some that have been lying around. He might sell them for a low price. By law, each trap has to have the owner's name either stamped legibly on the trap or on an attached tag. You can buy muskrat frames to stretch pelts. They cost about \$.50 apiece. Or you can make them. For bigger animals a simple homemade frame



A veteran trapper, Chuck puts the finishing touch on a trap set. Look close and you can see a small twig in his left hand. On the stick is scent material to entice the animal near the trap.



Gingerly, Kenny lifts a muskrat. Traps are set so muskrats quickly drown.



Returning to the car after checking a series of three traps, Chuck has a tail hold on a muskrat and an opossum. The opossum was released unharmed—their pelts, at present, bring less than a dollar.



It only takes five minutes for Kenny to skin a muskrat.

does the job. Among other essentials are hip boots, knife, and something to dispose of live animals, a hand axe for example. Traps are set so trapped animals will quickly drown. However, fox and opossum will probably be found alive in the trap. Georgia law requires all set traps are to be inspected at least every 36 hours. Bait (perhaps apple) and commercially bottled scent material (Hawbaker for example) can be used to lure animals to the trap. Pelt prices are as bouncy as stock market prices. To avoid disappointment, fur prices should be followed and

pelts sold when prices are the highest. Chuck follows the magazine *Fur, Fish, and Game* as a guide. Trapping is a lot like trying out for the basketball team. The one who gets up early to practice, who watches his opponents with a keen eye (finds out how they think and act), keeps his equipment in good shape, and practices, practices, practices — this is the boy who will make it. Sure, there is work involved, but work always comes before enjoyment. Get permission and try the nearest creek or pond. The job and the sport are there for the taking.

Pray For These Predators



Known for its ability as a destroyer of rodents, few people realize the important roles owls and hawks play in keeping small game populations healthy. They help eliminate diseased and weak animals.

By Jim Tyler

Disturbed, the owl sleepily flew to another tree just a short distance away. Keeping his hulking image in my eye, I slowly walked close enough to be in range for a sure shot. The sunlight was brilliant. I made a good shot. Down he came, wings flapping vaguely . . . I was a dumb kid.

Shooting an owl or a hawk is a stupid thing. Really. And it can't all be blamed on dumb kids. There are always those who shoot everything that trembles, yet many, many adults are guilty for the plain fact that they do not know or do not believe that an owl or a hawk is actually necessary for a wild population of quail or rabbits (or any small game animal) to remain healthy.

Sure, they swoop down on some game birds and animals. But among six of the more common species of hawks with varying diets, only 1% to 16% of their total diet consists of rabbits, squirrels, and game birds, according to the National Audubon Society (rodents, small birds, and insects are high on "feathered mousetrap" menus). Among these game birds and animals taken, many are the weak, diseased, and un- . . . They capture easier. By eliminating the unhealthy of cherished game species, the overall stock is improved in a

hereditary way. You know, eliminate animals that would pass weaknesses on to their offsprings. So this destruction in most instances is not nearly as bad as some people claim.

Need specific proof? Okay, let's get specific.

In South Carolina, members of a beagle club established a trail ground on a 25 to 30 acre tract of abandoned farm land. They fenced it with rabbit proof fencing and in two and a half years put 542 rabbits inside. The rabbits had been box trapped in the surrounding counties, except 24 imported from Missouri.

All this time predators were carefully watched and kept out. Few bunnies were taken by them. Then, after two and one half years of accumulation, this bunny heaven developed trouble. Rabbits started dying.

The Southeastern Cooperative Wildlife Disease Study people at the University of Georgia were called to the scene. Dr. John W. Foster, Associate Professor of Microbiology and Preventive Medicine, School of Veterinary Medicine, University of Georgia, supervised a study that showed the disease tularemia was present.

Now, if this would have been a normal situation when the disease was first introduced to this population, hawks and owls and other predators would have killed the diseased, sick animals quite quickly. Here, however, the sick bunnies were not bothered, lingered before they died, and further spread the disease. Although an unnatural situation, this surely illustrates what can happen when predation is eliminated.

When the beagle club was informed of the source of their problem, they discontinued their efforts to keep predators away. It wasn't long before tularemia disappeared.

Fitting into the scheme of natural life, hawks and owls daily work a 24 hour shift, hawks by day, owls by

night. They hunt without cruelty or pleasure; killing is as much their way of life as our simple uncalculated breathing of air.

There are over a hundred different kinds of hawks and owls throughout North America, and Georgia has its share. They are found everywhere. And everywhere they are diminishing in numbers.

In 1963 the General Assembly of Georgia passed a law protecting all birds except the crow, English sparrow, and starling. Regretfully, it hasn't been taken seriously. Guns continue to take a terrible toll of hawks and owls.

But there might be a more efficient killer than a man with a gun. Scientists are wondering if pesticides might eventually eliminate hawks and owls. Since they have relatively long lives in comparison to other birds, they tend to accumulate pesticides within their bodies. They keep on storing, scientists have found, and the percentage of lethal chemicals increases and increases. The result? Loss of reproduction and in some cases, death. Like pesticides, air pollution and radioactive fallout are also potential eradicators suspected to affect birds.

In Georgia, reproduction of common species such as the Cooper's hawk, marsh hawk, broadwinged hawk, and the red-tailed hawk, has fallen off drastically. The finger of guilt points to these invisible destroyers. To say the least, a problem that will grow in magnitude.

The future for hawks and owls is dismal. Man in his blundering way, blunders greatly and always against Nature. He chops, paves, dumps, builds, destroys, and goes right along. He could chop our feathered mousetraps right out of the scene. He had better expect more trouble with small game populations and stockpile his mousetraps . . . among other things. Or else he had better wise up.

Behold the mighty hunter!!

Giving the hunter his due, he probably didn't know that hawks and owls help the hunter and are actually his friend. And, surely, he didn't know that it is against the law to kill them.



Sportsman's



Calendar

SEASONS NOW OPEN

QUAIL, BOBWHITE

Season—Nov. 19, 1966 through Feb. 28, 1967.

Bag Limit—12 Daily, possession limit 36.

GROUSE, RUFFED

Season—Oct. 15, 1966 through Feb. 28, 1967.

Bag Limit—3 Daily, possession limit 6.

SQUIRREL

Season—Oct. 15, 1966 through Feb. 28, 1967.

Bag Limit—10 Daily.

OPOSSUM

Season—Oct. 29, 1966 through Feb. 28, 1967. Exception: Coweta County opens Oct. 1, 1966 through Jan. 21, 1967.

No Bag Limit.

RACCOON

N. Ga. Season—Oct. 29, 1966 through Feb. 28, 1967.

Bag Limit—One (1) per night per person.

S. Ga. Season—No closed season.

No Bag Limit.

RABBITS

Season—Nov. 19, 1966 through Feb. 28, 1967.

N. Ga. Bag Limit—5 Daily.

S. Ga. Bag Limit—10 Daily.

WILD TURKEY

Southwest Ga. Season—Nov. 19, 1966 through Feb. 28, 1967 in the counties of Baker, Calhoun, Decatur, Dougherty, Early, Grady, Miller, Mitchell, Seminole, and Thomas.

Bag Limit—Two (2) per season.

In Memoriam

John R. Moore, Chauncey, Ga., wildlife ranger in Dodge County, died Oct. 9, 1966. Mr. Moore was a ranger nine years, joining the Commission July 1, 1957.

E. Hughes Pitts, Lexington, Ga., wildlife ranger in Oglethorpe County, died Dec. 29, 1966. Mr. Pitts served as a ranger for 16 years, beginning with the Commission in July, 1950.

GEORGIA OUTDOORS

The Radio Voice of The Game and Fish Commission

Many readers of *Georgia Game and Fish* may not be aware of the weekly radio program produced by the Game and Fish Commission. The program is centered around the hunting and fishing activities of Georgia and its sportsmen, and is heard at various times of the week on radio stations throughout the state. If you enjoy reading *Game and Fish*, you are sure to enjoy GEORGIA OUTDOORS on the following stations:

| | | | | |
|---------------|------|---------|---------------------------|---------------------------------------|
| Adel | WAAG | 1000 kc | Saturday | 3:30 P.M. |
| Albany | WLBY | 1250 kc | Saturday | 8:15 A.M. |
| Alma | WCQS | 1400 kc | Monday | 7:45 A.M. |
| Americus | WDEC | 1290 kc | Sunday | 8:15 A.M. |
| Americus | WISK | 1390 kc | Sunday | 7:00 A.M. |
| Athens | WGAU | 1340 kc | Saturday | 5:45 A.M. |
| Athens | WRFC | 960 kc | Sunday | 6:30 P.M. |
| Atlanta | WPLO | 590 kc | Sunday | 7:30 A.M. |
| Blackshear | WBSG | 1350 kc | Saturday | 5:00 P.M. |
| Blakely | WBBK | 1260 kc | Saturday | 8:15 A.M. |
| Bremen | WWCC | 1440 kc | Saturday | 8:15 A.M. |
| Brunswick | WGIG | 1440 kc | Daily | 6:15 P.M. |
| Cairo | WGRA | 790 kc | Monday | 2:30 P.M. |
| Calhoun | WCGA | 900 kc | Tuesday | 3:15 P.M. |
| Cartersville | WBHF | 1450 kc | Saturday | 10:45 A.M. |
| Cartersville | WKRW | 1270 kc | Saturday | 6:00 A.M. |
| Cedartown | WGAA | 1340 kc | Saturday | 12:00 Noon |
| Claxton | WCLA | 1470 kc | Wednesday | 6:45 A.M. |
| Cleveland | WRWH | 1350 kc | Friday | 1:00 P.M. |
| Cochran | WVMG | 1440 kc | Saturday | 1:15 P.M. |
| Commerce | WJJC | 1270 kc | Saturday | 1:00 P.M. |
| Cordele | WMJM | 1490 kc | Thursday | 7:15 P.M. |
| Cornelia | WCOK | 1450 kc | Saturday | 1:15 P.M. |
| Covington | WGFS | 1430 kc | Tuesday | 2:45 P.M. |
| Cumming | WSNE | 1410 kc | Monday | 1:40 P.M. |
| Dalton | WBLJ | 1230 kc | Friday | 6:15 P.M. |
| Decatur | WAVO | 1420 kc | Friday | 5:15 P.M. |
| Decatur | WGUN | 1010 kc | Saturday | 8:00 A.M. |
| Douglas | WDMG | 860 kc | Sunday | 7:15 P.M. |
| Douglas | WOKA | 1310 kc | Saturday | 5:15 P.M. |
| Dublin | WXLI | 1230 kc | Saturday | 12:30 P.M. |
| East Point | WTJH | 1260 kc | Saturday | 5:30 A.M. |
| Fitzgerald | WBHB | 1240 kc | Sunday | 6:15 P.M. |
| Gainesville | WGUN | 1240 kc | Saturday | 1:15 P.M. |
| Gainesville | WLBA | 1580 kc | Friday | 10:05 P.M. |
| Glenville | WKIG | 1580 kc | Saturday | 7:30 A.M. |
| Griffin | WGRI | 1410 kc | Monday | 5:15 P.M. |
| Griffin | WHIE | 1320 kc | Saturday | 5:00 P.M. |
| Hartwell | WKLY | 980 kc | Saturday | 9:45 A.M. |
| Hazelhurst | WVOH | 920 kc | Thursday | 6:45 P.M. |
| Hinesville | WGML | 990 kc | Friday | 12:15 P.M. |
| Jesup | WLDP | 1370 kc | Monday | 1:00 P.M. |
| LaFayette | WLFA | 1590 kc | Wednesday | 11:45 A.M. |
| LaGrange | WLAG | 1240 kc | Saturday | 12:45 P.M. |
| Louisville | WPEH | 1420 kc | Wednesday | 10:40 A.M. |
| Macon | WCRY | 900 kc | Saturday | 7:45 A.M. |
| Macon | WMAZ | 940 kc | Saturday | or 15 minutes after sign-on 5:40 A.M. |
| Madison | WYTH | 1250 kc | Saturday | 5:00 P.M. |
| Metter | WMAC | 1360 kc | Monday | 7:15 A.M. |
| Milledgeville | WVMG | 1450 kc | Saturday | 5:30 P.M. |
| Millen | WGSF | 1570 kc | Monday | 3:45 P.M. |
| Montezuma | WMNZ | 1050 kc | Friday | 12:30 P.M. |
| Moultrie | WMGA | 1400 kc | Saturday | 10:00 A.M. |
| Nashville | WNGA | 1600 kc | Sunday | 6:30 A.M. |
| Newnan | WCOH | 1400 kc | Monday | 12:30 P.M. |
| Quitman | WSFB | 1490 kc | Saturday | 9:30 A.M. |
| Rome | WRGA | 1470 kc | Saturday | 5:45 A.M. |
| Rome | WLAQ | 1410 kc | Saturday | 6:00 A.M. |
| Rossville | WRIP | 980 kc | Sunday | 6:15 A.M. |
| Savannah | WEAS | 900 kc | Saturday | 7:15 A.M. |
| Savannah | WSGA | 1400 kc | Friday | 6:30 A.M. |
| Savannah | WTOC | 1290 kc | Friday | 7:45 P.M. |
| Statesboro | WWNS | 1240 kc | Saturday | 1:45 P.M. |
| Summerville | WGTA | 950 kc | Tuesday | 5:30 A.M. |
| Swainsboro | WJAT | 800 kc | Thursday | 6:45 P.M. |
| Sylvester | WOGA | 1540 kc | Saturday | 12:30 P.M. |
| Thomaston | WSFT | 1220 kc | Sunday | 12:45 P.M. |
| Thomasville | WLOR | 730 kc | Thursday | 9:30 A.M. |
| Thomasville | WPAX | 1240 kc | Saturday | 7:45 A.M. |
| Thomson | WTWA | 1240 kc | Saturday | 11:15 A.M. |
| Tifton | WWGS | 1430 kc | Wednesday | 6:30 P.M. |
| Tifton | WTIF | 1340 kc | Saturday | 6:30 P.M. |
| Toccoa | WLET | 1420 kc | Thursday | 4:45 P.M. |
| Toccoa | WNEG | 630 kc | Friday | 5:30 P.M. |
| Valdosta | WGAF | 910 kc | Monday | 12:30 P.M. |
| Valdosta | WJEM | 1150 kc | Monday, Wednesday, Friday | 6:15 A.M. |
| Vidalia | WVOP | 970 kc | Tuesday | 6:00 A.M. |
| Warner Robins | WRBN | 1600 kc | Sunday | 8:45 A.M. |
| Washington | WLOV | 1370 kc | Tuesday | 1:15 P.M. |
| Waycross | WAYX | 1230 kc | Monday | 12:30 P.M. |
| Waynesboro | WBRO | 1310 kc | Sunday | 2:00 P.M. |



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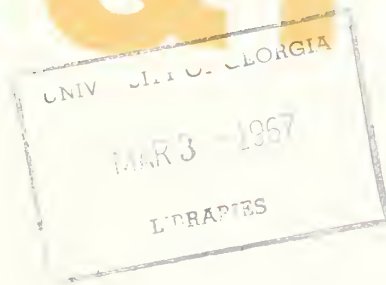
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GEORGIA

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GAME & FISH





GEORGIA

GAME & FISH

MARCH 1967

Volume 11 Number 3

Contents

| | | |
|---|-----------------|----|
| Color It Fine Fishing | Dean Wohlgemuth | 1 |
| Jackpot At Jackson | Jim Tyler | 4 |
| Catch A Crappie . . . | John Frey | 6 |
| Meet Your Commissioner | Dean Wohlgemuth | 8 |
| Make Sure the Big One Doesn't Get Away . . . | | 9 |
| Turkey Tricks . . . | Jim Scharnagel | 10 |
| Water Pollution Can be Tamed . . . | Jim Tyler | 12 |
| Fly Tying — Fun For Teens, Too . . . | Dean Wohlgemuth | 14 |
| Quail Preserves — A Promise With A Price . . . | Dean Wohlgemuth | 16 |
| Sportsman's Calendar . . . | | 17 |

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NEW INDUSTRY... and Clean Water Too

Georgia can "have its cake and eat it too" when it comes to new industry and clean water for fishing, boating, and swimming.

With modern methods of water waste treatment, few industries can justify failure to return the water that they use to Georgia's waterways in a condition fit for other use. Admittedly such treatment usually costs money, but this is an accepted modern day business expense, and must be absorbed in the cost of operation which determines the price of a product or service. Expenses for installation of facilities for air and water pollution control may soon be tax deductible.

New industries are welcome to Georgia, but they should clearly understand that they have a responsibility to treat wastes so that recreational activities are not destroyed. Chambers of commerce seeking new industry should realize that one polluter can hog miles of a stream, effectively warding away other industries who would also locate on the same stream if an adequate supply of clean water were available to them. And growing cities need adequate supplies of drinking water.

Having good fishing, boating, and swimming nearby on Georgia's wonderful waterways is also an important factor in attracting and holding potential employees to any new industry, as well as providing recreation for millions of Georgians who have more leisure time and more money to spend on pleasure. For this reason, the sports of fishing and boating are themselves more than a 100 million dollar yearly industry for Georgia, not counting their important role in stimulating tourism, also one of Georgia's fastest growing industries.

Much remains to be done to clear up past neglect of Georgia's beautiful streams and lakes, but the job is well underway, thanks to a new pollution law and the effective enforcement efforts of the Georgia Water Quality Control Board, led by its tough executive secretary, "Rock" Howard. With the full support of public officials, industrial management, and the general public, we believe that Mr. Howard's agency will go a long way toward cleaning up existing pollution in Georgia within the next five years, while preventing much future damage from occurring.

Clearing up municipal and industrial pollution on many Georgia streams will not be easy, cheap, or speedy, but the job is being aided by financial grants to municipalities by the federal government, although the need for funds is greater than the supply. Hopefully, under a constitutional amendment passed by Georgia voters last year, State grants to cities and towns for this purpose may soon be available. But for many of us, cleaning up water pollution will mean digging deeper in our pockets for tax money to construct treatment facilities.

It will be money well spent. We can "have our cake . . . and eat it too." J. M.

ON THE COVER: Fishermen start popping up in bigger numbers about this time of year, and the shiny, tasty crappie is one of the first fish to oblige the angler in early outings. Photo by Dan Keever.

* * *

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Color It Fine Fishing

*It goes by no less than four names, maybe more.
Regardless of what name you prefer, a fishing trip to
Lake Walter F. George is bound to have you calling
it a mighty fine place to wet a line!*

By Dean Wohlgemuth

warm day early in the year—a beautiful sunset—the fish are biting...a perfect ending to a fine day's fishing on Lake Walter F. George.





ABOUT THE AUTHOR

Bass fishing is the choice of all outdoor activities for Game and Fish Magazine managing editor Dean Wohl-gemuth. But any kind of fishing or hunting is fine with him.

He has been an all-around outdoorsman since boyhood, and has been writing for a living for the past 11 years. His writing experiences include the base newspaper at Shaw AFB, S.C., the Wichita, Kans., Eagle, the Rock Hill, S.C., Evening Herald where he was sports editor and outdoor editor, and the Lynchburg, Va., Daily Advance, where he was assistant sports editor and outdoor editor. He joined the Game and Fish Commission as an information officer in 1965, and writes a weekly newspaper column in addition to his magazine duties.

His wife, Ann Kay, is from Kershaw, S.C. They have two children, Warren, 4, and Cheryl Kay, 2. They live at 877 Meadow Rock Dr., Stone Mountain.



ABOUT THE PHOTOGRAPHER

Dan Keever, the talented photographer of Georgia Game and Fish Magazine, has been an outdoorsman since childhood.

A native of Rome, Keever enjoys rabbit hunting as his favorite sport, followed by quail, squirrel, and dove hunting. He likes fishing in both farm ponds and rivers, as well as swimming and water skiing.

Keever, 25, has been a serious photographer since high school, when he was sports editor of the school paper at East Rome High. While studying for his AB degree in journalism at the University of Georgia in 1963, Keever was staff photographer for both the campus newspaper Red & Black and the Pandora annual.

His photographs have earned him nine blue ribbons and three best of show awards in the past nine years in the Coosa Valley Fair photography competition.

Keever served as a first lieutenant with the Army signal corps in Korea and as a motion picture officer at Fort Ord, California.

A bachelor, Keever now lives in Atlanta at 679 Amsterdam Avenue.

If you want to be official, you can go with Walter F. George. If you live in the town of Fort Gaines, you might call the lake after the town where the dam is located. Others simply call it "Lake Chattahoochee," after the river that was dammed to create the lake. To others, mostly Alabamans, the long, narrow body of water is Lake Eufaula, after an Alabama city on its shores.

But you'll soon lose interest in trying to decide which name to use once you try the fishing in this lake just south of Columbus. And this year, 1967, is bound to be the best year so far for the lake. Just five years old, the 45,000 acre lake has yet to reach its peak in fishing production. It should reach its high point in perhaps another couple of years, say fisheries experts of the State Game and Fish Commission.

As is the case with most new reservoirs, Lake George is producing fishing for bass, crappie, and bream that borders on fantastic. Wildlife Ranger W. E. Hobbs declares there is no way yet to determine which, if any species is likely to become most prominent in the lake. Besides the species already mentioned, the lake has some white bass, channel catfish and white catfish. And Hobbs says though he has never seen them, he has heard reports of a striped bass or two being caught.

Why is this lake so hot? When water is backed up to form a lake, fertile top soil is flooded. Also, plant life is flooded and fertility of the water is very high. This all provides abundant food for fish, and the fish population expands at an astounding rate, according to Leon Kirkland, coordinator of fisheries for the State Game and Fish Commission.

"In just one year's time, the game fish already present in a river before the dam was built, can expand their population to a full complement for a new reservoir," Kirkland said. "Crappie and white bass, for example, will lay perhaps a half million eggs apiece per year. In a new lake there is nothing to prey on the eggs or tiny fish, so survival for the crop is very high."

White bass were present in the lakes downstream and some apparently were trapped on runs upstream when Walter F. George Dam and lock were built. Others may get through the lock during spring spawning runs. However they got there, the white bass are present in good numbers, providing another very gamy species for Lake George anglers. No white bass were stocked in that lake.

That the bass and crappie are plentiful was more than merely apparent on a recent visit to the lake. Dan Keever, Game and Fish Photographer, and I

toured the lake with Ranger Hobbs. An unseasonably warm spell for January had brought a good many anglers onto the lake and most were getting some very good fishing.

A pair of crappie anglers had boated 57 crappie between them, and several others had respectable strings. Few were the crappie fishermen that found little or no success.

A group of four bass fishermen — actually one of the group was a woman — had taken an almost unbelievable string of 22 bass in a day and a half of fishing, working only the morning and evening hours. Their bass ran up to 5½ pounds and the smallest was better than a pound. Four bass were over five pounds, and perhaps that many more were over four pounds. At least half of the catch topped the three-pound mark.

I saw this string of fish just after being a little skeptical of a statement by Ranger Hobbs. Asked what the average size was for bass caught in the lake, Hobbs replied "about four or five pounds." Crappie, he said, run three quarters to a pound on the average. "The largest bass I've seen taken out of here was about 12 pounds," he said.

In addition to being a new lake, George has other factors in its favor, to make it top-notch fishing. Many sandy points run out into the lake all along its shores, providing shallow feeding areas next to deep dropoffs. And there were a large number of trees left standing which are now underwater, leaving hiding places for both bass and crappie. One popular crappie hole is an old highway bridge, now perhaps 50 feet below the surface.

During my midwinter visit, the lake was several feet low, and tops of trees showed through the water. Later in the year the water will return to normal level, covering a great many of these spots, although others will still be visible.

Fishermen, particularly those in larger boats, will have to be wary in some areas along the Georgia shore, of those shallow sandbanks. Although the low water was partly to blame, Hobbs occasionally grounded his boat in shallow water. Once I had to take off my shoes and wade the chilly shallow water, to push the boat back to deeper water.

The spring season when fishing is best extends from late January or early February, through about the middle of May. But March is usually the hottest month of all for this lake.

Warm spells during February, or occasionally even January, may find the fish moving toward the shallows, but usually it is March before the biggest migration to shallow water, in prepara-

tion for spawning, brings the fishing to a high point.

While there is plenty of shallow water, there are also some deep parts of the lake, particularly in the lower end. The normal water level is 185 feet above sea level at the dam.

Since the lake is so new, facilities for anglers are rather limited. There are plenty of excellent public launching ramps however, provided by the Corps of Engineers. Hobbs said there were six of these ramps spaced between the dam and Georgetown, about halfway up the lake, on the Georgia side. There are only two places where boats can be rented, at either Lonnie's Landing or Pete's Landing. Motors are not available. A number of bait shops can be found in nearby towns. There is one group of cottages for rent.

Lack of facilities hasn't kept local sportsmen away. "When things really get started here, I just about have to camp out up here to keep up with what is going on," said Hobbs.

Not all the sport is for fishermen. Water skiing and pleasure boating is popular on the lake too. However, because of underwater brush and shallow areas, these groups are limited to open, deeper water, primarily near the dam. There's room for everyone — the lake is 85 miles long!

Since the lake forms the border between Alabama and Georgia, there are not only sportsmen from both states using its waters, there are two state governments involved in patrolling the lake. Hobbs and other Georgia rangers patrol only the Georgia half of the lake.

The main channel of the river, deep enough for barges and larger vessels, is marked with buoys. These buoys are considered the dividing line between the states, and mark the boundary of the area patrolled by Georgia. On the other side, Alabama patrols, and Alabama boating laws apply.

Alabama law requires all boats to be registered, regardless of the horsepower of the motor. Georgia boats on the Alabama side must comply with this law, and bear a registration sticker.

Fishing licenses from either state will be honored anywhere on the main body of the lake. However, Georgia license holders may not enter tributaries on the Alabama side without having an Alabama license. Alabamans, likewise, may not enter tributaries of the Georgia side without a Georgia license.

Creel limits for Alabama are the same as those for Georgia, for all species of fish.

For a place to go where fishing is as good as you'll ever hope to find, no one could get a better recommendation than Lake Walter F. George!



Displaying the kind of vigor you can expect from Lake George bass, this largemouth leaps high into the air in an effort to shake a plug from his mouth.



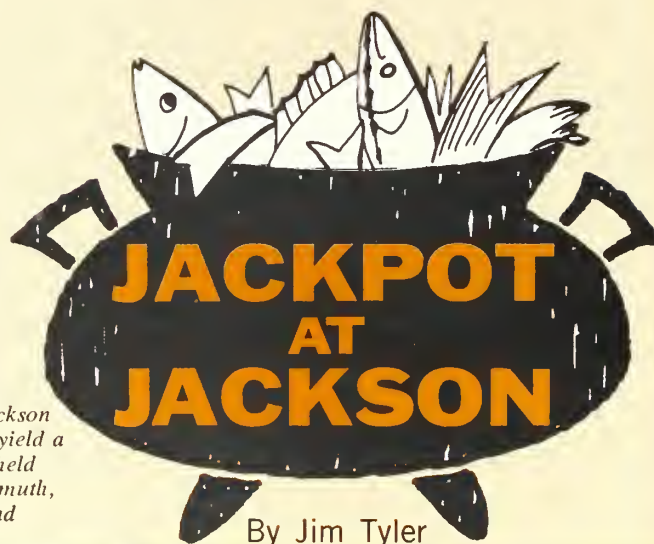
This family can vouch for just how good bass fishing can be at Walter F. George. From left, Henry, Veryl and W. H. (Bubba) Haddock of Damascus, show these 22 bass weighing up to 5½ pounds that the Haddock family caught in 1½ days' time. Mrs. Haddock got her share—she caught nine of them!



Crappie anglers can have their good days, too. H. C. Cashwell, left, has 30 crappie and J. O. Evans is close behind with 27. Both are from Blakely.



The crappie has no respect for age when he decides to bite. Dwain Kirkland, 12, of Social Circle, proves this by nonchalantly bringing one in.



A day of fishing on Lake Jackson can usually be counted on to yield a fine stringerful such as this, held up for view by Dean Wohlgemuth, managing editor of Game and Fish Magazine.



The sign said Lake Jackson. Dave turned the car off the highway onto a dirt road. The tires kicked up a trail of fine dust.

"I really don't know if I believe your Jackson Lake story," Glen said.

Glen turned to face Dave and continued, "Last time I was here, let's see, it was three years back, I didn't catch one passable fish. All small ones—skinny too. You sure they're catching big crappie?"

"One and two pounders," Dave said confidently.

"Hard to believe," Glen said.

"How the minnows doing?"

"Still kicking," answered Glen.

"Good, the crappie are taking minnows," Dave said as he braked the car to a stop.

They walked from the car to a treeless stretch along the lake. Lines were quickly run through the pole eyes, minnows on hooks, and, splash, splash, they were fishing.

Right away Dave's bobber plopped downward. Two minutes later a fine, flipping crappie was being examined by Glen.

"It's a beaut. Dave, must be over a pound."

"Told you so," Dave said triumphantly.

Fifteen minutes later Dave reeled in another. This one was a bit smaller, probably three quarters of a pound.

"Glen, move your bobber up about two feet, I don't think you are fishing deep enough."

Glen did so and cast his line out. With a short cry of glee, he leaped into action as his bobber disappeared. He landed the crappie and held it with a tight grip, forefinger in gill. He shouted that it was the biggest one yet.

A truck soon pulled up and parked alongside their car. A ranger from the Georgia Game and Fish Commission got out of the truck, walked down the path and joined them.

"How's it going?" he asked. He smiled.

Glen returned the smile with a yet bigger smile. "Look," he said and lifted the stringer from the water.

"Nice ones," the ranger said.

"How come?" questioned Glen. "Three years ago the crappie were terrible. They were small and skinny. Fishing was just terrible."

"To make a long story short," said the ranger, "we started feeding the crappie—bass, bream, and catfish too for that matter."

"Three years ago we stocked some small shad called threadfin shad into the lake. These are small fish, they never get over six inches long. By golly they've done wonderful. There are now thousands of the threadfin in the lake. The crappie are really eating them."

"Yeah, the fish are bigger, but at

here more of them?" Glen asked.
 "Right, the crappie are bigger," the ranger said, "and fishermen are catching about twice as many fish. In fact, this is the best crappie lake in the state."

"That's really strange," said Glen, "Jackson Lake is only 35 miles from Atlanta."

The ranger grinned and then said, "More about the shad. About the only time you will see the little shad is in the winter when the weather gets real cold. Then you might see a great many of them dying."

The ranger went on, "You are also able to hook into a respectable bass. The bass are eating shad, and the Game and Fish Commission has put a 10 inch limit on largemouth to help increase their numbers."

"Bass, the largemouth, have a hard time in a reservoir. Sometimes the water is drawn down the same time the largemouth are spawning. This usually kills the eggs because the largemouth build nests in shallow water. They lay eggs in the nests and when the water level drops, the eggs are left high and dry."

"Already, since September, over 100 small bass have been caught and released by fishermen," said the ranger.

"That's one bunch of bass," drawled Dave.

"The department also stocked another bass three years ago. It's called a white bass," said the ranger.

"I know," Glen said, "I've caught one in Lake Sinclair."

"Yeah," joined Dave, "They're a nice fish."

"White bass lay their eggs in deeper water and in streams emptying into the lake, such as the Alcovy and Yellow Rivers, for example, so they're not affected by water dropdown," said the ranger. "They also do not compete with largemouth. Together they both do fine. We hope soon you will be fishing in big whites. The lake is a big one, 5,000 acres, and gives us a lot to work with."

"How about that," said Glen with amazement. "Knowing this takes the sting out of the dollar hike on the fishing license."

"You old tightwad," Dave cut in, "a whole dollar, did you think it would break you?"

A small commotion, water splashing, caused Glen to look toward a fisherman down the shore.

"By golly," he murmured. He turned and said, "Excuse me ranger, I'm moving down shore a bit. Did you see the crappie that fellow," he pointed, "just caught? Must be a two pounder anyway."

Glen picked up his gear and hurried away. The ranger winked at Dave. Dave returned the wink.



These sleek, silvery crappie, displayed by Dwain attest to the type of crappie fishing that Lake Jackson is now famous for.



ABOUT THE AUTHOR

Jim Tyler, staff writer for Georgia Game and Fish Magazine, is a serious student of the out-of-doors. He holds BS (1961) and MS (1966) degrees from Colorado State University in fisheries science. However, the majority of his courses toward his Master's degree were in journalism.

He was a fisheries biologist for the Tennessee Game and Fish Commission and marine biologist for Florida Board of Conservation before completing his Master's. After finishing post graduate work, he became an information officer for the Georgia Game and Fish Commission.

Tyler, 28, is particularly fond of stream fishing for such species as smallmouth bass and trout. Saltwater fishing is a favorite with him, too, with spear fishing his favorite method. Although he enjoys all types of hunting, he admits that in his present capacity, his "biggest hunt is for the right words" to use in his writings.

A staunch advocate of physical fitness, Tyler has participated actively in weightlifting competition since high school. He also enjoys hiking and motorcycling.

He, his wife Lois, and daughter Tia, 3, live at 3119 Dove Way, Decatur.

The crappie or "white perch" is probably the second most popular pan fish in Georgia. Only bream are more popular with Georgia anglers. However, crappie are nearly as abundant as bream and are found in almost every lake and stream in the state. Anglers fishing in Georgia may fish for crappie throughout the entire year and take home a creel limit of 40 a day, which is more than most folks would want to clean at one time. Crappie, when not over-crowded, usually grow larger than bream. One pound crappie are not uncommon. The world record crappie (still standing) weighed 5 pounds 3 ounces and was caught in Mississippi. Many people think the crappie is the best eating fish in fresh water.

Two species of crappie are present in Georgia waters. The white crappie and the black crappie are both widely distributed in Georgia's lakes and streams. However, white crappie are somewhat more abundant in our state than black crappie. The white crappie is not as deep-bodied as the black crappie and is not as dark in color. Dark blotches present on the sides of

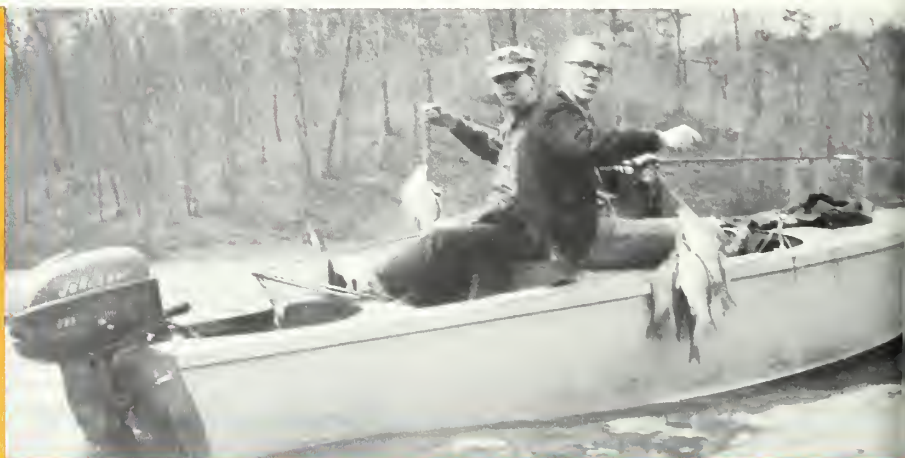
the white crappie tend to form a pattern of vertical bars. The white crappie usually has five or six spines in the dorsal (or back) fin. In contrast, the black crappie is more deep bodied than the white crappie and darker in color. The dark blotches present on the black crappie do not form a pattern of vertical bars. The black crappie usually has seven or eight spines in its dorsal fin.

Both species of crappie have the same spawning habits. Crappie may spawn at 1 or 2 years of age. Large ones of 1½ pounds may lay as many as 140,000 eggs. Smaller females of half-pound weight may lay 20,000 to 60,000 eggs. Spawning occurs when the water temperature reaches 64°F to 68°F, usually in April. Spawning areas are usually located in shallow brushy areas over a sandy or gravel bottom.

Because the crappie is such a popular fish with Georgia sportsmen, our department receives many requests each year to stock crappie in farm ponds. Unfortunately it has been found that crappie are not suitable for stocking farm ponds or small impoundments. Because of their high reproductive capacity, crappie almost always

After a brief struggle, the crappie surrenders and comes in meekly. His willingness to cooperate with anglers of all ages and both genders has made him highly popular with Georgia fishermen.

These Allatoona crappie fishermen have found good success on big fat crappie.



catch a crappie...

By John E. Frey
Fisheries Biologist

over-populate when stocked in a farm pond. In addition, crappie may seriously compete with bass and bluegill for food and spawning areas in a pond environment. The end result is usually a pond full of large numbers of starved fish. For these reasons the Georgia Game and Fish Commission does not recommend stocking crappie in farm ponds, and they are not available at our State fish hatcheries.

In central and north Georgia crappie usually bite best during April, with March the best month in south Georgia. In our reservoirs, during this time of year, they may be found in hallow brushy coves near the banks in from two to six feet of water. Crappie are nearly always found near or in some kind of cover such as sunken tree tops, brush, or stumps. A cane pole rigged with monofilament, a small float, split shot, and a #4 long shank soft wire hook is all the tackle necessary for crappie fishing. The most dependable bait is a small shiner (or each) 1½ to 2½ inches long. Crappie usually travel in schools, so if you catch one you are liable to catch eight or ten (sometimes more) in the same

spot and at the same fishing depth. For this reason, if the fish are not biting it pays to move around trying different areas while fishing at different depths until you locate a school.

Crappie will also strike such artificial lures as small doll flies, tiny spoons, spinners and flics, and small underwater plugs. Casting such artificial lures near brush, sunken trees, and stumps will often produce good catches of larger size crappie. Fly rods rigged with weighted streamer flies or small doll flies may also be used when crappie are feeding in shallow water. Crappie are also caught by slowly trolling small spinners, spoons, or doll flies near sunken tree tops and rocky points. Unless the fish are feeding near the bank in shallow water, I prefer the slow trolling method because you cover more ground while fishing and also stand a chance of catching a large-mouth bass or a white bass in addition to a nice string of crappie.

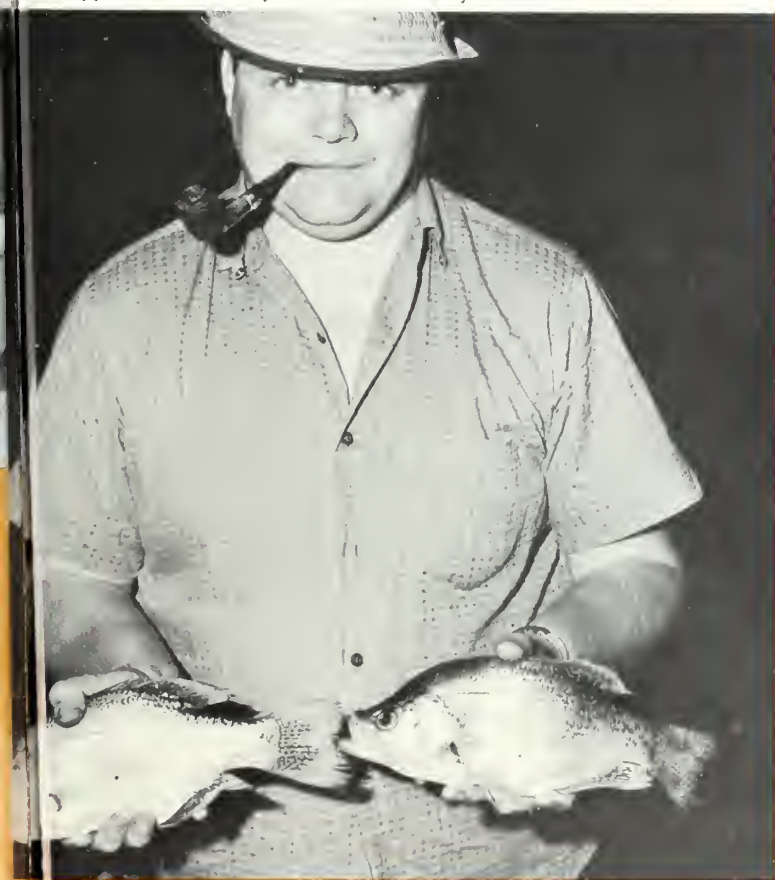
During the summer months crappie are generally found in deep water. You may have to fish at depths of 20 or 30 feet to make good catches in hot weather. At this time of year night

crappie fishing is very productive. Most fishermen hang a gasoline lantern or a battery powered light over the side of a boat, from a dock, or off a bridge so that it shines directly on the surface of the water. Some folks even float their lights on the water. The theory is that the light attracts insects on the surface of the water which attracts a school of minnows that attracts a feeding school of crappie. You simply put your minnow into the small school of minnows attracted to your light and sit back and enjoy the cool night air while waiting for a bite. Occasionally nice strings of white bass are also caught while night fishing for crappie with a light.

In central Georgia, Lakes Jackson, Sinclair, and Clark Hill are good crappie fishing lakes. In North Georgia I would recommend Lakes Lanier and Allatoona for crappie. In South Georgia Lakes Seminole and Walter F. George are top crappie fishing areas.

Tips on where to go and when to fish may also be obtained by contacting the local wildlife ranger working in the area you are planning to fish.

Crappie don't observe regular office hours. They'll hit day or night. These two crappie were taken by Dwane Rhoden of Decatur.



ABOUT THE AUTHOR

John Frey, 40, is one of the most widely traveled and experienced Georgia biologists, having worked in three different states as both a game biologist and a fish biologist.

Frey received a BS degree in agriculture with a major in wildlife from Ohio State University in 1954. During and after his college years, he worked as a biological aide with the Ohio Division of Wildlife in game management before joining the Louisiana Wildlife and Fisheries Commission as a game biologist.

Frey became a fisheries biologist for the Georgia Game and Fish Commission in 1957, working out of Macon for three years on a comprehensive survey on every major fishing stream and lake in the State. Later he concentrated on the Department's reservoir research project headquartered at Madison, which included extensive studies of crappie and other lake fish populations. For three years Frey devoted his attentions to the problems of maintaining good fishing in small farm ponds with the Department's Fort Valley office before going to Thomson in 1965 as district fisheries biologist. In his present position, Frey conducts fish management and research activities on Clark Hill, Sinclair, and other major fishing waters in the eastern portion of Middle Georgia, where he is also available to farm pond owners for consultation on fishing problems.

meet your commissioner:

JAMES F. DARBY, JR.
1st District

James F. Darby Jr. represents the 1st Congressional District in the conservation and development of Georgia's wildlife resources.



With dogs frozen on points, Thomas Jackson poked his toe into a clump of grass and the whole patch of grass and weeds seemed to erupt with a whirl, birds flying everywhere.

The Winchester automatic came up smoothly, followed a bird briefly, then barked just once. In a puff of feathers, the bird collapsed and plopped on the ground, a clean kill despite the thick, jungle-like cover along the tiny branch.

Now there was praise for the skilled shot. One covey earlier, there had been a mild teasing from next-door neighbor Jackson. "You won't kill a bird if you don't burn some powder, James," Jackson had said when James Darby, Jr. had raised his gun but hadn't fired. The trigger of the Winchester wasn't pulled until the shot had been more certain.

Even in the field, relaxed for a day's sport, you could still see the same cool, cautious yet precision-like business mind at work. No action had been taken until the situation had been carefully measured and evaluated.

The keen, all-business mind had made itself apparent from the first, when earlier in the day he talked in his office at Darby Supply Co.

Born and reared in Vidalia he left only to complete his education after graduating from Vidalia schools. He attended prep school at Riverside Military Academy in Gainesville, then completed his education at Georgia Tech, receiving a BS degree in general science there in 1936.

When school days were over, he promptly returned home and started the building supply business. He still seems to show a preference for this business, although he has varied interests. About the same time he founded the supply firm, he became a partner in the Vann Tobacco Warehouse Co. in Vidalia, and in 1948 he succeeded his father as president of Darby Banking Co. Inc. He has just completed his 19th year as bank president. He also owns a 500-acre farm on the edge of town. His father founded the bank in

1927, and the company is now celebrating its 40th anniversary. He is also involved in the construction business.

The press of these many businesses doesn't allow him much time for participation in outdoor sports, yet he finds time on several occasions each year to do some quail and dove shooting, his favorite outdoor activities, and once or twice a year, he'll go after saltwater trout and "redfish" (channel bass). He occasionally fishes his two farm ponds. And sometimes he hunts deer, ducks and turkeys.

His wife, the former Helen Threlkeld, is a hometown girl. They have a 16-year-old daughter, Connie, who is a junior in high school.

Active in a number of civic organizations, he has at one time or another been a member of just about any type of civic group to be found in Vidalia.

He has been president of the Vidalia Chamber of Commerce, and has been mayor and councilman. He has been chairman of the county commissioners for the past two years. Twice he was elected state Senator for his district.

And now he is serving his second term on the Game and Fish Commission for the First District. While he was chairman of the commission in 1965, the bill to increase hunting and fishing license fees by one dollar each,

was passed by the legislature.

"This is the greatest achievement of the Commission during the time I have served. We have come a long way since I first became a commissioner in 1949. At that time we didn't have much to work with. We've tried for a long time to get more money for Game and Fish, so there would be something to work with," he said.

"I think we have reached the point where we couldn't go further in accomplishing what we need to, without a bigger budget. Now that the bill is passed and we were able to get a larger appropriation, this should give the commission a chance to serve the people of Georgia better. Now we can do the things we have planned to do in the past."

These plans, he said, are his biggest goal — the acquisition of more public hunting and fishing lands and waters. "It is coming to the point where we don't have enough land and water for the commission to manage and to provide sport for everyone. We need hunting areas for both deer and small game."

Mr. Darby has three more years left on his current term as a commissioner. And he plans to devote that time to providing public hunting and fishing for the people he serves.



Since his home, Vidalia, is in the heart of Deep South Georgia quail hunting at its best, it's no surprise that bird hunting is a favorite sport of Commissioner Darby. While quail and dove shooting are high on his list, Commissioner Darby also enjoys hunting deer, ducks and turkey. He's also fond of saltwater fishing.



MAKE SURE THE BIG ONE DOESN'T GET AWAY

This year for the first time, the Georgia Sportsmen's Federation and Georgia Game & Fish Magazine are sponsoring a big fish contest for the State of Georgia during the calendar year of 1967.

Shortly after the first of each year, prizes furnished by the Georgia Sportsmen's Federation will be given to the angler catching the largest fish in any one of six categories: black bass, white bass, crappie, bream, mountain trout, and catfish.

Entries made after December 31 will be entered in next year's contest. A list of prizes will be announced at a later date, but entries should be made as soon as possible after the fish is caught.

How To Enter

1. Have fish weighed, measured, and entered at any official Georgia Sportsmen's Federation Weighing Station or any office of the State Game and Fish Commission. If no such station is available, have the fish weighed and measured in the presence of two witnesses who sign the official entry blank or a facsimile.

2. Before the affidavit can be accepted, the truth of the statements must be attested before a qualified officer such as a notary public, justice of the peace, sheriff, municipal clerk, postmaster, member of state or local law enforcement agency, wildlife manager, etc.

There is no entry fee for the contest.

| Minimum Weight for Certificate | State Records | World's Record | Minimum Weight for Certificate | State Record | World's Record |
|--------------------------------|---|-------------------|--------------------------------|--|-----------------|
| 10 lbs. | BASS, LARGEMOUTH 22 lbs., 4 oz. George Perry, Brunswick, Montgomery Lake, Ga., June 2, 1932. World's Record Second 17 lbs., 14 oz. Nickie Rich, Marietta, Chastain's Lake, April 27, 1965 Third 17 lbs., 9 oz. Emory Dunahoo, Gainesville, Lake Lanier, October 19, 1965 | Same | 3 lbs. | CRAPPIE, BLACK 4 lbs. (Unofficial) Jack Boutelle, Decatur, Lake Sinclair, 1961 | 5 lbs. |
| 5 lbs. | BASS, SMALLMOUTH No Official State Record | 11 lbs., 15 oz. | 3 lbs. | CRAPPIE, WHITE No Official State Record | 5 lbs., 3 oz. |
| 5 lbs. | BASS, SPOTTED 6 lbs., Elton Elrod, Cartersville, Lake Allatoona, Feb. 11, 1967 | 8 lbs. | 15 lbs. | GAR, LONGNOSE No Official State Record | 50 lbs., 5 oz. |
| 2 lbs. | BASS, REDEYE (COOSA) No Official State Record | No Record | Any weight | MUSKELLUNGE 38 lbs. Rube Golden, Atlanta, Blue Ridge Lake, June, 1957 | 69 lbs., 15 oz. |
| 5 lbs. | BASS, FLINT RIVER SMALLMOUTH No Official State Record | No Record | 5 lbs. | PICKEREL, CHAIN (JACKFISH) 9 lbs., 6 oz. Baxley McQuaig, Jr. Homerville, February, 1961 World's Record | Same |
| 3 lbs. | BASS, WHITE 4 lbs., 14 oz. Albert Pittman, Gainesville, Lake Lanier, Jan. 11, 1966 | 5 lbs., 2 oz. | 1 1/2 lbs. | SUNFISH, REDBREAST No Official Record | No Record |
| 1 1/2 lbs. | BLUEGILL No Official State Record | 4 lbs., 12 oz. | 2 lbs. | SUNFISH, REOEAR (SHELLCRACKER) No Official State Record | No Record |
| 10 lbs. | BOWFIN No Official State Record | No Record | 4 lbs. | SAUGER No Official State Record | 8 lbs., 5 oz. |
| 20 lbs. | CARP No Official State Record | 55 lbs., 5 oz. | 15" or 5 lbs. | TROUT, BROOK No Official State Record | 14 lbs., 8 oz. |
| 20 lbs. | CHANNEL CATFISH No Official State Record | 57 lbs. | 18" or 5 lbs. | TROUT, BROWN 12 lbs., 8 oz. Terrell Gragg, Rabun County, Seed Lake, 1960 | 39 lbs., 8 oz. |
| 2 lbs. | YELLOW PERCH No Official State Record | 4 lbs., 3 1/2 oz. | 24" or 6 lbs. | TROUT, RAINBOW 12 lbs., 4 oz. John Whitaker, Ellijay, Coosawattee River, May 31, 1966 | 37 lbs. |
| | | | 5 lbs. | WALLEYE 11 lbs., Steven Kenny, Atlanta, Lake Burton, April 13, 1963 | |

4. Any Georgia licensed angler, resident or non-resident, may enter the contest by completing the official affidavit.

5. Fish must be caught on sporting tackle and be hooked and landed by the entrant.

6. Fish must be caught in the State of Georgia during the legal angling season for the species taken.

7. Angler can submit as many entries as he wishes. Certificates will be awarded for all fish surpassing the minimum standards in the chart, but contest prizes will be awarded only in the general black bass, white bass,

crappie, bream, mountain trout, and catfish categories. Awards will not be given for specific species within these categories such as the largest white crappie, black crappie, etc. due to the difficulty of exact identification of the species in these categories.

8. Sideview photographs should be submitted with each entry which become the property of Georgia Game & Fish Magazine.

9. Affidavits should be mailed to Georgia Game & Fish Magazine, 401 State Capitol, Atlanta, Georgia 30334.

Georgia Sportsmen's Federation
and

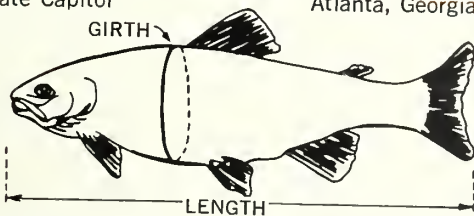
Georgia Game & Fish Magazine

1967 STATE FISHING CONTEST

Official Entry Blank

1 State Capitol

Atlanta, Georgia 30334



HOW TO MEASURE A FISH Girth: should be measured around the largest part of the body as shown in diagram. Length: Measure along a flat surface from the extremity of the mouth to the extremity of the tail.

Send all entries to: Georgia Game & Fish Magazine, 401 State Capitol, Atlanta, Georgia 30334.

I hereby swear that the following statements are true; that in taking this fish I complied with the contest rules, fishing regulations, and that the witnesses hereto saw this fish weighed and measured. I consent to the use of my name in connection with the Georgia State Fishing Contest."

PRINT OR TYPE ALL INFORMATION

Kind of Fish _____ Weight _____ lbs. _____ ozs. Length _____ ins.

Girth _____ ins. Bait used _____ Rod _____ Reel _____ Line _____

Brand _____ Test _____

Where caught (Lake or Stream) _____

Date Caught _____

Angler _____

Home Address _____

City and State _____

Telephone Number _____ Fishing License Number _____

(Signature of person who caught fish)

We, the undersigned, witnessed the weighing and measuring of the fish described above and verified the weight and measurements given.

1. Signature _____

Address _____

2. Signature _____

Address _____

Sworn to and ascribed before me this _____ day of _____, 19 _____

(Signature of a qualified officer—See Rule 2)

turkey tricks

By Jim Scharnagel Game Biologist

The wild turkey naturally prefers large tracts of mature or nearly mature woodland, preferably hard wood, with well interspersed clearings. Despite this classical definition of preferred turkey habitat, it is a mistake to say that the bird will not thrive except where these conditions are met exactly, for one of the most prolific turkey areas in the state falls far short of qualifying as perfect range. Generally, though, the true wild turkey will not tolerate as high a degree of human activity as other forest game, including deer, and thus does require more remote and better protected areas. This protection from poaching as well as from general human activity is particularly important when the bird is first introduced into a new area and the flock is building up to huntable numbers.

Where to Hunt

The Georgia turkey hunter has a choice of five separate areas, located roughly around the outer portions of the state in which to seek his trophy. These areas vary from the high mountainous terrain of North Georgia through a section of the Piedmont and the Upper Coastal Plain to the Lower Coastal Plain swamps along the Florida line. Since counties with a season may be added or deleted each year, current regulations should be consulted before planning your hunt in detail. The time of year one prefers to hunt will greatly influence the selection of a section of the state to hunt since the mountain counties across the top of the state and the small group of counties in the eastern Piedmont are open only to spring gobbler hunting. If you like to take a crack at the bird which slips up behind you on your deer stand then South Georgia would be the place to go since these southern counties have an either-sex turkey season during most of the deer season.

Spring gobbler seasons are preferred over fall either-sex seasons in areas where the turkey population is not high, since only gobblers can usually be effectively called up to the hunter. This makes identification of the birds' sex easier, since the birds are almost identical in appearance in the woods under low light conditions with the exception of the "beard" on the chest of the gobbler. If gobblers only are hunted in the spring, hunters seldom can take too many of the birds, threatening the breeding population. However, in the fall entire flocks of young turkeys can be called up and slaughtered by unscrupulous violators.

There are two sections of the state where turkey hunting is well above average. One of these is the little group of counties in the Eastern Piedmont or Middle Georgia area with its nucleus and origin at Clark Hill Man-

aged Area. A fair amount of land in this area, belonging to pulp and paper companies and Corps of Engineers land outside of the Management Area, is open to hunting without special permission from the owner.

The other outstanding section of the state is the group of ten counties in the extreme southwestern corner. Here a very different situation prevails as to available hunting opportunity because of the predominance of large plantations. If you live in another section of the state and wish to hunt in the southwest it would be wise to secure definite permission to hunt before the season opens or at least before making the trip down.

Managed Hunts

Possibly the top managed turkey area in the state is the Clark Hill Area near Thomson. Usually this area in the Piedmont, Johns Mountain in the northwestern section and three of the areas in extreme North Georgia are opened one week during April for gobblers only.

Methods of Hunting

A very desirable prerequisite for a successful turkey hunt is to master the art of yelping. For the complete novice, yelping is the practice of calling gobblers by imitating the call of the hen during the breeding season in the spring of the year and it is an art. The budding hunter should spend much time in good turkey range during the mating season to learn "turkey talk" and he will be fortunate indeed if he can begin hunting with an experienced caller. Although record players are not legal for calling turkeys, they may be used to advantage in perfecting your calling techniques.

A bewildering variety of calls, both homemade and commercial, have been produced over the years and a number of types are available from the larger sporting goods dealers and mail order houses. Perhaps more important than your choice of a caller is the time you spend learning to use it effectively

since many hours of practice are usually required to perfect a yelp that will convince an adult gobbler. Yelpers can generally be lumped into two broad categories:

1. Those operated by the mouth or breath.
2. Those operated by rubbing one material against another (or friction type.)

Callers in the first group vary from the human voice itself through green leaves, the diaphragm and turkey wing-bone. The diaphragm type made of rubber or plastic sheeting is very versatile, being capable of reproducing most sounds in the turkey "vocabulary" but may prove difficult to learn to use.

Of the friction type the box caller in one of its many forms is the most common. This type usually consists of a long narrow, hollow box, often of red cedar with a wooden scraper which is moved across the open top to produce a yelp. Another friction caller employs a sort of pointed wooden stylus mounted in a small block of wood. The sound is produced by rubbing the stylus in a circular motion on a piece of slate mounted on a sounding board. A soft chalk applied to the working surfaces of most friction callers enhances the sound produced.

The hunter should try several types of calls to see which he can operate best before selecting and mastering a particular model.

Until your calling technique has been developed to perfection, the most fruitful method of hunting is still hunting an area known to be used by a flock. Considerable pre-season scouting will not only enable you to locate the birds but also to learn their feeding and behavior patterns, which is necessary to become a really skillful hunter.

Since the turkey is a gregarious bird, one aim should be to locate and scatter a flock when hunting in the fall or winter. Even if a hunter cannot call,



Wild turkeys are considered the most elusive and hardest to kill of all Georgia's game animals and birds because of their keen hearing and eyesight.



The only successful way to hunt turkey gobblers in the spring is with the skillful use of a turkey call. J. B. Addis of Helen prefers the cedar box-slate variety, hunting the Chattahoochee game management area.

f he will conceal himself as well as possible near the place from which the birds were flushed, he has some chance of getting a shot as the birds reassemble. If he can call effectively he should do so sparingly and as soon as he gets an answer he should make himself as inconspicuous as possible and wait. Over calling is worse than not calling at all, and there is more chance of hitting a sour note. The place you make your stand is important. A log makes a good blind or a few branches stuck in the ground around you will help break up your outline. You should be able to see for some distance in all directions and avoid getting too close to thick cover. Sit in front of a tree, rather than peering out around it. An entirely different method of hunting the wild turkey and one reminiscent of hunting in Europe and England, is used in the fall on the South Georgia plantations when either-sex hunting is allowed. Here hunters armed with shotguns are placed on stands and when an attempt is made through the use of "drivers" to flush birds past the hunters. This type of elaborate operation provides some excellent wing shooting but is feasible only where the traditions and habits of the flocks involved are known in detail, as is the case with the intensive management carried out on many of the plantations.

Selection of a Gun

There are presently no restrictions on the type of caliber of firearm to be used for turkeys, leaving the choice pretty much up to individual preference. The initial choice the hunter

must make is whether to use the rifle or shotgun. Since expert hunters differ in their preference at this point it is impossible to say the rifle or the scattergun is the perfect turkey gun. It boils down to whether you wish to pick your bird off at 300 yards or endeavor to entice an old gobbler within range of your shotgun.

Generally if longer shots or wing shots are expected, a larger shot size, preferably number 4 or number 2 is required to bring down this big, tough bird. High velocity or magnum loads should always be used.

For the many people who prefer to use a rifle for their turkey hunting, any of the center-fire "varmint" rifles are a good choice.

With even the ideal rifle it is important to place your shot properly. There have been instances where turkeys have traveled tremendous distances with much of the breast shot away. The target should be the butt of the wing but the idea is to aim high and toward the front so that the heart, lungs, or backbone will be hit.

It is impossible in the space allotted here to cover all aspects of hunting what is considered by many to be our finest game bird. An entire book could be written on callers alone. One book which is recommended for the serious hunter and which was drawn upon for some of the information in this article is Roger M. Latham's *Complete Book of the Wild Turkey* published by the Stackpole Company, Harrisburg, Pennsylvania.



ABOUT THE AUTHOR

If Georgia's game biologists were called on to select one of their number as the authority on game birds, their choice would be Jim Scharnagel, northern region game supervisor of the State Game and Fish Commission at Gainesville since 1964.

After graduation from Auburn University with a B.S. degree in wildlife management, Scharnagel joined the State Game and Fish Commission in 1958 on the Altamaha Waterfowl Area at Darien. After completing a research project on squirrel management on an island in the Savannah River near Elberton he worked for several years in the North Georgia mountains, devoting his time to deer and turkey management work. Later he conducted dove research studies near Thomson while working closely with the deer herd and outstanding turkey flocks on the Commission's Clark Hill game management area.

At Gainesville, Scharnagel has continued his dove activities as coordinator of a joint research project on doves with other Southeastern states. Each year he represents Georgia on the Eastern Flyway meetings of the Dove Conference, the group which recommends dove regulations and seasons to the federal government.

In addition to hunting, Scharnagel at 34 enjoys weightlifting and sports car driving. He is a bachelor.



You can't catch dead fish. Wastes from industries and municipalities flushed into Georgia's rivers yearly take their toll.

If Georgians Act Right Now

Part I

One by one our heritages of natural beauty are disappearing, lickety-split. And for some time the waters of Georgia have been threatened. These waters will not disappear, hopefully, but there is a chance they could be lost forever for that one Georgian out of four who derives pleasure from fishing, hunting, and boating. If you add to this force all those who enjoy clean water for swimming, picnicking, and sight-seeing . . . you get an idea of the number of people who would suffer from this loss.

Pollution is the name of the monster that could possibly eat up the clean waters of the state and leave behind a gigantic recreational desert.

Many such deserts can be found today. Some industries and municipalities for years have continually dumped their ugly, poisonous, smelling waste products into Georgia's rivers and are reluctant to change their ways. "When approached about the awfulness of their deeds, they will stand up and cry how they contribute to the Gross National Product [the overall economy of the nation]," asserts R. S. Howard, Jr., Executive Secretary of the Georgia Water Quality Control Board. "We need

to get off this Gross National Product kick, and realize there are other things. You can't possibly measure the worth of seeing a clear mountain stream. Surely the cost of the rod and reel and the money spent getting there are small compared to the value of the stream's existence."

The aesthetic cry, the clean water and jumping, twisting fish has been the outdoorsmen's plea against pollution for years. It's a good one. It is realistic. Howard Zeller, assistant director of the State Game and Fish Department believes this, too. But he among others is beefing up the outdoorsmen's attack with hard facts. He is fighting economics with economics. He has figures to show that fishing and outdoor recreation are big business: There are an estimated 120,000 boats of various sizes in use within the state of Georgia. On a national average they will use, individually, 150 gallons of gasoline every year. And each boater will travel approximately 44 miles getting to water and returning home. Millions of dollars are spent by sportsmen just for gasoline alone. When you take into consideration the millions of dollars spent on picnic supplies, food, water-skis, fishing tackle, camping and

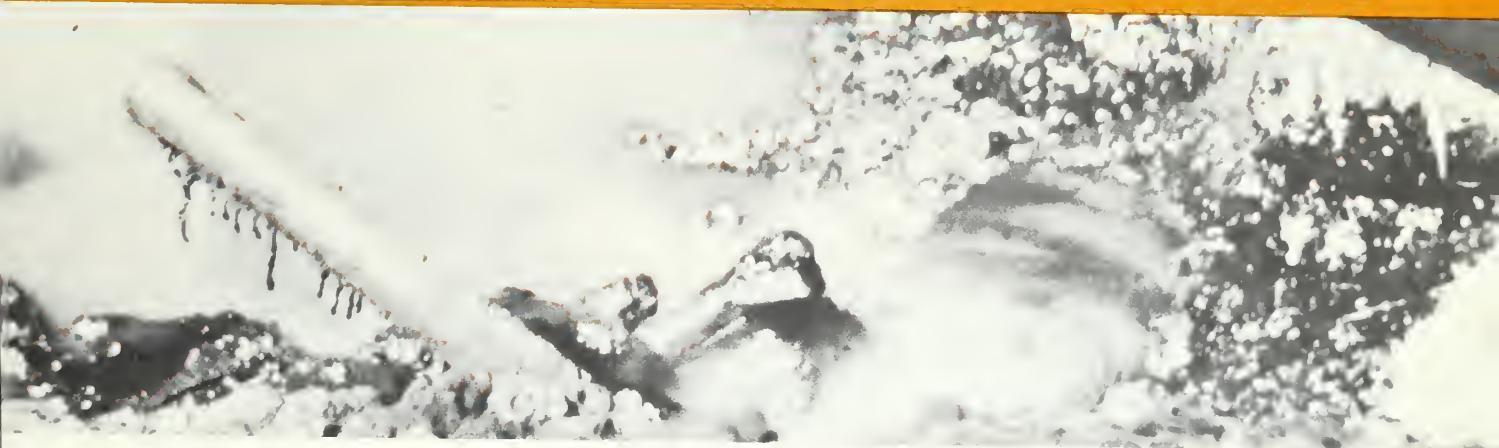
Fisheries biologists, such as Mike Bowling, are sometimes called upon to investigate polluted waters.





The icing on a dead river. Untreated industrial discharge lathers to a foam as it is poured into the Savannah River.

Slime coated pipes poke out of a processing plant and spew their filth directly into a North Georgia river.



WATER POLLUTION Can Be Tamed

By Jim Tyler

like, millions more flood the scene. The important thing about this money is that most of it goes to the "little people," the grocer, the fish camp owner, the motel man, the service station owner, and so on down the line.

The state agency delegated as "manager" of Georgia's water pollution problems is the Georgia Water Quality Control Board, an agency created in 1964. The board has a technical staff, headed by R. S. (Rock) Howard, Jr. Howard, a strong believer and fighter for the need to stop the pollution as soon as possible says, "Georgia presently has water pollution problems that are not overwhelming. We catch them now, future generations will not have to pay the high price of clean up. Even so, right now it will take about 41 million dollars to clean up Atlanta's pollution problems along the Chattahoochee River. This is a lot of money, but look at New York State. They have a 1.5 billion dollar pollution bond program." Now is the time to cut off the monster's head before it grows more and more legs that will reach out and grab more water. First reach for the main vein. Knock out the large

sources from which pollution is spewed. Then, attack the smaller contributors.

In Georgia, pulp and paper mills are the biggest source of waste products, according to the Georgia Water Quality Control Board. Sewage from cities, towns, and communities ranks second. Waste from textile manufacturers is the third largest source. Food processing plants are rated fourth, and a multitude of smaller industries are clumped together as a miscellaneous group to form the fifth largest source of pollution.

Simply put, polluters alter water. If not adding poisonous wastes, they will add something to water which destroys some of its natural properties, for example the amount of oxygen in the water. Most polluted waters are easy to detect. Pollutants such as chemicals, sewage, oil, and other by-products are dumped into water and turn the water to an unnatural color, a striking red for example. And as everyone knows, the odor of polluted water can be terrible. Fish are killed, or if they have an avenue of escape handy they will take it. The tiny organisms of plant and animal life that are necessary parts of a fish's diet will also be destroyed. And the stream is ruined.

You can't fish in it, you can't boat in it, and you can't swim in it. Obviously other uses of the water such as for drinking purposes are out of the question.

But pollution doesn't always raise its ugly head to be seen. Water can appear normal, yet pollution can go about its destructive job without fanfare. Some chemicals do not smell and do not stain the water. Insecticides that are applied to the land and then washed by rain into a river; a high concentration of small particles of dirt washed in from many sources (erosion and siltation); and even a rise in water temperature caused by an industry using river water for a cooling process and then flushing the heated water back into the river . . . although not as noticeable or not noticeable at all, can be as destructive as the high color, high smelling goop.

And, too, many instances of scattered "fish kills" are reported where a steady source of pollution is not the cause. Some money making concern may irregularly let a "slug" of poisonous material into a river and it will literally wipe out life before it dilutes away.

Part II: April Issue

FLY TYING

FUN FOR TEENS, TOO!

By Dean Wohlgemuth

Bill shows an assortment of flies he has all ready, so that when opening day comes, he's well prepared.



After the tail, then the body of the fly are in place, peacock herl is tied at both the front and back ends of the shank to form the bands on a Royal Coachman.



Wings are tied just in front of the forward band. Bill Crockford takes care in assuring that the wings are on just right.



The thick end of the hackle feather is attached near the eye of the hook.



With a hackle guard to hold it in place, it wraps the hackle around the hook.

Gloomy winter — what a bane it can be to an outdoorsman! Too early, too cold to go fishing. Too late to do much hunting. The weather's nasty, often times, and there just isn't much to do outdoors.

Those who love the out-of-doors have been known to get quite restless this time of year. What can they do indoors, that is in keeping with their outdoor nature? And who, of this breed, is as restless as any of them? Why, a young boy, of course.

But there are ways of beating the late winter lag that can keep interest sparking, and pay off in dividends a month or so from now, when the trout, bream and bass start hitting.

If you haven't tried it, you owe it to yourself to look into tying fishing flies. It isn't hard — this is attested to in that teenage boys who like fishing and such things, can master it well enough to get interested in it in a hurry.

For a case in point, take Bill Crockford. Bill, 15, is the son of Mr. and Mrs. Jack Crockford of Chamblee. Bill's dad is an all-around outdoorsman, which doesn't come as any surprise when you realize he's assistant director of the Game and Fish Commission.

Among his other accomplishments, Jack is pretty fair at trout fishing and fly tying. But other interests, namely amateur gunsmithing, have deterred Jack from fly tying. So a couple of years ago, he passed along his knowledge of the art to Bill. Now Bill is tying flies for both of them.

Bill got interested when, after reaching the age when he could go fishing with Dad, Jack remarked that he'd made some of the flies they were using. This sparked enthusiasm in the youth, so lessons began.

Bill finds fly tying "a lot of fun, and pretty easy to learn. It's a good hobby for boys my age." Of course it helps if, like Bill, your interests lie in things outdoors like hunting and fishing. But he's an all-around boy, and likes such other sports as swimming and track, too.

The best part of a fly tying hobby may be summed up pretty well in Bill's comment, "It sure is a good feeling to catch fish on flies I tied." Most of these would be the wary trout, too, since Bill ties mostly trout flies, and goes in for that sport primarily. Yet most game fish will take flies quite readily, and it's a new thrill to take them on a light flyrod.

Bill's advice is, before starting out, be certain you have all the equipment and supplies you'll need to tie the particular pattern you want to tie. And you'll need a good instruction book, complete with illustrations on step-by-step procedures.

Basic equipment includes a fly tying vice, hackle pliers, a bobbin, a variety of colors of threads, yarns, tinsels, and a good supply of feathers of various types, particularly hackles, and some deer hair. You also should have some beeswax, but a candle will do. It helps to have a bodkin and a hackle guard. A bodkin helps to tie knots and the hackle guards help in getting hackle feathers in place properly.

Using the very popular Royal Coachman for an example, Bill set to work.

First he waxed his thread with the beeswax, then tied the thread to the shank of the hook near the bend. A few turns of thread tied on a tiny piece of red feather, forming the tail.

A strip of herl from the shank of a peacock feather was tied in place, then wrapped around the shank where the tail was tied, forming the band.

Ahead of the band came red yarn, wrapped toward the eye of the hook, leaving room for another band to be added, forming the head of the fly. Each piece is carefully tied off with several half hitches. When the forward band is completed, a dab of color preservative is used to make the fly last longer. Incidentally, Bill pointed out, the yarn used for the Royal Coachman's body should be shiny.

Now comes the trickiest part of tying a fly — the hackle. For a wet fly, use a small hackle, but to keep a dry fly floating high and dry, more hackle should be used. Tie the large end of its feather to the shank of the hook near the head, and wrap it around several turns, carefully separating each hackle. More webbing is needed in the hackle for a wet fly, Bill points out, since it soaks up water better.

When the tip of the hackle is tied off, the fly is done and ready to catch a trout.

For beginner's purposes, larger hooks may be used. And these catch fish, too. Bill uses pretty good sized hooks, perhaps 10's or even 8's, and uses these flies quite successfully in stream-cr patterns for trout.

With more experience and ability, you should work toward tying smaller flies. Try a number of the popular patterns. Get a book on fly tying that explains the needed material for each fly and the steps in tying them.

So what if your first effort doesn't look too professional? Before long, your flies will be looking better, as you begin to get the idea.

Try out a few of them, perhaps on bream at first, and who knows? Before long, you may be making fine catches on flies you tied yourself! And you may find yourself tying flies year round.



Good cover, good dogs, good companions, good shooting—all these things combine to assure a successful and pleasant experience on a quail preserve.

Quail Preserves

A PROMISE WITH A PRICE

By Dean Wohlgemuth

"Where in the world can I find a place to go bird hunting? Everywhere I go, all I see are posted signs. Can't find any land to hunt on."

"I live in the city, and don't own any land. And I don't have any friends that do. I don't have a lot of time to go looking for a place to hunt. When I get a chance to go, I don't waste most of it just looking for a place to go."

"I'm from out of state. I've heard a lot about what great quail hunting there is in Georgia, but I don't know where to go. Can you help me?"

Have you heard any comments like these lately? These are just some of the questions that pour into the office of the State Game and Fish Commission during the hunting season.

Yes, there are many places where there is still good hunting. Yes, it IS awfully hard for a stranger, city-dweller, or a person who doesn't own land, to find a place to hunt. Yes, there is more timber, and it's hard to get any open shots.

What other answers can be given to these anxious hunters?

Efforts are being made to produce more public land open for hunting. These, however, are not the answer to all the problems. It is difficult to acquire land for public hunting that is open enough to provide plenty of good, open shots. Even with quite a good amount of hunting areas, it

would not be possible to provide enough public land for everyone who needs it. There are more hunters, less open land each year. The situation becomes more critical.

And not everyone is physically capable of hunting rugged, heavy cover. Occasionally, it is necessary to provide hunting on short-notice for out-of-state guests. When this happens, the host wants to provide hunting that is certain to produce plenty of shots. And he needs it NOW!

What then, is the answer? It just has to be the shooting preserve.

Preserves are not the answer for everyone, however these along with public hunting areas, game management areas, timber company lands, plantations and private lands all fit into the picture to provide shooting for all types of people, of all income brackets.

But for those who can afford it, a preserve offers a guarantee that there will be plenty of birds found, yielding good, open shots for the gun. And for less experienced wing shots, there is a better chance of a score than on wild birds.

There are some 20 hunting preserves in Georgia, and even though ours is a big state, this would make it appear that competition would be high between them for business, thus lowering prices.

Competition is high, but in spite of

this, costs must remain high enough for the preserve to show enough profit to survive. And costs of operating a preserve are high, indeed.

One middle Georgia preserve owner said he buys young quail at more than \$1 per bird. They must be fed several weeks and kept in expensive flight pens, until used. This brings the price higher.

Then, too, it must be considered that these preserves are 1,000 acres in size or larger. A tremendous investment in land is involved. Costs pile up. Preserves are not always the lucrative business they may appear to be.

Many preserves, in addition to hunting, also offer meals and lodging, so that guests may stay on the premises. This offers convenience and atmosphere alike. Most preserves are in the country a good distance from towns where good accommodations are available. These services are usually figured into an overall price for a hunt, as desired. That is, a certain rate may apply for hunting only, while a different rate is offered which includes lodging and meals as well as hunting.

In most cases, the price of the hunt also includes bird dogs and guides. Prices may range about \$30 per half day, including a certain number of birds. Over that, more birds mean you pay more.

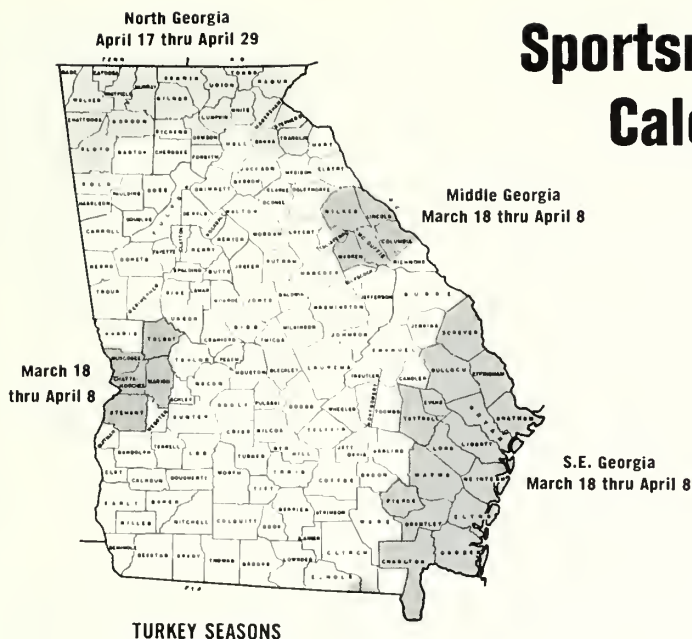
Just how good are these preserves? Actually, the standard of shooting is very good. Hunters are assured of having plenty of shots, and nearly all will be in open country. Hunters are given red carpet-VIP treatment.

The birds themselves, while not as fast and tricky as wild birds, do present challenging shots and make the hunt interesting. Birds kept in flight pens have an opportunity to build up wing strength in order that they will be good fliers when released for the hunt. They start off somewhat slower, but once in flight they build up good speed.

The season for preserves is also an added attraction, being longer on both ends than the regular season for quail. The preserve season in Georgia is from October 1 through the end of March. The regular open season this year is from Nov. 19 through Feb. 28. Even so, rates must sometimes be higher during the regular statewide season, since this is prime hunting time.

Yes, there is a definite place in Georgia's hunting picture for the preserve. It fills an important need. But the preserve plays for a select audience. You'll see more limousines than Model A's parked at the preserve — unless the Model A belongs to the preserve operator.

Sportsman's Calendar



SEASONS OPENING THIS MONTH

WILD TURKEY

Middle Georgia Season—March 18, 1967 through April 8, 1967 in the counties of Columbia, McDuffie, Lincoln, Warren, Wilkes, Muscogee, Chattahoochee, Marion, Talbot, and Stewart.

Bag Limit—One turkey gobbler per person during the spring season.

Southeast Georgia Season—March 18, 1967 through April 8, 1967 in the counties of Brantley, Bryan, Bulloch, Camden, Charlton, Chatham, Clinch and Echols south of U. S. 441 and west of Ga. 94, Effingham, Glynn, Liberty, Long, McIntosh, Pierce, Screven, Tattnall, and Wayne.

Bag Limit—One turkey gobbler per person per season.

SEASONS OPENING NEXT MONTH

WILD TURKEY

North Georgia Season—April 17, 1967 through April 29, 1967 in the counties of Gilmer, Murray, Fannin, Dawson, Union, Towns, Lumpkin, White, Banks, Franklin, Habun, Habersham, Stephens, Floyd, Gordon, Chattooga, Walker, and Whitfield.

Bag Limit—One turkey gobbler per person during the spring season.

SPRING GOBBLER

MANAGEMENT AREA HUNTS

Clark Hill Game Management Area—April 3, 1967 through April 8, 1967. **Blue Ridge, Chattahoochee, Chestatee, Lake Russell, Johns Mountain, and Warwoman Game Management Areas**—April 17, 1967 through April 22, 1967.

Bag Limit—One turkey gobbler per person during the hunt.

Regulations: \$2.00 daily permit required. Dogs allowed. Camping permitted on all areas with the exception of private land in the John's Mountain Area. Hunters may use either rifles or shotguns. Hunters who have killed a turkey outside the management areas during the spring season may not hunt on the management area turkey hunt.

TROUT

Mountain Trout

Open Stream Season—April 1, 1967 through October 15, 1967.

Creel Limit—Eight trout of all species per person per day. Possession limit 16 trout.

Fishing Hours—30 minutes before sunrise to 30 minutes after sunset. **NO NIGHT FISHING ALLOWED.**

Special Regulations—Coleman River below Forest Service Road No. 54 restricted to artificial lures only, 10 inch minimum size limit on brown and rainbow trout, 7 inch minimum size limit on brook trout. Chattahoochee River below Buford Dam to the Old Jones Bridge restricted to artificial lures only with a 10 inch minimum size limit for all trout species. Fishermen on artificial lure only streams may not possess live or natural bait.

Management Area Stream Season—May 3, 1967 through September 4, 1967 on designated days only. Write for detailed schedule.

Lake Trout Season—There is no closed season on trout fishing in Georgia lakes with the exception of Amicalola Falls and Vogel State Park Lakes, and Dockery Lake.

Special Regulations—14 inch minimum size limit on all species of trout in Lake Lanier. No size limit on other lakes.

OPEN STREAM DIRECTIONS

Below are directions to some of Georgia's most popular trout fishing streams off the management areas. These streams are all open from April 1st through October 15th without any permit required. Since they are more popular, they are also the heaviest stocked streams outside the management areas.

Cooper Creek

Directions from Atlanta: Go to Dahlonega. Proceed 9.3 miles on U.S. Highway 19 north to Stone Pile Gap (junction Ga. Hwy. 60). Take Highway 60 north 18.9 miles. Turn right at Cooper Creek Gro-

cery Store on U.S. Forest Service Road No. 4 and go 4.3 miles to creek.

Tallulah River

Directions from Atlanta: Go to Clayton. Take U.S. Highway #76 west 8.0 miles to Tallulah River Road, turn right and go 4.3 miles to junction. Turn left and go 1.0 miles to river. Good campsites on the Tallulah River.

Holly Creek

Directions from Atlanta: Go to Chatsworth (Murray County). Take U.S. Highway 76 east 0.9 miles. Turn left on paved road at Bill's 66 Service and Grocery Store. Go 6.5 miles to Conasauga Lake Road. Turn right and go 3.0 miles to Creek.

Warwoman Creek

Directions from Atlanta: Go to Clayton on U.S. Highway 23, 0.3 mile past junction with U.S. Highway 76. Turn right on Warwoman Road and go 8.2 miles. Turn right on Earl's Ford Road and go 0.5 mile to Creek.

Chattahoochee River

Go to Helen, Georgia, or Robertstown, Georgia. River at both towns.

Smith Creek

Directions from Atlanta: Go to Helen, Georgia (White County) and proceed 1.0 mile north on U.S. Highway 75. Turn right on Annie Ruby Falls Road and go 1.4 miles. Turn left on Unicoi State Park Road and go 1.4 miles to Creek.

West Fork Chattooga River

Directions from Atlanta: Go to Clayton on U.S. Highway 23, 0.3 mile past junction with U.S. Highway 76. Turn right on Warwoman Road and go 14.4 miles to river.

West Fork Wolf Creek

Directions from Atlanta: Go to Cleveland. Take U.S. Highway 129 north 10.5 miles to Turner's Corner (Junction U.S. Highway 19). Continue on U.S. Highway 129 north 12.8 miles to Kings Grocery. Turn left on U.S. Forest Service road 107 and go 1.2 miles to Creek.

Helton Creek

Directions from Atlanta: Go to Cleveland. Take U.S. Highway 129 north 10.5 miles to Turner's Corner (Junction U.S. Hwy. 19). Continue on U.S. Highway 129 north 9.5 miles. Turn right and go 0.1 mile to junction. Turn right and travel 1.0 mile to Creek.

Dicks Creek (Waters Creek Picnic Area)
Directions from Atlanta: Go to Cleveland. Take U.S. Highway 129 north 10.5 miles to Turner's Corner (Junction U.S. Highway 19). Turn left on U.S. Highway 19 and travel 0.6 mile. Turn right on paved road and travel 0.9 mile to Creek.

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Contents

| | | |
|--------------------------------------|-----------------|----|
| Thieves in the Night | Jim Morrison | 1 |
| White Knight of the Rivers | Phil Pierce | 4 |
| Jackfish — A South Georgia King | C. B. O'Neal | 7 |
| Meet Your Commissioner | Dean Wohlgemuth | 10 |
| Meet Your Director | Jim Morrison | 11 |
| Water Pollution Can Be Tamed Part II | Jim Tyler | 12 |
| Trout Tactics | Claude Hastings | 14 |
| Sportsman's Calendar | | 17 |

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Effective Law Enforcement The Key to Wildlife Conservation

Public recognition and support of the conservation law enforcement program of the State Game and Fish Commission is vitally necessary to the success or failure of any of the efforts made by biologists and other technical personnel to improve hunting and fishing. It is a well known fact that law enforcement activities are the heart of any wildlife conservation agency, and Georgia is no exception. Without the ceaseless efforts of Georgia's wildlife rangers to control night hunters, out of season hunters, illegal doggers, netters, dynamiters, shockers, giggers, trappers, and game hogs of many other descriptions, there would be no wildlife left to expand hunting and fishing opportunities. Programs of fish and deer or game bird stocking and the opening up of new public hunting and fishing areas would be of little value without control of individuals bent on overharvesting and wiping out game species for their own selfish desires. And control of the wild and reckless boat operator would be impossible without the wildlife ranger, who sometimes is one of the most unappreciated men in the world.

In order to do their job effectively, wildlife rangers and other law enforcement officers must have the support of the public in carrying out their assigned duties of enforcing the law. All too often in the past, apathy toward prosecution of violators of wildlife conservation laws has been the rule rather than the exception in some areas for a period of time. In such areas where the public was not conservation conscious, public officials were actually discouraged from doing their duty in prosecuting wildlife cases. Local county grand juries have sometimes refused to true bill good cases made by wildlife rangers, and sheriffs, and solicitors have sometimes been reluctant to carry the case forward to a conclusion. Occasionally judges have handed out relatively light sentences for major conservation offenses which were so inconsequential that the violator did not hesitate to commit the same offense again.

In cases of this kind, criticism should not be lightly directed toward these public officials, who are merely responding to public opinion as it is expressed to them in contacts with the public in person by acts as well as words, by telephone, and by mail. Since these officials must run for reelection, they must recognize the fact that the public frequently resents the handing out of fines and sentences on conservation offenses which the non-hunting public might think are too strict or harsh. If this is the case in your community, then only you can help change the picture.

Regardless of events in the past, the State Game and Fish Commission and its law enforcement officers stand ready and willing to cooperate with the general public, and with other law enforcement and judicial officials in a renewed and revitalized effort to preserve Georgia's wildlife for posterity through improved enforcement of wildlife conservation laws. —J.M.

Photo credits: Dan Keever, 2.t., t.3, t.5, l.6, 7, 8, 9, 10, 11, 14; Jim Morrison, 1, b.2, c.&b. 3, 4, b.5, r.6, 15; Jim Tyler, 12, 13.

ON THE COVER: Most casual observers would guess that the angler on this month's cover is probably casting for rainbow trout in a north Georgia mountain stream on opening day. In reality, he's jigging for white bass in the middle Georgia shoals of the Oconee River above Lake Sinclair. See the article on page four. Cover photo by Dan Keever.

Thieves in the Night

By Jim Morrison

It was a cold, clear night. The soft rays of a full moon bathed the small field in pale light while several does grazed peacefully on the lush, green grass. The deer were absorbed in their nightly feeding, and paid little attention to the slow approach of a car on the nearby highway.

Suddenly, a beam of light flashed from the car and centered a deer in its harsh glare. Blinded by the strange light, the animal stared at it curiously before resuming its grazing.

High on a nearby hill, a solitary wildlife ranger braced himself for the cannon-like roar of the high powered rifle, followed by the dancing, fire-fly-like movement of the light from the road across the distant field. The cold metal of the walkie talkie microphone seemed to chill the palm of his hand as he pressed the small plastic talk button.

With the glare of lights in their rearview mirror, the fleeing fugitives desperately braked to a halt, inches short of collision with the patrol vehicle parked broadside across the road, blocking their only escape route. "You're under arrest," one of the rangers said.





ABOUT THE AUTHOR

Jim Morrison is the editor of *Georgia Game & Fish Magazine*, as well as coordinator of information for the State Game and Fish Commission since 1963.

Although he is primarily a deer and dove hunter, he also enjoys hunting quail, rabbits, squirrel, and ducks. He especially enjoys stream fishing for white bass and trout, along with pond fishing for bream, lake fishing for largemouth bass, and occasional forays into saltwater.

Jim owns a 14 foot lapstrake boat with a 35 horsepower outboard motor which he uses most often for water skiing, boating, picnicing, and swimming on Lake Lanier with his wife Nina and their three year old daughter, Nina Lynn.

In addition to his public relations duties with the State Game and Fish Commission, Jim serves as chairman of the Georgia Natural Resource Education Council, and as vice-president of the Information and Education Section of the Southeastern Game and Fish Commissioners Association.

Before joining the State Game and Fish Commission, Jim worked as a news photographer-writer with the news department of WBT-WBTV in Charlotte, N. C., and with WPLO and WQXI in Atlanta.

Jim holds an AB degree in journalism from the University of Georgia, where he was co-captain of the varsity rifle team, earning a letter all four years and scoring the first and second highest over-all season scores in his senior and junior years. He still enjoys competitive target shooting.

He and his wife and daughter live at 2496 Joiner Court in Decatur.



Many deer shot by night hunters are not recovered because the animals run off and die a considerable distance away. Poachers are usually too hurried to blood trail a deer.

Last year, this scene or its equivalent was repeated many times. During 1966, wildlife rangers arrested 122 persons who were placed under charges related to night hunting for deer.

Shocking figures? Perhaps, but these are only token indications of the true size of the problem faced by wildlife rangers in protecting Georgia's deer herd so that it can naturally expand. Exactly how many night hunters there are in Georgia and how many deer they kill every year isn't known. "We've got a lot of it, but I don't know how to estimate it," says C. V. Waters, north Georgia region manager of the Game and Fish Commission.

"Chief Carter and his rangers in the Gainesville District alone have confiscated nine cars in the five months from October through February. There are usually two to four people a car. So far, we haven't lost a single car that we've confiscated. Every one that has been up for sale has been sold," Waters says. "We've got some good ones, including one brand new Fairlane 500 that the boy had just bought that day. We also got two '64 models, a Ford Galaxie and a Volkswagen, along with a '57 Ford that was really a hot one. It had oversized tires, four on the floor, and a '64 T-Bird engine. It'll really move on!"

Some of the guns also confiscated by rangers are expensive high-powered rifles with telescope sights worth several hundred dollars each.

But there is no doubt in the minds of wildlife rangers that night hunters are second only to free-running dogs in the number of deer that are wantonly destroyed or illegally taken. In some localities, illegal hunters are believed to kill more deer each year than are taken by legal hunters. The problem is a state-wide one, from the mountains of Rabun County in the north to the flat piney woods bordering Lake Seminole in the south. The problem is not a new one, since one of the first conservation acts of Georgia's colonial legislature in 1773 was to provide a penalty for killing deer at night of 30 lashes on the back of the offender "well laid."

"Fire hunting" or "jacklighting" of deer was first practiced with the aid of a burning torch, which served the same purpose as the present day electric lights used for "spotlighting." These methods take advantage of the fact that deer for some unknown reason are not frightened by a light at night. Instead, they either seem fascinated by it and stand motionless, or else ignore it and keep feeding. In either case, they are easy prey for unscrupulous hunters.

That this uncontrolled slaughter would soon wipe out deer if not checked

is quite obvious, and it was one of the leading reasons that deer were extinct in almost every part of Georgia by 1900. Today, it is still a major deer problem, and getting worse. Thanks to the expansion of suitable deer habitat, restocking, and protection from poachers and dogs, deer have increased by the thousands in Georgia, with a population estimated at more than 100,000 animals. This growing herd has also resulted in greater interest from poachers, who find their prey more numerous and easier to slaughter.

While the problem is greatest in areas where the deer herd is most numerous, night hunters have made their presence felt in almost all of Georgia's 159 counties, all of which have at least a few deer.

"Many new counties that were stocked with deer five years ago weren't opened for hunting this year," said Hubert Handy, coordinator of game management for the Commission. "We were only able to open up about 20 of the 40 or so counties which should have had a deer season this year because the population is still too low there."

Handy is convinced that night hunters and dogs are the two reasons for this. "Dogs are our biggest problems, since they work hardest year round on the fawns and the does, but jacklighters are right behind them."

Indications are that the average spotlighter is quite successful in taking deer. Robert Carter, chief of the Commission's Gainesville District, noted that two out of three groups of night hunters captured by his rangers in January had a deer in the car. Testimony by witnesses and informers indicate that some fire hunters shoot more than four or five deer in a single night's hunting.

But in spite of this, many of the jacklighter's targets escape him. His shots are frequently hurried, in poor light, at too great a distance. Deer frequently run for great distances, even when mortally wounded. Often the prey runs off and later lies down to die, and the meat is wasted.

That the hunter also successfully retrieves his ill-gotten gain is mutely testified to by the severed heads of does and hides of animals found lying in a roadside ditch. Frequently, animal remains left from butchering in the forest are quickly disposed of by scavengers like opossums, raccoons, and foxes. When evidence of night killings of deer like this are found even inside the locked gates of well-patrolled game management areas of the Commission, it is obvious that the problem is even greater in the outside counties where miles of lonely roads bisect deer areas. This probably helps

to explain why the deer population in the open sections never builds up as high as that of more protected areas.

Night deer poaching in most areas is most common in the winter months following the deer season of December and January, although some violations are reported year round. One reason for the decline of night hunting in the spring and summer seems to lie in the fact that the meat has a "greener" flavor when the animals are feeding on green vegetation. In the late winter months, food in the forest becomes scarce, and deer come out of the woods at night to graze on roadside grass and winter pastures, presenting a more tempting target for night hunters.

Why some hunters are willing to violate the law and threaten the very existence of the deer herd by hunting them at night is a difficult question to answer. Some of the answers are obvious, but others are more devious. Meat hunting has long been a predominant answer, since deer meat is rated as an excellent substitute for more expensive beef, even in colonial days. Market hunting is another, since five deer hides once could be traded for a pistol and today one deer carcass may bring \$25 or more, depending on the condition and amount of meat, etc. If a hunter could bag four or five animals in one night, why should he worry about a \$100 fine or less if he gets caught? One group of night hunters caught recently by the Commission's rangers were making payments on their new car with money obtained by selling illegally killed deer. Such sales are difficult to stop, even though they are illegal. Usually, they are between agreeing individuals, although some restaurants and meat packing houses reportedly also purchase venison, sometimes grinding it up and selling it as beef hamburger.

But many night hunters do not need the meat of the animals they kill. Often they seem to have little need for money. Usually they are men who can afford a fast automobile, an expensive gun, and have plenty of spare time. Few teenagers are caught night hunting. Most violators are in their 20's or 30's—old enough to know better.

Some night hunting during the season can be explained as unscrupulous efforts to bag a "trophy" buck the easy way, and some large racks undoubtedly have been taken this way. One violator reportedly even has the ceiling of his den covered with the antlers of nearly a hundred bucks he has slain at night.

But even when the motives of meat hunting, market hunting, and trophy hunting are lumped together, an explanation for many other violators cannot be so easily determined. Perhaps

the "thrill" of breaking the law, the danger and excitement of eluding pursuit and escaping detection, somehow fill the perverted psychological needs of a few sick individuals.

But regardless of their motives, it is evident that night hunters over the past two centuries haven't been deterred from their irresponsible acts by laws against them. In most cases, this probably was either because the law wasn't enforced very diligently, the penalty was too light, or both. There is no record of how effective the penalty of "30 lashes—well laid" was in reducing repeated night hunting violations, or even of how many times, if any, the penalty was actually administered. But it is known that until recently, enforcement of the night hunting laws was almost a joke.

The reasons for this situation are many and diverse, and night hunting is just one of many offenses of conservation laws and regulations that have been taken lightly by the public and law enforcement agencies and officials. Many of the difficulties of effectively enforcing conservation measures are similar to the problems of enforcement in other areas, such as moonshining, gambling, speeding, etc.

At the root of most law enforcement problems lies public opinion. Apathy on the part of the general public often leads to poor law enforcement such as officers badly underpaid who are subject to political reprisals for doing their job too well. Conditions of this kind sometimes lead to inefficient personnel who may even become corrupt. Good men are difficult to attract to this kind of atmosphere.

Continued on Page 16



This was the last sight seen by 122 illegal spotlighters arrested last year by wildlife rangers on charges of hunting deer at night. Ranger William Faulkner of Forsyth uses his truck for a roadblock.



Chief Robert Carter of Gainesville examines dual set of tags used by a night hunter on one of the nine cars confiscated by his rangers in northeast Georgia since October.

Night hunters take advantage of the fact that deer are not frightened by a spotlight, often resuming feeding in its glare.



WHITE KNIGHT OF THE RIVERS

By Phil Pierce
Fisheries Biologist

When the dogwoods begin to bloom in most parts of Georgia, fishermen just seem to be marking time at their jobs while suffering from some strange disease which comes to a fever pitch with the arrival of the long-awaited news that "white bass are a'runnin'."

The only known cure is an immediate treatment of battling one fighting white bass after another on light tackle until the fisherman just can't possibly stand to catch one more! Impossible? Then you've never caught white bass on the run.

Even though the white bass (*Roccus crysops*) is now one of Georgia's common reservoir fish, it is native only to the Great Lakes and the Mississippi River drainage. This highly desirable first cousin to the striped bass or "rock fish" was first introduced into Goat Rock and Bartlett's Ferry Lakes near Columbus, Georgia, in the early 1950's. Through an extensive stocking program by the Game and Fish Commission, the white bass is now found in virtually all of Georgia's major reservoirs. Where these fish have been successfully established, they provide some of the fastest, most exciting fishing that can be found anywhere.

The white bass has a moderately comprised body, forked tail, two separate dorsal or back fins, teeth on the base of the tongue, spines on the first dorsal fin and three spines on the anal fin. About ten narrow, dark lines or stripes run the length of the body with

five of these stripes lying above the lateral line. The mouth is typically bass-like with the lower jaw projecting beyond the upper jaw. The separate dorsal fins and the stripes along the sides will serve adequately to distinguish it from all members of the sunfish family.

The usual size of white bass caught by anglers runs from one half to two pounds. A three to four pounder is a trophy and anything over that approaches record size. The world's record caught at Grenada Dam, Mississippi on July 9, 1960, weighed five pounds and two ounces.* To successfully catch this often elusive fish, one should be familiar with their daily and seasonal habits. White bass become sexually mature when they are two to three years of age and spawn from mid March to early June in Georgia. At that time, the fish move out of the lakes and into the tributary streams where the males congregate in large numbers behind obstructions or barriers such as rock shoals, sand bars and particularly dams. The male fish start their run when the water temperature approaches 55°F and the females move into the schools of males when their eggs are "ripe" when the water reaches and maintains a temperature of approximately 62°F. The male fish are usually found adjacent to swift water directly behind dams and obstructions; whereas, the females locate themselves farther downstream in the less turbulent waters. This is probably because the female is less agile when heavy with eggs than the more streamlined males.

However, when it comes time to spawn, the females move into the schools of males and deposit their eggs (often as many as 1,000,000) directly into the water where they are immediately fertilized by the males' sperm that is also being released into the water. The eggs are heavier than water and adhesive; therefore, they slowly sink to the bottom and stick to rocks and debris. Within two to three days the eggs hatch and the minute fry join its kind in massive schools seeking food and protection in the reservoirs.

For successful spawning, conditions must be nearly perfect. A fast drop in water temperature is probably the main cause of failure with heavy predation on eggs and young fry by other fish and aquatic organisms being second.

Over harvest by hook and line is not considered to be a threat to a white

*A new world record white bass weighing 5 lbs. and 4 oz. was caught at Kansas' Toronto Reservoir outlet on May 4, 1966, by Henry A. Baker of Wichita, Kans. This catch, however, is not yet certified.





White bass have a striking white color with distinct black lines along their sides, similar in appearance to saltwater striped bass, with which they are sometimes confused.

bass fishery. This is why a liberal limit of thirty white bass per day is allowed in Georgia. The rate of growth for white bass is determined by the amount of food available and the water temperature. Where growing seasons are long and food is abundant, this species will reach seven inches the first year.

Since small fish must have small food, the Georgia Game and Fish Commission also stocked into its lakes another exotic "school" species of fish called threadfin shad which is very prolific and does not grow too large for white bass to eat. Before this species was added, white bass had to rely primarily on gizzard shad that often grew too large for them to eat within a short period of time.

Without the presence of the threadfin shad, it is doubtful that white bass would provide the fishery they presently do here in Georgia. Since white bass require moving water for spawning and prefer pelagic (open water) species of school fish for food, they do not do well in small impoundments such as farm ponds. This is one of the reasons that they are not available from state hatcheries for stocking private ponds or streams.

The best method for catching white bass during their spawning run is with light tackle using small spinners, jigs, spoons and live minnows. These lures and bait should be fished behind obstructions in the river. Cast spinners and spoons across current or downstream retrieving them at different speeds depending on success. Jigs should be cast across current or downstream and retrieved slowly, bouncing the lure along the bottom or slightly kicking the rod tip up and down while being retrieved through deeper water. The bait should be fished with a split shot and sufficient sliding weight to allow the bait to rest on the bottom after being cast downstream. Retrieve

bait slowly or let set. Bait fishing is often rewarding in areas that have been heavily fished with lures. To reduce the possibility of "hanging" a lure or bait in the rocks and logs that are so often associated with white bass spawning sites, it is recommended that casts not be made upstream, although this can be extremely productive. Because of their voracious nature, white bass almost always hook themselves, and seldom are lost before being unhooked, when they have a habit of impaling the unwary fisherman's finger on a sharp fin before flouncing back into the lake!

During the summer and fall months, white bass continue to travel in large compact schools. They often retire to deeper water during the day and invade the shallows at twilight. When feeding on schools of small shad, they often present a startling and spectacular sight. Their schools are so compact and their feeding so voracious that they sometimes cause the smaller fish to break the surface or swim up onto shore. Anglers who seek and locate a school of feeding white bass can ask for no faster or sportier action, especially when using light tackle.

Fishing for this species can run from hot to cold, depending on changes in daily feeding habits and reproduction success in the particular lake. The boom or bust type of reproduction, characteristic of all species that only spawn once each year, leads to an abundant year class which will dominate the population for two to three years. When this age class disappears, it may take a year or two for the next strong year class to attain a size desirable to the angler. Therefore, if past hot spots were not so rewarding last year, there is a good chance that things will be better next season.



ABOUT THE AUTHOR

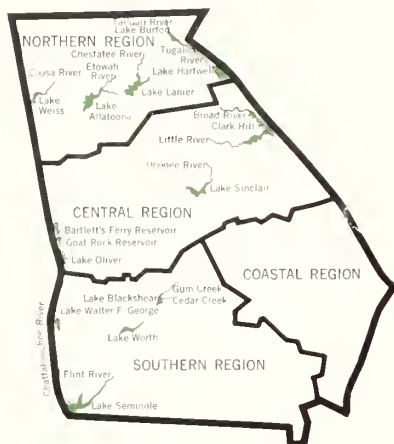
Phillip C. Pierce, fisheries supervisor for the Game and Fish Commission's Middle Georgia Region, works in the heart of the state's white bass territory, and works extensively with management and stocking of this species.

Included in his territory are such fine white bass fishing spots as Lakes Sinclair, Clark Hill and three lakes near Columbus, Bartletts Ferry, Goat Rock and Oliver. Also, he has worked with stocking white bass in Lake Jackson, and worked with stocking threadfin shad in Jackson. This shad species did much to improve fishing for crappie as well as white bass in this lake.

Phil, 32, joined the commission 10 years ago, and worked extensively in pond management until he became regional fisheries supervisor in 1964. At that time the scope of his work was broadened into management in streams and reservoirs as well, where white bass now prowl. He has worked a good deal with weed control in ponds, and with the effects of drawing down water levels in reservoirs during winter months.

When it comes to hunting or fishing, Phil is satisfied to enjoy whatever is in season. He particularly likes deer and bird hunting, and likes to "catch whatever fish are biting."

Pierce received his Bachelor of Science degree in fisheries from Oklahoma State University. He and his wife Bonnie have two daughters, Darrhea, 10, and Michelle, 3. They live in Fort Valley.



These are the best Georgia white bass lakes. Normally, the fish are best caught on their spring spawning run up the tributary streams.

Based on past catch records and fishermen interviews, the following are considered the better areas for catching white bass in Georgia even though there are surely many others that could be listed since this species is still being introduced into suitable waters.

NORTHERN REGION *Spring Spawning Runs*

In the northern region of the state, white bass fishing during the spring

spawning run is best in the Chestatee and Chattahoochee Rivers in Lake Lanier, the Etowah River in Lake Allatoona and the Coosa River above Lake Weiss at the lock and dam near Rome. There are also fair runs on the Tugalo River above Hartwell Lake and the Tallulah River above Lake Burton.

Summer, Fall and Winter

During the summer, fall and winter, good catches are often reported from Lake Lanier in the vicinity of Gainesville above Georgia Highway 60; and Flat Creek Bay and at the junction of the Chestatee and Chattahoochee Rivers. Night fishing using shad for bait is very popular in the Flat Creek Bay area.

CENTRAL REGION *Spring Spawning Runs*

In the central region, white bass fishing in the spring is best in Lake Sinclair in the Oconee River above State Highway 16 and most of the major streams that feed the lake; Chattahoochee River above Lake Walter F. George behind the low water dams near Columbus and behind Oliver, Goat Rock and Bartlett's Ferry Dams above Columbus; Clark Hill Reservoir in the Savannah, Little and Broad Rivers in addition to the smaller tributary streams that flow into the lake.

Summer, Fall and Winter

Even though white bass fishing is best during the spring spawning runs, summer, fall and winter fishing in the above areas can also be rewarding, particularly behind the power dams where the white bass congregate to feed on the enormous schools of shad that are usually present. Night fishing, using minnows, from docks and abandoned bridges is popular in Lakes Sinclair, Clark Hill, Oliver, Goat Rock and Bartlett's Ferry. Trolling off points and submerged islands and casting directly into schools of feeding white bass are also rewarding techniques

employed by central Georgia fishermen. The most unique white bass fishing area is found in Lake Sinclair during mid-winter in the vicinity of the Harlee Branch Hydroelectric Steam Plant where the warm water discharge attracts these and many other species of fish.

SOUTHERN REGION *Spring Spawning Runs*

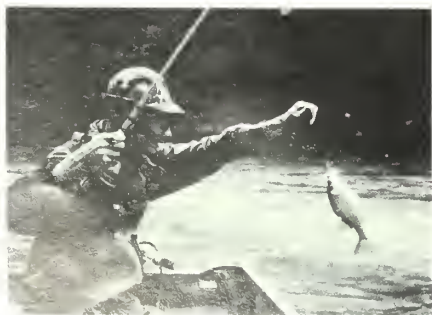
Although white bass are found in all of the major lakes in the southern region, only a relatively few spawning sites have been located that contain large concentrations of fish. This is because migration barriers such as high shoals and dams which are common in the northern and central regions are not found immediately above any of the southern region lakes. However, fishing during the spring is considered fair to good at Lake Blackshear in Gum, Cedar, Spring, and Collins Creeks and behind Blackshear Dam using live shad or small spinners, jigs and spoons; Lake Seminole in the Flint River arm from Hales Landing up to Bainbridge and below the Lake Worth Dam at Albany; Chattahoochee River below Columbus Lock and Dam.

Summer, Fall and Winter

Some white bass are caught all during this period in most of the areas mentioned above, particularly behind the dams where these fish feed on the congregated small shad. Summer and fall fishing is also good during the early morning and late evening in these lakes by trolling spinners or spoons and casting directly into feeding schools. Night fishing, using live minnows, is also productive at times.

White bass are exceptionally good eating if filleted and prepared fresh or frozen in water before cooking.

Once you have fished for white bass, you will surely be back to your favorite spot when the dogwoods are in bloom, but if you haven't, you don't know what you have been missing.



On boat spinning tackle, the white bass is a rumpy fighter who never stops pulling until he's on the stringer. Game & Fish Editor Jim Morrison lands one.



On their spawning run it's not unusual for white bass to exceed the limit of 30 white bass per person. This one was caught by Jim Morrison.

JACKFISH-A SOUTH GEORGIA KING

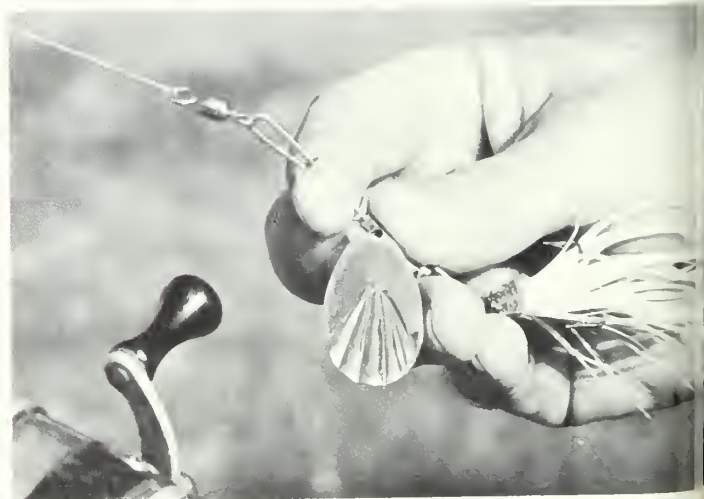
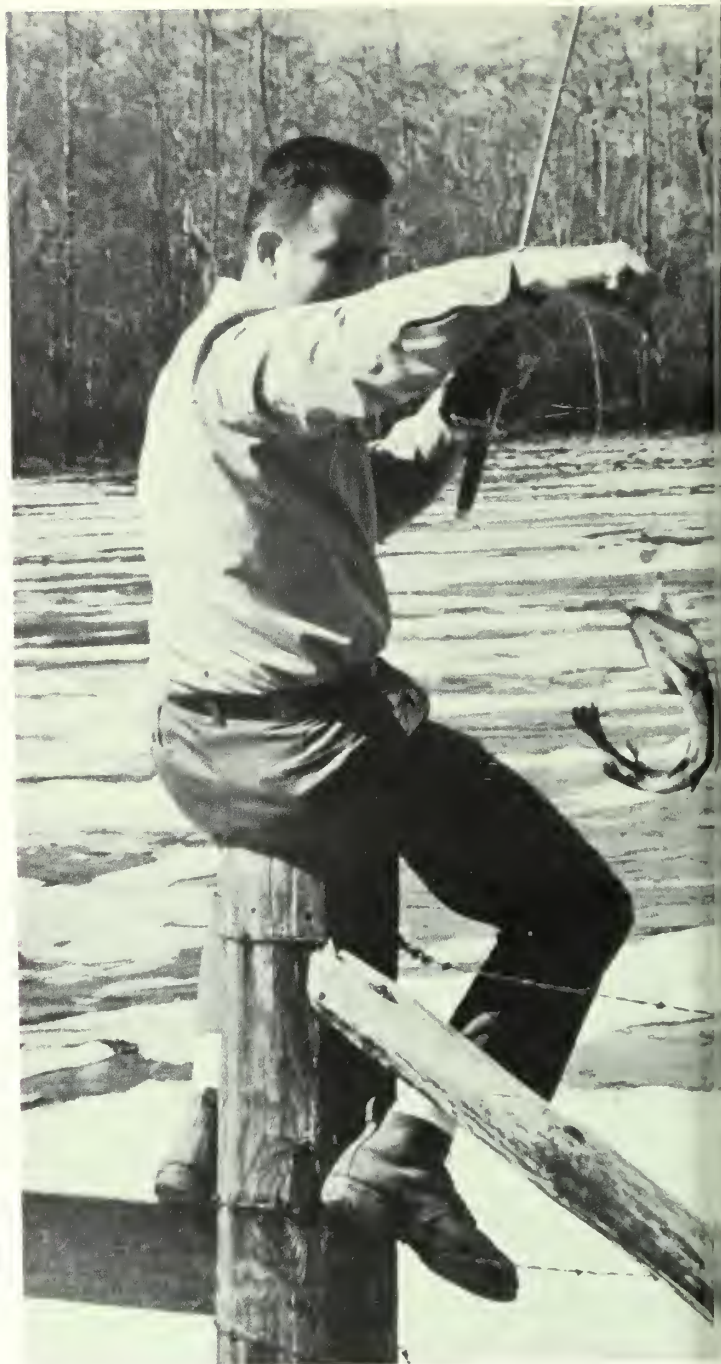
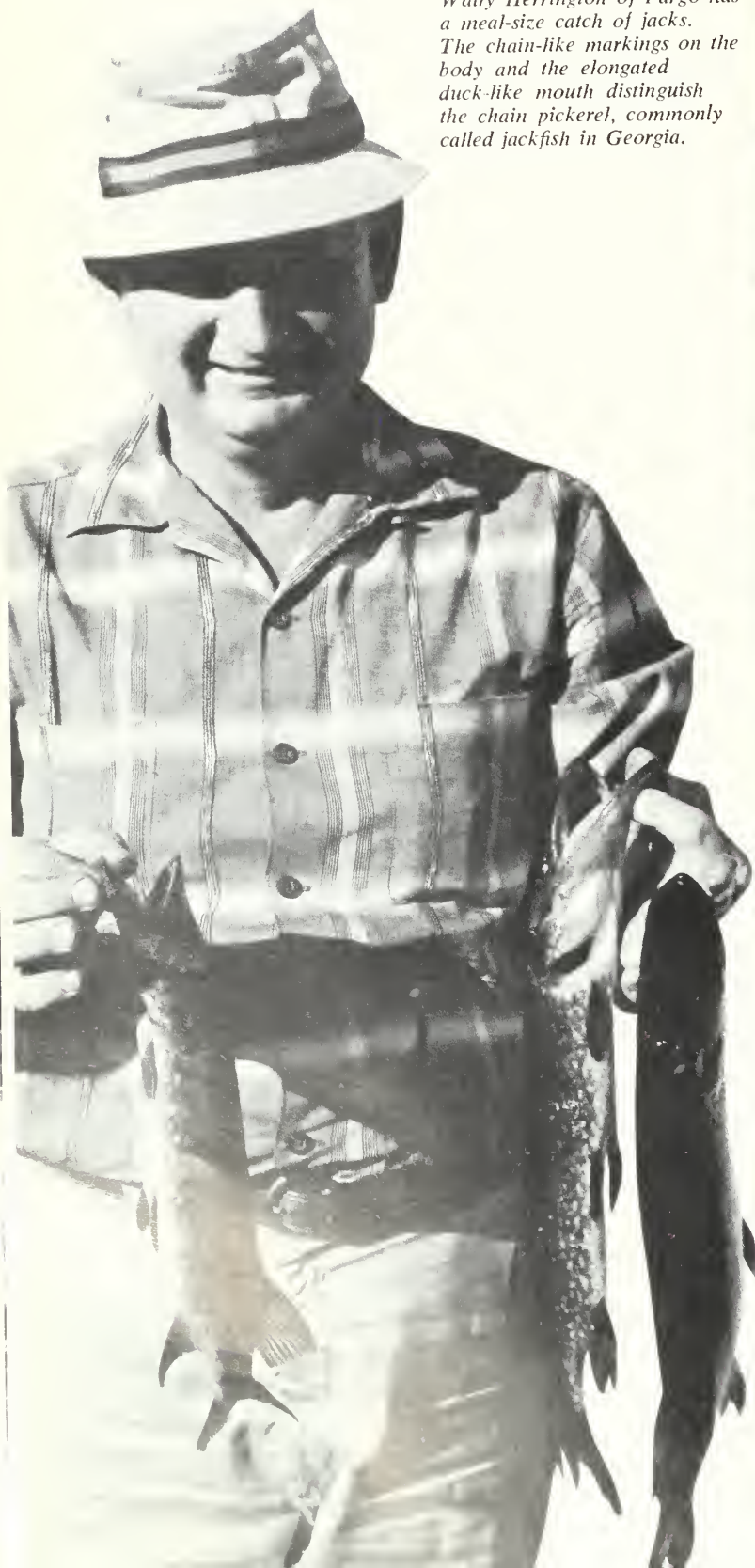
From the heart of the Okefenokee Swamp and down into the black waters of the Suwannee River as well as in other similar South Georgia habitats, one can readily find the smaller relative of one of the most sought-after fish in the northeastern United States — the jackfish. The larger relative is the muskellunge which makes its home in the colder waters of more northern regions. Both belong to the pike family.

By C. B. O'Neal
District Fisheries Biologist
Waycross



Paul Loska takes a jack near the spillway of the dam in the Okefenokee Swamp. The spillway marks the start of the Suwanee River.

Wally Herrington of Fargo has a meal-size catch of jacks. The chain-like markings on the body and the elongated duck-like mouth distinguish the chain pickerel, commonly called jackfish in Georgia.



A fluted spoon flashing ahead of a multi colored skirt is a common

While muskellunge up to 60 inches in length and weighing 75 pounds stand on the record books, the smaller jackfish is pound for pound every bit the fighter that characterizes the whole family.

This is not to say that the old jackfish is by any means a small fish, for to be sure, as an adult he is not. And as far as we can tell, Georgia grows them bigger than any other place. Among the records held by Georgia and Georgians stands the world record Jackfish.

The record is 9 pounds, 6 ounces. He was caught by a personal friend of mine, Mr. Baxley McQuaig, who resides in Homerville, a small South Georgia community in Clinch County. The habitat of the lunker was what is known to folks in these parts as a cypress mill pond located partly in Clinch and partly in Atkinson counties.

Unlike many world records, the world record jackfish is not mounted and displayed for the many folks who wish they could drop by and see such a prize. Rather, he was consumed by some fine people who enjoy a good fish fry as much as I do. Following the catch, he was displayed to various people in the vicinity, appropriately weighed and measured, and taken home where he caught mouths to water.

The bait used in taking this world record was a black spoon, a favorite of many anglers down this way. Incidentally, the angler in this case is by no means a once-in-a-while amateur fisherman. He goes at every opportunity, fair or foul weather, and ranks among the best I have ever seen with reel and rod.

The accepted common name of the jackfish is chain pickerel. Scientifically he is known as *Esox niger*. But let's be less technical and call him the jackfish, the name most often used. He is an easily distinguishable fish, being marked by having the front of the head shaped much like a duck's bill, stout, sharp teeth, and dorsal and anal fins set well back on the body.

The jackfish is a spring spawner, spawning taking place over soft bottoms away from any current. The eggs are adhesive, stick to bottom materials, and are deserted as soon as they are laid. A week or two afterwards they hatch and at the age of about two weeks are predacious and cannibalistic. They remain so for the balance of their lives. I recently examined a 4-pound, 1-ounce jackfish which had a 7-inch warbait in its mouth and another 13-inch jackfish in its stomach.

"The things always seem to be hungry," a friend of mine remarked recently. "Or maybe it's just greed, 'cause a fish with a stomach as full as some I've seen and caught sure couldn't be hun-

gry."

I agree. I have caught them with the tail of a previous meal still protruding from their mouth, yet they were still enthusiastic enough about food to take my lure. Just more proof, I suppose, that it's not necessarily the hungry fish of which we catch the most. Rather, they are the well-fed ones which have plenty of vim, vigor, and vitality and just can't stand the sight of something they figure they can outdo with little effort, hungry or not. Jackfish stomachs are fully gorged, winter or summer. He may slow down a bit as winter approaches but if he does, it is difficult to detect by examination of their stomachs.

The food habits of these fish and their constant concern over tantalizing baits make the jackfish a favorite sportfish, particularly in South Georgia.

In lakes and reservoirs the jackfish can be found cruising the edges seeking a tasty morsel. They are frequently caught by bass fishermen since their feeding areas are basically the same. He is a very definite competitor with the largemouth feeding in the same area and on the same type of food. To put it in simple terms, the two predators eat at the same table.

In streams, the jackfish can be caught in swift water but is more characteristically found in calmer waters of small lakes away from the main stream, and a favorite lurking place is in the mouth of sloughs which seem to be an area of abundant food. Any calm water in an area where smaller fish tend to congregate is an excellent place to drop your lure.


For the most part, the southern counterpart of the muskellunge takes to relatively noisy and very brightly colored baits with a great deal of action and flash. He simply cannot tolerate a flashing spinner moving through the water in his vicinity.

Favorite baits down South include the black spoon with skirt (red and white, or black and white seem to be preferred) or with pork rind of various colors; the brighter the better. The Buel Spinner and Fluted Spoon which are both excellent and brightly colored with feathers and spinner seem to be more than even the most cautious of jackfish can tolerate.

He's a real sport fish to many of us. Once hooked he has a mind of his own, and he uses it well. By the time he's boated, and sometimes he isn't, you have had all the fight and fury you can use for the moment. However, if you like the sport of such a fight, drop back in the same spot, there's likely another one around there close by. As many as four or five fish from the same spot is not uncommon.

When you get home with your catch,

you're still not through with the pleasures of jackfishing. You have some of the best eating you can imagine in the world of fish. True, he's a bit bony, but gashed and fried rather brown, he can be the main attraction of many a fish fry.

Get yourself rigged. Spring is here. The jackfish is ready to give you the type of excitement which no other fish can give. Have yourself some fun. In lake, pond, or stream, go catch yourself a jackfish—a South Georgia king! 



ABOUT THE AUTHOR

C. B. O'Neal is well qualified to write about jackfish (chain pickerel). He fishes for them frequently, and his job as a fisheries biologist for the State Game and Fish Commission brings him in constant contact with them professionally.

Born 30 years ago in Quitman, Ga., C. B. is a lifetime resident of the state except from 1954-58 when he was in the U.S. Air Force. He received his BS degree in biology from Valdosta State College where he graduated in 1962 with academic honors. He was an instructor of biology at his alma mater from 1963-1966.

At the present time, his main endeavor as a biologist is looking into all aspects of fish in the Suwanee and Alachua rivers; such as what fish are there and how many there are.

Asked about his hobbies, he says, "fishing, just any kind . . . can't say I have any other hobbies. Speckled sea trout are my favorite."

C. B., his wife Irene and eight year old daughter Debbie live at 405 Bibb St., Waycross.

meet your commissioner:

RICHARD TIFT

Richard Tift represents the Second Congressional District in the conservation and development of Georgia's wildlife resources.



By Dean Wohlgemuth

From the moment you arrive at The Oaks Plantation just outside of Albany, you notice the air is filled with Deep South tradition. And when you approach the house, you begin to become aware of an atmosphere of an ardent bird hunter.

At the door stoop is a boot brush adorned with a pair of golden quail. Once inside the den of the house, you'll see paintings of birds . . . you'll see birds everywhere. There are plates, ashtrays, a lighter, drapes . . . game birds of all types in every form imaginable. He and his wife, Elizabeth, have made their home at The Oaks Plantation for 27 years.

This is the kind of background brought to the Game and Fish Commission by Richard Tift, who represents the Second Congressional District. He has served on the Commission longer than any other current member, having begun his 17th year in his post.

Richard Tift represents a section of the State of Georgia that is typical of him. His own plantation is located in the heart of many well-known plantations. And these plantations are the heart of the plantation country of Georgia. Richard Tift, many years ago, through his foresight and love of quail hunting and game management, put together, organized and developed for his clients many of the plantations now in existence. In this area, Old South tradition is the standard—a tradition that is liberally seasoned with plantation-type quail hunting.

It is only natural, then, that Richard Tift is an ardent quail hunter. Nor is it unnatural that his primary business interests tie in very closely with plantations.

His foremost business concern is the Richard Tift Company of Albany, a real estate firm that specializes in the handling of plantations and huge tracts of land. His dealings include not only Georgia, but Alabama, South Carolina and northern Florida.

The 55-year-old native of Albany has

widespread land holdings and many business interests, including banks, railroads, insurance brokerage and land development.

In the field of conservation work, he has been chairman of the Georgia Game and Fish Commission on three occasions during his 17-year tenure. He was appointed by Governors Herman Tamm, Marvin Griffin, Ernest Vandiver and Carl Sanders.

His plantation work in real estate also involves game management, in improving quail hunting on these plantations.

Mr. Tift was enrolled at Georgia Military Academy at College Park at the age of 14, and after three years there, he entered the Citadel at Charleston, S.C. He also attended the University of Georgia in Athens three years, ending his education there in 1924.

While a Game and Fish Commissioner, Mr. Tift has seen the Commission come under the merit system, was chairman of a committee that gained approval for the renovation of the state's fish hatcheries which is now underway, and has seen the Commission raise its game management lands from some 125,000 acres to more than a half million acres.

He has seen the Commission come a long way, to become an efficient and well-run operation, and had a part in building the Commission to its present standards.

Mr. Tift has hopes of even further progress for the Commission, which would make it the best conservation organization in the entire nation, particularly the South. "And it is headed that way," he added. "We have made great strides with the added revenue we now have. I don't believe any other state in the South has made the gains Georgia has in conservation for the sportsmen of the state," he said.

"We have a splendid bunch of devoted citizens in Georgia now serving on the Commission, devoting their time and effort for the betterment and improvement



Commissioner Richard Tift shows that his bird dog pups are carefully trained and obedient. The young pointers hit a point on a training "bird."

of the Game and Fish Commission," Mr. Tift said.

In addition to hunting quail on his beloved plantations, Mr. Tift also enjoys hunting other upland game and ducks. He enjoys fly fishing for trout in North Georgia's mountain streams, and fishing the South Georgia streams for bass.

Conservation, hunting, and fishing are a way of life to Commissioner Richard Tift of Albany.

Meet your Director

By Jim Morrison

George T. Bagby, the new director of the State Game and Fish Commission, is a surprising man to people who are just getting to know him.

Born and raised in northwest Georgia at Dallas in Paulding County, George learned to hunt and fish with his father at an early age.

Today at 46, his favorite hunting sport is quail hunting. "I can't hit 'em, but I shoot at 'em," George says. He also likes to rabbit hunt, and owns several mixed breed hounds for this purpose, using a double barrel 16-gauge shotgun mostly. Occasionally he hunts squirrel and has done some possum and coon hunting. He is a long time member of the Paulding County Sportsman's Club. The club leases the hunting rights on several thousand acres of land, where George does most of his deer hunting.

Probably his first love in the outdoors is fishing, primarily for bass and bream and saltwater bass and trout. "I like to fish for bream with a cane pole, but you can't beat that topwater fishing for bass when they come up out of the water," George says with a twinkle in his eyes.

George and his sister Frances now own a cabin on the river at Steinhatchee, Florida, where he makes a semi-annual pilgrimage between Thanksgiving and Christmas, and again in the spring. "We'll have to annex it to Georgia now!" a friend commented.) He keeps two outboard boats at the cabin for sea trout fishing on the flats, an 18-footer and a 14-footer, both fiberglass.

As a boy, George's life was not always as easy as that of more fortunate youngsters. He soon learned to help his father in his work as a plumber until declining health forced his father to retire. After his father passed away, before George graduated from high school, his mother worked as a clerk in a local dry goods store and later as a receptionist in a doctor's office to finish putting George, his two older sisters, and a younger brother through high school.

With the help of his mother, he worked his way through nearby West Georgia College at Carrollton, hitchhiking his way to classes from home. During World War II, he served with the Navy on the U.S.S. Colorado in the South Pacific. "I was about as high up as you can get," George says with a pause, "and still be a seaman first class."

After the war, he joined the Georgia Bureau of Investigation as an agent before becoming director of the Bureau in 1947 during the Administration of Governor M. E. Thompson.

Later he began attending night law school at John Marshall in Atlanta, riding to work at his daytime job at an asphalt plant on the MacDougald-Warren work truck and hitch-hiking home.

In the meantime, George and his wife still helped with the family dairy until the day he passed the bar examination and went into private law practice in 1950. During most of that time, he has had a solitary practice. "A lawyer should use more care in selecting a partner than he would his wife," George chuckles.

First elected to the General Assembly in 1947, he soon earned a reputation for his support of bills sympathetic to the interest of the working man, both in and out of organized labor. He crusaded for stronger law enforcement, and led the move in the Assembly which gave highway patrolmen their largest single salary increase in history. For this, he was selected to join a handful of men honored with a life membership in the Georgia Peace Officers Association.

He led a legislative effort at the 1965 session to raise the license fees to provide more funds for the State Game and Fish Commission. During all of his 15 years in the General Assembly, at his request he served as a member of the Game and Fish Committee, later combined into the Natural Resources Committee, and has taken an active role in the passage of many wildlife bills.

During the Administration of Governor Ernest Vandiver, he served as speaker pro tem of the House. Later he was chairman of the powerful Ways and Means Committee of the House during the Administration of Governor Carl Sanders. Today, he is on a first name speaking basis with every member of the General Assembly.

As director of the State Game and Fish Commission, Bagby says in response to questions about his plans for the Department that "the main thing, of course, is to expand our program of law enforcement and construction of new public hunting and fishing areas. I intend to work more closely with the General Assembly and with the courts — the solicitors, judges, and sheriffs over the state."



"I didn't say that I was a good shot." Director Bagby has been a small game hunter since childhood. He is primarily a quail, rabbit, and deer hunter.



"You can't beat that topwater fishing for bass," Bagby gives his youngest son Tommy, 8, a casting lesson on one of the three stocked ponds on his 250 acre Paulding County farm. He recently opened a nine hole public golf course on the farm.



"We use the camper for going to Florida, and sometimes for deer hunting." The Bagby clan loads the hunch for a fishing trip. Mrs. Ruth Bagby gets a hand from sons Tommy (L) and Jeff. Their daughter, Judy, is a freshman at the University of Georgia.

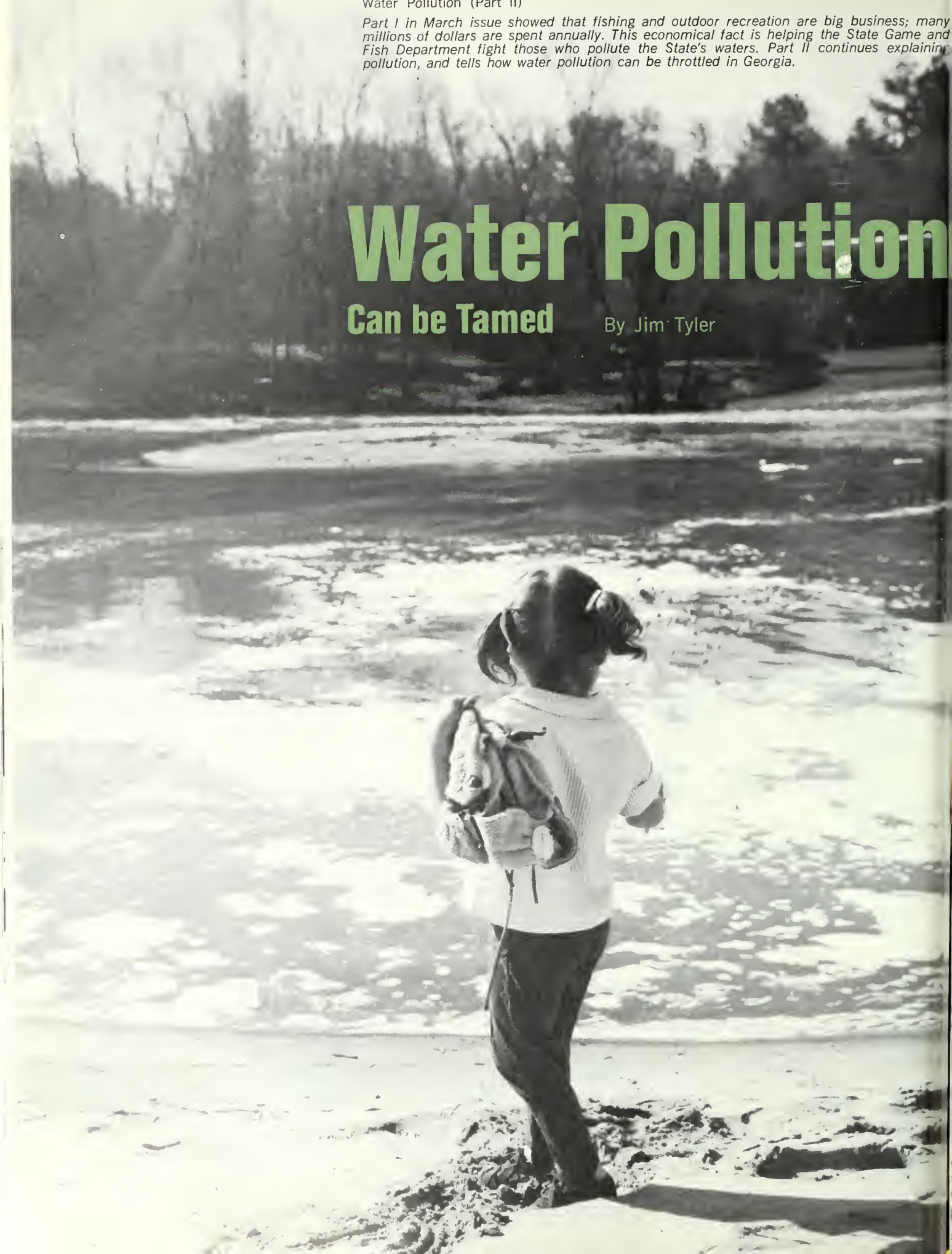
Water Pollution (Part II)

Part I in March issue showed that fishing and outdoor recreation are big business; many millions of dollars are spent annually. This economical fact is helping the State Game and Fish Department fight those who pollute the State's waters. Part II continues explaining pollution, and tells how water pollution can be throttled in Georgia.

Water Pollution

Can be Tamed

By Jim Tyler



Nature itself can take care of pollution but now it usually isn't given a chance. Bacteria in a river can dissolve and get rid of waste products if they have enough time. The natural process just does not have enough time. More pollution will be dumped into the river at a point downstream before the original load of pollution can be dissolved.

When a river that hasn't had a chance to cleanse itself empties into an ocean estuary area such as Georgia's, the filth knows no salt water boundary and flows out to kill and threaten marine life. Along the coast the Savannah, Altamaha, Brunswick, and St. Marys Rivers pump, if not death-dealing polluted loads, at least wounding loads to the shrimp, crab, shellfish, and fish which abound in the rich brackish water environment. Pollution has already rendered over half the coastal estuarine area unsuitable for oysters. If they do grow there, they are possibly contaminated.

So it is up to industry and communities to eliminate some of this load of pollution and make sure the load put into the water is small enough or treated enough so the river can handle it.

"Because of abundant rainfall [average 47 inches a year], and abundant river basins, Georgia doesn't have the problems of the industrial east," claims Rock Howard, executive secretary of Georgia's Water Quality Control Board. "With less rainfall and more industry they have, what I call 'working rivers.' But in the last 10-15 years Georgia has moved from an agrarian [farming] state to an industrial state. This puts a heavier burden of industrial and municipal pollution in the rivers. And, also, today people have more spare time. They need water clean enough for swimming, fishing, and boating."

This is one of the big realities that is being forced upon us. Water is needed for drinking and household purposes, industry, mining, agriculture, food processing, AND recreation and fishing. "Water of the state should be made available for all types of use and not become degraded to a level which restricts use to a few agencies or individuals," says Howard Zeller, assistant director of the State Game and Fish Department.

And in Rock Howard's words, "the responsible blue chip industries are cooperating and understand that the theory of multiple use of the state's waters can't be kicked around any longer." They realize that fishing and recreation are to be considered. "Another thing," added Howard, "this GNP [Gross National Product] kick has been taken up with the Chamber of Commerce philosophy. They should consider that new

industries will not move in and establish along a polluted river. Four or five industries can hog a whole stretch of a river."

The Water Quality Control Board was established to see that waters in Georgia are used properly for as many uses as possible. To do this the Board's technical staff has been surveying water areas in the state. They have started out with the larger rivers and river basins. Through the years they will expand their research until they have covered every stream, lake, and estuary in Georgia.

Here is how a survey works. First they select a section of a river. When possible their scientific staff samples the water to find out what fish and other life is living there. They check the water to see how clean it is, how much oxygen is in it, what the temperature is, and check a host of other things that totaled, give a picture of the river's condition along that particular section. They study who is using the waters of the river and what they are using it for.

A newly formed organization, the Division has not had time to take all the numerous samples that are needed. Sometimes they rely on other agencies, such as the Game and Fish Commission, who for years have collected data about the state's waters.

Then when all the information is gathered, the staff gets together and proposes which use is best for different areas of the river. For example, here is how they classified the Chattahoochee River from its headwaters in Habersham County to where it flows through West Point, Ga. The first 60 mile stretch is designated for recreational use, the next 50 miles for drinking water. The following 33 miles for industrial water, the next 25 miles for fishing, and the last 45 mile section is designated for recreational use.

This does not mean that an industry cannot locate along the section of the river designated for recreation. It means that anything they dump into the river has to be treated so the water can still be used for recreational activities, such as swimming and boating. Or if an industry is located in the zone that is supposed to be for fishing, for example, and they have been dumping waste products in the river that make this activity impossible, they will be required to "clean up" the wastes they dump in.

When a proposal has been completed, the Division calls a public hearing so agencies, like your Game and Fish Commission, industries, and any concerned individual or organization can meet and express their opinions.

For example, at the public meeting



"Rock" Howard, head of the Georgia Water Quality Control Board's technical staff, is the state's number one fighter against water pollution.

to discuss the proposed use of the section of the Chattahoochee just mentioned, Zeller presented the following information. He estimates that 20,000 boaters will yearly consume three million gallons of gasoline along the outlined area. This contributes \$720,000 to gasoline dealers in the area, and puts \$195,000 in the state kitty through tax on gasoline. Here again these figures do not take into consideration the thousands of dollars spent on picnic supplies, food, water-skis, fishing tackle, camping, etc.

With figures like this, the Game and Fish Department and the Water Quality Control Board can stand much taller while arguing for your rights. In the past, industries, the money makers, the raisers of the GNP, have been given a pat on the arm and a "be a nice boy and try not to dirty the water." Most of them have gone merrily on their polluting way because they, supposedly, contributed so much to the economy. By messing up the water they could possibly have caused more money to be lost than was actually gained.

Today water uses have a new perspective. The weight of sportsmen is being felt. Also, in Georgia, there is a strong law behind the wise-use of the state's water. Zeller says everyone has an obligation to safeguard this rich heritage, this water. And he is right. It is everyone's obligation, and if the Water Quality Control Board has the people's support, water pollution can be controlled. It can be tamed.

So is Howard right: "Water pollution is not all black and white, there is grey. Extreme sides, the conservationists and industry, have to compromise. If they don't, the young children will not inherit this interesting, entertaining, and beautiful world."



TROUT TACTICS

By Claude Hastings
Northern Region
Fisheries Supervisor

Sometimes I wonder if we fully appreciate that we have trout fishing this far South. Trout are normally thought of in terms only of being in the North, but since northern Georgia possesses the most southerly range of the Appalachians it also possesses altitudes sufficient in height and therefore sufficiently low in temperatures to support trout.

The mountains of Georgia have three species of trout. The brook trout—commonly called “spec,” “speck,” or “speckled trout”—is the true native of these mountains. At one time it was the only trout in the mountains and was abundant in all the streams which had low temperatures and possessed barriers to keep other fish from invading its territory. Through the years the brook trout has been crowded from most of its original habitat by other species of trout, stocked by well-meaning fishermen and organizations, and since it is not tolerant of other species it remains in only a few of our small headwater streams that are isolated by waterfalls, except where it has been restocked.

The rainbow trout was stocked in our mountains many years ago from egg stockings shipped in from the west coast and has become the most abundant of the trout in Georgia.

The brown trout (a European) is our latest arrival and is well-established in most of our streams. This fish seems to be the only fish that can withstand our present-day fishing pressures on trout streams and maintain a good population of good-sized fish.

Of the three kinds of trout that we have, the brook trout is the smallest and seldom exceeds 10 inches. Normally it grows to about seven inches. It also is the easiest caught of the three species.

Rainbow trout seldom exceed 12 inches in length in our streams, but are capable of growing much larger. The rainbow trout would grow from four to six pounds in many of our streams if it were not so easily caught.

The brown trout grows large in many Georgia streams. Brown trout which are 16-18 inches in length are not uncommon and six to eight pounders are recorded every year. The brown trout attains this size because of its adaptability to various types of habitats and its difficulty in being caught by fishermen.

Success in fishing for trout is like attaining success in anything—you have to work at it. Now, I realize and I hope you realize that reading this is not going to make you an expert trout fisherman, but I believe that it will make you aware of the mistakes that you are now making and I believe that it also will give you a few hints that you may try.

All of the following suggestions will be made to aid the fisherman to catch “wild” trout. These methods of course will also work for fishermen fishing for “stocked” trout.

The first thing to consider is the stream being fished. Make sure it has a fair population of “wild” fish in it. This information may be obtained by contacting Game and Fish Commission offices, inquiring from Wildlife Rangers, talking to residents, or discussing the possibilities with other fishermen.

I personally like relatively small streams. I have found that trout strike a greater part of the day if the stream is completely (or nearly so) shaded and are not so “moody” as trout in large streams.

Remember this also. To be a successful trout fisherman, you must fish alone unless you are on really large water. If you feel that you must have someone with you, alternate the lead. In other words, one fisherman should take the lead and the other fisherman should trail at a distance. This is fine for the fisherman in front but the fisherman in back will experience few strikes from “wild” fish.

There is a great amount of disagreement among fishermen as to the best time of day to fish for trout. In mid-summer, I have found that the best hours are from daylight until about 9:00 a.m. and then again from about 1:00 p.m. until dark.

Early in the year, when the water is cold, I have found morning fishing slow and prefer to fish from about noon until dark. There is a good reason for this slowness on the part of the fish to strike in the morning. It is due to the water being at its coldest at that time of the day. Toward noon, as the water temperature rises, the body processes of the fish become more active causing it to



ABOUT THE AUTHOR

When Claude Hastings writes about trout fishing, he draws from many years of experience on trout streams, both as a fisherman and as a biologist.

Having joined Georgia Game and Fish Commission nine years ago, Hastings, 41, has worked with trout management all that time. He was project leader of a stream and lake survey conducted under a Federal aid (Dingell-Johnson) program. He became Northern Region Fisheries Supervisor for the Commission in 1964.

There's no fish he's rather go after than a trout, when it comes to fishing. Nor is there anything he'd rather do than go fishing. Claude also likes all kinds of hunting, but has a particular fondness for stream fishing. He doesn't care much for angling in reservoirs.

Receiving his BA degree from John Brown University in Siloam Springs, Ark., he got his BS in zoology, specializing in fisheries, at the University of Arkansas in Fayetteville. Then he received his MS in zoology, again specializing in fisheries, at the University of Kansas in Lawrence.

He served in the U.S. Army in 1950 and 1951.

Claude makes his home in Gainesville, where his office is located. He and his wife, Shirley Anne, have two sons, Marc, 15, also an ardent fisherman, and Bruce, 13.

lure stops—strike. Any hesitation at this point with spinners or spoons and you have missed your fish.

Now, just a word or two about fighting your fish after it is hooked. Be sure that your rod is in a relatively high position, say about 10 to 11 o'clock. Never allow the rod to point directly toward the hooked fish. Also never hold the rod so that it is directed back over your shoulder or you may find that your beautiful one-piece rod is now a two-piece rod.

Your drag should be set at all times so that it will give line, slightly below the breaking point. Beware, however, the loose drag. You will have difficulty setting hooks on the strike and you will have difficulty keeping your fish from wrapping your line around the nearest brush pile.

Never try to rush your fish. When you feel that the fish is sufficiently worn out to be landed bring it to the net head first. If you, like many veterans, do not use a net, slide your fish out on a sand bar or gravel bar. If these are not handy, the trout may be landed by grasping it from the top side directly behind the gill covers. One more thing—do not land fish by taking hold of your line.

Good Luck! Good Fishing! ☺

become more likely to feed.

Fly rods and spinning rods are the rods to use for trout fishing in streams. There is nothing in trout fishing that will give as great a thrill as seeing a large brown rise to a dry fly. However, since most of our trout streams are small and brush-covered, there is little room for a forward cast, much less a back cast. Ultra-light spinning rods in 4½-5½ foot lengths are recommended. Appropriately light reels should be used with these rods. The Alcedo Micron reel and the Mitchell Model No. 308 are both good choices. Lines of the finest diameter in 2-4 lb. test should be used. I prefer a 4-lb. test. Ultra-light lures that are especially good are Mepps "0" spinners (bucktail and plain) in both brass and nickel, C. P. wing spinners (Size "0" and "1") brass and nickel, and "L'tl Spike" wobblers—brass, nickel and pearl. There are other spinners and spoons that are good, but these are my favorites.

Some good trout fishermen who fish exclusively for large browns with spinning equipment use heavier equipment and larger spinners and spoons. But if you want faster action, stick to the small equipment.

Some of the more popular and successful baits used by fishermen who prefer not to use artificials or who wish to try their fishing include worms, caddisfly larvae, stonefly nymphs, mayfly nymphs, hellgrammites, crickets, grasshoppers, hornet larvae, and salmon eggs. Many of the small rocks and sticks found in the stomachs of trout which are such a mystery to fishermen are the remains of cases of the caddisfly larvae. Fishing with natural baits with a good presentation is as difficult as fishing artificial lures—perhaps more so. I have tried baits on several occasions but have never met with much success. Therefore, since I cannot give this information first-hand, the reader must go elsewhere for it.

The approach to your trout must be cautious. Stay in the water or as low as possible at all times. Fish are much easier "hooked" by a fisherman on the bank than in the water. Walk softly so as to not crunch gravel under your feet and

so as not to telegraph your presence by sending waves ahead of you. This is especially important in quiet pools where trout are more difficult to catch.

The types of places in a stream where trout will be found vary, but if you look in the following places you will usually find them. Generally, all trout like to be under some type of cover. This can be low brush in the water or slightly above the water, under logs, beneath undercut banks, under ledge rock, or beneath the edge of boulders.

Browns are noted for wanting cover over their heads. Rainbow and brook trout will more often lie out in the pools where they are more accessible to fishermen.

The cover must be situated where the current is moderate to possess fish. Few trout like to stay in extremely fast water. Let this be a hint to you. Those beautiful waterfalls, cataracts, and other fast water may be nice to look at but they contain few trout. Fish the slower waters of the pool-riffle type. There are good reasons for trout not being in the fast waters. First, they find difficulty remaining there, especially in periods of flood, and second, gravel is not able to stay in these areas, and gravel-areas are the food-producing areas.

The cover does not have to be in deep water to possess good-sized trout. I once passed up an undercut bank where the water-depth was only about six or seven inches deep to have my 11-year-old son who was following me catch an 18½-inch brown trout from this spot.

Probably the best way to fish is to fish upstream. Cast the lure upstream and bring your lure past the various spots that you think may have trout. Make your retrieve as slow as you can and still bring out the action of the lure. This will allow it to go as deep as possible which will bring you more strikes. Be sure the lure is as close to the cover as you can possibly get it. Sometimes an inch will make all the difference in getting a strike. Remember this also—if you are not hanging-up once in a while, you are not getting close enough to your cover.

The moment you feel a hit or your

THIEVES IN THE NIGHT

Continued from Page 3

In the days of early conservation measures, already overworked officials were saddled with the extra-unwanted and difficult task of enforcing sometimes unpopular conservation laws. But even after a separate conservation enforcement force was set up for Georgia in 1903, enforcement in many areas never really got off the ground. Grand juries composed of local county people frequently refused to return true bill indictments against local violators. Elected sheriffs, solicitors, and judges were discouraged from seeking or handing out stringent fines and sentences.

Some fines for night hunting were as low as five or ten dollars, and some fines today are scarcely more severe. There is little inducement to a ranger to spend half of his nights without sleep for six months on the wettest, coldest nights of the year on the vague hope of catching a night hunter, only to see him go free with a fine of \$100 or less. If the case is no-billed by a grand jury, or rejected by a sheriff or a solicitor, there was nothing that a ranger could do about it, until 1962.

That is the year that Representative Jones Lane of Statesboro introduced and secured the passage of his bill to allow the seizure and sale of any automobile, boat, animal, or gun used in connection with night deer hunting. Under the provisions of this law, any vehicle involved in the violation can be seized in a civil action.

Here for the first time was an effective and enforceable tool in the hands of the wildlife ranger. The loss of an automobile worth several thousand dollars is a penalty which usually effectively insures that the former owner doesn't repeat his mistake. News of the confiscation of a night hunter's automobile spreads fast, and undoubtedly has a restraining effect on other would-be violators.

But in spite of the certainty of losing their automobile if they are caught, hundreds of violators are still willing to take their chances for whatever reason they have for damaging Georgia's valuable deer herd. A butchered buck may bring only \$25 for his meat, but on the hoof he's a lot more valuable to more than 120,000 Georgia deer hunters. To replace him for stocking purposes would cost the Game and Fish Commission anywhere from \$35 to \$350 depending on the area and the extent of Commission development and protection effort.

Stopping such night hunting is a difficult task. Amateur, most com-

monly hunt on Friday and Saturday nights, but more experienced meat hunters prefer cold, wet nights, when they feel there is a better chance of the wildlife ranger being home in his warm bed. For this reason, rangers often vary their schedules of patrolling, sometimes working from dark to midnight, at other times arising at midnight to work until dawn.

Almost every night hunter attempts to flee wildlife rangers when he is approached. Many escape, but the number who do so successfully is growing smaller as rangers are equipped with faster, more modern vehicles and better radios purchased with funds from the recent license increase. Additional rangers that have recently been added to the patrol force now make it easier for rangers to work in groups of two or more. Using their two-way radios, they can call rangers ahead to set up a road block to halt fleeing violators.

Once the spotlighters are sighted, long, boring, chilling hours of waiting turn to frantic moments of dangerous, high-speed chases which call for all of a ranger's skill and daring. One of the more spectacular chases occurred recently in northeast Georgia when rangers Arthur Abernathy and Hugh Elrod began chasing a car of night hunters who had just shot a doe deer. The car crashed after a four-mile chase, and the occupants fled on foot. Bloodhounds were brought from the Alto prison camp, and the men were spotted entering a second car which was stopped and the three men and their would-be rescuer arrested. Returning to their posts at 3 p.m., the two rangers soon began chasing another car with three night hunters which was run down by Rangers Loyd Stephens and D. A. Garland. Both cars were confiscated.

"One of the main reasons people are getting tired of night hunters is that they are so unscrupulous," says Bob Baker, law enforcement coordinator of the Commission. "If they can't shoot a deer, they'd just as soon shoot a cow, a dog, a road sign, or anything else. They have no respect for personal property or for human life. In the dark, they never know if they are shooting toward a house or a barn, and don't really seem to care. They'd just as soon kill a pregnant doe as not."

One of the more flagrant violations of this kind occurred last fall in Jasper County, when Ranger Gus Tillman caught four men and three young boys loading a butchered registered black angus bull into their auto. The adults received sentences for four years each: two years for shooting the animal, one

year for hunting deer at night, and one year for shooting into a house.

Frequently, night hunting involves multiple violations of game laws. In addition to night hunting for deer, violators may also be charged with hunting with a light, hunting from a public highway, hunting deer out of season, hunting deer with an illegal weapon, hunting without permission, and hunting without a license. If rangers observe a violation being committed, they may search the violator's car immediately in connection with an arrest. If it is suspected that the car contains contraband game and the violation was not seen by the ranger, the driver and his car may be held in custody until a search warrant can be obtained.

Under the provisions of the automobile confiscation act, cars can be seized and sold that are used to hunt from, to carry the night hunter to or from his destination, or to carry the illegal deer. In addition, a fine of up to \$200 and a jail sentence of up to 60 days can be handed out. Other charges usually associated with night hunting are misdemeanors, and the judge can give fines up to \$1,000 or up to 12 months in jail, but penalties this severe are almost unheard of. There have been several fines of up to \$500 and probationary sentences up to six months, but there is considerable room for more stringent penalties.

Georgia's wildlife rangers have their hands full in protecting deer from night hunters year round, but present laws are adequate for their purpose, if they are effectively and stringently enforced. Where public opinion favors such enforcement, night hunting is severely discouraged. In others, it blooms in the shadow of public condonement, but Georgia's growing army of deer hunters can hardly stand for less than prosecution "to the fullest extent of the law."

Anyone who sees night hunting in progress or has information about it can greatly assist wildlife rangers by immediately reporting it, along with helpful information such as the tag number, description of the car, location and time of the violation, etc. Find out who your local wildlife ranger is, and write his telephone number down in a place where you can quickly find it. If he isn't in, you can usually reach him by calling your local sheriff or police department. Violations may also be reported by calling long distance collect to the nearest office of the State Game and Fish Commission, which is in constant two-way radio contact with patrolling rangers. ☞

A black and white photograph of a dense, leafy plant, possibly a shrub or small tree, with a large, dark, rounded object (possibly a basket or pot) in the foreground. The plant is very full and bushy, with many leaves visible. The object in the foreground is dark and has a textured surface, possibly woven. The background is light and somewhat indistinct.

Special Regulations—14 inch minimum size limit on all species of trout in Lakes Blue Ridge, Burton, Clark Hill and Lannier. No size limit on other lakes.

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Contents

| | | |
|------------------------|-----------------|----|
| ABCs of Bass Fishing | Leon Kirkland | 1 |
| Sing A New Song | Dean Wohlgemuth | 5 |
| Meet Your Commissioner | | 9 |
| Shepherd of the Sea | Jim Tyler | 10 |
| Babes in the Woods | Art Rilling | 13 |
| Haven at the Hill | Bill Baab | 14 |
| Sportsman's Calendar | | 17 |

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Wild Animals Are WILD

And that's the way they should be. Several years ago we picked up a conservation magazine article by that title which narrated many unfortunate encounters of homo SAPIENS with "tame" wild animals.

A good bit of the article had to do with tourists in the Smoky Mountains and other national parks feeding the bears, and in one case, one motorist who even tried to shove a reluctant bruin into the car with his wife — to make their picture!

We were reminded of that article as we read Stone Mountain Game Ranch manager Art Rilling's common sense article on page 13 about "lost" fawns and irresponsible or ignorant people who pick them up and try to make pets out of an animal created to live in the wild. As a man who has dealt with wild animals in captivity on a first hand basis for years, Rilling knows what he's talking about when he counsels people to stop picking up animals.

We'd hate to know how many times we've seen pictures in newspapers and magazines of pet deer, squirrels, rabbits, quail, raccoons, etc. Certainly we have nothing against pets, in their place. Some wild animal species can be obtained legally from domesticated specimens, and may make a wonderful pet. But most wild animals that end up as "pets" or prisoners in a pen are usually obtained in violation of game laws and regulations, which in Georgia require that a permit be obtained from the State Game and Fish Commission before any game species may be held in captivity. Molestation of young animals is prohibited entirely, and hunters must immediately dispatch any animals or birds that they cripple.

These regulations are established for good reasons, and are designed to protect both the wildlife, the hunter, and other persons, including children.

Taking an animal from the wild and making it dependent on humans for its existence is usually a tragic experience for the animal. Young animals such as squirrels or raccoons may make cuddly pets as youngsters, but as they mature they usually become vicious. Having lost all fear of man, they do not hesitate to scratch or bite. Larger animals eat a good deal of expensive food, or have special needs which most people are unprepared to give.

The end result is usually the same. People lose interest in the adult animal, which is neglected, perhaps abused, and eventually killed by starvation, disease, dogs, cats, and in the long run, by people. For the same reasons, hunters should immediately kill any game birds or animals they cripple, both for their own protection and to prevent the animal from dying an inhumane, slow, and often agonizing death. Few injured wild animals will survive, and most people don't have the specialized knowledge to effectively treat them.

Probably the most sickening thing about the whole process is the shameful sight of a once magnificent wild creature of nature reduced to a mere pitiful object of curiosity . . . something to be poked at. — J.M.

ON THE COVER: Nothing can compare with the most exciting moment of largemouth bass fishing, when a lunker leaps from the water in a frantic effort to throw the lure. Lake Jackson photo by Walter Stephens.

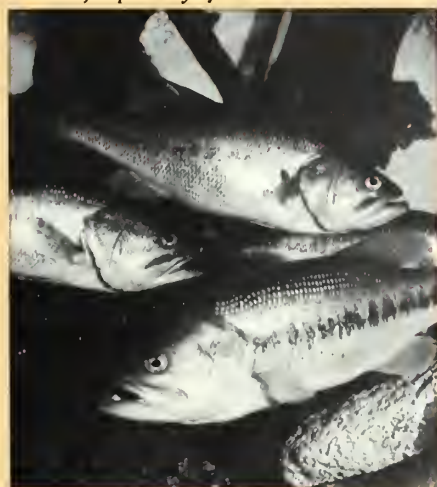
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SIMPLE? Like **A**mbitious anglers Catch **B**ass **C**onsistently



That stump protruding from the water is the target for Leon Kirkland's lure, and there's a good reason. Bass like such places to hide, especially if . . .



. . . it looks like this underneath, with plenty of snags to crawl under. Note the large number of bass. If you get one bass, cast again. You may get another. And another.

By Leon Kirkland
Coordinator of Fisheries
as told to
Dean Wohlgemuth

Whoever it was that said fishing was a lazy man's sport wasn't a bass fisherman. If you want fishing made easy, then bass isn't your game. Find yourself another fish.

It takes a lot of hard work and familiarity with the fish, for a person to become consistent in taking bass. You must be willing to work hard, and to realize that there's no simple recipe for catching a lot of bass.

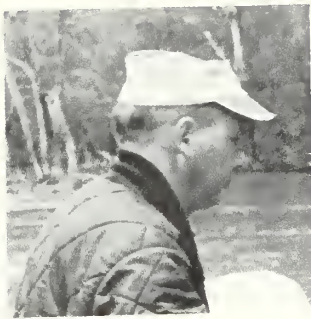
That old saying that 90 per cent of the fishermen catch 10 per cent of the fish, and 10 per cent of the fishermen catch the other 90 per cent of the fish, applies more to bass fishing than any other kind. The largemouth bass just has to go down in the books as one of the gamiest and hardest to catch fish that Georgia has to offer.

Georgia anglers, records indicate, rate the bass the second most popular fish in the state. Bream lead the pack, with 31.2 per cent of the anglers going for them. Right behind them are the bass anglers, with 20 per cent of Georgia's fishermen seeking the largemouth. Catfish rate third, crappie fourth, white bass fifth, then trout rank sixth.

There are two types of fishermen — the one who fishes for recreation and what he catches is incidental; and the competitive fisherman, who fishes as hard as he works. The competitor gets the bass.

If it's so difficult to catch the bigmouth, why is he so popular? Mostly, it's because of the great challenge he offers an angler.

If you want to get bass, be serious about it. Do a little boning up before you go, by reading on the subject just as you are doing now. Then if at all possible, get a good bass fisherman to take you with him. You'll learn a lot in one trip. But the more you go with



About The Author

Leon Kirkland, 34, who spent seven years as project leader on reservoir investigations for the State Game and Fish Commission before becoming coordinator of fisheries, has had something to do with just about every lake in Georgia.

And not only is he "in the know" biologically about these reservoirs, he is accomplished in the art of catching fish himself. While he shows a special fondness for catching crappie and white bass, the largemouth is still very much his favored fish. He enjoys any type of fishing.

Being impartial, he's nearly as fond of hunting as of fishing, with quail hunting getting the nod as his favorite, closely followed by deer hunting. But then, he's been known to hunt just about anything that walks or flies.

His wife, Ruby, is an ardent bass fisher and deer hunter too. And son Dwain, 11, follows in his dad's footsteps. Leon also has a daughter, Shelia, 14.

Kirkland received his BA in fisheries from Berea College, Berea, Ky., and did graduate work in the Duke University marine laboratory at Beaufort, N. C. For three years he was with the U.S. Fish and Wildlife Service's Bureau of Commercial Fisheries on the North Carolina coast.

Then he came to the Georgia commission in 1957 as reservoir project leader on all the state's reservoirs, working out of Madison. He became coordinator of fisheries in 1964.

It was that year that he was awarded the title of Georgia Wildlife Conservationist of the Year by the Georgia Sportmen's Federation.

Among his accomplishments while reservoir project leader were the induction of threadfin shad, a forage fish which provides food for most game fish, into the state's reservoirs; stocking white bass into most reservoirs; inaugurating the walleye program in Georgia; establishing the two-story trout fisheries in several lakes; and beginning a smallmouth bass stocking program.

While he personally was in charge of successful rearing of striped bass in a hatchery, at Lake Burton Hatchery. Georgia is one of few states that have successfully accomplished rearing of stripers in a hatchery.

him, the more you'll learn. You won't get it all in one lesson.

Now that we're getting set to go out for bass, let's do a little thinking before leaving the dock, on what we'll use in the way of bait. The diet of a bass is made up almost exclusively of small fish, although he sometimes likes a change of diet to frogs, small snakes, turtles, large insects and such — just so long as it's good solid meat. He's a meat eater, and he eats heartily.

Good artificial baits include plugs, bladed spinners, imitation plastic worms and perhaps jigs, although these are better for smallmouth bass. Live baits include lizards, minnows and pink worms or nightcrawlers.

The larger fish you are after, the larger should be your bait. A big bass needs more food, and if a 10-pounder were to go after small quarter-ounce minnows, he'd work himself to death chasing down enough to eat. So he goes only for the bigger ones.

Considering this is spring, when the bass are most easily found along the shorelines, we'll concern ourselves with this type of fishing only, in this article. In later issues, we'll discuss other types of bass fishing. And we're speaking primarily of fishing large reservoirs, although much of this applies to ponds and smaller lakes.

And we're using plugs and lures mostly, but we may use some live bait before the day is over. So we'll take along a few lizards (salamanders) and some large minnows, considerably bigger than crappie-size, perhaps four or five inches long.

Once on the lake, we start looking for productive water. There's no use in wasting time casting to waters that are potentially unproductive. Knowing that bass consistently stay around some type of cover, that's what we'll look for. The bass likes to stay in the shade, where he'll be able to hide from forage fish that like the same kind of cover.

What we want to find are brushy treetops that have fallen into the water, or better yet, stumps protruding from the water, rock ledges with crevices, rock piles, pilings, even docks, and maybe small bushes partially submerged.

Having found the kind of cover we're looking for, we move the boat in close to shore, as close as we dare without spooking the fish. There's no use making long casts that will be in unproductive water most of the time during the retrieve. The first 10 feet from the shore is where most of the bass will be, so if we're casting 20 to 30 feet, that's far enough away.

Accuracy is of vital importance in casting. It's not enough to get a plug in the general vicinity of cover. It must be CLOSE to the stump, rock or snag — within inches.

General rule: Get to know the water you're fishing. Know where underwater stumps are that you can't see. Know where there's a steep drop off. The easiest way to do this is to visit the lake in winter when the water is low.

Another general rule: Know your tackle and how to use it. Choose the type of tackle you like best and can use best, and practice with it so that you can handle it well without giving much conscious thought to it. And learn to cast accurately!

Shoreline fishing is often best early in the morning and late in the evening, when the bass are moving in to feed. An exception may be early in the year, when the water is still cool.

In using plugs, remember that the slower the retrieve, the better results you can normally expect. You must realize that basically, most plugs imitate an injured minnow. Fish it slowly and erratically, with jerks, and change in speed. As with all rules, there are exceptions, however, so if you're not getting results try speeding up the retrieve for a while. Find the speed that works best. But vary the speed several times during each retrieve. Make the plug look like a minnow that's in distress and injured. A big bass might not waste time in a vigorous chase after a healthy minnow. A wounded minnow looks like a tempting morsel easily captured.

In fishing topwater lures — and these are most effective in the spring when the bass are along the shores in shallow water — remember that most people fish topwater plugs entirely too fast. Let a plug lie, after the cast, just as long as you can stand it. If you don't, you won't give the bass time enough to zero in on your plug.

Then twitch, jerk and pop your plug to attract the fish's attention. Many people are too delicate with their topwater plugs. They're afraid to make too much noise. But many times a school of big bass are along the shore, and they make noise in feeding. A loud splash or pop may sound to them as if a bass had struck at a minnow. They hear the sound, and to them it's just like a dinner gong. Make those topwater plugs talk! Jerk briskly, making them pop loudly. Really kick up a fuss. That will make the bass think there's a big bass there, getting a meal, and they'll want to join him. They'll know exactly where to go. Bass feed by sight as well as sight.

The gurgling type plugs are best at night. They are very effective, largely because of the disturbance they produce. This is one kind of plug that may work best with a steady retrieve. Other topwater lures should be allowed to come to a full stop occasionally.



Other good shoreline lures include bladed spinners, which also should be retrieved slowly, with an erratic speed. Let them fall a little, then bring them up a few feet more, then drop them down deeper again. Especially when the water is a little dingy, such as it often is in spring, the bladed spinners seem to be easier for the bass to see, probably because they reflect flashes of light. Also, their vibrations can be felt by the bass, and thus spinners may bring results where other lures fail. Fishing with live "spring lizards," actually salamanders, is much like fishing the imitation plastic "worms," or crabs. So both of these will be lumped together.

In fishing these two along the shoreline, it's best to go without any weight, if you prefer some weight, use only one or two very small shot. The best way to work these baits is to let them sink to the bottom and retrieve them just as slow as you can. I to retrieve them. Again, you may want to bring them in with slow jerks. Nearly every angler has a different way of retrieving them in.



Spring is the time to work the shoreline. You can see many of the hiding places, but some may be under the surface of the water. So you'll know what to expect under the water, take a note around your favorite haunts during the winter months when the water is low. Take in this view, you can find the stumps and branches now, and they will be hidden in the water when the water is up to the top of the stumps.



How's that for real fishing? J. P. Roberts hefts a prize string of largemouth bass from Lake Jackson, including the fish on this month's GAME & FISH Magazine cover.

Also, there are 1,000 different "best ways" to set the hook with these baits. Some strike back as soon as the lure begins to move off with the bait. Others hit just as soon as they feel the fish hit the lure. Still others wait until the first run stops, then strike at the beginning of the second run.

I've found this method best for imitation plastic worms and spring lizards: I hold my rod tip high, so that as soon as I feel the least resistance on the end of the line I IMMEDIATELY lower the rod tip, allowing the bass slack to move the lure without feeling any drag on the line. A second after he hits is too late. Then I allow the reel to let out for a foot or two. When the line begins to tighten I hit the fish, and hit him HARD! When I say set the

hook, I mean really slam it to him, particularly if you're using a weedless hook. I find, incidentally, that using the weedless hook is highly preferable. This keeps you from spending so much time getting your hook unfouled.

Some fishermen use this same method with plastic "worm" lures, except they keep some tension on the lure while the bass "mouths" the bait, so he will think the bait is alive and still resisting. Otherwise, the bass may think he picked up a stick or inanimate object and spit it out.

Probably more harsh words are used by fishermen setting the hook while using imitation worms and lizards, only to find they draw back their bait, or just part of their bait, and no fish. And I must say I've contributed my share

to the blue air. I think if a plastic worm fisherman can set the hook into 75 per cent of the fish that strikes, he'll catch one whale of a lot of bass.

Using shiners or other large minnows, and live worms is very effective, particularly when the water is very muddy, or very cold early in the spring.

To fish both of these types of live bait, put a float on the line about 18 inches or two feet above the bait. You may need a little weight with the worms. Then cast right to the shoreline, or right next to stumps or whatever cover you're working. Steep shorelines are among the places where these live baits are most effective.


Another general rule: This one is as helpful as anything else. A bass fisherman is as much a hunter as he is a fisherman. He must always look and listen. I've found more bass that way than any other. Watch to see if you see a bass jumping, or perhaps you'll hear one behind you. Go where he is. Perhaps he's one of a school of bass and you'll strike it rich. And remember where there's one bass, often times there are several. Don't quit a spot after catching one. Keep trying awhile longer until you no longer get strikes.

Night fishing is also very productive along the shorelines, and this time is good perhaps throughout much of the year. Plastic worms and plugs are all good, but I for one, find a real thrill in using those gurgling type plugs, cast to the shore and retrieved steadily. These are particularly effective in fishing heavily fished farm ponds that seldom produce much in the daytime.

Fishing at night gives you an eerie feeling. You cast, then sit all alone in the quiet dead of night, hearing not a sound. Then after a seemingly impossible time, you hear a splash, and you know this time you were lucky — your plug hit the water.

To fish at night, you must know your waters well. Even so, as often as not you'll cast into a snag, rather than into the water. It takes extra effort, but it might prove to be well worth it.

One thing that keeps the bass fisherman coming back for more — particularly the shoreline fisherman — is that just getting his quarry on the hook is far from synonymous with landing him. Getting that big one out of the tangles along the shore can put anyone into a nervous fit. And once you get him in open water, he still may stand on his tail and toss that plug right back at you.

You can count on Mr. Bigmouth Bass to be a worthy opponent — one that you'll never forget, once you've tied into a few with enough size to show you his bag of tricks, and what bass fishing is all about! 

Sing a new Song

*"Out of the hills of Habersham,
Down the valleys of Hall,
I hurry onain to reach the place,
Then the rapids and leap the fall."*

(from Sidney Lanier's "Song of the Chattahoochee")



Sing a new Song

By Dean Wohlgemuth

The brash, bustling Chattahoochee River charged through those valleys of Hall County when it was viewed by the famed poet.

But today, things are different for this river. With the coming of a dam, the river's character has undergone a vast change. There's a new song, now, for the Chattahoochee. A song that tells not of wild, free running water, but of a monstrous giant of a reservoir.

Sometimes the giant sleeps, when the winds are calm, and the surface is smooth, ripple free.

And Lanier is big enough to accommodate all of these people.

For example, its wide open areas are a mecca for water skiers and sailboat enthusiasts. The lake is long enough, with two major arms, to provide long cruises for those who enjoy this type of boating.

There's plenty of water, both in depth and in width, to handle large cabin cruisers and yachts. The lake covers 38,000 acres.

Plentiful picnic areas and boat launching ramps are easily found, being located close together all along the lake. Camping sites are in abundance, too.

The 540 miles of shoreline are a paradise for anglers. And as a huge bonus, there are dozens of islands, all adding extra miles to shorelines.

The wide variety of water and shoreline types produce marvelous fishing opportunities. And another of the important varieties offered by the lake is in the different species of fish available.

Few lakes in Georgia can offer more choice of fish to catch, than can Lanier. Look at these species, if you will:

Largemouth bass, white bass, spotted bass, smallmouth bass, bluegill, redbreast, shellcracker, warmouth, wall-eye, yellow perch, channel catfish, bullhead catfish (sometimes called speckled pond cats), black crappie, and rainbow, brown, and brook trout.

Primary forage fish of the lake is the threadfin shad which were stocked in 1958, and are plentiful enough to provide an abundance of food for all game fish which eat them.

The game fish inventory in the lake includes some species which are just becoming established.

Walleye, for example, are just becoming established in good enough numbers to provide good fishing. True northern smallmouth were stocked only recently, and it will probably take a few more years before they'll be present in large enough numbers to yield much sport.

Trout, too, are in the early stages in Lanier, being first introduced into the lake less than three years ago. However they have been responsible for bringing large groups of anglers in for a visit, and have put a lot of heft on many stringers. Trout up to seven and a half pounds have been taken from the lake and quite a few in the four to five pound class have been recorded.

Small trout — about eight inches when put into the lake — will reach a size of perhaps 1½ to two pounds in a matter of five or six months. Ample food provided by the threadfin shad have accounted for the astounding growth of trout in the lake.

But to assure that these trout are giv-



Lanier's 38,000 acres are a boating paradise. Pausing from a cruise in their runabout, Mr. and Mrs. J. C. Jones, Jr. of Atlanta watch a sailboat race at the Lake Lanier Sailing Club on Chattahoochee Bay.



During rapid rising, a powerful force is felt in the water, which is a warning of a flood. The water is a powerful force, and it is a warning of a flood.

Then again, the wild winds blow, awakening the sleeping giant, and he becomes a demon, with high waves lashing out, threatening to toss aside anyone who dares venture out onto the vast watery prairie.

All of this makes you wonder. Was the Chattahoochee really tamed and harnessed by the dam? Or is it still as wild and wonderful as when the poet for which it was named, Sidney Lanier, put to verse his interpretation of this great river?

But the new song of the Chattahoochee is more than that of wild, free water. It's a song of holidays, of care-free pleasure — pleasure for many millions of people who visit there each year.

And there are as many reasons for their visits as there are visitors. How many visitors? The U. S. Army Corps of Engineers, builder of the lake, reports it is used more than any other lake in this nation that they have built.

The reasons are this. Lanier provides a water playground that attracts all types of watersport enthusiasts. It is near the hub of population in the South, with a huge population center in Atlanta, and its shores dotted with several smaller cities and towns.

en an opportunity to grow large enough to be extra gamey, the Commission this year inaugurated a size limit for trout. No trout under 14 inches in length may be kept, but must be returned to the water.

To tell the Commission more about trout in Lanier, this year's stocking was tagged. Anglers catching a trout bearing a tag are requested to clip it off and return it to the Commission along with pertinent information such as the angler's name, date, time, and place of catch, method used, and size of the fish.

This information will tell the Commission more about trout habitat in the lake and help to improve trout fishing.

Not only that, the tag may be worth a good deal of money to the angler. Merchants in the lake area have put up cash for prizes. Winners will be determined by drawings.

The most popular and most productive method of fishing for trout in Lanier is by trolling, mostly using deep running plugs. White is the favorite color since white plugs tend to simulate the white threadfins which make up the bulk of the trout's diet.

The top three fish, ranking them by popularity and numbers caught, are crappie, bream and bass. Numerous trees submerged in the lake provide ideal crappie hangouts, and fishing for them is good year around, day and night. Oddly, all of these are black crappie, and none are white crappie.

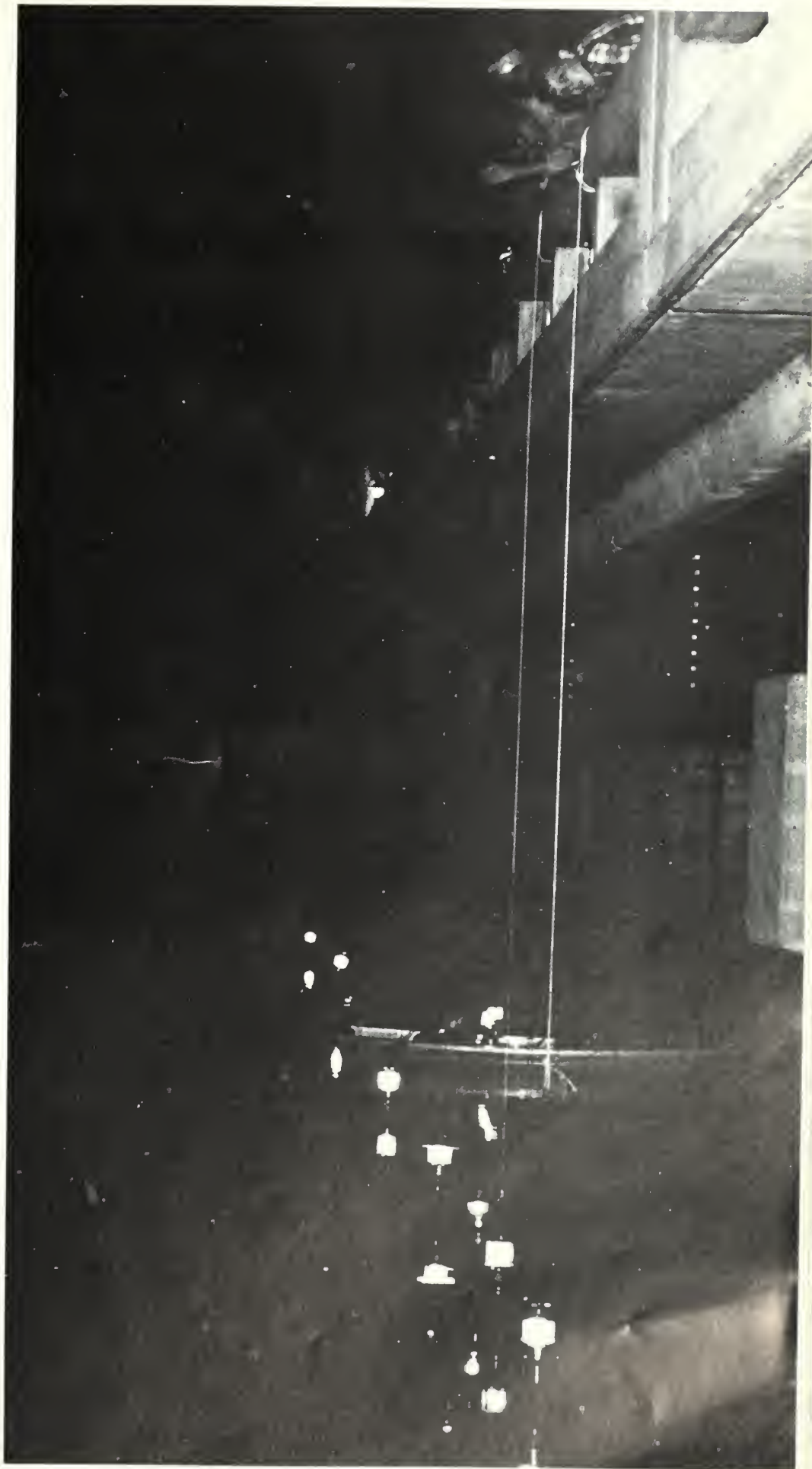
The various species of bream are also plentiful in the lake, and keep thousands of anglers happily busy pulling them in.

Perhaps more hours are spent in search of bass than any of the other species, but being hard to catch as they are, the number caught is somewhat lower than the panfish.

There are those Georgians who are predicting Lanier contains several fish which will be caught and become world records. One of the species which they feel Lanier can yield one bigger is the largemouth bass. In 1965, for example, a bass weighing 17 pounds 9 ounces was taken from the upper end of the lake. And just this March, a 15 pounder was pulled from this lake. The 17-pound 9-ounce fish was the third largest in Georgia history — and Georgia holds the world record.

Another bass, the white bass, might give Lanier national recognition in the record books. Numerous white bass of over four pounds have been recorded, and in the past year and a half, have been landed that were five

Crappie fishing from Lanier's bridges at night is also a favorite summer pastime. Gasoline lanterns hung low over the water attract shad, as well as the crappie and occasional white bass that feed on them.





Stocking 50,000 trout in Lake Lanier last December was a cold, wet job for Game and Fish Commission biological aides. These four ounce trout will reach a size of more than a pound and a half by mid-summer.



Sleek, fat mountain trout up to seven and a half pounds are now being caught in Lanier, adding an exciting new dimension to the lake's attraction for fishermen.



Little Holly Harper, 4, takes a good look at the first trout she ever caught, taken from Lanier. Her dad, H. W. Harper of Gainesville, holds the stringer. Holly was fishing for crappie when the trout took her minnow.

and six ounces, respectively, below the old world record of five pounds, two ounces. The record was moved up two ounces recently, to five pounds, four ounces. But this is still within reach of Lanier whites.

While it may be some years before the trout reach a size to contend for world's records, Lanier may soon produce a new state record in this category.

Lanier, along with sister lake Clark Hill, are the two southernmost trout lakes in the nation.

Both largemouth and white bass can be found in just about any part of the lake most of the year. Early in the spring, the whites congregate near the mouth of the Chestatee and Chattahoochee rivers which join in forming the lake. Trout stick to the deeper, cold water near the dam during the hot months.

Yellow perch are a neglected species in this impoundment. Few anglers know enough about how to fish for them, to effectively deplete their numbers. Yellow perch like deeper water than do most species. Walleye, too, are usually found in deeper water than the more popular fish. Bass are more likely to be found close to the shorelines, and because of the many islands, they can find an abundance of good habitat at a depth they like.

Because of the depth and cold temperatures deep in the lake, Lanier is nearly an ideal fishing spot. Even though the lake was filled 11 years ago and is past its initial peak as a "hot" lake, it has stabilized into a fine fishery. Part of the reason is because of the wide variety of temperatures available to the fish. They may seek out the temperature they prefer. And it seldom gets very cold in the winter,

providing a long growing season.

The wide range of water temperatures also accounts for the wide variety of fish. For example, the bass, crappie, bream and other warmwater species have no trouble finding a home in surface waters. On the other hand, the trout like it cold, and occupy a different layer of water. This is called utilizing a "second story" of the lake.

And ideally, the threadfin shad reproduces rapidly enough to supply an abundance of food for all species.

And there is more choice on the type of water you prefer to fish. If you like perfectly clear water, you can fish from Flowery Branch on downstream and almost always find crystal clear water, shimmering and emerald green only because of its fertility and great depth.

But if you, like many anglers in search of bass and panfish, like to see a little color in the water, go on upstream a few miles, above Brown's Bridge. There's usually enough color in the water to suit you. Just keep going upstream until you find the right water conditions to suit your taste.

As for facilities available, you can't find a better equipped lake than Lanier. On any road leading to the lake, you'll find a bountiful supply of grocery stores, bait and tackle shops and just about anything you need. A number of boat dealers are located near or on the lake.

And there are at least seven fully equipped marinas which have for sale bait, tackle, boats and supplies of all types, and rent boats and motors. These include Holiday on Lake Lanier Marina, Kelley's Marina, Aqualand Marina, Snug Harbor Marina, Gainesville Marina, Lan-Mar Marina and Bald Ridge Marina.

These, along with public access areas make it easy for anyone to put a boat into the water. To find them, request a map of the lake from either the Corps of Engineers, Lawyers Title Bldg, Atlanta, or the State Game and Fish Commission, 401 State Capitol, Atlanta. Most tackle shops and marinas have ample maps available.

If you prefer to get fully equipped before going to the lake, and plan to use a public ramp instead of a marina, you'll find anything you need at tackle, bait and other shops in the towns of Gainesville, Cumming, Flowery Branch, and Buford, all on the lake's shores.

So if you're looking for a water playground that gives you a wide choice of angling, boating, camping, picnicking or any other outdoor recreation, for a day, a weekend or a week or so of vacation, there's no need to take a long trip to a faraway place. For in your own backyard, there's as good an all-around playground as you can find, in Lake Sidney Lanier! ~

meet your commissioner:

WILLIAM E. SMITH

William E. Smith represents the Third Congressional District in the conservation and development of Georgia's wildlife resources.



A tractor engine cuts the stillness of a warm Spring day as it turns up rich black topsoil, some of the only black dirt in Georgia. At the controls of the machine is Game and Fish Commissioner William E. Smith of the Third District.

Intense enthusiasm for vegetable gardening (he prides himself on being an organic gardener rather than using chemically treated fertilizers) is a characteristic that distinguishes Commissioner "Billy" Smith, one of the most successful lawyers in South Georgia. For many years, he was a law partner of Georgia Supreme Court Justice Hiram Undercoffer, formerly Commissioner of Revenue.

Billy's love of the soil, even in a



Plowing a backyard garden is fine after-work relaxation for Game and Fish Commissioner Billy Smith of Americus, one of Georgia's most successful lawyers.

backyard garden, is typical of his deep appreciation and reverence of nature and all the living things in it, especially the wildlife. Just as deep is his love for his native Georgia and its people.

Billy has lived all of his life in Georgia. In fact, with the exception of his military service in World War II and his schooling, he has never lived anywhere but in Americus.

The beautiful Victorian home owned by the Smiths is the house where he has lived since boyhood as the youngest of twelve children.

After a year at Emory Junior College in Valdosta and a year at Georgia Southwestern College in Americus, Billy went off to Athens to study law at the University, graduating in 1939.

Returning to Americus, he opened his own law office, specializing mainly in civil law. Practicing law was not to last long, however. America was at war, and in 1942, he became Lieutenant Smith of the Army Air Corps. As an instructor, he taught many young pilots while stationed at the Flight Instruction School at Marfa Army Air Field in Texas. He rose to captain by the end of the war.

He met his wife Lucile in 1936, and they were married in 1941, shortly before he entered the service. They now have two daughters: Susan, who is married and lives in Savannah, and 16-year-old Jane, a student at Americus High School.

Billy is an avid fisherman. He fishes mainly in the lakes these days, but as a boy, he fished mostly on the many streams that ran through the countryside near his home. His favorite fish are the spotted bream (found only in the Flint River) and the largemouth.

He enjoys hunting doves more than any other game, but he also hunts quail and ducks.

The Smiths own a small boat for fishing, and it regularly plies the waters of Blackshear, Walter F. George, and Seminole. Of concern to Commissioner Smith is the plight of fishermen at Lake Blackshear. He has strongly supported

the increased efforts of the Commission to improve Blackshear fishing.

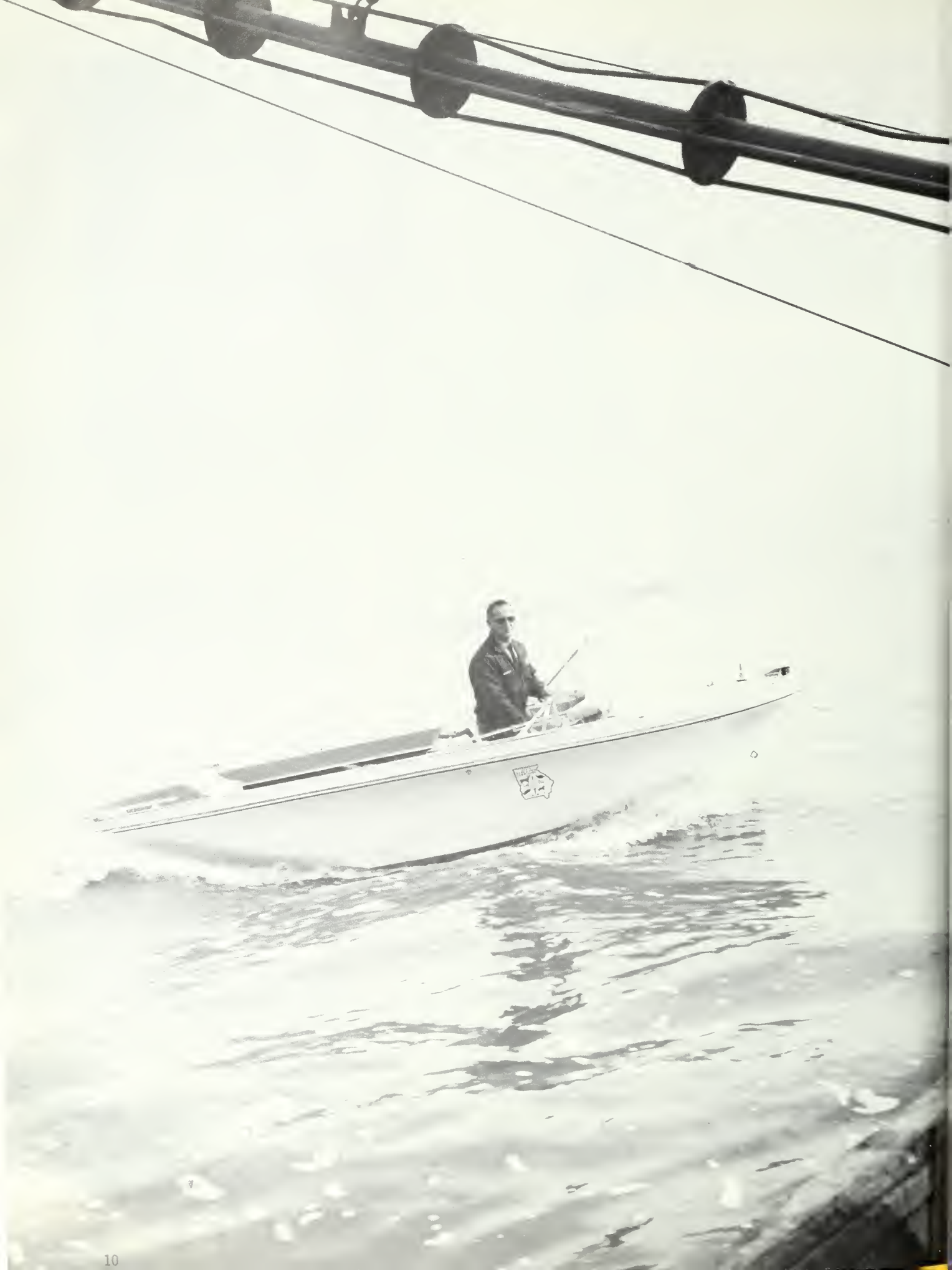
It was 1959 when Billy was appointed to the Commission by Governor Ernest Vandiver to fill an unexpired term. He is currently into the fifth year of his first full term. Commissioner Smith has served as Chairman of the Commission, and he prides himself on pioneering the "one year term" for chairmen, claiming that the honor should be shared, along with the responsibility for providing the impetus for new programs. Of the present Commission, he says that it's a "great board of distinguished Georgians interested in wildlife conservation."

Another pet project of Commissioner Smith's has been improvement of the possibilities for coastal sport fishing in Georgia. His idea is a two pronged attack to first rid coastal waters and rivers leading to the coast of pollution, and then work to fully develop the potentialities for sport fishing on the coast.

Rounding out an already well-rounded life, he is a past President of the Americus Bar Association, serves on the State Disciplinary Board of the State Bar of Georgia, and is the Americus City Attorney.

During Billy's eight years of service on the Commission, he has earned a reputation for his progressive, modern philosophy of dynamic action. He has long been a staunch supporter of the Department's professional conservationists and their programs of research and development to improve Georgia's hunting and fishing. Recently he played an active role in the Commission's acquisition of its newest public hunting area, the Oaky Woods game management area south of Macon.

Commissioner Billy Smith has justly earned the praise of his fellow Commission members, as well as that of employees of the Commission and outdoorsmen in general who have been fortunate enough to witness his fearless dedication to the cause of wildlife conservation. ~



SHEPHERD OF THE SEA

By Jim Tyler

Jim Petway, Wildlife Ranger of the State Game and Fish Commission's coastal patrol, pulls up alongside of a shrimp boat. He keeps an eye on shrimpers, mostly making sure they're fishing in waters that are legally open.

But sometimes, he goes aboard, just for a friendly visit, and to see how things are going.

by Author



"I'm going out on the water. You know when to expect me."

"Yes, when I see you."

With this everyday fare-thee-well, Ranger Jim Petway bids his wife goodbye.

Today his boat is located at Coffee Bluff. It's a pleasant drive from his home in Savannah to the fish camp located there. The road winds beneath moss laden pines and ends atop a bluff. From the bluff you look out over the fast moving Ogeechee River and see marsh grass islands. It's all pretty — all nice — all Southern.

Jim wheels his boat and trailer beneath a sturdy looking boat hoist which electrically lowers his 150 horse in-board-outboard patrol boat into the water. It's time for another coastal patrol, and this time I'm going with him.

Once the boat is in the water Jim tromps down on the throttle. The boat gets out fast and soon we are skimming down the Ogeechee toward the open sea at 45 mph. We follow the river as it winds lazily and opens into Ossabaw Sound. Then a bit farther, the open sea.

The smooth ride comes to a hard bouncing stop as we hit the open water and the boat begins fighting its way over and through the uneven sea swells.

For some time in the distance we had been seeing outlines of shrimp boats, their slender arms outstretched against the sky. Now we were in their legal working grounds — the open sea. The open sea, in this case, starts at the outermost of the islands and extends seaward. Because tidal rivers and creeks serve as nursery grounds for young shrimp, they are closed to commercial shrimping. Most of the sounds are closed too; Cumberland, St. Andrews, and Sapelo are exceptions. Jim and other rangers patrol all this water, the creeks, rivers, and open sea out to the three mile boundary. From three to twelve miles out the water is under Federal Government jurisdiction. Beyond this, the water is international, and as such, is not regulated by Georgia or the U. S. Government.

"What do you check these shrimpers for?" I asked Jim.

"Mostly we make sure they shrimp only in the prescribed boundaries. And sometimes we check the size of the shrimp they are taking."

"The net looks like a long funnel with a flattened side, right?"

"Right. They drag the net along the bottom to pick up the bottom living shrimp. The boat can drag one or two nets at a time, depending on its rigging."

"Ever have any trouble with shrimpers?"

"Well now, some of these men have been shrimping all their lives. Some don't cotton to regulations and such."

"Any trouble?"

"You have to watch them. That's why I carry that M-1 carbine," he pointed. "One shrimper awhile back told me he was going to run my boat up on a mud bank. This carbine says he won't."

"They're like everyone else," I shouted over the noise of the boat crashing through the waves and the bottom of my pants beating a rhythm on the boat seat. "There are always some bad ones."

"Yeah, there are plenty of good shrimpers, too."

"Let's head into the islands," I shouted.

"Okay."

Another blast of sea water came flying over the windshield. Jim ducked. I didn't. After a few weeks in the city of Atlanta's atmosphere, that salt and wetness felt like a cleansing lotion that only nature could brew up, and I'll be darned if I was going to pass it up.

Jim headed into a creek that cuts into the heart of Wassaw Island. The tide was out and the mud banks stood naked and were pock-marked with crab holes. The creek narrowed and narrowed. Soon the water was so shallow that the prop kicked up mud. I vaguely pictured myself as Humphrey Bogart in the "African Queen" pulling the boat out of this narrow, shallow channel. But Jim knew the water. He knows every sand bar, creek, and mud flat.

"Here is where we have to watch small boats," Jim said. "The big rigs can't get in here, but a small boat, 12, 16 feet or so, can drag through here and strip the channel bare of shrimp." "And the Georgia coast has several hundred miles of these small creeks," I added.

"Yeah. Plus the rivers, plus the sounds, plus the open water."

"That makes for a lot of patrolling," I put in.

"You better believe. We're cagey though. We're mobile. We have trailers and keep putting in at different times, different places. It's still hard. These big shrimp boats see us coming and they radio the word around that THE MAN is out. But they are actually very little trouble. Like I said, it's law breakers with small boats and 100 horsepower engines we have to watch. They can make fast runs in and out of closed areas."

Besides watching the shrimp activity, the coastal patrol keeps an eye on crabbers, oyster gatherers, boaters, and sport fishermen. Last year Jim caught up with a pair of sneak-thieves who were stealing crabs from traps set by legitimate, hard working commercial fishermen. By dark of night, they would scurry from trap to trap and hoist their unearned booty from the water. Jim and other members of the coastal patrol also have to keep their eyes peeled for oyster gatherers — due to contamination from pollution, several estuarine areas are closed for the gathering of oysters. And, like fresh water boaters, a life jacket per person is required for the salt water sailor.

The creek widened and we came out into a wide river. With a nod of the head in the direction of the shoreline, Jim said, "Anybody says Georgia doesn't have a beautiful coast, hasn't been here."

He's right. Some of the coastal islands have inviting sand beaches and all are bending over with lush vegetation. It's a shame they are mostly privately owned. Yet, again, old John Q. Public would probably mar the islands into a

"beautiful" place for all to come with their beer cans and weiner wrappers. Anyway, your eyes can rest on the islands, and the water is for everyone.

"Jim, this is a bunch of water, you ever get tired of it?"

"It gets monotonous as hell, sometimes, after 10 to 12 hours of it."

"But you wouldn't change it, would you?"

He smiled and nodded a slow negative.

We were now in the Wilmington River, buzzing along. It was late in the day. The whole world was water, green, sky, and a fading sun. The sun was shaded by an evening mist and looked like a golden olive floating in the prettiest blue-hued martini you ever saw.

We stopped to see if some sport fishermen were doing any good. They were. They had an ice chest half full.

Soon, the sun was swallowed by the misty clouds. We traveled down the Vernon River and around the bend into the Ogeechee. Crabbers in their small shallow wooden boats worked their crab lines. It seemed impossible that the heart of Savannah pulsed only 12 miles away and we actually were skimming the city's outskirts.

It was dark when the electric boat hoist plucked the boat from the water.

"It's all right pretty, Jim."

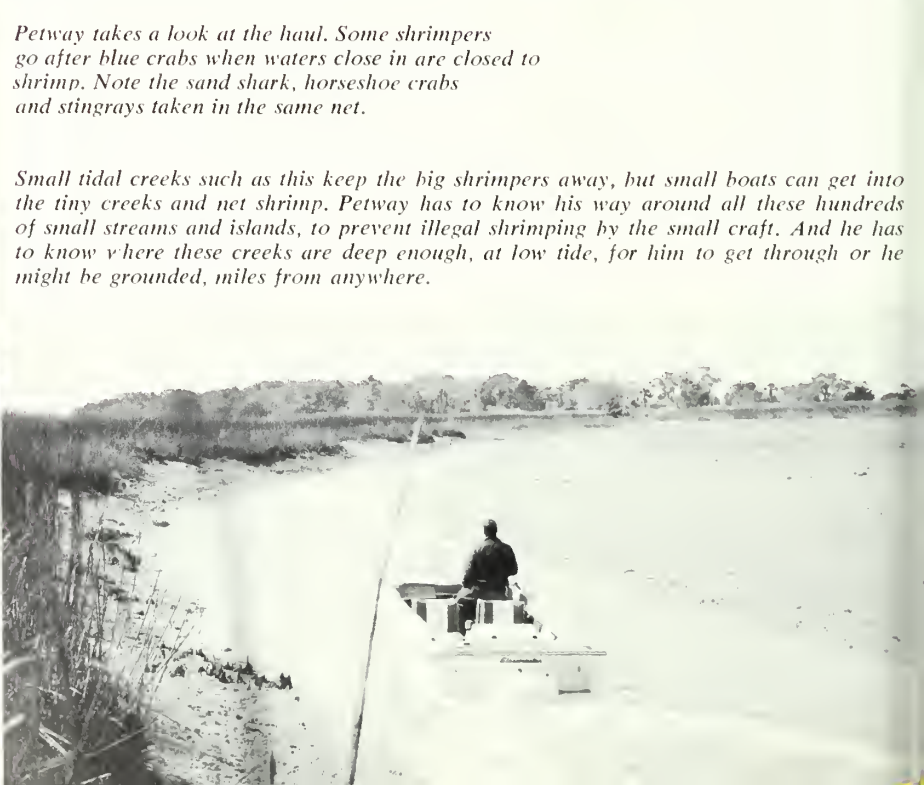
"Today was nice, but it's cold and miserable at times."

"Hey," I said, "Tonight you won't be too late for supper."

"Yeah. I'll probably get home, eat, take a shower, go to bed — and then I'll get a call about someone illegally shrimping or something and I'll be back on the water again." —

Petway takes a look at the haul. Some shrimpers go after blue crabs when waters close in are closed to shrimp. Note the sand shark, horseshoe crabs and stingrays taken in the same net.

Small tidal creeks such as this keep the big shrimpers away, but small boats can get into the tiny creeks and net shrimp. Petway has to know his way around all these hundreds of small streams and islands, to prevent illegal shrimping by the small craft. And he has to know where these creeks are deep enough, at low tide, for him to get through or he might be grounded, miles from anywhere.



Leave the Babes in the Woods

By Art Rilling



If you take that fawn home for a pet, soon he'll be full grown and will sprout a set of antlers like these. And when those antlers drop out, the mating urge makes a vicious animal out of him. He may attack without warning.

Apparently helpless and lost, this little fawn lies completely still, its spots camouflaging it against the background. But this babe is not lost in the woods. Its mother knows where she left him, and she'll soon be back.



Early summer days bring out the restlessness in man. During this time, we all are anxious to get out into the woods and fields to picnic and enjoy the great outdoors.

This is also the period when the animals of the woods are having their young.

Finding an apparently abandoned fawn in the woods can be a thrilling experience to a youngster. His pleas to take him home for a pet can be very hard to resist. As parents, we can rationalize that it was "abandoned" and will starve if left. The temptation to take it home awhile, then when it is no longer return it to the woods, is very great.

This is not only violating the law, but is also an injustice to the animal. In the first place, animals rarely abandon their young in the woods. Unlike humans, they have no baby sitters and must leave the young hidden in a safe place while they hunt for food. Leaving a young fawn in an open woods may not seem like a safe place to us, but for the fawn it is ideal. The varied

shadows create a light pattern that makes him practically invisible. This, combined with the lack of odor, is sufficient to offer protection from most enemies, provided he doesn't move. Indeed he is safer without mother around, because she has an odor that can give them both away. The doe trains her fawn to mind as soon as it is born. When she stamps one foot a fawn will collapse in a heap and not move until called by mother with a guttural meowing sound. At this call he will follow her if possible.

By removing the fawn from this environment, subjecting him to strange foods and frequent handling, man deprives him of the education that nature intended him to receive and greatly increases the chances of his being killed if returned to the woods to fend for himself. In a civilized environment he tends to lose his natural fear of dogs and people, which usually is fatal if the deer is again released in the woods.

Wild animals seem to make excellent pets when young, but as they mature

and get the mating urge, they react in ways that are frequently dangerous to their masters. The young buck that seems so gentle all spring and summer will turn unexpectedly on this same master and attempt to kill him when the mating urge hits him. There are many records of individuals who thought that the deer they had was different, only to find themselves fighting for their life against their "pet." The animal usually wins.

For these reasons, the State Game and Fish Commission has always discouraged people from making pets of wild animals, especially large or potentially vicious animals. It is illegal to hold any wild animal in captivity without a permit from the Commission, and these are seldom issued to anyone except zoos or institutions equipped to properly handle and care for the animals.

So leave the young in the woods where they belong. It's best for everyone. ←

HAVEN AT THE HILL

Clark Hill, East Georgia's Outdoor Playground . . .



By Bill Baab

What makes Clark Hill Reservoir, east Georgia's outdoor playground, so popular with the millions of "Mr. and Mrs. Average Citizen" who visit it each year?

Could it be the fishing? There are no less than 17 distinct varieties of game-fish just waiting to be caught. Maybe it's the boating. The huge lake has more than 1,200 miles of shoreline awaiting the small boat skipper. Or perhaps, it's the camping, hiking, swimming, picnicking, water skiing, or the side benefits of sunshine, clean water and smog-free air.

More probably, it's a lot of everything combined that places Clark Hill Reservoir high on the outdoor recreation popularity list. More than four and three-quarter million persons visited its shores last year and this year, more than five and one-quarter million are expected to visit the 15-year-old reservoir and use its many facilities.

The reservoir is located on the Savannah River 22 miles above Augusta. The lake itself stretches 39 miles up river from the dam. The Savannah is one main one of 21 major tributaries and innumerable smaller streams flowing into the lake.

Let's take a look at what "Mr. and Mrs. Average Citizen" can expect to find for their pleasure on a visit to Clark Hill. The U.S. Army Corps of Engineers, who operate the powerhouse and maintain the dam, the 78,000 acre reservoir and its facilities, have been generous to the outdoor lover.

Fifteen public camping areas, about 50 picnic areas located in strategic and peaceful spots, and more than 60 ramps for the boater have been provided.

Two state parks, both on the Georgia side of the impoundment, are located on the shores of the reservoir with two more being contemplated, one in the McCormick County, S. C., area. In addition, three privately owned and developed concessions provide the visitor all the comforts of home through rental cottages and other facilities. Boat rentals, bait, tackle and other such necessities are available in Georgia at Camp Creek Lodge near Lineolnton, Little River Sportsman's camp near Rich and Fishing Village, Plum Branch, S. C.

State Parks on the lake include Eli Clark State Park off Georgia Highway 43 and U.S. Highway 378 near Lineolnton, and Bobby Brown State Park off Georgia Highway 79. Further information on state parks may be obtained from the State Parks Department.

The lake's "season" usually begins in early April, just in time for the inter-



nationally famous Masters Golf Tournament at the Augusta National Golf Club. The renewal of schooltime in September means the end of the "season," although mild temperatures may be expected to last throughout the fall and on into early winter.

Visitors arriving during the early part of the season usually have one thing in mind: Fishing. The waters are still too cool for swimming and water skiing, but just right for the spawning run of one of the lake's most popular fish, the white bass.

The popular largemouth black bass produced fantastic fishing in Clark Hill when the lake was new. But even though the years when the population was expanding are history, the lake may be making a comeback. This may possibly be attributed, in part, to two consecutive excellent spawning years, and even perhaps, lessened fishing pressure with the advent of Lake Hartwell nearby.

Pictures are proof, and the evidence of some good bass fishing is on the stringer of Harold Parker of Forest Park, held by Harold Jr. and son Allen.

In the mid-1950s, Clark Hill was named one of the top 100 black bass fishing lakes in the nation because of the tremendous catches being made at that time. An unusual crop of bass was produced in the first few years after impounding the lake, yielding sensational growth and fishing. For a time, the average catch was three pounds. But that group of fish has apparently been depleted by time and fishing, and the lake has settled down to the more normal pattern for a large reservoir. However, improved fishing may well be in the offing, thanks to the recent good spawns.

This spring also should be a good one for crappie. Both white and black varieties of crappie exist in the reservoir. Known as "specks" and "speckled perch" in other parts of the country, the crappie is most fished for in the early spring and late fall around sunken treetops and brush piles. The crappie enjoys much popularity among fishermen.

Bluegill, pumpkinseed, redbreast and shellcracker also can be caught in the reservoir, but most anglers seem to neglect these game little panfish in favor of the bass. The lake's many islands, bordered with half-submerged willow trees, provide good hiding, feeding and living areas for the bream, which will take crickets, worms and

artificial lures.

The Georgia Game and Fish Commission and South Carolina Wildlife Resources Commission recently completed a joint stocking program which placed rainbow, brook and brown trout in the big lake.

The addition of these fish, normally found only in mountain streams and lakes in the northern section of the state, is expected to add considerable prestige to Clark Hill. While no natural reproduction is expected because of adverse water and temperature conditions, the "catchable sized" trout are expected grow like crazy.

Other varieties of gamefish sought by the Clark Hill fishermen include the jack (chain pickerel) which is beginning to make itself well-known throughout the reservoir. Bass fishermen, using spoon, shiny plug or minnows, are sometimes startled by a sudden, savage strike by a long, snake-like fish showing off a crocodile-like jaw filled with teeth and gaping in a toothpaste-like grin. That's the jack.

The walleye and its close cousin, the sauger, and the striped bass also have been stocked, but populations of these fish have not yet exploded. Clark Hill is truly the angler's "Horn of Plenty," but if fishing isn't the forte of the "Mr. and Mrs. Average Citizen Family," then what is left?

Plenty. A weekend jaunt to the impoundment could result in a picnic at one of those many areas provided by the Corps of Engineers. Mom can relax in the shade of towering pines, while Dad can take a restful snooze. The kids can have a game of catch, or go exploring, but wading around the shore is not safe because of the uneven and often rocky bottom. Weekends also can become bits of paradise to those who bring a tent, camping trailer or mobile camper to Clark Hill, and those who do will find plenty of company.

If the family's expedition in search of weekend recreation happens to wind up near the dam, the folks just might witness graceful sailboats gliding over a pre-marked course. A boom of a tiny cannon signals both start and finish of the Augusta Sailing Club's weekly regattas featuring the 20-foot Lightning Y-Flyers, Jolly Boats, Flying Terns, Sunfish, Sailfish and even tippy Peanuts, to mention a few boats.

The approach of hot summer months usually brings a few water ski shows to the big reservoir with the Georgia-Carolina Boat and Ski Club putting on the best at its site near Cherokee Creek off Little River.

That's the story in a nutshell of Clark Hill Reservoir, east Georgia's inland ocean. 🐟



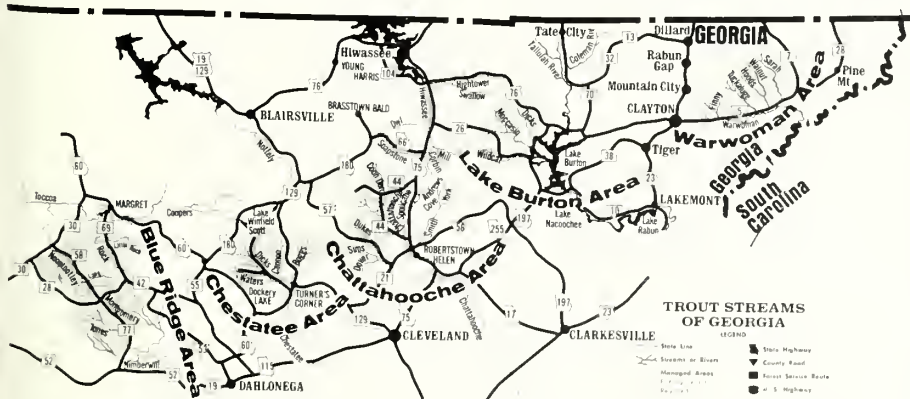
Crappie fishing is a popular Clark Hill sport, especially around the now rotten trees left standing in the lake. Mr. and Mrs. Hubert Holmes and son Rusty of Atlanta give it a try.



Clark Hill is still a good bass fishing lake, and was once listed among the 100 hot spots for bass in the United States.

| MANAGEMENT AREA | STREAM |
|----------------------|---|
| BLUE RIDGE | Jones (Artificial Lures) |
| | Montgomery |
| | Nimblewill |
| | Noontootley (Artificial Lures) (Catch and Release) |
| | Rock Creek |
| CHATTAHOOCHEE | Chattahoochee |
| CHESTATEE | Dukes |
| | Boggs |
| | Dicks |
| | Waters (Artificial Lures) |
| LAKE BURTON | Dicks |
| | Moccasin (Not Stocked) |
| | Wildcat |
| WARWOMAN | Finny |
| | Sarabs |
| | Tuckaluge |
| | Walnut Fork and Hoods Cr. |

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ORGIA

GAME & FISH





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Contents

| | |
|-----------------------------|--------------------|
| The Little King | Herb Wyatt 1 |
| Meet Your Commissioner | Dean Wohlgemuth 6 |
| Next Time | Dean Wohlgemuth 7 |
| Ride with the Rangers | Dan Keever 10 |
| I Lost My Heart to Hartwell | Dean Wohlgemuth 12 |
| Access—Ability | Jim Tyler 15 |
| Sportsman's Calendar | 17 |

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The Okefenokee needs protection

*Like the sweet apple which reddens upon the topmost bough
A-top on the topmost twig — which the pluckers forgot,
somehow —
Forgot it not, nay, but got it not, for none could get it
till now.*

*Like the wild hyacinth flower which on the hills is found,
Which the passing feet of the shepherds forever tear and
wound,
Until the purple blossom is trodden into the ground.
(Sappho, 7th Century B. C.)*

It has been said that a majority of the people now alive have never been out of earshot of another human being during their entire life, and never will be.

Most of those people have never seen a place like Georgia's famous Okefenokee Swamp. And they really have no idea what the 23rd Psalm means in the beautiful words "He shall lead me beside the still waters; he restoreth my soul."

Some of these points should be given careful consideration in the discussion over adding the magnificent Okefenokee to the new National Wilderness System.

Right now the Okefenokee is just about the last place on the Georgia map that a road doesn't make the straight line between two towns. Such a road is possible to build, and has already been proposed. Under current state and federal laws, there is no legal protection possible to stop such an unexcusable, wanton rape of the last great wilderness area in Georgia.

Sure, we've got to have some roads and highways to get around the world on, and nobody wants to hike a hundred miles to go hunting or fishing. But if there were no wilderness left anywhere, there would be no wildlife, and no place to hunt or fish. When man comes to live, he brings the saw, the plow, roads, houses, factories, pollution, and death for the wildlife and natural beauty that he seeks as relaxation "to get away from it all."

By constantly building roads, "scenic highways," picnic areas, gas stations, souvenir stands, "cabins," and subdivisions in once beautiful natural areas, man eventually destroys the very thing that he sought in the first place.

Man can protect his refuges from civilization, but not without a struggle first with those who are either honestly mistaken, too blind to see the fallacy of their ways, or who are too selfish to sacrifice possible material gain for the common benefit of their fellow men.

We believe that now is the time to preserve all of the land possible for future recreational use by hunters and fishermen, regardless of whether a private organization, city, county, state, or federal agency administers the area. And that also means that such areas must not be overdeveloped, ruining their natural beauty and esthetic appeal. Even though they may never go there, thousands of outdoorsmen and nature lovers savor the thought that such an area is there with no roads, no cars, trucks, or busses, and that someday they may be fortunate enough to enter it on a quiet and lonely pilgrimage.

There should be no delay in adding the Okefenokee to the Wilderness System, as has been proposed by the U. S. Fish and Wildlife Service, administrators of the present 400,000 acre refuge. This should be done regardless of whether or not 75,000 acres of swampland adjacent to present federal holdings are purchased.

If the Okefenokee isn't given additional legal and physical protection from man, one of Georgia's last remaining areas of natural beauty will suffer the fate of Sappho's subject.

J. M.

ON THE COVER: The age-old sport of sailing requires safety, too. Wildlife Rangers patrolling Lake Lanier and others check all types of boats, including this Snipe class sailboat, for safety equipment. The Rangers are there to give aid, if your engine — or breeze — should quit.

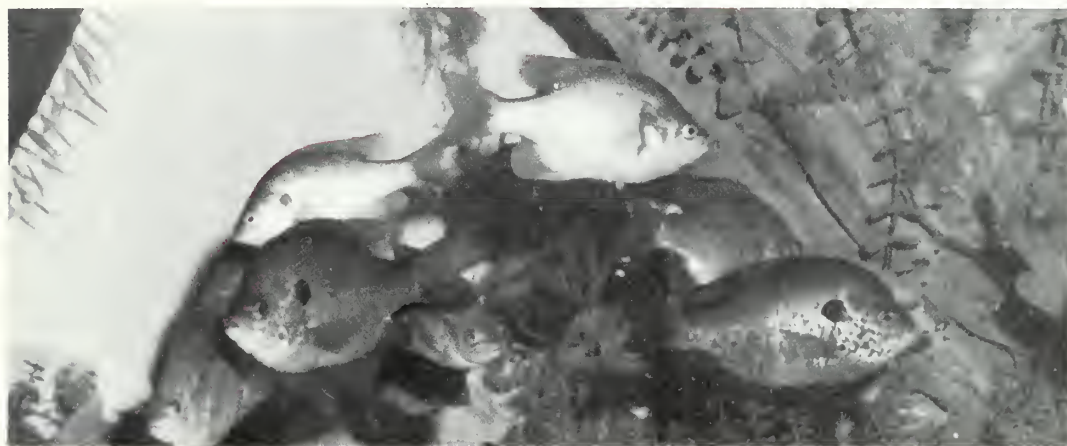
ON THE BACK COVER: LAKE LANIER SUNSET —
"... A summer's day; and with the setting sun
Dropp'd from the Zenith, like a falling star ..."

John Milton, *Paradise Lost*

PHOTO CREDITS: All photos by Dan Keever except: P. 5 Joe Kight; P. 1, Jim Morrison; P. 12, Pacer Studios; P. 4 Jim Tyler.

*Which fish is sought more often by more anglers?
What fish can be caught by the most different methods,
the most times of year,
and in the greatest numbers?
What fish fights hardest, ounce for ounce?
These factors are all part of
the reason that the bluegill, truly, is*

The Little King



By Herb Wyatt, Fisheries Supervisor Southern Region

A fly rod arching against a sudden strike; a spinning line slicing frantic circles through the water; a cane pole twitching and throbbing as if suddenly alive . . . Pick your tackle, the bluegill will oblige you.

From a number 20 dry fly to a 1/10 popping bug; from a 1/10 ounce ultralight spinning lure to a 4-inch bass plug, plus any kind of worm or insect you can think of. Name your bait, somebody has caught bluegill on it.

This is one reason the bluegill is the first choice of Georgia fishermen. He is so darned cooperative. Yet there is something more.

He is, in all the varied shades of coloration, an extremely attractive fish. Blind indeed is the fisherman who has not paused an extra moment or two to admire the vivid reds, coppers, yellows, blues, and blacks of a large male in breeding color.

But this still does not fully explain the attraction of the bluegill.

He is found in almost any puddle, pond or branch, river or lake east of the Rockies. By sheer weight of numbers

he manages to outclass less numerous members of the sunfish family. So naturally he is better known.

Are these then, the reasons why bluegill are so popular?

You can bet your hand whittled seoul-ling paddle it isn't.

The main reason is because for his size, there isn't a more scrappy fish around. Often, when bugging the river for bass, I have set the hook into what felt like a three or four pound bass, and only when the fish settled down to a circling, darting struggle do I realize I've hooked a 10 or 12 ounce bluegill.

As for the fish himself, the bluegill (*Lepomis macrochirus*) is the same species throughout the country. The color pattern and sub-species varies from area to area from the almost black coppernose of parts of Georgia and Florida to the brightly colored specimen of more northern states.

It is a favored speculation of bream fishermen in Georgia that the native bluegill has been polluted by introduction of the northern bluegill. And also, that the small size, pale colored indi-

viduals found in so many ponds is an insipid representative of the species which is contemptuously referred to as "government bream." It is believed this less desirable fish was brought into our waters by the government hatcheries. But bluegill, like any other animal, reaches its greatest size and vigor when best fed.

While almost everyone realizes that different waters bring out different coloration, few realize that diet effects not only the coloration but also the entire appearance of bluegill. These small fish are the result of bluegill from anywhere being so overcrowded they are on a starvation diet.

It is true that there tend to be slightly different characteristics in fish from different areas, but the bluegill from Okfenokee and one from Iowa will produce offspring that are unquestionably bluegill, and this offspring will have the potential to be brightly colored or dark, little and pale or large and vividly colored as the water he is in and the amount of food he can get will let him.

Got him! Frank Cole of Fayetteville puts the hook in a nice one, and Granddad, F. A. Sams, Sr., gets a kick out of seeing it done.

It takes a bit of instruction on the part of Granddad, or so he feels. But Frank seems to know how that fish fits on the stringer.

Bluegill is the general term used throughout the country for our fish, but he has a myriad of local names. The most common in Georgia and the southeast is bream. Fisheries people prefer the name bluegill because there are other fish that are called bream, but there is only one bluegill.

The bluegill bites such a variety of baits, and is so available, it is difficult to say with any certainty what is the best way to catch him.

The most popular tackle in Georgia is the slender, whippy cane pole with light monofilament line, one split shot for weight and a number 8 or 10 Aberdeen style hook. When a float is used, the expert cane pole (that's right, ac-

cent on the cane) fisherman prefers the absolutely smallest one he can get by with. Such rigs probably account for three fourths of the bluegill caught in this state and the entire Deep South. And if you haven't tried it, don't knock it. It has a definite appeal no other technique can match. As with other methods, to acquire the art and science of cane pole fishing requires dedication, study, and observation.

Basically, there are two ways to cane pole fish. The most employed is to park yourself or your boat at a likely looking place, stick a bait on the hook and toss your line into the water. Now the sounds simple, and of course can be, but even the most casual observation of the way this is done will reveal if the fisherman is a cane pole pro or amateur.

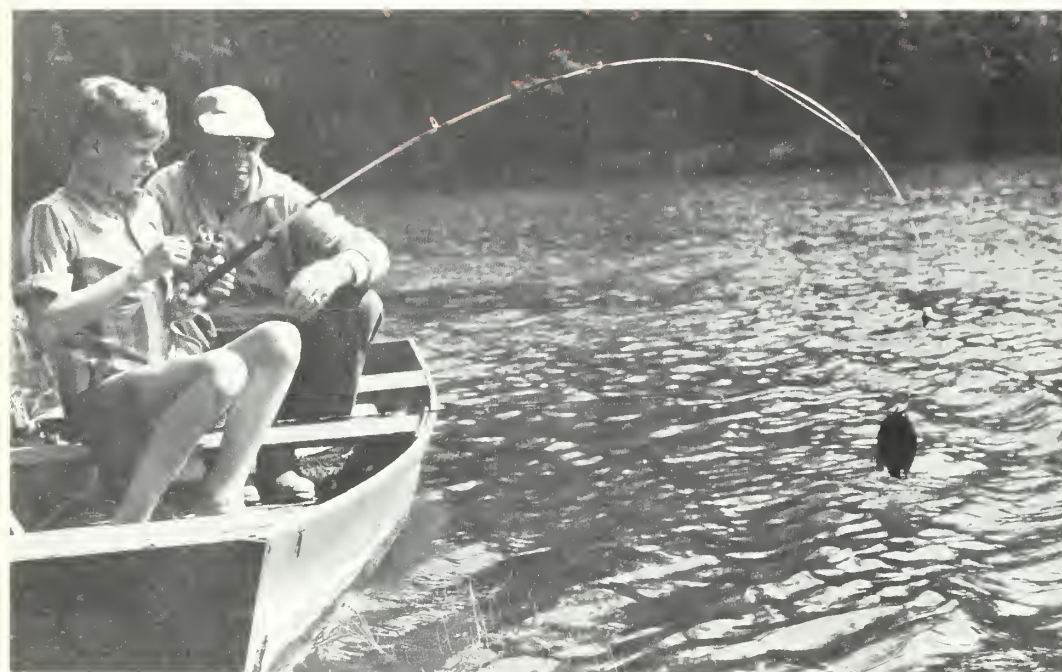
Watch the pro and you will first notice that the selection of the place to fish is not necessarily dictated by thoughts of comfort. He will endure some discomfort if necessary to place the bait in the proper place the proper way.

The second way to tell an expert is the way he impales the bait on his hook. Regardless of the type of insect or worm used, he will hook it in such a way that the bait will have maximum freedom of movement. A light hooked bait will live much longer and a bluegill will hardly touch a dead bait unless the action is really fast.

The amateur, on the other hand, usually threads a worm very carefully on the hook from stem to stern, and a worm with an Aberdeen hook for spine doesn't have much chance to wiggle. The amateur is also prone to skewer crickets from head to tail, which takes the kick out of crickets.

But it is in tossing the baited hook into the water that the differences between amateur and expert are most obvious.

The amateur first of all usually has a line anywhere between 10 and 20 yards long with the extra line wound from grip to tip around and around the pole, with a big ball of monofilament at the tip that looks like the worst nightmare of the worst backlash you ever had. Besides effectively taking the action out of the pole, when our un-informed friend tries to get his hook in the water, it takes considerable pole swinging to get the line airborne. He usually picks up the pole and attempts to toss the line out by letting it swing to and fro. The pendulum effect method of casting can be effective with a shorter line, but distance and accuracy is difficult to attain. Usually our beginner has a much longer line than the pole and cannot clear the ground with the line even while standing, so he resorts to other methods including swinging



ing the line around and around over his head until it is clear of the ground, then trusting to chance the bait, if still on the hook, hits the water somewhere around the right spot.

Consider now the real cane pole fisherman. He takes less space to cast his line than he would with a spinning rod.

First, his line is about the same length as the pole. I don't understand what physical law is involved here, but it is certain that you can't cast a line that is longer than the pole.

The pole is held at the butt with the right hand, the tip is raised until the line swings back to the fisherman's hand. He then catches the hook in his left hand, holds it somewhere around the eye, and with a glance to make sure the point is turned up, flicks his wrist forward, bringing the tip down in line with the point he wishes the bait to hit. The tip bends, and after the right tension is achieved, the hook, still pinched between thumb and forefinger, is released. Like an arrow from a bow, the hook, line, and sinker travels in a straight line, landing usually within six inches of the target.

The art of casting with the cane pole is, to me, more difficult to master than even possibly the fly rod. To watch how deftly some elderly, sunbonnetted lady flicks the cricket under a low hanging branch to land in the only spot of open water among the lily pads is enough to make the most accomplished fly caster take notice.

The fly rod is one of the most enjoyable ways to take any fish, bluegill included. With a fly rod matched to line and lure, there is the widest possible variety of baits to use. Although it takes second place to the cane pole in handling live baits, even worms and the entire range of beetle and larvae favored by bluegill fishermen can be used.

Of course, the fly rod is best suited to the almost incredible numbers of wet and dry flies, including the popping bugs, sponge bugs and even the small metal spoons, wobblers and miniature jugs. In the great majority of cases, these artificial baits will take just as many, and perhaps more bluegill than live baits. One of the more consistent producers is the sponge bug. The normal size fits a number six or eight hook, although larger sizes are sometimes more productive for bluegill of pound size and over. Reports of sponge bugs tied on number 14 or 16 hooks taking large numbers of bragging size bluegill are heard, but to my knowledge, these baits are hand tied and cannot be normally bought in the local store.

When the smaller sized fly is used, bream fishermen usually borrow the



Fishing too far from shore? Don't you believe it! These old pros know there's a bream bed down there.

trout fishermen's favorite patterns. Strangely enough, the brightly colored patterns such as the Royal Coachman are more normally picked by the fisherman, but bluegill seem to prefer the more drab colors. The most widely used pattern in our section is the Black Gnat. This fly, fished wet or dry or in combination with a small spinner, is a real killer during the spring and summer.

It has been my observation that fly fishermen accustomed to fishing popping bugs on the heavy fly rods favored in the south, tend to make one glaring mistake when shifting to dry flies. They use a leader that is too heavy. This ruins the lie of the fly, causes it to land too heavily and float too low in the water. Where level leaders are used, monofilament of no greater than four pound test should be used. Tapered leaders should have a tippet diameter light enough so that the first couple of

inches of leader is suspended by the floating fly.

Detailed discussions of appropriate sized leaders can be found in numerous books on trout fishing. The fly rod bluegill fisherman should not scoff at the information available on using light fly tackle. Adapting these techniques to the south's big bluegill can have very satisfying results.

From my own regrettably limited experience, I can say that bluegills taken on the very small trout flies combined with a leader of sewing thread strength is one of the best ways to develop the finesse in playing a fish on a fly rod necessary for the expert to take anything from butterbean-size sunfish to tarpon.

Besides that, it is a real thrill to offer the challenge of a sporting chance to the fish. After all, the sport, not the meat, is what the true angler most desires.

Almost everybody who fishes has a spinning outfit. When going to the local pond for a few minutes after work, the spinner takes the least amount of time to rig and fish. In addition, they are so easy to use that the fantastic increase in fishing in the past twenty years is probably due, in some part, to this inexpensive, versatile, convenient addition to the fisherman's arsenal.

With only a few exceptions, spinning lures do not consistently take bluegills. The use of flies in combination with a plastic float tied some distance from the fly to add the necessary weight for casting and to float the fly, brings the bluegill within the range of the spin fisherman. Ultra-light lures, used with the appropriate rod and line, improves the bluegill fisherman's catch considerably.

A fly trailer on a top water plug is also productive, but the short length of line tied to the rear hook on the plug is prone to become tangled around the plug hooks on the critical cast. This double-barreled rig offers a choice to both bluegill and bass, but frequently the fly is picked first by a bass, which can result in the loss of a nice bass as well as a fly.

A rig which I thought was original at the time paid off in some happy hours on the Alapaha River some summers ago. I was fishing a plastic worm for bass, using a plain plastic worm on a weedless hook. I could feel bream nipping the tail of the plastic worm on almost every retrieve, and even lost the fluttering tail to some bream when attempting to set the hook in what I thought might be a bass, only to have a large bluegill who didn't want to turn loose make me pull the worm in two.

I threaded some four pound monofilament through the worm with a



After snaking a fly line on top of a bream bed, Woodrow Craven of Newnan brings in the result of an expert cast.

needle improvised from a long shanked hook, tied on a small wire hook which I embedded in the very tip of the tail of the worm. By embedding the tip of the bream hook in the worm, this left my worm weede. The soft plastic offered little resistance to the bite of the bream, and although the day's stringer had only a few bass, it was filled with very nice bluegills, warblers and redbreast which otherwise would have been swimming around on the vital part of my flytail.

But the greatest use of a spinning rig for bluegill is with live bait. With just enough split-shot to get the necessary distance, the spinning rod will cast the most delicate live bait far enough to let the fisherman reach the necessary eddy, stump or bed. In fact, he can stay farther back than the cane pole fisherman, and the fly caster.

This rig can also be used with a sliding cork when still fishing and with a slip lead when bottom fishing.

When using a slip lead to get the

bait on bottom, do not tie the slip lead to the line. Place a small split-shot a few inches above the hook to keep the lead from running down over the hook. This lets a fish pick up the bait and swim off with it, as the line runs freely through the lead, and permits you to feel the slightest tug of a fish. Since the bait is not weighted down, the fish takes it more freely.

This method is especially productive in reservoirs when fishing the bottom and in ponds during the winter months when bluegill are feeding on the bottom. At such times, a large wiggler or pond worm hooked near the end and slowly inched over the bottom is one of the best ways I know of to catch large bluegill.

The place to fish for bluegill varies with the time of year. During the spring every pond and lake will have nesting bluegill. When the water temperature reaches about 78 degrees, the bluegill congregate in the shallow water to "fan the bed." The nest construction consists of sweeping out a circular depression about the size of a dinner plate where the eggs are later deposited and fertilized.

Fishing these beds, as they are termed in our area, during construction will produce a preponderance of males, for the male builds the nest. Later on, the females move in to lay the eggs. Both sexes can be caught now and later when they combine forces to guard the nests from the hordes of smaller bream and other fish who prey on the eggs. But unlike the bass, who does not readily bite while nesting, the bluegill are not so involved in production of progeny that they pass up an opportunity for an easy meal. The beds made up from as few as a half dozen nests to (so I have heard) acres of them, produce some fantastic catches. It sometimes seems impossible that so many fish can be caught in one place. This is the reason why the news that the bream are bedding can cause thousands of fishermen to invent excuses for skipping work, class, and wifely chores to converge on the reported

body of water. For the bluegill fisherman, this is the highlight of the year, the thought that bears him up through a long, hot summer and a tedious winter. It is fishing like no other and an experience that no fisherman should be without.

For the balance of the warm weather the bream fisherman must satisfy himself with results consistent with his skill and knowledge of the best areas and best methods. Ponds and lakes in the summer produce best during early morning and late afternoon. This is the time for leisurely working the drooping willow tops and the lily pad edges with the fly. It is also the time when that ambitious worker, the pitch fisherman, can put it on his more lazy brethren.

The pitch fisherman works for his fish, and like all hard workers, usually has better results. To pitch fish, you must be able to scull a light boat with one hand and manipulate a cane pole or fly rod with the other. The name of pitch fishing comes from the action of pitching the bait or lure in a likely looking spot, letting it sink, then slowly picking it up clear of the water and throwing in another place. The accomplished pitch fisherman never stops moving his boat except to land a fish or to throw back in the same spot. The rhythm with the pole is pitch, hesitate, pick the next spot, l-i-f-t, and pitch again. All the while moving the paddle arm in that deceptively easy looking figure eight pattern that moves a boat gently through the lilies and cypress trees.

This method demands one thing: targets to pitch to. It works best in mill ponds and swamps that are a maze of reeds, lilies, and coontail moss. Each bit of cover potentially holds a bream, and constantly moving, a great amount of area can be covered. Pitch fishermen are indeed a specialized lot, but the development of this technique can aid enjoyment and fish, and is well worth cultivating.

Summer bluegill fishing is also good in streams. The water is never quite as hot as in ponds and lakes, and the bluegill, as a rule, run larger if fewer in number. Summer days bring to mind cool evenings on a river like the Flint, Omulgee, Ogeechee, and Altamaha; the smell of insect repellent and an endless pattern of rocky shoals or willow limbs tracing v's in the water, each boil and eddy being centered with a dancing popping bug or disappearing creek.

This is buddy fishing, for it is difficult to maneuver the boat and fish alone. Since handling the boat requires full attention of the paddler and he controls the opportunities you have

to present the bait to the greatest possible number of spots, treat him with the greatest respect. And when your turn is up, work as hard as you can for him, for on the next change over, he has the opportunity to take revenge. You can tell when a solid rapport has been established when the question "Is this too far out?", is answered by "No, that's about right."

The cooling nights of September make dove shooters feel prickly and bluegill fishermen happy, for the less congested waters of autumn coincide with an upswing in bluegill activity. On the Suwanee, Alapaha, Satilla, and St. Marys rivers, the tupelos are dropping their fruit in the water, and each of the thousands of "plops" made as the tupelo balls hit the water sounds exactly like a big, pug-nosed bluegill sucking in your fly. And on these streams, if you can get there, more than a few of these "plops" can be just that.

Let your popping bug float "dead" down toward a cypress or gum tree, and as it swings out around the triangle or more calm water on the upstream side of the tree get set for a bluegill of pound size or better. Toss your cricket into this same spot or the eddy on the down stream and you are apt to have the same result.

As for winter fishing, I would say the size of bluegill caught then usually averages larger than those caught in the spring. Fish do not feed as readily in the winter. Cold water slows down their activity and their need for food. Little fish can maintain themselves on less food than larger ones, so the larger fish prowls about feeding more. Since insects, crayfish, and other food organisms are less plentiful this time of year, the big bream noses around the bottom of the pond picking up the aquatic worms that live there. This is the time when the method with the spinning outfit mentioned above works so well.

For the cane pole fisherman, a little baiting with hog pellets or commercial fish food in a good spot can also make bluegills as well as catfish hang around an area that can be fished by the comfort of a fire where such necessities as a thermos of hot coffee are readily at hand.

So, no matter how sophisticated the fisherman or his gear; from the willow pole cut at creek side strung with flour sack string and a bent pin baited with a red wiggler dug from the back yard, to the custom made bamboo fly rod with tapered line and leader baited with your own personal hand tied pattern, no other species of fish offers the variety of fishing experiences, or is as easy or challenging to catch, depending on the fisherman, as the bluegill, the most popular fish in Georgia.



About The Author—Herb Wyatt

Pacing across the South Georgia coastal plain like an expectant father, that is Herb Wyatt, fisheries supervisor of the Game and Fish Commission's southern Region.

With almost nervous anxiety he keeps a watchful eye on the conditions of the fishing waters in his region. At the present time, his greatest concern is a new project for the state, involving the stocking of a mighty fighting fish, the striped bass.

This is the kind of life this biologist loves. But when duties allow him to relax, he likes to find time to get in some sportfishing himself. And one of his favorite fish just happens to be the bream. For the bream is another of his pets, one he studies closely in the Suwanee and Alapaha rivers.

His parental care also extends to two of the state's major reservoirs, Lakes Seminole and Blackshear. It is at these two bodies of water that he holds high hopes for the future, because of the striped bass.

Herb received a BS in wildlife conservation from Oklahoma A & M in 1957, and joined the Georgia Commission on Jan. 1, 1958. He has lived in Tifton since that time, working now out of Fitzgerald.

In addition to lakes and rivers, he has done extensive farm pond research.

meet your commissioner:

Rankin M. Smith
5th DISTRICT

Rankin M. Smith represents the Fifth Congressional District in the conservation and development of Georgia's wildlife resources.



With outdoor sports harder to come by for city folks than for others, Atlanta area sportsmen can at least be thankful that they have an outstanding sportsman representing them on the State Game and Fish Commission.

Who, after all, is a more outstanding sportsman than the owner of the Atlanta Falcons, Georgia's professional football team?

Now, pro football is not exactly the same type of outdoor activity that comes to mind when you speak of the Game and Fish Commission. But that side of the sportsman is also strong in Rankin Smith, Fifth District Commissioner from Atlanta.

The genial boss of the hunting hawks (Falcons) likes to do a bit of hunting when he has time. But time is a precious commodity for a man whose life revolves around pro football, and around his position of executive vice president and chief agency officer of Life Insurance Company of Georgia.

Now when it comes to activities outdoors, Rankin has his partialities, but not to the extreme. He likes all types of hunting and fishing, but his special loves are bird hunting and trout fishing.

He is a member of a group of sportsmen that has leases on bird hunting country near Unadilla and Newton. And he owns a farm near Athens, where he usually holds a dove hunt each year.

The Atlanta native loves to use fly and spinner for trout, and growing out of this love was the excellent trout fishing just beyond the outskirts of his hometown, the Chattahoochee River below Buford Dam.

On his way to \$50 apiece to buy some trout to put in the river, there at Holcomb Bridge. Some people said they wouldn't survive, but they did. And look at the fishing there now!" he said.

"I was very much interested in seeing that at least part of that stream was reserved for artificial lures only.

In fact, I'd like to see it all that way," he added. The upper 20 miles of that section is now reserved for artificials.

Commissioner Smith was appointed to the Commission in 1964, to fill an unexpired term. He was appointed to a full term this past January, and thus has seven years to go on his present term. Just recently, he was elected vice-chairman of the Commission. His hopes for his position include gaining more public hunting and fishing areas for the people he represents . . . "particularly public hunting. People who live in such a vast metropolitan area just have no place to go, unless we do provide them with public hunting and fishing areas. This is especially true of hunting."

Salt water fishing is another favorite sport of the Atlanta commissioner. He keeps a 38-foot sportfisherman docked in Miami, and whenever possible he loves to take a fishing cruise to the Bimini Islands.

Commissioner Smith has been a big fan of football through the years, and has always followed the University of Georgia team. He attended the University for a time, after doing some studying at Emory University. He studied business administration.

In earlier school years, at Bolles High School and Jacksonville, Fla., prep school, he played "little — very little" at halfback.

There was more at Athens than the University and football that attracted the Commissioner. His wife, Meme, is a native of that city. They have five children, Rankin Jr., 19; Carroll, 18; Dorothy Anne, 16; Taylor, 14; and Karen, 9.

In Rankin Smith, urbanites have a commissioner who knows and understands their problems in finding a place to go hunting and fishing. And he'll work to alleviate those problems.



Commissioner Rankin Smith, right, boss of the NFL Atlanta Falcons, first pro football team for the South, goes over the club roster with his head coach, Norb Hecker.



The long cast—the strike! And the fight is on! Rankin Smith likes to battle fish, fresh or saltwater, just as surely as he loves to see his Falcons tangle on the gridiron.

NEXT TIME...

will there be another?

By Dean Wohlgenuth

These two boats are about to ram head on (top picture). There won't be any danger, though, if both boat operators know their rules of the road. If they do, the boat in the foreground will yield to the boat at his right. He'll either come to a complete stop and allow the other boat to pass, or he'll alter his course to pass to the rear of the other boat (bottom picture). The boat to the right always has the right of way.



A dark, ominous cloud appeared on the eastern horizon, but the two anglers in the small fishing craft didn't notice it.

They had been enjoying a warm spring day on the lake, catching fish at an encouraging rate. The weather had been perfect — mild, warm, and with a gentle southern breeze drifting across the water, flowing over them coolly. There was just a slight ripple in the water, making fishing conditions just right.

The first inkling they had that a storm was coming, was when the breeze built up briskly, rocking their boat. Still they kept on fishing, until the waves built up more, now sloshing the boat around dangerously. It was

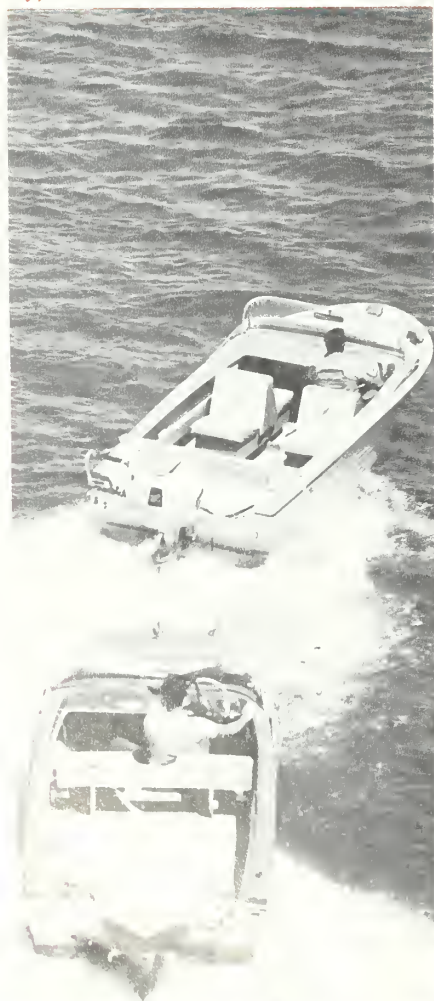
then that the fishermen noted the wind had shifted to the east. A quick look told them the big black cloud was moving up on them swiftly, and that most likely a sudden late spring storm was coming.

They pulled anchor, realizing they had some five or six miles of water to cross to reach the landing where they had put in.

Thinking back, they recalled that when the day had begun, they had forgotten to bring their life preservers. Rather than waste the time necessary to go back home, an hour's drive to get them, they decided to "gamble." After all, they rationalized, there was no real gamble on needing them. The



Life preservers are a must for ALL boating! You must have one Coast Guard-approved preserver, either vest or cushion, aboard for each person in a boat. The vest type is preferred. Make sure you know how to put it on right, and adjust it properly, as Brenda Bell does for Judi Townsend.



Even if you cross that path of another boat, it could be rough enough to upset your balance. So use the proper collision avoidance technique.

weather was calm and warm, not a cloud was in the sky when they started. The sturdy fishing boat was nearly new, and they were experienced enough in boating, they felt, to handle a boat safely. If there was any real risk in not carrying their preservers, it was that a wildlife ranger might catch them.

Now they wished they had the preservers, even though it had never entered their mind that they might need them. It was only that peace of mind which would be afforded by having them aboard, that made them worry a little.

Rain began to slant down, drenching them. The small motor droned across the high waves, and the boat was tossed about from side to side. Now and again, a rush of water doused them over the low sides of the boat.

Out in the widest part of the lake, the waves lashed at them viciously. They had to head south to the landing, so the wind was hitting them broadside.

Finally, the man operating the motor from the stern realized he could no longer maintain his course crosswind. He headed upwind, figuring to take it at a slight angle, then he could quarter again downwind, and make it in safely.

The going got rougher heading upwind, so he decided to take a downwind tack. As he turned the boat, a big wave caught the boat broadside, swamping it.

Over the boat went, tossing the fishermen into the water. Fishing tackle and other items sank out of sight quickly, but at least the anglers were soon able to grab the sides of their overturned boat. Holding on tightly, wet and shivering in the high wind, the two rode out the storm for 45 more minutes. Finally as the wind began to ease slightly, their feet touched bottom, some 15 yards offshore of a small island.

They hurried ashore, pulling the boat along. They were safe!

But then, there they were, stranded. They had no food. Their matches were wet, and they were wet from head to toe. They propped the boat up and got out of the wind and rain, but longed for a warm fire to dry themselves.

When the storm was gone, out came the sun. But a glance to the west told them that there were only a couple of hours until dark. They tried to crank their motor, but found it had been soaked too much to start.

Not a boat was in sight anywhere.

The darkness settled in, and the two huddled under the boat, on the lonely, dark island. One of them finally man-



aged to get a light from his cigaret lighter, and tried to light a fire from wet wood on the island. But the rain has soaked everything in sight, and his efforts were futile.

It seemed like a week went by before daylight came. But the sun was barely up good in the east, before they heard a motor droning in the distance. When the boat came near, the two waved their shirts wildly.

They shouted gleefully when the boat made a sharp turn and headed for them. And they felt even more relieved when they saw that the boat was a Game and Fish Commission vessel, piloted by a ranger. Ironically, they recalled hoping the day before that they wouldn't run into a ranger. Today, they were more than happy to see him.

The ranger had left the dock before dawn, after receiving a report that two men who had been fishing the day before, had not returned home that night. He recalled the storm, and figured the two probably had been swamped.

He doubted he'd see any sign of the two, but possibly, he thought, if they had been turned over, he might find a boat washed ashore somewhere, or maybe even still drifting out in the middle of the big water.

He'd been running only a few minutes from the landing where he'd found the men's car and boat trailer, when he spied two figures on an island, waving their shirts.

Soon the two men were ashore again, safe and warm. And a lot wiser.

Next time there would be life preservers aboard. They might not be able



Cushion preservers are handy in a boat, but are virtually useless if improperly used. In fact, they can be dangerous if worn on the back (left), as Wildlife Ranger Jack Andrews points out. Now, with Jack's guidance (right), Brenda Bell is using the cushion correctly, putting her arms through the loops, with the cushion in front to keep her head out of the water.

Below: Don't be selfish. And inconsiderate. Give the fisherman his share of room. Do your high speed cruising on open water. You're liable if your wake causes damage or discomfort to any other person or property.

Bottom of page: Running close to a swimming area is illegal—because it's very dangerous. Stay away! There's plenty of room elsewhere on a lake, for high speed running.



to get hold of the boat. And next time, they'd keep an eye out for bad weather. And if they were caught, they'd head for the closest land next time, be it an island or whatever.

Next time. Fortunately for these two men, there WAS a next time. There most wasn't.

There's no way to guess how many people risk their lives by taking chances like these two men did.

Perhaps it wasn't life preservers they left behind. Maybe it was a fire extinguisher. Or a paddle. An anchor. Maybe.

Or they had too many passengers aboard. They had neither a mirror or a server aboard while pulling a skier. They rode the bow of the boat, without having the protection of a rail.

They "buzzed" a large, fast inboard about close to a small fishing boat or sailing vessel.

They took a moonlight cruise without lights aboard.

They had to show off a little, making runs too fast and too close to shore.

They pulled a water skier across a falling fishermen's line.

They crossed their little boat at high speed across the wake of a larger boat.

They failed to yield the right of way to another boat.

They ran at high speed too close to a swimming area or dock.

Some of them got away with it. Nothing went wrong. They were lucky.

Next time, it might not go so well. Next time.

For others there is no next time. Just a watery grave.



RIDE WITH THE RANGERS

Game and Fish Commission Rangers Protect Lives on the Water

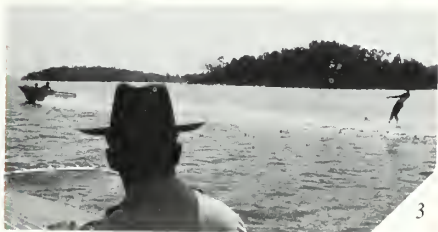
By Dan Keever

The rangers of the Gainesville District patrol heavily-used Lake Sidney Lanier to aid luckless boaters and to enforce boating safety regulations. When a call for aid flashes over the two-way radio, the rangers move out. Calls come from the Gainesville and Flower Branch bases and from other patrol units on the lake. Familiarity with the numerous coves, creeks and islands is a necessity for these men—knowing the shortest route may save a life.





1: Chief Robert Carter of the Game and Fish Commission (L) assigns an area of Lanier to receive the special attention of Rangers Jim Farris (C) and Russell Honea. The rangers work in teams of two per boat and there are as many as five boats on patrol on the lake during the peak summer fun days.



3



2

2: This fisherman maintains his cool. An umbrella provides the shade, a safety cushion provides a good seat and hungry trout lurking in the depths provide the action.

3: An unbeatable skiing combination: a fast boat, a good driver, a ski belt, a bright sun, an observer/friend, a touch of skill, plenty of open water and a watchful ranger who is always happier to see a scene like this than one with a reckless driver with no consideration for the other boats on the water.



4

4: Part of the rangers' daily activity includes checking fishing licenses. Farris and Honea are often faced with the question, "What're they bitin'?" and often they are able to aid the occasional fisherman in finding that right combination . . . but don't expect fishing lessons from the rangers—that's left to the angler.

5: A familiar sight to Lake Lanier boaters: "Let me see your life preservers!" The request usually brings the response of a cushion for every person: "All hands SAFE!"



*Gene Floyd of Hartwell works
his spring lizard carefully, waiting for a big one to hit.*



*I Lost my **HEART** to Hartwell*

By Dean Wohlgemut

You could see the bright violet plastic worm dangling from the corner of the bass' mouth as he leaped from the water and shook his head viciously.

Then the worm made a dazzling streak through the deep, forest-green water as the bass bored downward, trying to burrow his way under the boat.

I put pressure on him and managed to lead him out from under and then used all the force I dared to get him into the net.

Gene Floyd neatly swept the bass into the net and hoisted it aboard. Rain water dripped from my face as I weighed the fish, watching the scale go down to 13¼ pounds.

No sir, he wasn't the monster we'd been looking for, but right that moment he looked mighty good to Gene and me. We'd been snakebit. For two days we'd fished hard on Lake Hartwell, and what few bass we'd taken had come hard. This bass had come hardest of all.

I wiped some of the rainwater off my face and all of a sudden I wasn't shivering any more. When the bass had taken the worm, I was shivering so hard I wasn't sure at first that I'd actually had a strike. But then I let the fish have slack line to run with just in case. When I snapped the bail shut and checked the hook home, the bass socked back, and the scrap was on.

It was nearly noon when I took that fish, and we hadn't put a bass in the boat yet that day. We had hit Hartwell shortly after dawn, and had been on the lake barely 45 minutes when the rain started. From then on the rain came down at steady intervals. I was soaked to the skin. All the while I mentally chewed myself out for leaving my raincoat at the motel in the town of Hartwell, where I was staying.

It had taken less than two hours from the outskirts of Atlanta to reach the town of Hartwell. And from the moment I reached the water's edge, I felt like this was going to be a lucky weekend.

The first omen I had was when I posed for a picture for a news photographer in a boat near the dock at Hartwell Marina. After he got his picture, I made one cast just to get the coils of line off my reel. The tug came in just a few feet before I was gradually aware the tug on the line was too heavy for just the plug. I was about to believe I'd picked up some water weeds on the hooks, when a pound-size bass broke water and shook its head.

Startled, I didn't even set the hook. I looked back at the photographer. "Boy, you want a picture of me catching a fish?" I yelled.

The photographer, some 15 feet away by then, looked back astonished. But when I turned around I had given the bass too much slack, and without the hook driven home, he found it easy to get free.

Moments later, Gene and I were cruising across the big part of the lake in his fishing rig. He had the boat out-

Big water means big wind, to a sailor's delight. It's no surprise that sailing goes over big here.



fitted to perfection, with a 35-horsepower electric starting outboard motor, electric auxiliary motor, steering wheel and depth finder on his open 14-foot glass fishing boat.

It wasn't long before Gene's spring lizard put aboard the first bass of the day. But it was better than an hour before I could get fish smell on my hands.

Finally, while drifting before the wind in a cove, I felt the rap of a fish on my flitail plastic worm. As I set the hook, the fish took off, and the fight was on. He took three leaps before wearing himself out enough to be netted. This one went about two pounds, I suppose, although I didn't think to weigh him.

Gene decided it was time for a fresh lizard, and this time he selected an extra large one. "Going to get me a big one now," he grinned.

And it wasn't long till he set the hook in a bass, but he was disappointed to find that it was no monster, just an average size bass.

"I'll have to say this," said Gene, a Hartwell cabinet shop operator. "These Hartwell bass are mean. They really put up a scrap, and don't know when to quit. They pull some dirty tricks."

It was about that time that I set the hook again, and felt a heavy but nearly dead weight on the 15-pound test mon-

ofilament. The bass came up into view some 10 feet from the boat, and appeared to be about the same size as the other one I'd already boated.

But when Mr. Bigmouth saw the boat, "he decided he didn't like this silly game," as Gene put it later. He jumped out of the water, then dived, struggling to get under the boat. Though he got out of sight underneath me for a moment, I worked him out again, but then he feinted a run toward the waiting net, then sped off the other direction. The quick turn worked the hook free.

I sat back on my seat and said something derogatory about the fish.

It was mid-afternoon now, and as we pulled up on the downwind side of an island, Gene, watching his depth-finder, said "It's about 12 feet deep here. This ridge runs out about 100 yards, then bends to the left. I always get strikes here. But that bottom is rugged — just full of bushes."

He cast out the big lizard and let it settle to the bottom. Suddenly he was on his feet, leaning forward as the bass began taking out line. If the fish hadn't been there when Gene set the hook, I feel sure Gene would have fallen overboard. I mean, he really leaned into that rod!

But in the flash of an instant, Gene



One of two modern, fully equipped marinas on Hartwell. Both are easily reached. Note Interstate Highway 85 bridge in background.

knew the jig was up. The bass had made a complete turn around a big stump, and there he sat, rod bent, line tight, and no nothing on the hook. "I'll promise you that was a real good one," he said.

I believed him. The bass had not yielded a bit to the pressure put on him on the 25 pound test line, but had driven straight ahead to the waiting stump.

Not long after, I had a similar experience. Sure I had a good strike, I heaved on the rod. But though I felt something solid, there was no movement on the other end. "Snagged," I muttered and pulled the line firmly, hoping to pull the hook loose. The pressure on the stump put life into it, however, and I could feel the powerful surge down deep on the bottom. Then it stopped again, solidly.

This time I was sure I'd lost the fish. Undoubtedly, he'd made a turn around a stump, and though he was still on for awhile anyway, I had no hope of getting him in.

He's gone now for sure, I thought, and again tugged on the line with the rod. Once again I felt the same surge of a swimming fish, then once again the movement stopped. Then the line went slack.

"Yessir, these Hartwell bass are mean," droned Gene grimly.

I had to believe him. Our final score was four fish boated, none over two pounds. We'd lost twice that many more, and I'm sure most of the lost fish were larger.

We hadn't picked the best weather available. Clouds had rolled in, bringing high wind and rain, the morning I

drove up. But fishing had been excellent the preceding week. Gene told of many trips and many bass caught here. To him, 8 to 10 pounders aren't exactly a novelty.

Despite not setting the woods on fire with my fishing, it didn't take long for me to take a real liking to Lake Hartwell. While there are often quite a lot of boats on the 57,000-acre Corps of Engineers impoundment on weekends, it's not nearly as jammed up as more popular lakes closer to big cities. The fishing is there, and it's mighty good fishing.

The variety of fish available is wide. It has the usual species found in most middle Georgia lakes, including the more popular largemouth, crappie, bream, walleye and catfish. It also has some striped bass, stocked by South Carolina.

This year should be the best yet for Hartwell, as the lake is in its sixth year. And several more very good years may be expected before the lake settles back to a normal routine.

Facilities as yet are not as plentiful as on other lakes, but they appear to be very adequate for the number of users on the lake thus far. Two modern marinas are located on the Georgia side, Harbor Light Marina just off Interstate 85, and Hartwell Marina, at Hartwell. Both have boat rentals and full facilities. There are 23 boat ramps on the Georgia side, 18 of which are operated by the U. S. Army Corps of Engineers.

Picnic areas number 13, and there are four camp sites. The state owns and operates one recreation area, and three more are county owned.

For the most part, Georgia waters of the lake strongly resemble Lake Lanier. Cool, clear mountain water down the Tugaloo River keeps Hartwell cool and clean in that arm of the lake. Perhaps since the water is somewhat cooler than in most Georgia reservoirs, the fishing may be a little slower coming about in the spring, but might last a little later into the spring. And cool, deep water can be found even in the summer's heat.

Even though the lake is young, many local anglers know the bottom well in their own areas. But those who know it best are those equipped with depth finders. Gene, my companion for example, has an intimate knowledge of the lake near the town of Hartwell.

Yet since the lake is new enough to provide the kind of fishing found only in impoundments of less than 10 years of age, most anyone can find good fishing with little difficulty.

The first time I fished the lake, for example, was a few weeks earlier than my trip with Gene Floyd. Leon Kirkland, coordinator of fisheries for the Commission, visited the lake with me to show me around some, and tell me about it. Actually, Leon had seen little of the lake too, so we depended pretty heavily on Wildlife Ranger Ray Boleman of Hartwell to give us some hints on where to go.

By the time we got around to fishing, there were only a couple hours left in the day. And once again, we were hampered by a stiff, chilly breeze, and a fine but steady drizzle.

As with the other trip, I found encouragement quickly. My fifth cast produced a bass that would fit neatly into a frying pan. But from then on we couldn't seem to locate the fish.

Finally, with time running out on us, we pulled into a sheltered cove. Leon unlimbered a crappie jig and went to work. Still unwilling to give up on bass, I made a few more casts, all unproductive.

Giving up, I decided I'd east just once more then go to the jig. The plug came in untouched, but just as I lifted it from the water, a bass of a little better than a pound splashed up and gulped in the plug, inches above the surface. I automatically set the hook and as I did, the bass came clear of the water.

I'd like to say the bass are that eager all the time, but I've found that Hartwell, like other lakes, is not supernatural. Bass fishing is bass fishing, and those bass are as smart as their brother found anywhere.

But I agree with Gene Floyd - you won't find more ornery, mean bass anywhere. I love 'em!



Members of the Cave Springs Wildlife Association launch their boats on a public ramp located on the back waters of Lake Weiss near Rome. The club initiated the move to get the ramp and provided the fenced-in beach play area (on the left). The Game and Fish Commission and Floyd County built the ramp, one of the first built with the aid of the Commission.

ACCESS-ABILITY

By Jim Tyler

Down the solid, smooth, concrete surface of the new boat launching ramp on Lake Chatuge, the car braked slightly as the boat trailer rolled toward the water. Slooosh. The trailer and boat were in the water. A little shove and the boat was free. With a toe touch on the accelerator the heavy car squatted down and traveled effortlessly up the ramp, then was parked in the parking area. Just like that. No strain. The Game and Fish Commission's boat launching ramp program is under way. Sixteen new ramps are right now in use and several others will be completed throughout the following months. As outlined in the October issue of *Georgia Game and Fish*, these ramps are just the start of a program that will, initially, see within the next five years a launching ramp for approximately every 15 miles on 20 major Georgia streams, plus one ramp for every thousand acres of water not now served by a

ramp in 12 private power company and TVA reservoirs in Georgia.

Each ramp site is, or will be, located in an area where the ramp will serve the most people. Fishing pressure, naturally, is the first consideration, but the many uses of water such as boating, hunting, canoeing, and sight seeing—additional recreational pursuits other than fishing, were considered when selecting ramp sites.

Any club or individual interested in a possible ramp for their area should contact one of the regional supervisors of the Game and Fish Department at Gainesville, Fort Valley, Fitzgerald, or Brunswick, or their county commissioner or county ordinary. The regional supervisor will investigate the area and see if it is feasible to put a ramp there. He will check the area from an engineering standpoint and also see if the proposed ramp is located in an area that would serve a goodly number of

people. This, however, is just a starting point. "People can't expect to ask for a ramp one day and have it the next day," emphatically says C. V. Waters, Northern Region Manager of the Game and Fish Commission.

Monies for the new ramps are provided by the State Game and Fish Commission and by the Land and Water Conservation Fund through the U.S. Bureau of Outdoor Recreation, along with local government support. When looked at over the long range, the cost is very reasonable, say the slide rule men. They figure each new ramp will yearly provide 2,920 man-days of recreation (in other words, on the average, every day of the year eight individuals will use each of the new ramps as a springboard for a day's outing). Over the anticipated ten year life span of a new ramp, the initial investment will be diluted down to show it costs only eight cents for a man-day of use. But the

boater using a new ramp need not worry about the cost; no use fee will be charged.

A bad blow to the ramp program was the failure of a proposed constitutional amendment to be introduced in the 1967 legislature. This amendment, if passed and then voted into being by the Georgia people, would have earmarked the fuel tax paid on the gasoline bought by boaters to be used to expand the ramp construction program and to step up the Department's boating safety program. This tax money now goes to the State Highway Department. Not a paltry amount, well over one half million dollars are involved. So, the program will be limited to a \$100,000 yearly expenditure, roughly 40 ramps.

Still, the new ramps will greatly help fishermen and boaters, enabling them to launch their crafts with ease and assurance.

Here is a list of the new ramps:

NORTHERN REGION

Nottely Lake, at the dam. Union County.

Oostanaula River, at Calhoun. Gordon County.

Oostanaula River, Highway 156 crossing. Gordon County.

Etowah River, Highway 5 crossing. Cherokee County.

Lake Chatuge, Highway 76 crossing. Towns County.

Tugaloo River, below Yonah Dam. Stephens County.

CENTRAL REGION

Ogeechee River Highway 88 crossing. Washington-

Jefferson County line.

Ogeechee River, Highway 1 crossing. Jefferson

County.

Ogeechee River, south of Louisville, McCombs

Bridge. Jefferson County.

Ogeechee River, Highway 78 crossing. Jefferson-

Burke-Emanuel County line.

Oconee River, State Hospital property,

Milledgeville. Baldwin County.

Oconee River, Highway 287 crossing. Green County.

SOUTHERN REGION

Ocmulgee River, at Abbeville. Wilcox County.

Flint River, Reeves Landing. Sumter County.

COASTAL REGION

Altamaha River, Shrine Club Landing upstream

from Highway 301 crossing. Wayne County.

Altamaha River, Gray's Landing between Highway 1

and Highway 221 bridges. Toombs County.

A rutty, inadequate launching site can be a headache. The Commission's new launching ramp program will provide dependable, fee-free ramps, plus roomy parking areas.

Sixteen new ramps have been installed. Many more are on the drawing boards and will be completed soon.

Put a boat in here? Members of the Georgia House Lakes and Rivers Study Committee examine a hazardous ramp located at the Georgia 120 crossing on the Chattahoochee River near Duhuth. Committee members were concerned with the lack of facilities on Georgia waterways.



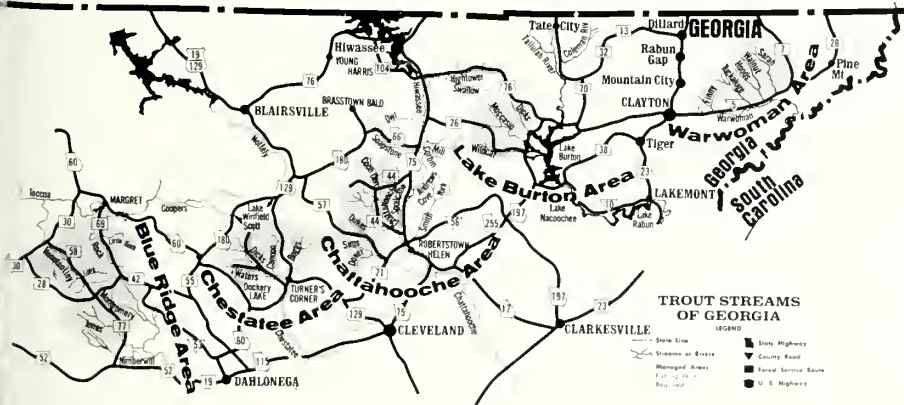
Sportsman's Calendar



1967 GEORGIA TROUT MANAGEMENT STREAM SCHEDULE

| MANAGEMENT AREA | STREAM | MAY | Wednesday-Thursday | Saturday-Sunday | Wednesday-Thursday | Saturday-Sunday | Saturday-Sunday | Wednesday-Thursday | Wednesday-Thursday | Saturday-Sunday | SEPTEMBER |
|-----------------|--------------------------------|-----|--------------------|-----------------|--------------------|-----------------|-----------------|--------------------|--------------------|-----------------|-----------|
| BLUE RIDGE | Jones (Artificial Lures) | 3-4 | 10-11 | 17-18 | 24-25 | 31 | 6-7 | 13-14 | 20-21 | 27-28 | 3-4 |
| | Montgomery | • | • | • | • | • | • | • | • | • | • |
| | Nimblewill | • | • | • | • | • | • | • | • | • | • |
| | Noontootley (Artificial Lures) | • | • | • | • | • | • | • | • | • | • |
| | (Catch and Release) | • | • | • | • | • | • | • | • | • | • |
| CHATTAHOOCHEE | Rock Creek | • | • | • | • | • | • | • | • | • | • |
| | Chattahoochee | • | • | • | • | • | • | • | • | • | • |
| CHESTATEE | Dukes | • | • | • | • | • | • | • | • | • | • |
| | Boggs | • | • | • | • | • | • | • | • | • | • |
| | Dicks | • | • | • | • | • | • | • | • | • | • |
| LAKE BURTON | Waters (Artificial Lures) | • | • | • | • | • | • | • | • | • | • |
| | Dicks | • | • | • | • | • | • | • | • | • | • |
| | Moccasin (Not Stocked) | • | • | • | • | • | • | • | • | • | • |
| WARWOMAN | Wildcat | • | • | • | • | • | • | • | • | • | • |
| | Finny | • | • | • | • | • | • | • | • | • | • |
| | Saraha | • | • | • | • | • | • | • | • | • | • |
| | Tuckaluge | • | • | • | • | • | • | • | • | • | • |
| | Walnut Fork and Hoods Cr. | • | • | • | • | • | • | • | • | • | • |

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SEASONS NOW OPEN

TROUT

Mountain Trout

Open Stream Season—April 1, 1967 through October 15, 1967.

Catch Limit—Eight trout of all species per person per day. Possession limit 8 trout.

Fishing Hours—30 minutes before sunrise to 30 minutes after sunset.

No night trout fishing is allowed on trout streams open during the regular state trout season. Trout fishing at night on Reservoirs is permitted.

Special Regulations—Coleman River below Forest Service Road No. 54 restricted to artificial lures only, 10 inch minimum size limit on brown and rainbow trout, 7 inch minimum size limit on brook trout. Chattahoochee River below Buford Dam to the John Jones Bridge restricted to artificial

lures only with a 10 inch minimum size limit for all trout species. Fishermen on artificial lures only streams may not possess live or natural bait.

Management Area Stream Season—May 3, 1967 through September 4, 1967 on designated days only. For detailed schedule see map and chart above.

Lake Trout Season—There is no closed season on trout fishing in Georgia Lakes with the exception of Amicalola Falls and Vogel State Park Lakes, and Dockery Lake.

Special Regulations—14 inch minimum size limit on all species of trout in Lakes Blue Ridge, Burton, Clark Hill, and Lanier. No size limit on other lakes.

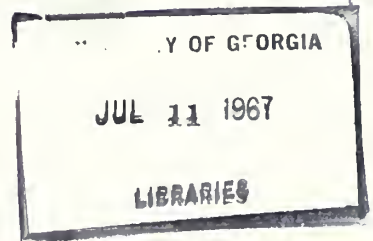
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ORGIA

GAME & FISH





GEORGIA

GAME & FISH

July 1967

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Contents

| | | |
|------------------------|-----------------|----|
| Savages of the Sea | Jim Morrison | 1 |
| Family Fishing Fun | Dean Wohlgenuth | 6 |
| Don't-Fence-Me-In Bass | Leon Kirkland | 7 |
| Meet Your Commissioner | Jim Morrison | 9 |
| For the Fun of It | Herb Wyatt | 10 |
| Why The Shrimp Ebb | Jim Tyler | 13 |
| Sportsmen Speak | | 16 |
| Sportsman's Calendar | | 17 |

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Does Georgia Need a Saltwater Fishing License?

A major portion of this month's *Georgia Game and Fish* magazine is devoted to the treasures of the Georgia coast, both for the sport fisherman and for the man who makes his living harvesting shrimp, crabs, and oysters from the sea.

From the mouth of the Savannah to the mouth of the Saint Marys, from the thousands of miles of saltwater creeks and rivers, and from the beautiful offshore islands to the brilliant blue Atlantic waters offshore, the Georgia coast is unquestionably a fisherman's paradise.

But like any section of paradise, a worm can be found in the apple. In the case of the Georgia coast, the major problem seems to be that Georgians for one reason or another have never really done anything to develop the full potential of this great sport and commercial fishing area.

Vast areas teeming with fish in season go virtually untouched by fishermen, while thousands of Georgians and even more of their northern cousins race each other down the ever widening highways to Florida, there to spend their money for gasoline, meals, lodging, bait, boat rental, fishing tackle, guide service, etc. Much of this money could have been spent with equal fishing success in Georgia waters, but was not.

Why? There seem to be two answers, both closely related. The first is the relative shortage of facilities for fishing on the Georgia coast, such as large fish camps with motels, restaurants, guides, boats, etc., at least when compared with most Florida fishing waters. The second factor is the almost complete lack of promotion of the fishing and facilities that are available, at least up until recently. In fact, few Georgians have any idea that there are more than a dozen saltwater fishing camps now located on the Georgia coast. True, the services offered by each varies widely, running from everything a fisherman could ask for to a mere gas pump on the water. Some are sparking new additions to the coastal scenery, while others are aging, paint-peeled watermarks of years past. Some are operated by intelligent, aggressive men anxious to please their customers, while others are the bailiwick of sour old curmudgeons who scarcely seem to care if a single fisherman ever darkens their door again.

Why haven't more top-notch fishing facilities been constructed and efficiently operated to lure fishermen to the Georgia coast? And why hasn't more promotion gone into advertising the facilities and services that are now available? And why hasn't some effort been expended in improving sport fishing through management of fish there, such as the potentially helpful construction of artificial offshore reefs?

These are all knotty problems. The first two are similar to the argument of whether the chicken or the egg came first. If there are few decent facilities available to promote, what good is it to advertise an inferior product? And if not enough promotion is given to those facilities to attract enough customers how can the business survive, flourish, and expand? Obviously both ingredients are needed: there is room for ambitious businessmen with money to construct the necessary facilities and to begin promoting them. At the same time, more effort in advertising the area to fishermen can and should be made by local chambers of commerce, and by city, county and state government. Such an effort would be amply repaid in increased business for the area, resulting in increased profits of operation.

(Continued on page 16)

ON THE COVER: Down goes the gaff and in comes a little tuna, one of the fierce battlers of the sea found off the Georgia coast during the summer months. The landing of the fish is the anti-climax, but still an exciting moment for these anglers on a charter boat operating from Jekyll Island. Photo by Jim Morrison.

ON THE BACK COVER: This painting by Georgia's former first lady, Mrs. Betty Foy Sanders, graphically depicts the twilight entrance of a Georgia shrimp boat into the harbor at Brunswick, center of Georgia's multi-million dollar commercial fishing fleet.

PHOTO CREDITS: Dan Keever b. 4, t. 7, 8, 9, 13, 14, 15 Jim Morrison 2, 3, t. 4, b. 7; Walt Stephens r. 6; Jim Tyler 10, 11, 12; Dean Wohlgenuth 1, 6.

Miles from Sight of Land Off the Georgia Coast, Big Game Fish are Hitting!

SAVAGES OF THE SEA

It was a hot, sunny afternoon on the blue waters of the Atlantic.

Hours ago, the last sign of the Georgia coast had disappeared from view to the accompaniment of the dull, monotonous roar of our trolling inboard motor. I was just about to doze off into a catnap when the snap of one of the lines being jerked from the outrigger clip awoke me with a start.

"Fish on," yelled one of my companions as I jerked the heavy saltwater trolling rod from its holder on the rail and began attempting to reel. Suddenly, for the first time in my life I was

face to face with a fish strong enough, vicious enough, to be pulling me from the wrong end of the line! Watching a fish take line away from a block and tackle rod and reel against a tight drag, with energy to spare, is a frightening experience — here was a real battle.

"Keep the line tight," somebody yelled, as if I had any choice! But then the bend in the stout rod suddenly eased, and the line slackened.

"Reel, he's coming toward you!" they screamed. From that point on, I began taking advice, attempting to hold as much line as possible, reeling a few

cranks a minute whenever the wild horse on the end of my line would let me.

Minute by minute, the fight wore on, with still no sight of the fish. Then, a long silvery shape flashed briefly from under the water before again moving from sight.

"It's a king!" roared the boat captain, landing gaff in hand. "Bring him on in."

That was easier said than done, but gradually, reluctantly, the big fish moved slowly to the transom, and the mate plunged downward with the gaff

• By Jim Morrison



as my line, sickeningly, went slack and my king fish splashed back into the sea.

"Tangled in one of the other lines," cursed the mate. "Unhooked him." In the excitement of the strike, we had carelessly forgotten to reel in one of the four trolling lines and it had coiled itself around my fish, releasing it. The fish must have been a 20 or 25 pound king mackerel, even if it was "the big one that got away."

It was just as well that the next strike came on someone else's line, because my heart hadn't stopped pounding from my exhausting battle with the big king. Still, I was green-eyed when one of my companions boated a king at least as big as mine would have been.

Later, other members of the party matched strength with a deceptively named "little tuna," pictured on the cover of this month's *Game and Fish* magazine. We found that he is a real scrapper, even on heavy tackle.

Then, a dolphin took the hook. After a battle of almost 15 minutes and three spectacular jumps more than a yard out of the water, we stuck the gaff into one of the most beautiful creatures ever to come from the sea. In quick succession, the 20-pound fish changed color, chameleon-like, from blue to green to a brilliant yellow-gold hue.

Trolling more than 40 miles offshore from the Georgia coast, we had other strikes and lost other fish, but the three tackle-busters we landed were well worth the trip. As a bonus, we ambushed a school of Spanish mackerel in Saint Andrews Sound on the way out, in plain view of Jekyll and Cumberland Islands. In fact, we had scarcely left the dock at the Jekyll Marina and got our lines rigged with small trolling spoons before spotting the mackerel school almost inside the inlet. Small black "mackerel birds" circling and diving rapidly in the water were the first indication of feeding fish, quickly confirmed by signs of small bait fish leaping from the water, pursued by the thrashing forms of larger, hungry fish.

Trolling around the edge of the school to avoid driving it back down, we quickly began piling two-pound fish into the boat with six lines in the water at a time. As quickly as we could let a Clark's spoon on a three foot wire leader back into the water, a mackerel took it.

Using heavy trolling tackle, the one-and-a-half to two-pound Spanish mackerel can't put up much of a fight, but it's a good way to fill your ice chest in a hurry and catch all of the fish that you'll ever want to at one time, one after another. We never halted the

boat as we constantly followed the fish, pulling in mackerel after mackerel. In case you're wondering, there is no limit on the number of fish you are allowed to take in the ocean, and no fishing license is required.

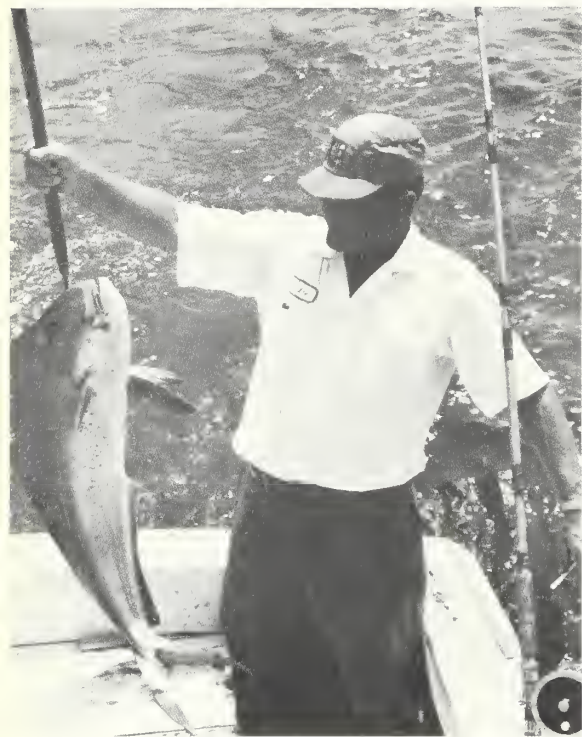
On this trip, our goal was the big offshore fish, so we left the Spanish mackerel school after 30 minutes and at least as many mackerel. We could have regretted this move if we hadn't hit the big fish later.

But don't be fooled about the sportiness of Spanish mackerel. If you don't like meat fishing with a "block and tackle," you can get real sport from the Spanish by using light spinning tackle. Use a short six-inch wire leader for casting since the mackerel has a respectable mouth of needle-like teeth. Bluefish, another small size school fish, are frequently caught with the Spanish mackerel, trolling or casting small spoons. Both are tasty additions to the frying pan, as well as dogged fighters on light tackle.

During the summer months from late May through early September, especially July and August, the ocean waters off the Georgia coast are an angler's paradise for many exciting species of game fish. After wintering near the Bahamas, the fish migrate north, split off from the Gulfstream, and move inshore as the ocean waters warm in the summer. King mackerel, dolphin, little tuna, cobia, bonita, amberjack, jack crevalle, tarpon, Spanish mackerel and bluefish are just a few of the fish that make their appearance in Georgia waters only during this time of year.

Closer inshore, fishing is also good from the beaches for channel bass. Old docks and pilings make good places to fish for sheepshead, croaker, spot, tripletail, and flounder. Saltwater river creeks, and sounds are good spots for summer sea trout and channel bass fishing from small boats. Since these species are more accessible to the average fisherman from the bank or small boat, most of the fishing on the coast is for these inshore species. The larger fish are found only further offshore. Catching the big game fish is a matter of having good enough equipment, starting with a boat capable of going offshore.

The smaller varieties such as Spanish mackerel and bluefish can often be taken in the summer months inside the sounds or within five or six miles offshore, putting them in reach of even fairly small outboards, depending on weather conditions and the nerve of the boat operator. In the ocean, all of the safety problems of boating on fresh water lakes and rivers are multiplied many times by the vast expanse of wa-



The Dolphin is probably the most beautiful big game fish caught on the Georgia coast, rapidly turning from blue to green to yellow when taken from the water. He's a strong fighter who jumps often while on the line.

ter, the stronger currents, the hidden sandbars, the distance to shore, the lack of other boats around, and the suddenness of squalls.

Obviously, fishing outside the sounds is only for the cautious and calm-nerved angler who is prepared for all eventualities, and who finds that the worry about possible risks does not outweigh the potential enjoyment of the excitement of pulling fighting gamefish from the very ocean itself in a small boat kipped by himself.

How big a boat do you need for offshore fishing? There really aren't any hard and fast rules. You could try with your horse-and-a-half motor and a fishing pram, but most fishermen won't go five or six miles out in anything less than an 18 to 100 horse outboard, depending on their financial means and need for peace of mind. Most also take a small motor clamped to the transom or stashed under the bow for possible use as an auxiliary motor in case of engine failure at sea. A good anchor with a line six or seven times the depth of the water is an essential if your motor stalls, you want to anchor, and you can't keep the bow to the wind (a sea anchor is also used for this).

Needless to say, a good repair kit with pliers, wrenches, screwdrivers, extra sparkplugs, shear pins, spare prop, should be standard equipment, along with a fire extinguisher, first aid kit, drinking water, emergency food supplies, extra gasoline and oil, signal flares, towing line, and other odds and ends. Of course, you could do without any or all of these items, but why find out that you should have had them when it's too late?

Needless to say, make sure that you have at least one U. S. Coast Guard approved life preserver on board for each person in your boat. Life preservers of the jacket, vest, or "horse-collar" design are preferred over the cushion type of preserver, especially in saltwater where rescue may be hours away at best.

Whenever you go boating, especially offshore, it's a good idea to let someone on the dock or at home know where you're going and when you'll be back, in case you run into trouble. Make sure they have a good description of your boat to aid searching parties.

One of the best safety precautions as well as a good way to catch fish, is to go out offshore with another boat, especially with a native fisherman who is familiar with the water, sand bars, tides, weather, and the fish. Then if either one of you runs into trouble, help is close at hand. On the Georgia coast, it's a fairly simple matter to follow along with another boat going off-

shore, especially on Saturday and Sunday.

Most anglers like to have the company and the safety that numbers bring. There is plenty of room for extra boats offshore without hindering the fishing for anyone. If you use one of the many popular docks or boat launching facilities on the coast, you usually won't have to take long to make arrangements, especially through the dockmaster.



Most of the larger outboard and inboard-outboard boats now being used on the larger freshwater Georgia reservoirs are suitable for use in saltwater, often with only a few additional items of equipment. One of the most essential is a good set of lifting rings on the boat, since there are few launching ramps in the tidal areas. Such ramps usually stay covered with a coat of sticky mud after every tide, making them dangerous to use. For this reason as well as for easier handling of bigger boats, the hoist is the most common saltwater launching facility. The saltwater also rusts metal trailers quickly. Some hoists are equipped with straps which can be placed beneath the boat, but most require that boats be equipped with lifting rings, usually one on the front deck and two on the transom of outboards, or one on the back deck of inboards. The front ring should be bolted through the deck to the keel below to insure safety in lifting. The owner of the boat is always liable for the security of his own lifting rings, in case they pull out and his boat sinks at the hoist. Launching fees are usually \$2.00 for boats under 18 feet, and \$4.00 for larger ones. Regular users of a hoist usually join a club, which reduces their launching fees in half. Dry storage is available at many marinas for boats at low prices.

For going after the bigger offshore varieties 30 to 40 miles out, naturally you need a larger, more powerful boat.



Top: Outboard and inboard boats with 100 or more horsepower motors are commonly used by Georgia coastal fishermen as far out in the Atlantic as 30 or 40 miles. Judson Smith and Freddie Missildine are old hands at offshore trolling, as are many other members of the St. Simons Boat Club.

Above: The sweet exhaustion of victory! Norval Netch's king mackerel is a whopper in the book of any fisherman who never caught one before. The king is fine eating.



Top: Trolling under offshore buoys is a good way to catch cobia, one of the larger offshore species. Cobia like to lay under the shade of navigation markers.

Above: Modern marinas on the Georgia coast offer fishermen good launching facilities, gasoline, and food. Launching hoists are used instead of ramps on the coast because of tidal mud and saltwater corrosion of metal boat trailers.

Outboard and inboard motors of more than 100 horsepower and boats 20 or more feet in length are a good idea, if they are well constructed with plenty of freeboard, especially at the transom. Poorly designed boats can break apart in heavy seas, or be quickly swamped by breakers. An electric bilge pump is one of the many items worth their cost further offshore, along with a depth finder, a ship-to-shore radio, a good compass, and a set of charts. (An index of charts of the Georgia coast is available by writing to the U. S. Coast and Geodetic Survey, Washington, D. C.)

Such boats may be capable of speeds of over 30 miles an hour, in calm water, but frequently in a squall they cannot safely operate at more than 7 or 8 miles an hour. If a storm overtakes boats fishing 30 miles out, they must be able to weather the blow if they cannot run in or run further out in time to avoid it. This can call for real seamanship on the part of the skipper, and a good knowledge of his boat and its capabilities in all kinds of weather and water conditions. Most of these men are reasonably familiar with basic navigation principles. If you haven't taken it, it's a good idea to sign up for one of the U. S. Power Squadron's basic piloting courses. The U. S. Coast Guard Auxiliary also gives boating safety classes, and makes free safety inspections of boats and their safety equipment.

Fishing tackle-wise, you can get along with your regular freshwater spinning or casting equipment inshore, although you may want to use light saltwater spinning or casting rods and reels. Offshore, you'll need really heavy, short saltwater trolling rods and star-drag reels. Without outrigger poles on your boat, it is difficult to effectively troll more than two lines at a time. Outriggers enable you to fish two lines out-

side the wake of the boat, and make it possible to catch billfish like marlin and sailfish that characteristically strike a bait fish with their bill, then circle back to eat it.

When an outrigger is not used on a trolled line, the billfish strikes the bait, circles around, and expects to find the bait lying dead in the water, so that he can immediately eat it. However, if the bait is still being trolled, it won't be there, and the fish knows that something is wrong.

For this reason, outrigger poles are usually equipped with a clothespin-type clip into which the trolled line is placed with just enough tension to snap off when the fish first strikes the bait. This lets enough slack line loose so that the bait stops moving in the water, even though the boat does not, and the fish takes the lure.

Outrigger poles usually are 20 to 30 feet long, and are equipped with a pulley type line using guides up the pole for reeling the spring clip into the boat and back out the pole again when the trolling line has been placed in the snare.

A wide variety of baits and lures are used for the large offshore fish. But the most popular are large barracuda spoons, feathered jigs, broken-bait plugs, cut mullet or bonita strips, and a small dead bait fish known as ballyhoo that can be purchased in fish markets.

Although the excitement and adventure of taking your own boat offshore and catching large fish is worth considering, suppose that you first want to get better acquainted with where and how to fish, or that you don't have the boat or the tackle for it yourself. What then?

The best answer probably is to charter a boat and skipper to take you out, provide the tackle and lures, and show you how and where to fish. There are dozens of small boat owners on the

coast who are licensed by the Coast Guard to carry passengers for hire, and who will be glad to take you out for a reasonable price if you make arrangements a day or so ahead with a marina operator, especially for the weekends. Prices vary considerably, but a boat capable of taking up to eight fishermen would run about \$100 a day, although a smaller boat with room for three fishermen and a skipper probably could be arranged for \$50 or less, depending on how far out the run is.

Inshore, guides for trout and channel bass fishing charge about 10 to 12 dollars a day, with or without bait included. Boats and motors can also be rented for an additional charge. Boats for inshore fishing are readily available at more than a dozen saltwater fish camps on the Georgia coast. Charter boats for offshore fishing usually can be arranged at either Savannah, Thunderbolt, Savannah Beach, Sunbury, Midway, Yellow Bluff, Brunswick, Saint Simons, or Jekyll Island. Writing to the chamber of commerce in many of these cities will provide some helpful information. In addition, a map is available free of charge from the State Capitol office of the State Game and Fish Commission which shows the locations of the various fish camps and marinas, and gives an index of the type of facilities and equipment available at each location. The folder also includes an identification guide to saltwater fish species, along with tips on how, where, and when to catch them. Ask for the brochure, "Saltwater Fishing in Georgia."

When you're making plans for your saltwater adventure, don't forget the possibility that you could get seasick. If you're not an old salt who can take a constant up and down and side-to-side motion of a small boat on the ocean swells without hanging your head over the side, it's a good idea to get some motion-sickness tablets at the drugstore and begin taking them the night before you go out for maximum protection. Avoid eating spicy seafood or consuming much in the way of alcoholic beverages the night before you go out — you'll feel safer until your feet are firmly planted back on the bank. Sunburn is also another possibility, since the power of the sun's burning rays are intensified by the reflections on the water, as well as by the effect of the wind. Extra protection may be needed for hands, ears, neck, nose, etc. Another thing — don't try to unhook your fish with your bare hands. Almost every saltwater fish, no matter how small, has a respectable set of sharp spines that he'll gladly use on your unsuspecting fingers, if you let him.

Use a heavy glove and/or a pair of pliers. Smaller fish like trout may be netted, but a gaff is essential for larger fish.

If you want to score on the savages of the sea lying in wait off the Georgia coast, don't put it off too long — most of these species migrate back into the Gulfstream and back to the Bahamas by early fall as the water begins to cool in September, returning again to Georgia waters in May. Inshore, fishing for trout and channel bass improves, and actually reaches its peak in November and December (See *Georgia Game and Fish*, November, 1966).

So if you've always had an inner longing to go down to the sea in your own small boat and catch a fish half as long as you are, now is the time. Even if you don't get a strike, it'll probably be an adventure that you'll never forget.

Bottom: Fishing is good on the coast during the summer for large channel bass inshore. Bull Durham and Bob Gill of Brunswick are proud of this fish taken near Little Egg Island in the Altamaha Sound.

Below: From top to bottom, three popular offshore battlers are the dolphin, king mackerel, and spanish mackerel.



The plug came in untouched for about the 10th time in a row, and impatience overtook me. I walked up the dam to where I had left my tackle box, and selected a new one.

As I was tying it on, I was aware that a group of three women were approaching. One of them stationed herself right where I'd been standing.

My first reaction was disappointment, because I'd already landed some 10 or 12 bass from that one spot, although none quite reached the 10-inch size limit, and had been carefully returned to the water.

Then, recalling the fruitless casts immediately preceding the change of lures, I thought little of it. Let her have the spot, I told myself, and crossed over to the other side of the dam to another pond.

Only a few minutes passed before I heard a gleeful shriek. "I've got a big one!" The voice was that of the woman who'd taken my spot. I peered over the dam. The woman needed help with the fish. I got there just in time to aid her in landing it, a three-pound beauty with a plastic worm dangling from its mouth.

This spot became my favorite in all the many spots available to anglers at the McDuffie Public Fishing Area. On my next visit, I got there just as another group of anglers were leaving, with a good sized stringer of bass. Still I got a two-pounder and a couple other keepers in an hour and a half.

Later in the day I found another spot, full of stumps, and in the next hour I landed bass almost at will. Most of them, admittedly, were again below the keeping size. But it was good recreation.

Actually, I wasn't seriously fishing that day. I had taken the family and some friends along, with hopes of giving them some sport.

And the McDuffie Area, in McDuffie County not far from Augusta, was the logical choice for such an expedition.

The public fishing area operated by the Game and Fish Commission contains 14 lakes, totalling some 100 acres of fishing water. All are stocked with bass and bream, and five of them also have channel cats. It is pond fishing at its finest in the highly managed ponds. The Commission uses its best knowledge in pond management to produce the maximum fishing possible for as many anglers as possible.

This, of course, means a few more restrictions than on big water. Bag limits are 20 bream, five bass and five channel cats per day. Bass must be over 10 inches long. And anglers over 16 years of age must pay \$1 each per day to fish.



Family Fishing Fun

By Dean Wohlgenuth

No boats are available, so anglers must use their own. Only electric motors are allowed. A campsite is set aside for those desiring to stay overnight.

Charge for non-fishermen using picnic facilities is \$1 per person 12 or over but there is no charge for fishermen and their families who wish to use the picnic tables. Only limited camping facilities are available including water and tables . . . There are no tent or trailer pads.

Since this is the third year for this area, fish should be of better size than in previous years. Ed Henderson, who is superintendent of the area for the Commission, told me that there should be quite a good number of four to five pound bass and equally good channel cats in the ponds now. Shellcrackers to 1 1/4 pound and bluegills of a pound were not too uncommon last year, and these species can only be better this year. Last year, 6,000 fishermen took home 10,200 pounds of fish.



Above: If fish aren't biting in one of McDuffie Public Fishing Area's 14 lakes, it's a simple matter to find one where they are.

Left: How much happiness can you hope for? Four year old Warren Wohlgenuth of Decatur seems to have found it with these chunky McDuffie bass.

Ready to go? Here's how you can get there:

The McDuffie area is about 10 miles west of Augusta just off U.S. 278 Highway. From Augusta, go west to Dearing. Turn left at caution light and go three miles to Iron Hill Church. Turn right at the church and go to wooden sign, and turn left on a dirt road. Follow the dirt road .8 of a mile to the checking station.

From other sections of the state, go to Thomson on U.S. 278, continue east on that highway 5.2 east of Thomson. Bear right at a large wooden sign on a sharp curve, and travel 3.3 miles on a paved road. Turn right onto the dirt road and travel .8 miles to the checking station.

When you see anglers in a boat, casting plugs, you almost always see them along a shoreline. If you do see someone fishing quite a distance from shore, chances are you laughed at them.

"Amateurs," you chuckled. "They don't know that fish must have something to hide around, so they hang around stumps along the shore."

Very true — in spring or fall, when the water is cool enough. But when the weather and the water gets good and hot — or very cold — you won't get anything along the edge except perhaps a yearling bass.

Those big boys didn't get that size by being dumb. They're old enough and smart enough to know they are too big to maneuver well in shallow water. And they can be seen there.

More important, the temperature is too warm in shallow water during hot weather — even in the springtime at

midday. And if the water is cool enough, the sun's rays penetrate the shallow water and make things too hot for them.

Then too, bigger fish eat bigger food and this is hard to come by when the big bass can't hide well along the shore. He's too big to get into any chases around tangles, stumps and weeds.

He just lies in wait, where he can't be seen, until some foolish forage fish gets too close, and POW! It's dinner time.

And who says there's no cover for the big boys 'way down deep? YOU can't see it. But you see only the top of the water. HE sees everything underwater.

So if you want to get the really big bass, especially in hot or cold weather, you've got to find good cover in deep water.

The best time you can spend in hunting big bass, is to go out to your favorite lake in the winter time when the water is down low. Now, and only now, can you see what the fish sees all summer. You'll be amazed. Out in the middle of that cove, you'll see huge rocks, stumps and brush protruding out of the water. In the summer, all you saw was wide open water. During low water, you'll see dropoffs. Last summer, it all appeared to be level.

You can get a good idea of very deep spots, and you can find shallow spots out in the open, often referred to as "submerged islands," or "underwater islands." These are little hills that were flooded along with everything else, but they're not so deep. While water around them may be 50 or 60 feet deep, atop the "islands," the water may be eight to 10 feet or perhaps a little deeper. These, especially if they have

Don't Fence Me In Bass

By LEON KIRKWOOD
Coeditor of *Fishing News*
and
Leon V. DeMott

Fishing for fun? Then you'll find it
easily done in the warm, sunny
especially when the water is warm
rock strong and
the weather is just what you need
complete with the best of everything





Some good spots to fish for bass on Lake Lanier during the summer months include submerged islands like the one marked on the right, along with the tree areas in the background which may also indicate a submerged island or point where bass are hanging out.

a lot of brush or rocks on them, are the places where you'll find the big ones.

Some of the shallow spots in the open may be long ridges. They provide huge areas of extra fine fishing. If the wind is blowing right, you might be able to drift along the ridge and really clean house!

Of course the water may not be low-ered enough even in the dead of winter or at the lowest point during a long drought, for you to actually see bottom . . . But you CAN see stumps, tree tops, etc., that you couldn't see if the water were even three or four feet higher. These are tipoffs that there is shallow water there.

Get a good map of your lake. Mark these spots on the map. Make sightings of your location with objects on shore. And check them for depth. That's easy to do with a heavy weight and line, measuring the line. You can easily find where the shallow water drops off that way, too. And dropoffs are just made for a bass's liking. He can hunt in the shallows, and easily slip off into deeper water when he's aware of danger, or when he gets his fill.

The preferred depth for open water fishing is from about 8 to 18 feet. These are the kind of places you're looking for.

Of course, there's a better way to find these spots, especially in summer when the lake is full. This is with an electronic device called a depth finder. This way is more expensive than most of us can afford. And there are those that feel such devices are unsporting.

It's possible, true enough, that sometimes you may actually find fish — or what you think are fish — with a depth finder, but the real value of this device is to tell you how deep the water is in a certain spot. And as a bonus, you can often get an indication of what's on the bottom in the way of cover. You can readily find the drop-

offs with the depth sounder.

No, you don't have to spend all that money. You can go back to your heavy lead and sounding line, and measure the depth. This, however, is much more trouble, much slower, and takes up so much of your time you won't get in near as much fishing.

There's another way you can find water and cover at the right depth, and at the same time help you to locate the fish. Although I don't personally care for this method of fishing, trolling can help you learn a lake.

Take deep running plugs and troll them, noting carefully where the plug hits bottom. Of course, it helps if you have a good idea just how deep the plugs are running. If you hit snags, you know you have found cover. And if you get a bass, stop and anchor near there, and cast for awhile.

You should realize, of course, that you must find cover to find bass. And finding cover this way will mean finding snags. What I'm preparing you for is that you can expect to lose some plugs on those snags.

While plugs are the thing to use while trolling as just described, I don't recommend them for fishing these open water fishing spots, once you drop anchor and start fishing seriously. You're far better off using plastic worms or lizards. These stay right on the bottom, and work the bottom slowly. You can drift fish them too, if you like, if the wind is not too strong. The slow movements of these baits are just what the doctor ordered for those big lunkers.

It should go without saying, that this type of fishing requires weedless hooks. If you don't, you'll spend most of your time getting unsnagged, breaking your line, re-rigging, or spooking fish by trying to get your rig free. I can catch just as many bass on a weedless hook as a regular hook, especially when you consider I spend a lot more time fish-

ing. Just remember to set the hook harder.

If you have an aversion to using plastic worms or lizards, possibly the best artificial lures you could use would be large spoons, if they're properly worked. I let them sink to the bottom, pull them up a bit, let them flutter down again, pull, let them sink, and so on.

Live bait, too, such as worms and large minnows, can be effectively fishing in these deep water spots. Let the bait sink to the bottom, and fish similar to plastic worms and lizards. One thing you must learn in bass fishing is that versatility is the most important factor in catching fish.

You must realize that fish do move around, seeking a water depth to their liking. So don't stick to one depth without trying others, week in and week out. In fact, try various depths each day you fish.

One of the easiest ways to find the right depth of water by trial and error casting, is by anchoring off a point where the land slopes down into the water.

Anchor where you can cast to the shoreline. If you get no results, turn around and fish toward open water. And especially if it stays shallow for quite a distance, move a little farther from land and fish even more toward open water. Judge the depth by whether your deep running plug hits bottom. You might find some good dropoffs and fish cover by fishing this way.

Just remember this — bass are where you find them. You could take a slide rule or a small computer in your boat with you. According to the moon tables, wind direction and velocity, temperature, barometer and everything else, you may be able to determine whether the bass should be hitting and where they SHOULD be. But they can't read. They might not know where they're supposed to be. You still have to find them, to catch them.

meet your commissioner:

BEVERLY LANGFORD

Beverly Langford represents the Seventh Congressional District in the conservation and development of Georgia's wildlife resources.



A white and brown colored beagle burst into the clearing, raced across the pasture, and leaped into the woods on the other side where the unmistakable music of beagles hot on the trail of a rabbit had just sprung up.

"There goes Dan!" shouted Seventh District Game and Fish Commissioner Beverly Langford of Calhoun. "He's got a voice that'll knock the hickory nuts out of the trees! He's got a mouth like a big hound!"

In a moment, the commissioner's point was made as the distinctive voice of a champion rose in excited contrast to that of the other dogs.

"Yooou! Yooou! Yooou!"

"That's Dan!" cried the commissioner.

"Yoph, Yoph, Yoph."

"That's Dottie."

"Yap, Yap, Yap."

"That's the puppy."

Commissioner Langford has owned two field champions that he handled himself, plus two near champions in "Langford's Dirty Dan" and Dirty Dan's mother. Dan won the Southern Futurity last year.

"I usually keep a kennel of 15 to 20 hounds," Langford says. Helping take care of the Langford kennel and two Gordon County cattle farms is the duty of Mr. Woods, a retired West Virginia coal miner.

The commissioner keeps a herd of registered Aberdeen Angus cows on his land, along with a tremendous bull with the deceptive name of "Millie."

"I like my cows about as well as my dogs," smiles Langford, who is really a farm boy at heart. He takes great pride in experimental pasture plantings, as well as game food patches. There is nothing that he would rather do than walk briskly over his acres, inspecting the grass, and listening to the dogs.

"If all my children were out of school, I'd move out here," he says joyfully. "I love the country — only thing is I can't get out here often enough — just two or three times a week. I never have time to take a vaca-

cation. I got to take only four days last summer, but I can come out here for half a day and feel just as refreshed as going on a vacation."

Actually, most of Beverly's waking hours are devoted to his extremely successful law practice in Calhoun, where he is building a modern new office building behind the Calhoun National Bank, of which he is a director. Although he likes to call himself "just a country lawyer," Langford's reputation in the courtroom is more impressive.

As a member of the State Game and Fish Commission since 1959, Beverly has lived up to his reputation for energetic hard work, especially during his

Fishing-wise, Beverly prefers bass and bream fishing in his two fish ponds, using artificial lures on closed-face spin casting equipment. He keeps a small fishing boat and motor for getting around on the largest pond.

Now 45 years old, Beverly was born in Calhoun near where his father and grandfather lived. His college education at the University of Georgia was interrupted by a tour of duty in Italy during World War II as a cryptographic security officer with the 12th Air Corps, after completing OCS training. Finishing his law degree in 1947, he has practiced ever since in Calhoun, marrying a girl he met in the service,



Running his champion beagle hounds is the favorite pastime of Seventh District Game and Fish Commissioner Beverly Langford of Calhoun (l).

term as chairman of the Commission in 1964. Even before being appointed to the Commission by Governor Ernest Vandiver, Langford was instrumental in efforts of the Sugar Valley Sportsmen's Club to help the Commission set up the John's Mountain Game Management Area, which was soon restocked with deer and turkeys that have since spread out into many surrounding northwest Georgia counties where both species once were extinct.

Primarily a small game hunter himself, Beverly rarely kills a rabbit, but prefers only to enjoy the chase by the dogs, letting the rabbit survive for another chase another day. He likes to shoot doves and quail, and occasionally does some squirrel and raccoon hunting. His son Jim is also a hunter, bagging his first deer last season.

Edna Synder, from Ponca City, Oklahoma. In addition to 13-year-old high school freshman Jim, the Langfords have two daughters, Judy, 17, a freshman at Agnes Scott; and Lucie, 11, in junior high.

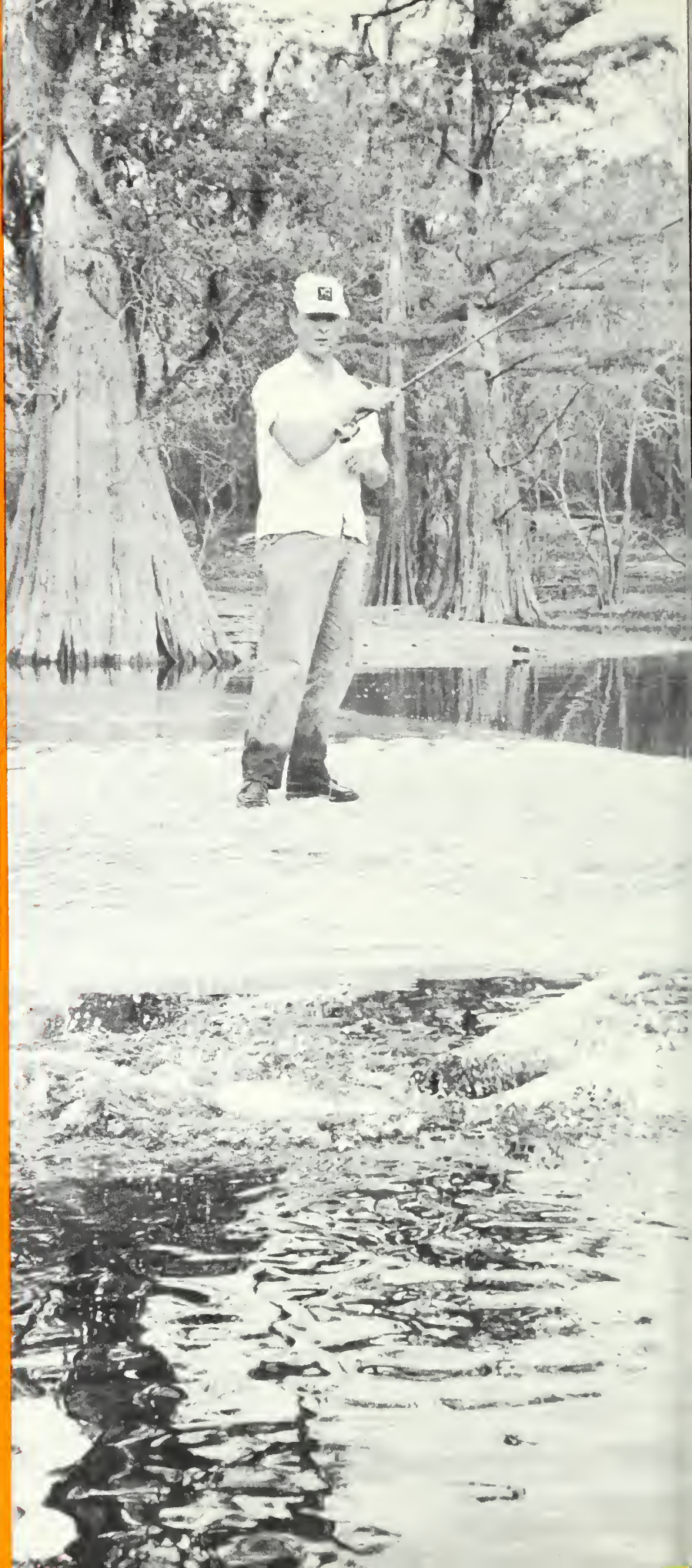
Formerly president of the Rotary Club and chairman of the board of deacons at First Baptist Church in Calhoun, Beverly perhaps holds his fondest memories of his youthful years as a Boy Scout, when he was an Eagle Scout, and worked several summers as a camp counselor on the water. "Scouting is a wonderful thing," Beverly says. "It's something you can't learn anywhere else. I'm proud of the Scouts."

And sportsmen from the 7th District have plenty of reason to be proud of their commissioner — a good scout, and a good conservationist.

For The Fun of It

By Herb Wyatt,
Fisheries Biologist

*If you want action, take
a bowfin on a flyrod.
Especially if you hook an
eight pounder like the one
Joe Kight of Tifton is
"horsing" in.*



Looking for an exotic-type fish with plenty of muscle that he just loves to use? Here's a Georgia fish that picks a fight with most any type of lure, at the slightest provocation.

He means business when he strikes. He is not temperamental like bass or trout. When he goes for a lure it is because he means to kill and eat it, not apparently because he is mad, moody, or playful.

After getting a plug in his mouth, he tears into it with a jawful of needle-sharp teeth, shaking his head from side to side to rip while chewing. No aereobatics for him. He doesn't have the finesse to jump and throw the plug. All he knows to do is to bulldog it through, bore down, thrash, shake and overpower. Pull out the hook, break the line.

He will take your most cherished plug, the one like they don't make anymore, and reduce it to a useless chunk of splintered wood, gouged with tooth marks, paint flaked off, hooks bent and broken, spinners or lip bent out of true.

For doing this he is one of the most maligned and mistreated fish that swims in Georgia. When he is hooked he is cussed, in landing he is clubbed, shot, stabbed, stomped and beaten off the lure. When finally subdued to the status of turtle food, and lying in the bottom of the boat, he will still revive enough to chew up a finger, knock over your tackle box and your just-opened cold drink.

He is a pre-historic monster, a never-say-die fighter. He is the bowfin.

Call him mudfish, blackfish, dogfish, grinnel, cypress trout, bowfin or any of the host of unprintable names fishermen feel obligated to use on occasion, he is still the same brawler.

Although he is found all over the eastern United States, the bowfin is usually not really plentiful in streams. Swamps and woods ponds are his habitat. Situations where more sensitive fish are killed by stagnant water are home for the bowfin. Although he spills out into streams flowing from these areas, in Georgia he is normally associated with slow water, gar and gators.

One exception to this is the Suwanee River. Besides growing some of the largest bluegill, warmouth and stumpknockers found in Georgia and some of the scrappiest bass found anywhere, the scenic Suwanee has an abundance of bowfin. In fact, surveys show the bowfin is the most abundant fish in the river at the present time.

Since the Suwanee flows from the Okefenokee Swamp and is fed by

countless outlying bays and swamps, it is a natural outlet for the bowfin that abound in these areas.

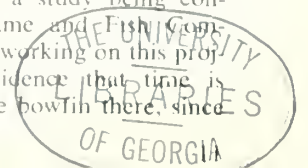
The present high numbers of bowfin probably resulted from one drought a few years ago. During this extended drought, the water in the swamps stopped flowing and almost dried up. The leaves, limbs and accumulated natural debris of the swamps continued to decay. The decay of any organic material in water or on dry land, requires oxygen. Under normal conditions, the debris is spread out in a large area by currents. Oxygen is mixed in the water from the air as the current churns the surface, and the decay is accomplished with no harm to anything. In fact, this decay is what fertilizes the waters. But when water is ponded with an excess of organic materials, such as is found in a swamp, the weather is hot and there is no current and little wind action, the decay uses up all the oxygen, leaving none for the fish.

Most fish must take oxygen directly from that dissolved in the water. The water flowing over the gills supplies this oxygen. When there is not sufficient oxygen in the water, the fish simply suffocate. But the bowfin has a primitive lung. The spongy tissue joining the underside of the air bladder is connected to the mouth by a type of windpipe. As long as the bowfin can keep this tissue wet, he is able to actually take a breath of air and survive while most other fish are dying.

In this way, the bowfin can outlive his competition, and when conditions again become favorable for normal activity, there are more bowfin left than any other kind of fish.

Since the bowfin has a head start on other fish, he is able to get off larger spawns and can maintain this dominance of numbers until finally forced to control his own numbers by cannibalism, by starving from eating himself out of house and home, or by being killed out by nature's control for overcrowded animals -- a parasite or disease.

The short-circuiting of this normal sequence of events resulting in high numbers of bowfin in the Suwanee River, is one part of a study being conducted by the Game and Fish Commission. Biologists working on this project have some evidence that things are running out for the bowfin there, since





Top: Bowfin can be as thick as flies. From the small slough on the Suwannee River in the background, over 500 pounds of bowfin were taken with toxicant during a Game and Fish Commission population study by fisheries biologist Herb Wyatt.

Above: An armored head, tough, sturdy body, muscle power to spare, a fight-to-win attitude — the bowfin is a worthy adversary of any fisherman.

they have not found any small bowfin for the past three years. This indicates the bowfin reproduction is very low. Such a reaction is common in fish populations that become so overcrowded that they endanger the food supply. So, if this sign of trouble is correct, another two or three years should see a considerable drop in the bowfin numbers.

But for the present, if you want to catch fish just for the fun of it, you are missing a bet if you don't try for bowfin in the Suwannee and Okefenokee. There is no limit and the local fishermen will welcome your efforts to thin out the bowfin. And make no mistake about it, you catch those fish on almost any type of lure or bait. Like any other fish, sometimes they bite better than others, but I would almost guarantee catching an ole mudfish on something. They have a definite preference for underwater lures and seldom hit a top water plug or any lure retrieved rapidly. I'm planning to launch an assault on the bowfin this summer with a fly rod and streamers. My friend Wallace Herrington of Fargo, who fishes for Suwannee River bass with a fly rod and popping bugs tells me that a few years ago while using streamers for bass, he hooked bowfin. In fact, they bothered him so much that he uses popping bugs exclusively now for bass to avoid catching bowfin.

Imagine . . . a fighting fish on light tackle. This is the main point. All else; the eating quality, attractiveness, acceptability and so forth is window dressing.

The worst thing about a bowfin is his reputation. In a sort of reverse snobbishness, by voicing your disgust

with the bowfin, loudly and at length you can prove to anybody within hearing that you are a sure enough bass fisherman and simply can't tolerate any fish other than the one recognized as worthy of your efforts. So go ahead and fuss about catching the bowfin. It's traditional and adds to the fun something I guess like the fox hunter whooping after his dogs. It doesn't discourage the bowfin, and you can still have the thrill of a good tussle and save face at the same time.

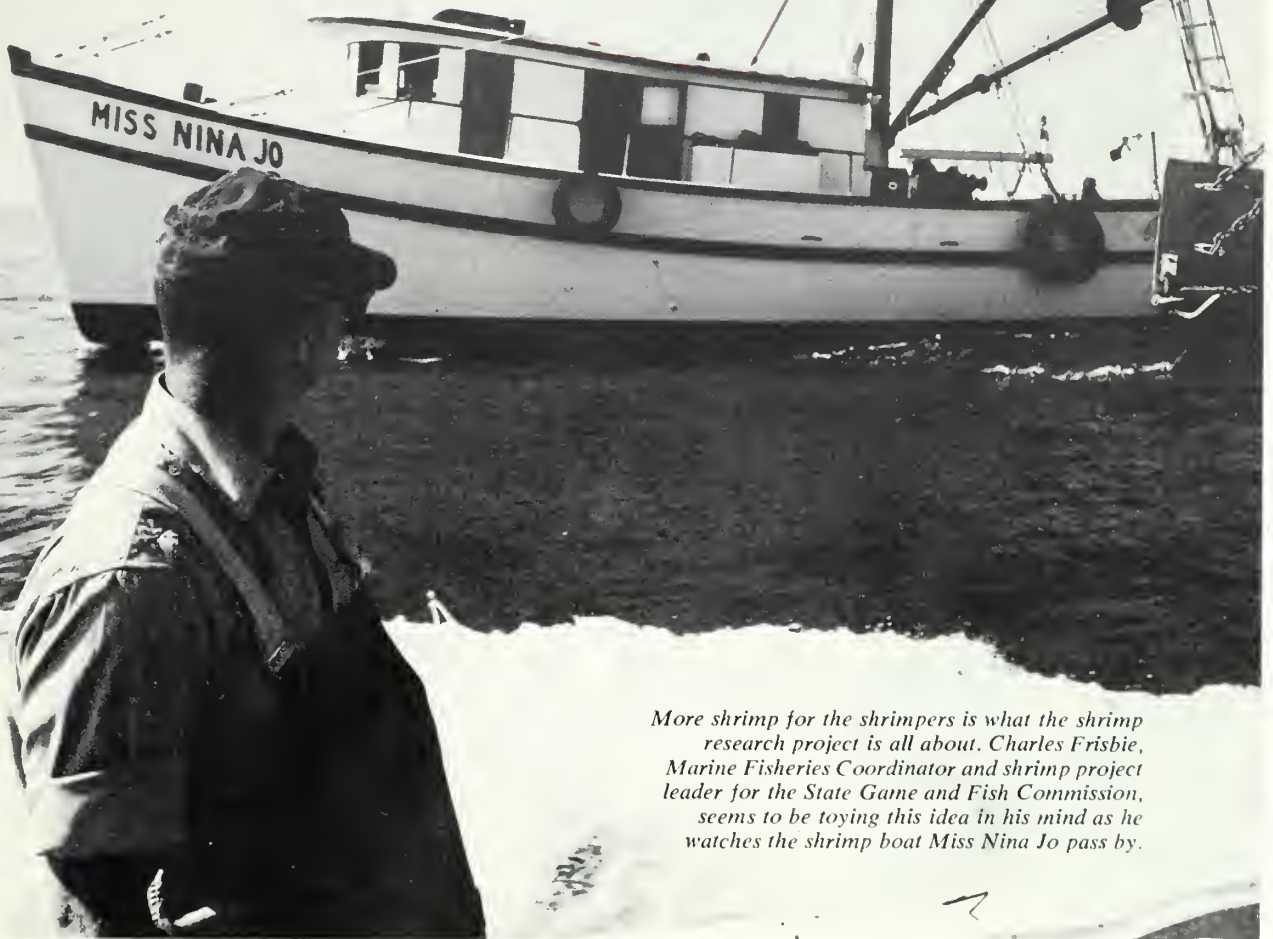
Some time ago I was talking with A. J. McClane, fishing editor of *Fish and Stream* and renowned fisherman. He was telling me of one of his trips up the Amazon River and the amazing variety of toothy, savage fish found there. One thing I especially remember is his vivid description of a particular fish that had a mouthful of teeth with a set of lower fangs, and how this fish slammed a lure, gave a strong fight and was very abundant. I recall thinking at the time that we have a mile counterpart in Georgia of both the river and the fish. Instead of the Amazon's wild headwaters where few fishermen have ever been, we have the placid Suwannee, known by thousands, which pours from the untamed Okefenokee Swamp. And our own lowly bowfin has much in common, too, with the exotic South American fish.

Al didn't mention if the fish was good to eat or not, and I didn't think to ask him. It didn't cross my mind. You go to the Amazon to catch fish not to eat them. You fish for the fun of it.

So, if you can't manage the Amazon try the bowfin in the Suwannee this summer and have some fun.

Why the Shrimp Ebb

By Jim Tyler



More shrimp for the shrimpers is what the shrimp research project is all about. Charles Frisbie, Marine Fisheries Coordinator and shrimp project leader for the State Game and Fish Commission, seems to be toying this idea in his mind as he watches the shrimp boat Miss Nina Jo pass by.

So you like shrimp.

And, in 20th century style, you don't have to go to the sea to enjoy this fine eating. Miraculously, if you think about it, packs of shrimp can be found in the nearest grocery whether it be in Rome, Georgia, in Coon Rapids, Iowa, or in Cheyenne, Wyoming. Yes, everyone knows of shrimp eating.

"But where does the shrimp come from?" I asked.

"From the ocean, silly."

"Oh yeah, what does he do in the ocean?"

"Oh . . . he lives in the ocean," she replied knowingly, gave a pretty smile, and reached another boiled shrimp.

"I mean, is he found near the beaches

in shallow water, or a hundred miles offshore? Do they swim, walk, or crawl?"

She smiled, and had another shrimp.

I'll be my dinner companion speaks for most of us in our knowledge of a live, moving shrimp. Well, let's take one of those ready to eat shrimp and put the plastic-like protective shell back on. Continue to back up the process even farther, put his legs back on, give him his head. Pump some blood and air into him, give him life again. Now let's take a look at him.

First, we see shrimp come from the sea via commercial fishermen. Along the Georgia coast there is a thriving business that depends on these live

shrimp. Over 300 boats search for them, and in 1966 they deposited 6,475,746 pounds of shrimp on Georgia docks. That's a lot of shrimp, but the total catch has fallen off in the last few years. Way back in 1945 Georgia shrimpers had a bumper catch of 16,400,000 pounds. For the last 10 years the annual take has varied from between 10 million to five and a half million pounds, with a declining trend from 1960 to 1964. It did recover somewhat in 1965.

The men in the shrimp boats and the shore-bound industry depend on shrimp for a livelihood. Naturally this drop-off in annual catch concerns them. It also concerns the shrimp



Top: In comes the shrimp net after a 15 minute pull along the ocean bottom where it has scooped up shrimp and whatever else it came up on. The large wooden doors keep the net spread open while the shrimp are being pulled up.

Bottom: A shrimp net after a 15 minute pull along the ocean bottom where it has scooped up shrimp and whatever else it came up on. The large wooden doors keep the net spread open while the shrimp are being pulled up.

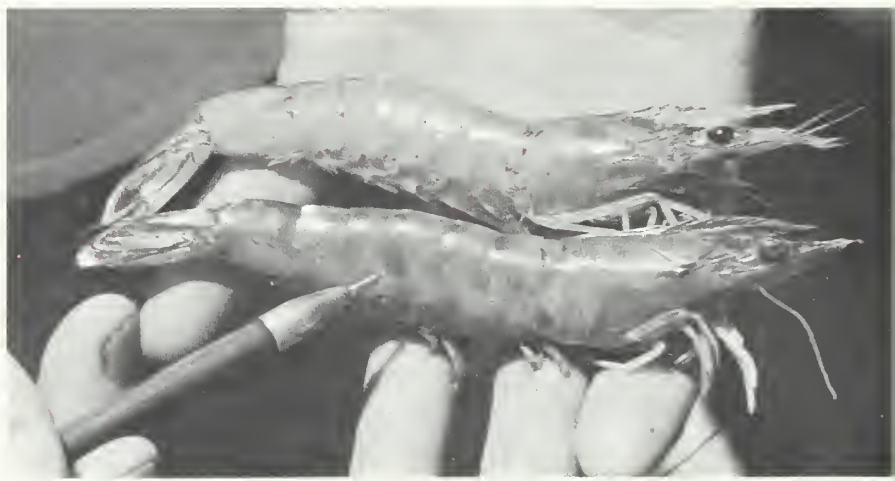
Bottom: A shrimp net after a 15 minute pull along the ocean bottom where it has scooped up shrimp and whatever else it came up on. The large wooden doors keep the net spread open while the shrimp are being pulled up.

fancier who gets bug-eyed when he focuses on the high price stamped on a carton of frozen shrimp. And it concerns the Game and Fish Commission too. Concern has firmed to action and a three year research program is now underway to see if Commission biologists can find out why the shrimp catch has dropped off.

Charles Frisbie, the Commission's Marine Fisheries Coordinator, heads up the research effort. Plowing through the title of his project, "Seasonal Abundance and Biological Stability of the

be found over 10 miles from shore Shrimp, then, tend to restrict themselves to a narrow coastal band.

When the fall season puts a chill in the water, offshore shrimp, like the migrating birds, head south. Some of the inshore shrimp migrate offshore, then southward. But some of the shrimp stay put and overwinter in Georgia coastal waters. Moving along the bottom, migrating shrimp can do a rapid shrimp-walk. To find out how fast North Carolina biologists have tagged shrimp and followed their movements



Commercial Shrimp of Georgia," we find his goal is to increase the yearly catch of shrimp and to sustain the higher catch year after year. Great. But that is the top of the mountain. Right now he is checking over the mountain to find the best way to climb it.

Looking into the life of the white shrimp, the most abundant Georgia shrimp, he believes the baby shrimp start life offshore, anywhere from one to 15 miles; so far, biologists haven't found any in the sounds and tidal rivers. The newly hatched shrimp spend a period of time offshore as members of the plankton (tiny microscopic open water critters). Then when they get about 1/4 to 1/2 inches long and are called a post larvae, the little shrimp catches a ride on the tidal currents and come inshore. Charlie believes they then go into the coastal tributary streams, and on up as far as possible into the marsh seepages. Here is a shrimp nursery area where the little ones find protection from the hordes of salt water predators whose desire for shrimp exceed man's. After a few weeks in this play area the shrimp have grown rapidly and move downstream, moving now along the bottom. Charlie says, for some unknown reason, a portion travel only out to the tidal rivers, a portion travel out to the sounds, and a portion travel farther out offshore. Concentrations of Georgia shrimp usually do not go over five miles offshore, but at times they will

Tagged shrimp have travelled 120 miles in five weeks, 150 miles in the same length of time, and one long distance walker traveled 345 miles. In the estuary nursery area, shrimp will migrate an average of about five miles a week.

As the spring sun warms the water the shrimp migrate north and mate. Then the shrimp's circle of existence has made a complete spin.

Off Georgia, there are three kinds of shrimp: white, pink, and brown. All are about the same size. An adult averages four to five inches, including tail, body, and head. Jumbo shrimp you buy at the grocery come from shrimp about seven inches or longer. Jumbos are taken mostly from the Gulf of Mexico. The white shrimp spawns from May through September, the brown spawns in the fall. The seldom-found pink shrimp spawns from March through October. Charlie says, "Georgia is a desert for pink shrimp. North Carolina and Florida have a lot of pinks. Off both states the ocean bottom is sandy, the water clear, but our ocean bottom has a lot of mud along with the sand, and the water is muddy. This is probably the reason for the scarcity of pinks."

There is no great glaring way to tell the three apart. A spot here, a groove there, but the differences can be seen upon close examination.

"Shrimp have a life span of only about a year, one and a half at the

most, and most shrimp are caught commercially when they are less than a half year old," says Charlie. "This is why it is so important to manage this fishery. Shrimp are a yearly crop. If you completely destroy it in one year, there will not be a next year."

To manage anything effectively, you have to know a lot about whatever is to be managed. And the spectrum of man's knowledge about Georgia shrimp is fairly well riddled with question marks.

Enter research.

Marine research has been sorrowfully lacking along the Georgia coast. About the only prior Georgia shrimp research Charlie can use for comparison, is work done in the early 1930's by W. W. Anderson, a federal biologist, who was the first marine biologist working in Georgia. Anderson's marine projects, however, were terminated after only a short duration. Charlie has established sampling stations in the Ossabaw, Sapelo, and St. Andrews areas. Some of the stations are in approximate areas where Anderson sampled.

By sampling three areas, 21 sampling stations, for three years, Charlie will have a good picture of Georgia shrimp. "At any time during the year, I will be able to find shrimp in at least one of the stations," he commented. "I believe my sampling station arrangement covers the differences found along the Georgia coast and will give me the total picture."

At each station, a trawl net is lowered from the research boat and pulled along the bottom for 15 minutes. The net, a small version of the net commercial shrimpers use, is 20 feet across the mouth. Shrimpers use nets from 30-60 feet across the opening, depending on the size of their boat. The most popular size is 40 feet. As the net is pulled along the bottom, it scoops up any life it comes upon. Besides shrimp, squid, sand dollars, star fish, sea urchins, crabs, and an array of fish are sometimes trapped. This neptune's grab bag is important. By checking it over the biologists might find a species of fish, say the sea trout, is very numerous and could actually be consuming so many shrimp as to keep the total number down.

The net is pulled aboard and the catch is checked. The shrimp are sexed, measured, and stage of sexual maturity determined. Notes are made on everything caught.

"It's a boy," Charlie tells biological aide Marvin Shell. Marvin records the information. Doc Jones, biological aide and boat pilot, sits by the wheel, watching, slapping a flock of pesky king-sized mosquitoes. As soon as the net is in the



boat, catch emptied, and the recording started, Doc revs up the 26 foot boat and travels to another sampling station. Over the roar of the engine and the splashing wake, Charlie continues, "girl, 148 millimeters. Another boy..."

At each sampling station the salinity (how salty the water is), temperature, turbidity (how clear the water is) and tide stage are recorded. They need environmental information to see what type of water the shrimp are found in, and what season of the year they are there.

Soon the project will be expanded to look into the activities of the post larvae (the young shrimp drifting back into the marshes). And if the project gets a much needed large offshore-size research boat, further expansion will be possible.

Surprisingly, Charlie says that the drop in the shrimp catch doesn't appear to be caused by over fishing by the shrimpers, but from undertermined ecological factors and perhaps man's change of the shrimp's habitat. Pollution, for example.

So, the shrimp still hold many of their secrets. And if we are to have an increased, steady shrimp catch, these secrets have to be found out. Charlie is out to eliminate some of the question marks.



Charlie and Doc Jones, biological aide, are out to eliminate some of the question marks.

Does Georgia Need a Saltwater Fishing License?

(Continued from inside front cover)

tion, as well as an increase in tax revenues reflected by the general improvement which would result in the local economy.

But what about action by the State Game and Fish Commission to improve coastal fishing through research to discover the problems; and management enforcement, and development to help correct them? Activities such as those now carried on by the Commission on freshwater lakes, rivers, and ponds cost a substantial amount of money, primarily paid for by fishing license fees paid by anglers who receive the benefits.

At present, Georgia saltwater sport fishermen are not required to purchase a fishing license of any kind. For this reason, they do not receive the benefit of any Commission sport fishing improvement activities. Boating safety enforcement is paid by boat registration fees, and commercial fishermen purchase licenses.

Some sport fishing groups on the coast have begun a move to ask the Commission to begin projects to improve coastal fishing, especially offshore. Before they do, these persons should ask themselves serious questions about where the money for such projects should come from, and whether the advantages of such a management plan, if feasible, will offset any disadvantages of a requirement that saltwater anglers pay to improve their fishing as freshwater anglers do now.

Arguments on both sides are heated. Coastal residents for centuries have enjoyed the privilege, if not the "right" of fishing without a license in saltwater. True, they received little or no benefit from the operation of the State Game and Fish Commission, and appeared to not need or want any, so why should they pay for nothing?

But now, the picture is changing, as forward looking residents of the coastal area begin to see the promise of a bright new future of improved economic development as a result of tourism, and fishing is a primary attraction to the area. But as holes in the apple of paradise begin to pop up, applying worm killer will cost money.

Actually, an overwhelming majority of saltwater fishermen already purchase fishing licenses, but only for use in freshwater. If all fishermen were required to buy the same license, regardless of where they fished, only a few thousand persons would actually be affected. It is extremely difficult to believe that more than a handful of these persons over 16 years of age or under 65 cannot pay \$2.25 a year for the privilege of catching fish worth many times that price if they were sold, rather than eaten for the meat alone, not even counting the

sport involved. Yet, the fact that perhaps 20,000 individuals are not purchasing a fishing license is a strong, valid argument by sportsmen and conservationists from other areas of Georgia to stringently object to the spending of their money on the Georgia coast. Removal of this objection could be easily accomplished by requiring all anglers to buy the saltwater fishing license, rather than an additional separate saltwater license.

A frequently heard objection is that purchasing a license would drive tourists on to Florida, where no license is presently required for saltwater fishing. Here the situation is different, due to the easy accessibility of the sea on all sides of the state and the huge influx of tourist dollars which permeate the entire area. Here, general tax dollars can fairly be devoted to improving saltwater fishing, but this is not the case in Georgia, where general tax funds are quickly drained by urgent needs like education, highways, mental health, prison, highway safety, etc. Thus, little if any tax money is available or should be available in large amounts from general tax funds to promote the primary interest of six coastal counties out of 159 in Georgia. Obviously, a special tax for a special purpose, such as a requirement for a fishing license in saltwater, is the only answer.

Experience has shown in the past that fishermen will go where good fishing is, especially if good facilities are available and are well advertised, regardless of the license fee. Each year, more than 180,000 non-resident fishermen each go to both Tennessee and Florida and purchase non-resident fishing licenses and permits for freshwater fishing that cost as much as more than Georgia's non-resident \$2.25 permit for five days or \$6.25 for the season. Non-resident children under 16 are not required now to purchase any license, except for fishing in mountain trout streams. Thus the average family could fish for \$5.50 for almost a full week for the price of a good movie, a medium priced seafood dinner, or a football ticket. If they can't afford it, chances are they can't afford to take a vacation, either.

The trend in this direction is clear. Already, Alabama, Texas, Louisiana, and California have begun licensing saltwater fishermen. Georgia must follow suit, if programs to improve sport fishing are to be successfully initiated on the Georgia coast.

It is up to the people of the Georgia coast, and of the rest of the state, to decide if the Georgia coast should have something for nothing, rather than paying for what it gets.

We believe the price should be right. — J.M.

Sportsmen Speak...



Short, thought-provoking letters from readers are welcomed. Because of space limitations, not all letters can be printed. The editor reserves the right to edit the length of letters to bring out the cogent points and to insure grammatical correctness and clarity.

DOGS AND DEER

I enjoyed reading the article, "Dog Versus Deer: A Losing Contest." I agree that we must enact stronger laws to take care of the wild or unwanted dogs. I have also noticed that rabies is on the increase. There has been two known deaths in humans during 1966 in spite of the new and better rabies vaccine. If I can be of help to you in any way, call on me.

C. F. Davis, D.V.M.
Columbus

In relation to your story in the January issue of *Georgia Game and Fish* "They're Eating Her Alive," I would like very much to comment about this and see it printed in the next issue to see how our readers feel about this.

Being a hunter and fisherman we really do have problems as to how to preserve the little game we have left. Surely our so called sportsmen ruin our deer herd, tear down our farmers' fences, and kill anything that moves day or night. But, the roving dogs really kill a lot of our game. We have a law against man which keeps our wardens busy all the time, but we should have a state law prohibiting dogs to run free and strictly enforced by our local authorities.

How many times have you seen someone drop a dog out in the country to roam? We know what happens in a case like this, pretty soon we have a pack of dogs killing our second best heritage.

Enjoyed your article very much, but would like to see more on this. A real fine magazine.

Thomas W. Schuhoff, Valdosta

GEORGIA GAME & FISH

Congratulations for a very fine, professional-looking magazine! I just received my copy of *Georgia Game and Fish* and was greatly impressed with the layout and contents.

Frank Craven, Chief
Forest Education
Georgia Forestry Commission
Macon

I have just received my copy of *Georgia Game & Fish* and want to let you know how pleased I am with it and how much I look forward to receiving future issues.

The format and stories are well done and give every promise of truly being a new voice for wild life conservation. Please convey my congratulations to J. Morrison, his staff and your Board members who have so loyally supported your efforts.

Robert H. Walling
State Representative
District 118, Post Office
Decatur

We want to congratulate you and the Commission on the beautiful *Georgia Game & Fish*. If this quality is maintained you will have the top publication in this field.

We hope you will keep us on your mailing list as we undoubtedly will want to reprint some of your very excellent articles in our *Izaak Walton* magazine.

Royal B. McClellan
Information Director
Izaak Walton League
of America

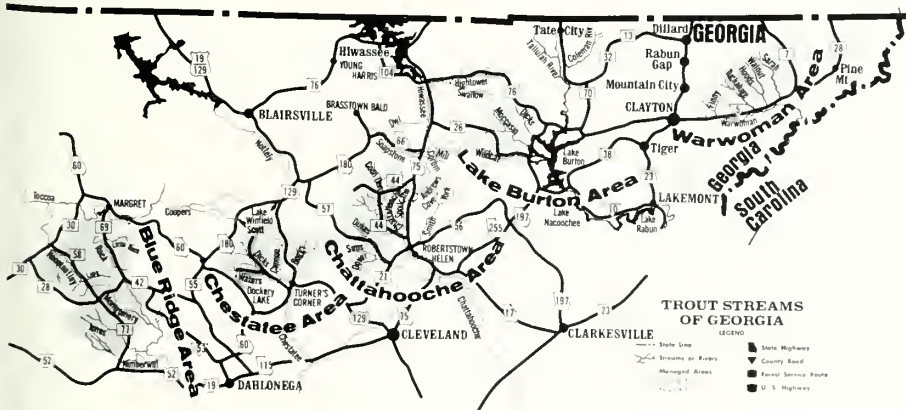
Sportsman's Calendar



1967 GEORGIA TROUT MANAGEMENT STREAM SCHEDULE

| MANAGEMENT AREA | STREAM | MAY | Wednesday-Thursday | Saturday-Sunday | Wednesday-Thursday | Saturday-Sunday | Saturday-Sunday | Wednesday-Thursday | Wednesday-Thursday | Saturday-Sunday | SEPTEMBER |
|-----------------|--------------------------------|-----|--------------------|-----------------|--------------------|-----------------|-----------------|--------------------|--------------------|-----------------|-----------|
| BLUE RIDGE | Jones (Artificial Lures) | 3-4 | 10-11 | 17-18 | 24-25 | 31 | 6-7 | 13-14 | 20-21 | 27-28 | 1 |
| | Montgomery | . | . | . | . | . | . | . | . | . | . |
| | Nimblewill | . | . | . | . | . | . | . | . | . | . |
| | Noontootley (Artificial Lures) | . | . | . | . | . | . | . | . | . | . |
| | (Catch and Release) | . | . | . | . | . | . | . | . | . | . |
| CHATTAHOOCHEE | Rock Creek | . | . | . | . | . | . | . | . | . | . |
| | Chattahoochee | . | . | . | . | . | . | . | . | . | . |
| CHESTATEE | Dukes | . | . | . | . | . | . | . | . | . | . |
| | Boggs | . | . | . | . | . | . | . | . | . | . |
| | Dicks | . | . | . | . | . | . | . | . | . | . |
| LAKE BURTON | Waters (Artificial Lures) | . | . | . | . | . | . | . | . | . | . |
| | Dicks | . | . | . | . | . | . | . | . | . | . |
| | Moccasin (Not Stocked) | . | . | . | . | . | . | . | . | . | . |
| WARWOMAN | Wildcat | . | . | . | . | . | . | . | . | . | . |
| | Finnv | . | . | . | . | . | . | . | . | . | . |
| | Sarabs | . | . | . | . | . | . | . | . | . | . |
| | Tuckaluge | . | . | . | . | . | . | . | . | . | . |
| | Walnut Fork and Hoods Cr. | . | . | . | . | . | . | . | . | . | . |

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SEASONS NOW OPEN

TROUT Mountain Trout

Open Stream Season—April 1, 1967 through October 15, 1967.

Creel Limit—Eight trout of all species per person per day. Possession limit 8 trout.

Fishing Hours—30 minutes before sunrise to 30 minutes after sunset.

No night trout fishing is allowed on trout streams open during the regular state trout season. Trout fishing at night on Reservoirs is permitted.

Special Regulations—Coleman River below Forest Service Road No. 54 restricted to artificial lures only, 10 inch minimum size limit on brown and rainbow trout, 7 inch minimum size limit on brook trout. Chattahoochee River below Buford Dam to the Old Jones Bridge restricted to artificial

lures only with a 10 inch minimum size limit for all trout species. Fishermen on artificial lure only streams may not possess live or natural bait.

Management Area Stream Season—May 3, 1967 through September 4, 1967 on designated days only. For detailed schedule see map and chart above.

Lake Trout Season—There is no closed season on trout fishing in Georgia Lakes with the exception of Amicalola Falls and Vogel State Park Lakes, and Dockery Lake.

Special Regulations—14 inch minimum size limit on all species of trout in Lakes Blue Ridge, Burton, Clark Hill, and Lanier. No size limit on other lakes.

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GAME & FISH





GEORGIA

GAME & FISH

August 1967

Volume II, Number 8

Contents

| | | |
|---------------------------------------|-----------------|----|
| Pick Your Trout Stream | Jim Tyler | 1 |
| The Sweet Song of the Rivers | Jim Morrison | 5 |
| Crappie Fishing . . . Night Style | Claude Hastings | 8 |
| August — The Day Before Christmas Eve | Joe Kight | 10 |
| Buried Treasure . . . Inches Deep? | Jim Tyler | 12 |
| Meet Your Commissioner | Jim Morrison | 15 |
| Sportsmen Speak | | 17 |
| Sportsman's Calendar | | 17 |

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Ted Borg, Photographer

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Register All Boats? A Good Idea.

Will a rock float? No.

Will a sailboat turn over? Yes.

Can an overloaded row boat capsize? Yes.

Can a man stand up in a canoe? Yes. Will he drown? Maybe.

Does a 10 horsepower boat have to be registered? No, but a 10½ horsepower boat does. Does that make sense? No.

Since 1960, Georgia law has provided that all motorboats of more than 10 horsepower must be registered with the State Game and Fish Commission. Registration of boats serves two purposes; identification and revenue raising.

A registered motorboat must bear an identification number which can easily be read at a distance, and is different from that displayed on any other boat, just as automobile tags are. The number is on file with the State Game and Fish Commission, enabling the owner of the boat to be easily and quickly identified.

The importance of such a number is illustrated by a recent case on Lake Allatoona which is cited by Game and Fish Commission Director George T. Bagby. Rangers found a boat capsized in the lake with a large hole in the bottom, but since the boat was not registered, there was no way to determine to whom it belonged or if the operator was missing.

"Our men didn't know whether to look for bodies, or what to do," Bagby said.

In addition to identification of the boat, its operator, or passengers in a possible emergency situation, registration numbers aid wildlife rangers in enforcing boating safety laws especially in the case of reckless or intoxicated boat operators. Witnesses can write down the boat number and report it to rangers. Also, boat theft is made more complicated by registration numbers, decals, and certificates.

But the primary importance of boat registration is to provide a means of financing law enforcement of boating safety laws and regulations. In this way, only members of the public who benefit from boating safety laws are required to pay for safety enforcement.

However, under present Georgia laws, only boat owners with more than 10 horsepower are required to register their boats. Therefore, only these boat owners are paying their fair share for the enforcement of boating safety laws, even though rangers spend a great deal of their time and effort checking unregistered boats for required safety equipment, especially life preservers. In fact, more drownings occur among occupants of small unregistered boats than to occupants of larger, safer registered craft.

For instance, rangers must patrol sailboat regattas, even though these boats are not required to register with the Commission and pay nothing toward the cost of keeping rangers on the lake. Rowboats and canoes are especially dangerous craft, yet they cannot be identified by registration number, and their owners pay nothing for efforts to protect the lives of their passengers, even though rangers may spend long, bone chilling, wet hours dragging the river bottom to locate the drowned bodies of their crews.

Some 72,000 registered motorboat owners are paying their fair share of the lake patrol cost, paying from \$5.25 to \$15.25 for a three-year registration certificate, depending on the length of their boat. Estimates by the Game and Fish Commission place the number of unregistered boats who do not pay their way at close to 40,000 or more craft of all shapes, sizes and methods of propulsion. Requiring these boat owners to

continued on page 10

ON THE COVERS: Here is Georgia's wonderful world of rivers . . . just two examples of the unexcelled variety of fishing in Georgia. On the front cover, *Game & Fish* staff writer Jim Tyler casts into the cool, clear water of a gravel lined pool on the Coleman River in Northeast Georgia's Rabun County one of the mountain forest streams described in Jim's story or the opposite page. On the back cover at the opposite side of Georgia, the Suwanee River ambles along through magnificent cypress trunks that Stephen Foster had never seen when he picked the name of the Suwanee out of an atlas for the opening line of "Old Folks At Home," one of the most popular songs ever written. In next month's issue, Jim Tyler will treat readers with a visit to the Suwanee, the favorite off-duty fishing spot of wildlife ranger Walter Booth of Homerville. Photos by Dan Keever.

PHOTO CREDITS: Ted Borg 8, 9; Dan Keever 11; b. 13; Joe Kight t. 10; Jim Morrison 5, 6, 7, b. 10, 15; Jim Tyler 1, 2, 3, 4, t. 12 & 13, 14.



Pick your trout stream

By Jim Tyler

Which will it be? Find a steep running, crisp, sparkling pure creek confined to a very narrow stream bed cut from the high rock mountains. The water flees headlong down little waterfalls, erupts into a fizz of bubbles, then rushes to yet another fall. Sometimes the water hits a fair sized pool at the bottom of such a fall, and, for a distance, the water loafs along. Here you can find

small brightly colored native trout. The going is rough to get them and the fish are small. Yet who is going to argue size when a wild trout is taken from a fairylike pool rounded by moss flecked boulders in the mountain shade of tall, silent trees, the creek singing in your eyes and ears?

Or do you prefer a somewhat wider, slower trout stream? Here, the water

slows a bit, but still seurries right along. You have your choice of more and larger pools to fish and the riffle areas running washboard patterns over black and golden hued rocks can sometimes be fished with success. The going isn't so rugged. The terrain slopes steeply, for say a hundred yards, but gives you relief when it hits a small valley, a meadow, sometimes pasture land, and

coasts, barely gurgling to itself, then is off again, tumbling over and between rocks. The rocks are usually smaller, not many boulders, and by wading most of the time, you can fish quite nicely.

The medium sized stream has more living room for fish, more food. Every now and then, if you know what you're doing, you might snag a good size trout. And in a good many of these streams, hatchery trout have been stocked to make sure you catch a ten-inch-plus fish occasionally. You will come across other fishermen, sometimes a group of them. Undoubtedly, you have lost the isolation and unique beauty of the high mountain stream, but you will not be scenic short changed.

Then, like old men lumbering along with heavy loads, there are the large rivers. They gather in all the waters that have drained from the highlands, and with pronounced slowness, in comparison to the laughing, dancing high country streams, they plod along and are trout waters until they reach regions where the water temperature gets too warm for trout. But, really, even a large trout river doesn't plod along for a long distance. It has stretches of deep lengthy pools, but also stretches of quick moving water. The spinning rod angler has more room to work the rivers, but the fly fisherman pulls his share of trout from them. The fish can be, and are, larger. You have to wade or float the trout rivers.

So, you have three types of trout streams to choose from. That's a start. Now let me hit you with this. Robert K. Franz, while working with the Commission in the middle 1950's, walked out and surveyed the streams in that area of north Georgia where trout might possibly be. He listed 813 streams with names. Of course, this included rivers, streams, creeks, and branches. Now here is what I'm getting at. Before you slam out of your home town hot after that "finny fatale," the trout, pick your stream. There are big ones, medium-sized ones, and small ones. And any one of them probably has at least a few trout in some section of its length.

To sweeten this vast trout network, the State Game and Fish Commission stocks hatchery reared trout in 159 of the streams. Many of the stocked streams contain a year round trout population, but the streams are stocked so summer fishermen can catch more trout than the streams could naturally produce.

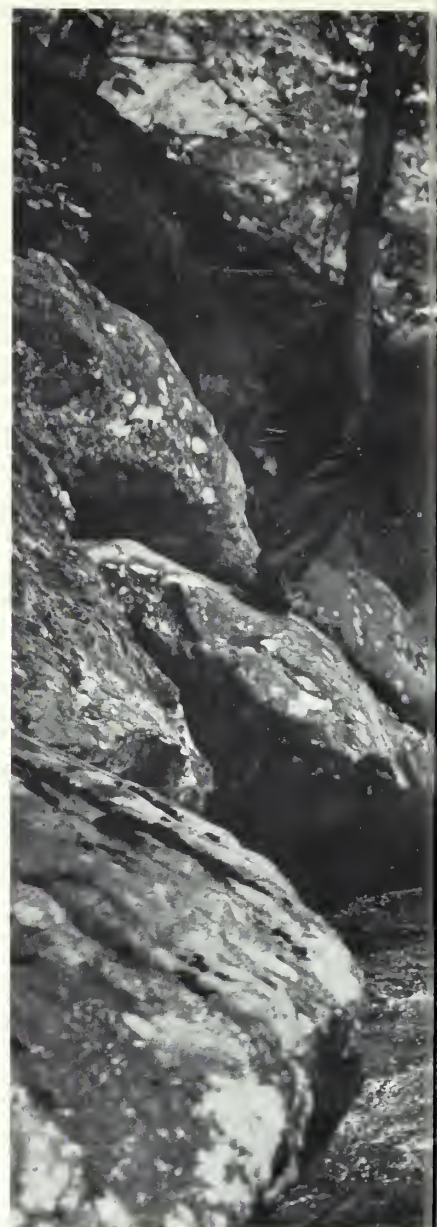
All the streams contain rainbow and brown trout, and the headwaters of a few of them hold wild, native brook trout. See the chart accompanying this article for their names, relative size, and probable fishing luck.

I asked Claude Hastings, Regional

Fisheries Supervisor for the Commission, and Carlton Nichols, his senior biological aide, to tell me the relative size and probable fishing luck of all the 159 streams. Claude looked at me, rolled his eyes. Carlton just gave a small chuckle. Anyway these two, although professing the difficulty of such a task, relented and did so. Claude, a professional fisheries man, and Carlton, who has worked 17 years with the Georgia trout, based their opinions on personal fishing experience and scientific fish population studies (both love to get over a fly rod on a trout stream). They added that some of the streams travel just a short distance before joining another stream. And streams can vary in size in a short distance because tributaries flow in making the stream larger as it proceeds to lower elevations.

When you have a stream picked out, then you have to find out if you can get to it to fish. This requires first hand exploring, or you need a detailed map to show locations and, also, to show if the land is privately owned. The best bet are the U. S. Geological Survey topographical maps obtained from the Georgia Department of Mines, Mining, and Geology, 19 Hunter St., S.W., Atlanta, Georgia 30334. They are available for 75¢ apiece. The Greenville N17-4 map and the Rome N16-6 map cover most of the Georgia trout waters. The Game and Fish Commission, 401 State Capitol Building, Atlanta, has free maps that outline U. S. National Forest land in north Georgia. National Forest land is public and open to everyone. Still if you want to fish a stream that runs through private land, a knock on the landowner's door, a smile, and a polite asking, many times turns the trick. Remember, you are automatically trespassing if you do not have permission to be on the land, even if it isn't posted. And as no Georgia trout streams are considered navigable, the stream bed is owned by someone.

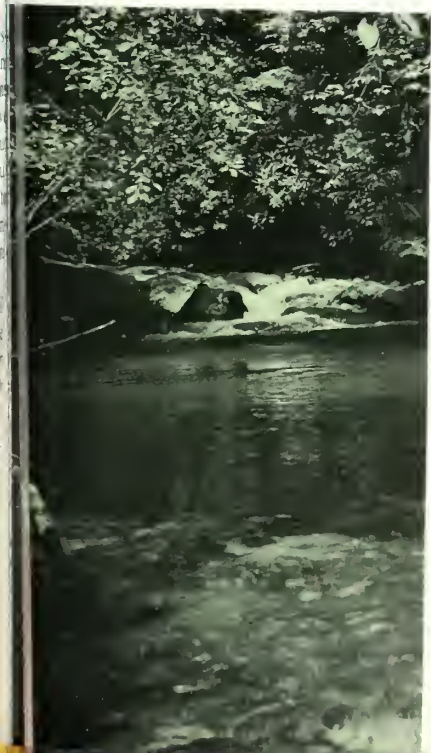
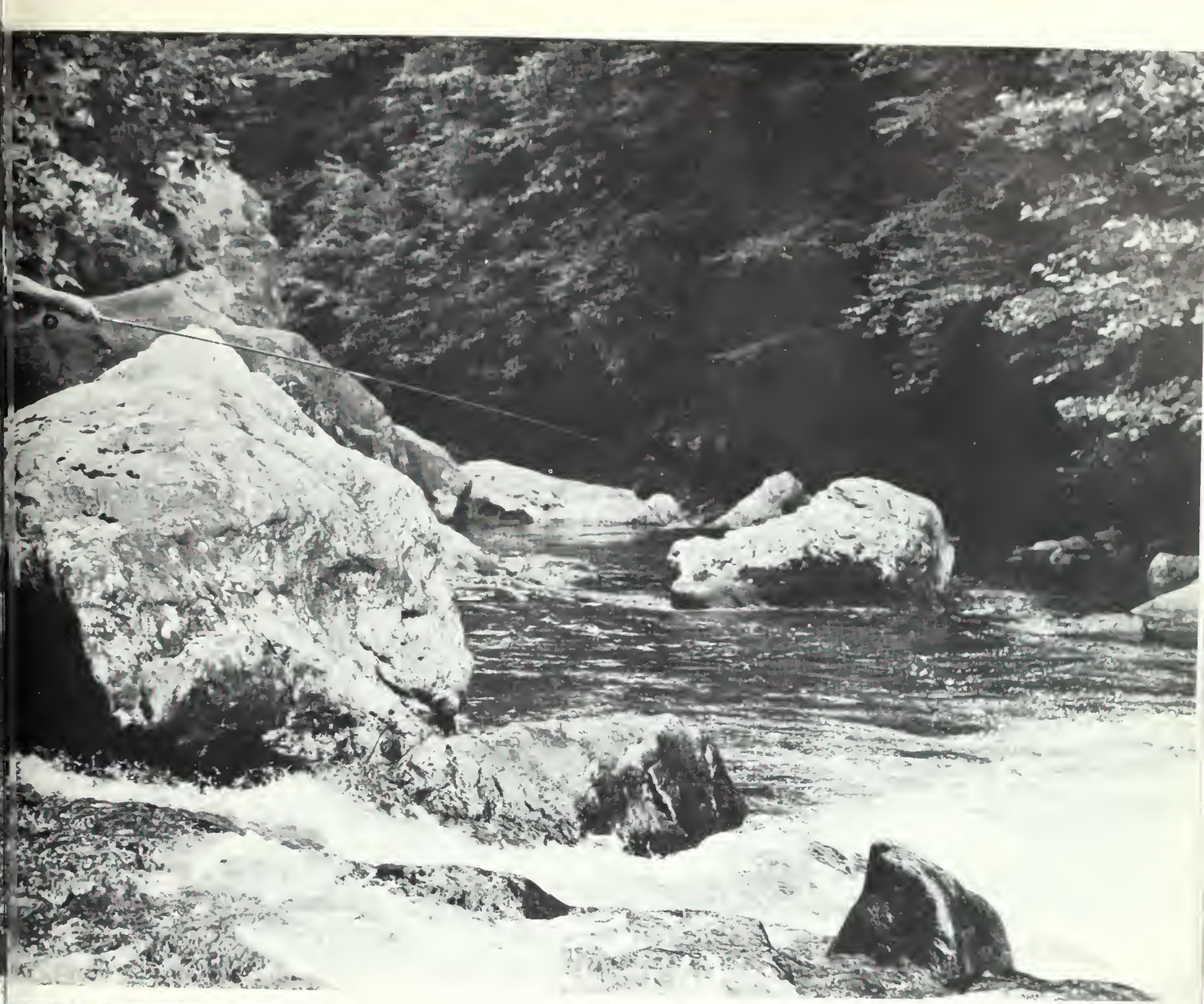
State Game and Fish Commission Wildlife Management Area streams are located on National Forest lands. Consider. Over 40% of the total number of trout stocked in Georgia streams are stocked in wildlife management area streams. This surely accounts for fishermen on area streams averaging a catch of four trout per day. Outside the areas, stream fishermen average a catch of 2.5 trout per day. Surprisingly, Claude says, as a whole, fishing pressure is less on area streams compared to the pressure on outside streams, for both native and stocked trout. Still, the easily accessible and heavily stocked area streams can sometimes have seeds of fishermen. They catch fish, though, so it just depends on what kind of trout fishing you enjoy and whether you feel



management area stream fishing worth the \$1 a day permit.

Management areas Blue Ridge, Chattahoochee, Lake Burton and Warwoman, have trout stream small to medium in size, and all have head water portions with native trout swimming about. The Georgia Trout Regulations, available from all State Game and Fish Commission offices, includes a map and written description of each area.

Two other stream choices are available to trout chasers. "Catch and release" streams are a rather recent modernization of trout fishing. On Noontootley Creek, anglers catching trout under 16 inches in length are required to release the fish, unharmed, back into the stream. Here the emphasis is entirely on the sport of fishing. Very few trout over 16 inches are caught. No trout are stocked there, so it is principally a fun stream. You might catch more fish on fishing-for-fun streams, but your take home creel



Below, a small, clear, rapid stream flows over a bed of smooth, light-colored stones. The water is white with foam, and the surrounding forest is dense and dark.

The small, clear, rapid stream flows over a bed of smooth, light-colored stones. The water is white with foam, and the surrounding forest is dense and dark.

The small, clear, rapid stream flows over a bed of smooth, light-colored stones. The water is white with foam, and the surrounding forest is dense and dark.



will usually be empty. Fishing-for-fun streams are limited to artificial lures. So are Waters Creek, Jones Creek, and a section of Coleman River limited to artificials, although the 16 inch limit does not apply on these streams.

The more heavily fished streams are stocked more heavily in certain areas and are called "put and take" waters (asterisk on chart). The Commission "puts" the trout in some sections of the streams and by heavy fishing pressure, anglers "take" the stocked trout out in a short period of time. Rainbow and brook trout are stocked in these areas. Claude says this is the only place brook trout are stocked. He limits the areas where brooks are stocked because he doesn't want to "mess" up the native brook trout population. Brook stockers do not normally over-winter and do not spawn successfully. If they are not caught out of the streams by late fall, most die one way or another during the winter months.

Claude also worries about road building in the mountains. Gouging out a road along a mountainside does two things to trout. It opens another avenue

for vehicular anglers, and it causes heavy loads of silt (small dirt particles) to be flushed into the stream, knocking down their trout carrying capacity and frequently destroying the ability of trout eggs to hatch in the stream. Trout, like the rest of the wild animals outside the confines of a zoo, must look forward to more problems as man further encroaches their domain.

Sometimes, I believe, the overall picture of trout fishing is oversold. I mean mountain fishing, like fishing any other place in the world, can have its bad days. And let's face it. With more people flocking to the mountains, more and more pressure is going to be put on the trout.

But right now, today, you can, with a little planning, define your trout pleasure. You might get a bang out of trout fishing in an easy to get to stream around a bunch of folks, or you might be the kind that wants to get way back and be by yourself, and enjoy catching small wild trout. It's your choice.

GEORGIA STREAMS OUTSIDE MANAGEMENT AREAS STOCKED WITH MOUNTAIN TROUT

(Streams on wildlife management areas are heavily stocked, but not included in this list; see story for information on them)

| Stream | Size of Stream | Fishing |
|----------------------------|-----------------|--------------|
| MURRAY COUNTY | | |
| Jacks River | large | fair |
| (Beach Bottoms) | small | fair |
| Shanty Creek | medium | good |
| Holly Creek* | medium | good |
| FANNIN COUNTY | | |
| Big Creek | medium | fair |
| Cooper Creek* | large | fair to good |
| Conasauga River | medium | good |
| Cutane Creek | small | poor |
| Fighting Town Creek | medium | fair |
| Hemphorn Creek | medium | fair |
| Hothouse Creek | small | fair |
| Jacks River | large | fair |
| Little Fighting Town Creek | medium | good |
| Little Skeenah Creek | small | poor |
| Noontootley Creek | large | fair to good |
| Sea Creek | small | poor to fair |
| Skeenah Creek | small | fair |
| Stanley Creek | medium | fair |
| Sugar Creek | small | fair |
| Tumbling Creek | small | poor |
| Wilscot Creek | small | fair |
| GILMER COUNTY | | |
| Anderson Creek | medium | fair |
| Big Turniptown Creek | medium | fair |
| Broadtown Creek | medium | poor |
| Clear Creek | medium | fair |
| East Mountaintown Creek | medium | fair |
| Little Rock Creek | small | fair |
| Mountaintown Creek | large | good |
| Owltown Creek | small | poor |
| Rock Creek | small | fair |
| Rolston Creek | small | fair |
| Tickanetley Creek | medium | good |
| Turkey Creek | medium | fair |
| PICKENS COUNTY | | |
| Dishroom Creek | small | poor |
| John Pendley Creek | small | poor |
| DAWSON COUNTY | | |
| Amicalola Creek | medium | fair |
| Big Amicalola Creek | medium | fair |
| Cochran Creek | small | fair |
| Fall Creek | small | good |
| Little Amicalola Creek | small | fair |
| UNION COUNTY | | |
| Arkagua Creek | medium | poor |
| Big Creek | medium | fair |
| Bitter Creek | small | poor |
| Butternut Creek | small | poor |
| Canada Creek | medium | good |
| Cooper Creek* | large | fair to good |
| Coosa Creek | medium | fair |
| East Fork Coosa Creek | small to medium | fair |
| Hatchet Creek | small | fair |

| | | |
|-----------------------|--------|------|
| Helton Creek | small | fair |
| Ivylog Creek | small | fair |
| Mt. Airy Creek | small | poor |
| Mulky Creek | small | poor |
| Nottely River | large | good |
| Suches Creek | small | poor |
| Stink Creek | small | poor |
| Toccoa River | large | fair |
| Towns Creek | medium | fair |
| West Fork Coosa Creek | small | fair |
| West Fork Wolf Creek | small | fair |
| Wildhog Creek | small | fair |
| Wolf Creek | medium | good |
| Young Gane Creek | small | poor |

LUMPKIN COUNTY

| | | |
|---|--------|------|
| Boggs Creek | small | fair |
| Chestatee River* | large | good |
| Cane Creek | small | fair |
| Cavender Creek | small | fair |
| Clay Creek | small | fair |
| Dicks Creek | medium | fair |
| Etowah River | large | fair |
| Hurricane Creek | small | fair |
| Jones Creek | medium | good |
| Mill Creek | small | fair |
| Mill Creek (tributary to Hurricane Creek) | small | fair |
| Nimblewill Creek | medium | good |
| Pruitt Creek | small | poor |
| Ward Creek | small | fair |
| Yahoola Creek | medium | fair |

TOWNS COUNTY

| | | |
|------------------------|-----------------|--------------|
| Brass Town Creek | small | poor |
| Center Soapstone Creek | small | poor |
| Fodder Creek | medium | fair |
| Hiwassee River | large | fair to good |
| High Shoals Creek | small | good |
| Hightower Creek | medium to large | poor |
| Hog Creek | small | poor |
| Little Hightower Creek | small | poor |
| Mill Creek | small to medium | fair |
| Owl Creek | small | fair |
| Scataway Creek | small | poor |
| Swallow Creek | medium | poor |
| Tallulah River* | large | good |

WHITE COUNTY

| | | |
|----------------------|-----------------|--------------|
| Chattahoochee River* | large | good |
| Chickamauga Creek | medium | fair |
| Craig Creek | small | fair |
| Crumbly Creek | small | fair |
| Dukes Creek | medium | fair |
| Smith Creek* | small to medium | fair to good |
| Spoilane Creek | small | fair |
| Town Creek | medium | fair |

RABUN COUNTY

| | | |
|--------------------------------|--------|--------------|
| Baily Branch | small | poor |
| Blacks Creek | small | fair |
| Betty's Creek | medium | good |
| Big Creek | medium | good |
| Checho Creek | medium | poor |
| Crow Creek | small | fair |
| Cuttingbone Creek | small | poor |
| Darnell Creek | medium | good |
| Dicks Creek | small | fair |
| Holcomb Creek | medium | good |
| Kelly Creek | small | fair |
| Keener Creek | small | good |
| Lick Log Creek | small | fair |
| Little Persimmon Creek | small | good |
| Little Tennessee River | medium | good |
| Massar Creek | small | fair |
| Moccasin Creek* | medium | good |
| Moringill Creek | small | fair |
| Mud Creek | medium | fair to good |
| Patterson Creek | small | fair |
| Persimmon Creek | medium | fair |
| Plumorchard Creek | medium | good |
| Popcorn Creek | medium | good |
| Reed Creek | small | fair |
| Rickman Creek | small | fair |
| Scott Creek | small | fair |
| Stekoa Creek | medium | poor |
| Slick Shoals Creek | small | poor |
| Stonewall Creek | small | fair |
| Tallulah River* | large | good |
| Tiger Creek | medium | poor |
| Timpson Creek | medium | fair to good |
| Warwoman Creek* | medium | good |
| West Fork Chattahoochee River* | large | good |
| Wildcat Creek | medium | good |
| Worley Creek | small | good |

HABERSHAM COUNTY

| | | |
|----------------------|--------|------|
| Goshen Creek | medium | good |
| Little Panther Creek | medium | fair |
| Panther Creek | medium | fair |
| Raper Creek | small | good |
| Sogue Creek | medium | good |

FORSYTH, FULTON AND GWINNETT COUNTIES

The Chattahoochee River below Buford Dam of Lake Lanier is stocked with trout. The river is large, fishing is rated good.

*Areas on these streams are designated "put and take" sections. You would be more likely to catch trout in these areas due to the heavy stocking. However, you would also be more likely to find a number of fishermen there also.

Georgia's famous rivers are the best place to fish during the hot summer months



What can compare with the beauty of a river? Georgia has 17 large rivers that ramble over the State for more than 3,000 miles.

Sweet song of the Rivers

By Jim Morrison

Have you ever stopped to consider how many songs you have heard of that mention a river or a stream, either in their title or in a line or two?

Need examples? How about "Down by the Old Mill Stream," or "Down by the riverside, down by the riverside, going to lay down my burden, down by the riverside."

Getting more religious, there's "Shall We Gather at the River," or the line from "Swing Low, Sweet Chariot," . . . "I looked over Jordan and what did I see . . ."

Still serious, there's "Old Man Riv-

er," and "Flow Gently, Sweet Afton." On a lighter vein (or current) there's "Cruising Down the River," or "Beat Your Feet on the Mississippi Mud."

One of the most famous of all is the opening line of Stephen Foster's immortal "Old Folks at Home," which begins "Way down upon de Swanee ribber, far, far away, dere's wha my heart is turning ebber, dere's where de old folks stay."

Picked for the song solely for its musical name, the Suwanee is just one of more than 17 large rivers and hundreds of smaller freshwater streams in



Fourty
B. Hicks
Two to
every stream.

Georgia that bear equally beautiful names, many of Indian origin, that fall on the ear with the magic lilt of a babbling brook leaping over moss-covered stones deep in the hidden recesses of the forest: names like Alapaha, Altamaha, Canoochee, Chattahoochee, Chestatee, Etowah, or Ochlockonee.

Even more delightful are the quaint names of many smaller, but equally famous fishing streams like Ichawaynochaway, Kinchafoonee, Towaliga, Tallapoosa, Coosawattee, Conasauga, Tallulah, and Chattooga. The list is almost endless, running from the mountains of North Georgia to the flat piney woods of the coastal plain.

And in these streams can be found some of the finest fishing in the world . . . and some of the worst. Stream fishing depends on a great variety of factors, especially the effects of the activities of man on it, and the effect of weather and seasonal conditions.

That river fishing is a popular sport in Georgia is undeniable. A 1961 survey showed that more than 46 per cent of all Georgia fishermen fish some time during the year in a warmwater stream, an estimated 398,000 fishermen.

There are many reasons for this. For one thing, many Georgians, especially

in large sections of Southeast Georgia don't have anywhere else to fish except in small farm ponds, since there are no large artificial impoundments that portion of the state.

River fishing is popular with many anglers because of the greater variety of fish that can be commonly caught there in comparison to a small pond or a large artificial reservoir. For instance, more than 22 different species of game fish are found in the Flint River alone, including large and "small" mouth bass, black and white crappie, jack fish, white bass, warmouth, redear bluegill, rock bass, bluespotted sunfish, redbreast sunfish, channel catfish, white catfish, flathead catfish, bowfin, etc.

And perhaps most important of all, river and stream fishing is usually near or at its best at the times when lake and pond fishing is at its worst, especially during the hot summer months. During July, August, and September, the rivers and streams generally are the best fishing available. Lake fishing is generally confined to early in the morning or late in the afternoon for bass and white bass, primarily on schooling fish, with the exception of night fishing for crappie.

In the lakes and ponds, the water

temperature is considerably hotter, and fish are feeding and moving much less than earlier and later in the year at cooler water temperatures when their body metabolism is faster, requiring more food in a shorter period of time. The lakes frequently stratify into layers of hot and cold water, and the small forage fish that bass feed on move down during the day, taking the predators with them, except in the afternoon when bass congregate on schooling shad moving to the top.

In the flowing streams, the water doesn't stratify, and forage fish and the species that eat them are still scattered over the entire range of the stream, making the fish more accessible to anglers closer to the surface or bank.

Then, there's the factor of physical comfort. In August, it's hot on the lake or pond, so there's nothing cooler than floating down the river under the shade of the trees, or actually wading right into the water up to your armpits. The water isn't cold enough to chill you, but it is pleasantly cooling on a hot day, as any boy knows who has leaped into the old swimming hole on the creek on a hot Fourth of July!

What fish do you fish for on a stream? Name it — it's there to catch: bass, bream, crappie, catfish, suckers, bowfin, and many others. How do you fish for them? Try casting, spinning, or fly tackle. For bait, use worms, crickets, hellgrammites, crawfish, cut bait, stink bait, doughballs, topwater plugs, spinners, flies, popping bugs, spoons, rubber balloons, or cigarette filters! Whatever it is, chances are good that you can catch fish on it somewhere, sometime, in a Georgia river.

Obviously, you have to go river fishing at the right time of year, and when the water conditions are right. Streams may quickly muddy up after a hard rain. Since most game fish are sight feeders, muddy water decreases visibility, and results in poorer fishing, especially for bass. In many South Georgia rivers, high water conditions cause the rivers to overflow their normal banks, spreading the water, and the fish, out into the surrounding low-lying swamp areas, thus making fishing poorer than when the river is back in its banks, concentrating the fish in a smaller area. If you really want to catch fish at the river, don't waste your time by going when it's out of the banks and muddy. Check the water conditions yourself, or call someone who lives near the river or crosses it during the day to get a report on water conditions. The local ranger is a good prospect.

As a rule, during late August, September, October, and early November, most Georgia rivers are low and clear, due to seasonally normal slack periods

of rainfall. For this reason, fishing is best at these times, although unexpected at these times, although rains can change the picture suddenly.

If you aren't familiar with the fishing available in a particular river, try to find someone who has fished it before for information, or write to the State Game and Fish Commission at the State Capitol, or contact the local wildlife ranger.

While many Georgia rivers have fine fishing, especially in the early spring or late summer and fall, there are some entire rivers and sections where fishing is almost non-existent because of pollution from silt coming from farm land, mines, or roadsides, or because of industrial and municipal pollution. This problem is especially acute below large cities. For instance, there is little or no fishing available on the Chattahoochee River for miles below the city of Atlanta, or on the Ocmulgee below Macon, even though both rivers have good fishing above the cities. There are numerous other such examples that could be cited with equal justification. However, improved farming and soil conservation practices, as well as tighter enforcement of water pollution regulations, offer hope for improved river fishing in Georgia in future years.

Generally speaking, the best river and stream fishing to be found in Georgia is in the southeastern and southwestern portions of the State, but this does not mean that there are not good fishing streams in middle and north Georgia, even though they are not as well known and have fewer fishermen. Many of these streams are small enough, with shoal areas extensive enough, to make wading safe and practical, although some of them, like the Coosa, are too bold for wading.

In areas of these rivers where shoal areas are scattered enough to allow boat fishing, the State Game and Fish Commission is actively improving fisherman access by constructing hard-surface boat launching ramps. (See the July, 1967, issue of *Game & Fish* for a list of completed ramps.) However, the best fishing in many streams frequently is in the middle of the shoal areas that can be waded, especially for bass. Eddy pools, where the current runs backwards, are also good spots. Overhanging limbs or trees that have fallen in the water are always good bets for bass, bream, and crappie.

What are some of the better fishing rivers, and what can be caught there? Naming them all would be impossible in an article this short, since there are over 2,818 miles of major rivers and more than 3,000 miles of smaller tributary warmwater streams. Only the most outstanding can be mentioned.

Excluding the trout streams of northeast Georgia, there are many popular streams that have trout in their colder headwaters, that become bass and bream streams in the lower reaches. For instance, the Toccoa River and the Hiwassee River are both trout streams that become the home of the true Northern smallmouth bass before they leave Georgia to join the Tennessee River, providing excellent stream fishing. The Chestatee and the Chattahoochee above Lake Lanier are good spotted bass streams.

Further to the west, the Coosawatee is a fine stream for spotted bass, largemouth bass, redbreast bream, and

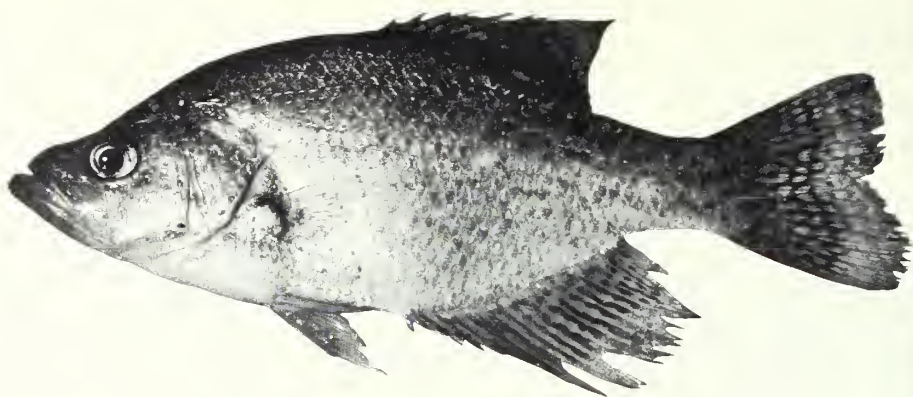
Continued on Page 16



The Toccoa River is a good place to catch bass and bream. The Hiwassee River is also a good place to catch trout and bass. The Chestatee River is a good place to catch spotted bass and bream. The Chattahoochee River is a good place to catch largemouth bass and redbreast bream.

The Coosawatee River is a good place to catch spotted bass and largemouth bass. The Ocmulgee River is a good place to catch bass and bream. The Flint River is a good place to catch bass and bream.

CRAPPIE FISHING.... NIGHT STYLE



By Claude E. Hastings
Fisheries Biologist

□ Most of our crappie fishing in Georgia consists of hordes of fishermen running around madly in the spring, throwing minnows and jigs into shallow water at crappie while they are spawning, or looking for spawning sites.

After the spawning season is over, the crappie move to deeper water, and most of the fishermen that have been after them decide crappie fishing is over for the year and either quit fishing until the following spring or start fishing for some other kind of fish.

However, a small but select group of these fishermen know that their fishing for crappie isn't over, but that their tactics will have to be changed. These fishermen turn to night fishing. They know that night fishing can and often will produce just as many or more crappie as daytime spring fishing.

Our large reservoirs in Georgia have black crappie and white crappie — sometimes but not necessarily both in the same reservoir. Since both species are found in the same types of places and since both species can be caught in the same manner, this article will treat both as one.

The first thing that must be done is to locate the crappie. Crappie are found in schools, and unless one of these schools can be located a lot of unproductive fishing is going to result. Crappie prefer dark places. There are two places where you are likely to find this if the water is deep — bridges and large boat docks. Since most boat docks are privately owned and are not open to fishing without permission from owners, bridges are your best bet. However, not all bridges offer good crappie fishing.

The best method of locating crappie "hot-spots" is by inquiring from wildlife rangers, sporting goods store personnel, and other fishermen. These places can be located much faster in this manner than with the trial and error method. Both dock fishing and bridge fishing can be done without the use of a boat. However, in some places

it is illegal to fish from bridges, making the use of a boat necessary.

The only special equipment that is needed at night is a good lantern and a means of hanging it directly over the water. Ropes are used to hang the lanterns from bridges. Hooks that hang the lantern over the side are used on boats.

One theory is that the lantern attracts insects and plankton, which attract small fish. The small fish are supposed to attract large numbers of crappie. I have not been convinced of the truth of this theory. I believe that the light acts more as an aid to the fisherman in seeing what is happening, and as an aid to the crappie in seeing the lure or bait.

Crappie have been caught on many different kinds of baits and lures, but there are two that are most reliable — minnows and jigs. Jigs popularly known as "Doll Flies" are excellent. For you fishermen who like to use minnows, select a small minnow — 1½ - 2 inches in length. Crappie prefer small minnows. I have seen fishermen using minnows 3 - 4 inches in length and wondering why they were not catching fish while everyone around them was having a field day using smaller minnows. Also, if you have a choice of different kinds of crappie minnows, select a fat-head minnow (also called blackhead) if your dealer has them. They are not as shiny as the golden shiner which most dealers sell, but they live longer and crappie seem to prefer them.

I prefer a yellow jig ¼ to ½ ounce in weight. I like a chenille body and a maribou tail on the jig. The hook size should be a four or six. If you are tying your own jigs, tie the tail short — barely beyond the bend of the hook. If you buy your jigs, clip the tail off short if you fail to catch anything with the longer tail. My next choice is the same jig in white. But if you take jig fishing seriously, get yourself a good selection of the smaller sizes (up to ⅛ ounce) in different styles,

colors, and color combinations. This may seem strange to stress variable colors for night fishing, but I have seen failure turned into success many times by changing to a jig which differed only in color.

The depth at which crappie may be found often varies from night to night and often varies considerably during the same night. It is necessary for you, the fisherman, to try fishing at different depths until you find them. Since they are found in schools, if you catch one you will probably catch several.

The methods that are used in fishing minnows or jigs are very important to your success. It is true that there are some nights when all you have to do is heave your bait into the water and pull out crappie. These nights are fun, but they are rare. Most of the time it takes a fisherman using good methods to consistently make good catches.

When using minnows, use a good lively minnow and hook it lightly through the back with a fine hook. The purpose of the fine hook is to do a little damage to the minnow as possible. Some persons hook their minnows in the tail or through the lips and make good catches. I hook in the back because I seem to be able to make better catches in this manner.

Fish at different depths, either with or without a float. If you use a float use a small one that will offer the least resistance when the bait is taken. Use a light line (4 - 6 lb. test) and a very small sinker. When a crappie takes the bait, allow the fish to have the bait a few moments (varies from night to night) and then lift the rod and hook the fish. It is not necessary to jerk the rod because crappie are easily hooked.

Crappie are sometimes moody and will not take minnows fished in conventional manners. If you are fishing at such times, vary your fishing methods. Try moving your minnow slowly from side to side. If this doesn't work give your minnow a little more action

by giving a short jerk once in a while. I've seen this wake them up. If still no success, hook your minnow in the tail, pinch off the front half of the minnow, and move it up and down and from side to side slowly. This method has been successful for me several times when I couldn't take them in any other way.

Probably the most successful way — although not the most popular way — of catching crappie at night is with jigs. The selection of equipment is very important in using jigs. To be most successful, an ultralight spinning rod with a good, smooth-operating spinning reel is needed. This often makes the difference between feeling and not feeling the strike of a crappie when fishing deep. I use a four pound test line.

There are several successful ways of using jigs at night. Probably the most successful and the most nerve-wracking way is to fish the jig straight up and down. The nerve-wracking part comes from having to fish it so slowly. Lower the jig to approximately 25 feet and slowly — very slowly — reel or lift the jig straight up. Don't use any weight other than the jig unless the wind is blowing and then more weight will be needed to keep the line straight. Otherwise you will not feel the strike. When you are retrieving the jig slowly, strikes are sometimes hard to detect, so strike fast if you feel anything out of the ordinary at all. When you connect with a fish, you then know the approximate depth to fish. From then on drop your jig below this depth and bring it up through the school of fish very slowly. This fishing very slowly — extremely slowly — is usually very important and an absolute necessity in winter months.

If no strikes occur using this method, try casting the lure allowing it to sink to different depths before starting individual retrieves. Again fish slowly. Most persons catch few crappie on jigs because they fish too fast. Of course, there are exceptions to almost everything and I've found times, especially when the water is warm, when the fast retrieve is preferable.

Another method to try if you are still not catching any fish is to lower your jig to various depths and actually "jig" it. Give it a sharp jerk, let it settle back to the end of your line, and repeat the process. Good catches are sometimes made in this manner. Make these short jerks, because the jig is normally taken after the jerk as the jig settles back and the fish is hooked as the fisherman makes the next jerk.

Normally one of the above methods will work if you are fishing among crappie. I want to stress the importance of trying different styles and colors of jigs while using the different methods.

The crappie has been belittled by many fishermen for not having the fighting qualities of some fish, and it's true that it doesn't give the fight that some fish give, but catch it on light tackle when the water has warmed up and it has thawed out of its winter chill, and the crappie is a respectable combatant. And, anyone who has eaten crappie won't quarrel about its flavor, so why not burn the midnight oil on the lake this summer?



1. Studying the lake at night and the crappie. The crappie is a very common fish in the lake and is a very popular fish to catch. The crappie is a very common fish in the lake and is a very popular fish to catch.

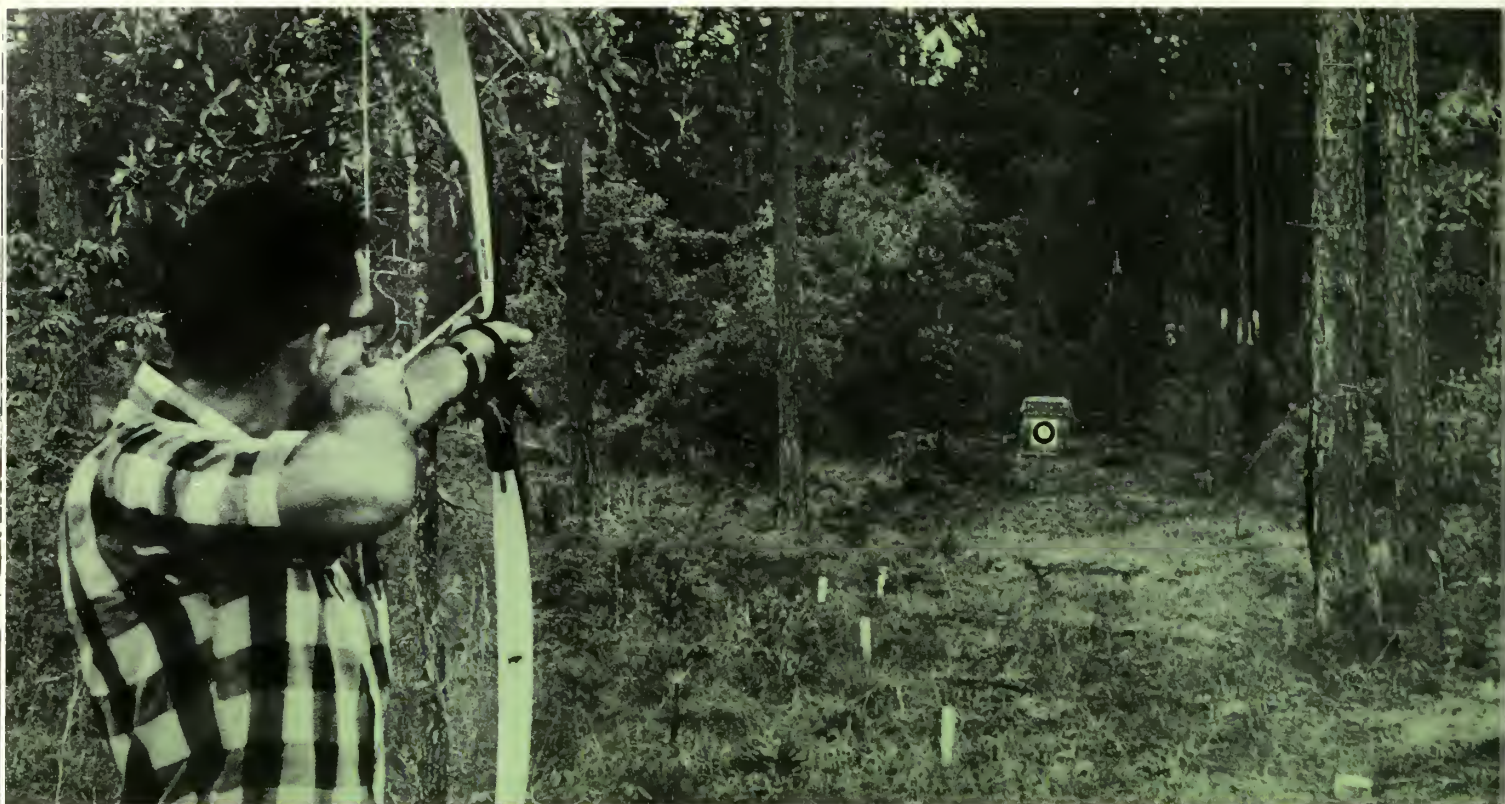
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August...The day before Christmas Eve

By Joe Kight



Top: Summer practice in bow shooting is an essential part of successful bow hunting. Belonging to an archery club affiliated with the Georgia Bow Hunters Association is one of the best ways to get help, and practice.

Lower: Bow hunters depend on their ability to remain unseen by deer until they come within range. Camouflage suits are standard equipment for bow hunters like Dan Quillian of Athens, who usually hunt from a tree stand, where a deer is less likely to see the archer drawing his bow.

August — a time of aestivation, which is sort of a reverse hibernation. It's too hot for anything strenuous and most all the varmints, except man, have got enough sense to take it easy.

It's a time for "just settin" in the porch swing in the evening and watching the sheet lightning flickering in the distance — a time for listening to the July flies practice their raspy musical scales in discord with the katydids — a time for sitting under a big shady tree on the creek bank in the late afternoon and thumping pebbles at the "meller bugs," those little shiny black bugs that glide around on top of the water.

It's a time to kinda take inventory of faded safaris and plan some magnificent new ones. But don't spend all your time just thumping rocks and thinking about it. August is a sort of day before Christmas Eve time. The big event is close enough to enjoy but still far enough away to get ready for it. Point is, you've got just enough time to get ready for the coming deer season.

Along about the middle of the month the air will take on a different feel. It's nothing that you can put your finger on but if you're a hunter you'll understand what I'm talking about. Maybe I've been in the woods too long, but I imagine that a wild duck gets the same sort of feeling just before starting its migration flight.

Dove season opens in a couple of three weeks and that will take care of September. Then there you are archery season will open tomorrow and you haven't even had your bow out of the house, much less scouted your favorite hunting territory.

What to do about it? Well, if you haven't been out shooting a field range or shooting at a carp or a gar or a blue frog or some such, let's start with your equipment. Check your bow very carefully for little nicks and cracks. Modern technology has provided us with tough, durable, and highly efficient bows. But check it anyway. I once had a very nice little bow that developed a very small little crack in the base of the lower limb at the handle riser. Just a little bitty crack. The bow still shot all right. I didn't think much about it until one day the darn thing exploded at full draw. Rained splinters for five minutes! Very disconcerting.

Take a good look at the string too. If it is frayed or if the serving (wrapping) is loose or coming apart, then get a new one. You need a spare.

Arrows, whether wood, glass, or aluminum, should be checked very carefully. If an arrow is badly bent, cracked or nicked, break it! This is the best way to keep from unknowingly shooting it. An arrow undergoes a tremendous amount of stress as it leaves the bow.

If a damaged shaft should break on release, the jagged edge could catch you on the hand or arm. Fletching should be replaced as necessary to maintain a stable flight of the arrow.

Quivers, bow string silencers, brush buttons, arm guards, finger tabs or gloves, and assorted accessories are largely a matter of taste. If it does the job and you like it — fine.

The same thing applies to broadheads. There are hunting tips available in two blade, three blade, four blade, and even one that is made in a circle like a cookie cutter.

So "you pays your money and you takes your pick," as the man said. Only please, please, please make sure that broadhead is at least razor sharp when you point it at a deer. Excepting the rare brain or spinal shot, an arrow kills by hemorrhage. We won't get into the intricacies of the dynamics of cell structure, but you can be assured that a sharp edge will cause more efficient bleeding than a rough or dull edge.

Weights of broadheads and field points vary, and it's a good idea to try to use a field point that weighs the same as the broadhead you plan to hunt with. This way you can practice with field points and change to broadheads with a minimum of effort. Also, field points are much less expensive and a considerable amount of time is saved in trying to get that fine edge gone on a broadhead after it has been shot into the ground a time or two.

Field archery is a good way for the hunter to get practice under hunting conditions. It's also a lot of fun. There are 38 archery clubs in Georgia, most with field archery ranges. These ranges are usually set up in a patch of woods and the course is laid out sort of like a golf course. You shoot four times at each target, retrieve your arrows, and go on to the next shooting point. Target ranges usually vary from a few feet to 80 yards.

Mr. Richard Parker, president, the Georgia Bowhunters Association, 2604 N. Clark Dr., East Point, Georgia 30044, can give you the name and address of a club in your area. If you're interested in competition, there are local, state, and national matches. GBA now has over 500 members.

Now. You've got your equipment in good condition and have been out practicing. Assuming that you can hit a deer in the rib cage at a moderate distance, the problem now is to get within range of a deer. A tree stand will be a big help here. If you haven't heard about a tree stand, it's a little portable device that you can attach to the side of a tree or pole. They come in assorted sizes and colors, but its purpose is to give you a place to stand or sit that is above the ground. This gives you a

much better view of things. Also, deer seldom look up unless they hear something or get a glimpse of sudden movement. If you can find a good deer trail and place your stand over it, chances are excellent that a deer will walk right under you.

But let me pass on a sad word of experience. I have a tendency to shoot over a target when shooting down at it. In fact, I missed the same deer three times one morning. Clipped hair each shot but never did connect. After the four point buck had wandered off into the brush and I had settled down a bit, I shot at an oyster shell lying in the trail. It was a little bitty oyster shell too. Naturally, I hit it dead center and ruined a broadhead. So perhaps it was just buck fever. Anyway, climb up on something and try a practice shot or two. It may mean a lot of difference.

After you've made a hit on a deer, keep quiet and sit still. He'll probably run a little bit, but probably won't head for the next county unless you spook him. Just mark where he was standing when you shot and where you last saw him. If you got a good hit, you should be able to find a blood trail within a few yards. However, if you are sure you got a good hit and don't find much blood, don't get discouraged.

So, give your deer about 30 to 45 minutes before you start tracking. Some hunters wait an hour. If the blood trail is not distinct, you may have to track him. If you lose the trail, stick an arrow in the ground at the last sign and start casting around until you pick it up again. Don't neglect to look on weeds and brush. Blood will wipe off if the deer brushes up against them.

If the deer was hit in the paunch, wait till the next day if possible. Chances are good that it will lay up in heavy cover and stiffen up if you give it enough time. This will require a good bit of patience and looking. If you lose the trail, start walking in increasingly larger circles. (Some folks who have never even been hunting before already have a lot of experience at this!)

Some hunters, on finding their deer, whip out their Bowie knife and set to with a vengeance. They slash the deer's throat, skin out the inside of the hind quarters, and hack away at other things that were once important to the deer. All this is quite unnecessary.

Since the deer is already dead, the only blood you might get out from its throat would be only that in the vein. You usually cut some hair which is next to impossible to replace if you should want to have the head mounted. The glands on the inside of the back legs are rather rank smelling, but they really aren't bothering anything. If, on the other hand, you bother them,

chances are that you'll contaminate your hands and everything you touch. It can make the meat taste rather strange. If you've shot a buck, there's not much use in removing his manliness. He's had them all his life and a few more minutes are not going to make that much difference.

So now you have got your deer the hard way. You can take it home and be justifiably proud. That is unless you happened to have goofed an easy shot. If so, welcome to the club.



About The Author—Joe Kight

Joe Kight, supervisor of game management for the South Georgia region, is a skilled archer and has tagged his share of venison with the bow.

A versatile sportsman, he likes to hunt "anything that's handy" and feels just about the same way about fishing. He's equally at home out-of-doors with either a bow, firearm or fishing tackle in his hand.

But you'll please him just about as quickly by handing him a fly rod as anything else. But here, too, he's not really choosy. He'll take either fresh or saltwater for his flyrod sport.

Joe, 32, native of Clarkston, Ga., received his BS in forestry, majoring in wildlife, from the University of Georgia in 1960. Then, with a fellowship through the Atomic Energy Commission, he got his MS at Georgia by working on a deer research project near Albany. These studies included census, reproduction and hunting stress effects as well as other phases of deer habits.

Before attending college, he served with the U.S. Marine Corps in 1954 through 1956. He began work as a game biologist with the Commission in 1962 at Gainesville, later working at Calhoun, then took over his present post at Fitzgerald in January, 1965.

During his five years with the Commission, he has worked with deer stocking, the exotic game bird program and other similar projects. A paper on deer management he helped present at the Southeast Game and Fish Commissioners' meeting a year ago, received an award at this year's meeting as the outstanding technical paper on game management.

Joe and his wife Glenda have a son, Danny, 3, and a daughter, Lynn, 1. They live in Tifton.



Buried Treasure inches deep

By Jim Tyler

A treasure hunt is right now taking place along the Georgia coast. And if the hunters find the treasure, they will give it away.

Biologists from the State Game and Fish Commission hope to find concentrations of clams large enough to constitute a treasure. Clams a treasure? Could be. Clam rich New England is not clam rich any more. Clams have been overfished up North as the market has mushroomed in size. And New England dealers are now eagerly looking for new clam sources even though 15¼ million pounds of hard clams worth 10 million dollars were harvested in the U. S. in 1965. There is, then, a potential market to make Georgia clams worth a treasure.

This situation is just a happy coincidence and is not the reason why the search began. Georgia already has an annual 25 million dollar commercial fishery including the shrimp, oysters, crabs, and shad, but the potential for expansion is enormous. With over 2,300 miles of coastal shoreline, laced with tidal rivers and creeks, there are many marine species, shellfish for example, that haven't been touched or their whereabouts even known.

Besides the possibility of paving the way for additional commercial fishermen, men now in the business need stand-by crops to turn to when the shrimp, crab, or fish they catch have a bad year.

Clams are one of the items fishermen could turn to. And if the treasure hunt is extremely revealing, full time clam gatherers could be born. History shows that along the Georgia coast, clams were taken commercially from the late 1880's to 1932, with a peak harvest occurring in 1908 when 43,000 pounds were marketed. After 1932 the fishery became non-existent. Pollution

or a shift to a more valuable fishery shrimp for example, are probably the reasons.

How to Hunt Treasure

Recently a big-bellied man with rumpled clothes and disheveled greystreaked hair told marine biologist Walter Godwin of the Commission's Brunswick office about an area where he would lean over the back of his boat and as the tide pulled the boat along through a marsh creek, he would use his fingers as a rake to bring in as many clams as he wanted. He knew where a treasure was located. But how do you hunt for clams when you don't know where they are?

First, you need equipment. Walter, project leader of the clam search, uses long handled rakes for probing and scratching up clams in shallow tidal flats. For deeper waters, he had trouble finding a device to do the job. Using his ingenuity, he invented a rake-like dredge that is small enough to handle, yet will get down and scratch clams free from the bottom. Pulled along with a 120 horsepower drive boat, Walt's dredge does a dandy job.

His fathometer gives some indication of the bottom the boat passes over. Certain species of clams prefer certain types of bottom material, mud or sand or a combination of the two. He can also tell something about the bottom material by the way tidal rivers and streams twist and turn. Pockets of softer muddy material will probably be found where the current isn't as strong. This he knows. But in the past, not much scientific investigation of Georgia's coast has taken place, and he has to rely on some guess work. Intelligent trained guess work, that is. He approaches the hunt in a methodical scientific fashion.

1 The dredge is lowered to the bottom and
scraped along a sandy bottom in the
marsh creek. The dredge is pulled up and
the clams are sorted out and packed in ice.
The dredge is then lowered back to the
bottom.

2 The dredge is pulled up and the clams are sorted out.

3 The dredge is lowered to the bottom and
scraped along a sandy bottom in the
marsh creek. The dredge is pulled up and
the clams are sorted out and packed in ice.
The dredge is then lowered back to the
bottom.

4 The dredge is pulled up and the clams are sorted out.

5 The dredge is lowered to the bottom and
scraped along a sandy bottom in the
marsh creek. The dredge is pulled up and
the clams are sorted out and packed in ice.
The dredge is then lowered back to the
bottom.



How Treasure Looks

There are three types of clams along the coast which might be present in abundant numbers — the quahaug (pronounced kway-hog) or hard shell clam, *Mercenaria mercenaria*, marsh clam *Rangia cuneata*, and the southern quahaug *Mercenaria campechiensis*. Clams found in Georgia are no different from other clams. They are found buried in the mud or sand of the bottom, and do not attach to anything like the oyster does. They have the typical two shells which are attached together on one side and can be pulled tightly together along the other edge. Through the nonattached side they can extend their muscular foot that will move them slowly up and down through the mud. The rate of movement makes a snail seem ridiculously fast.

Clams seldom burrow very deep because they feed by extending two siphon tubes (out of the unattached edge of their two shells) up out of the mud or sand in which they are buried. Water is pulled through the "in" siphon tube. The water is circulated through the clam's body. In the clam's body, oxygen for respiration, and minute organisms which are the source of food, are filtered out of the water. Then the water and waste products are forced through the "out" tube. The marsh clam's tubes are only 1 - 1½ inches long and the quahaug's run 2 - 3 inches in length. The quahaug, by the way, is the same clam that grows up north.

The hard shell quahaug comes in three sizes, depending on its age.

A small one (1½ - 2¼ inches) is called a little neck and is eaten raw, on the half shell, steamed, or as a cockle. They bring from \$16 - \$18 a bushel.

A medium size one (2¼ - 3 inches) is called a steamer or cherrystone and

will bring \$10 - \$11 a bushel.

A large one (over 3 inches) is called a chowder clam and will bring \$4 - \$5 a bushel. These are the old, tough ones that are chopped up for clam chowder.

The listed prices are paid by the Wholesale Fish Market in Long Island, New York. There is a clam market in Williamston, North Carolina; however, Georgia clams would probably bring better prices on the New York market.

The other clam the biologists are presently searching for is the smaller marsh clam (about 2½ inches maximum size). It is found in a mud bottom beneath brackish water. Quahaugs will most likely be found on a combination mud and sand bottom.

The third clam, the southern quahaug, is found in the deeper waters offshore. Biologists hope to explore these areas when they get a large research boat.

Problems

Let's say the searchers find a large concentrated area of clams. What then? Hopefully it will be near the population centers of Savannah or Brunswick where facilities for processing them are available. Transporting the catch is a cost factor not to be denied. The fishery would have to be big to entice a commercial enterprise to build new processing plants.

Another problem is pollution. Much of the coastal waters receive a good share of pollution from the fresh water rivers that empty their polluted load into the ocean. Pollution has closed about half of the available estuarine areas.

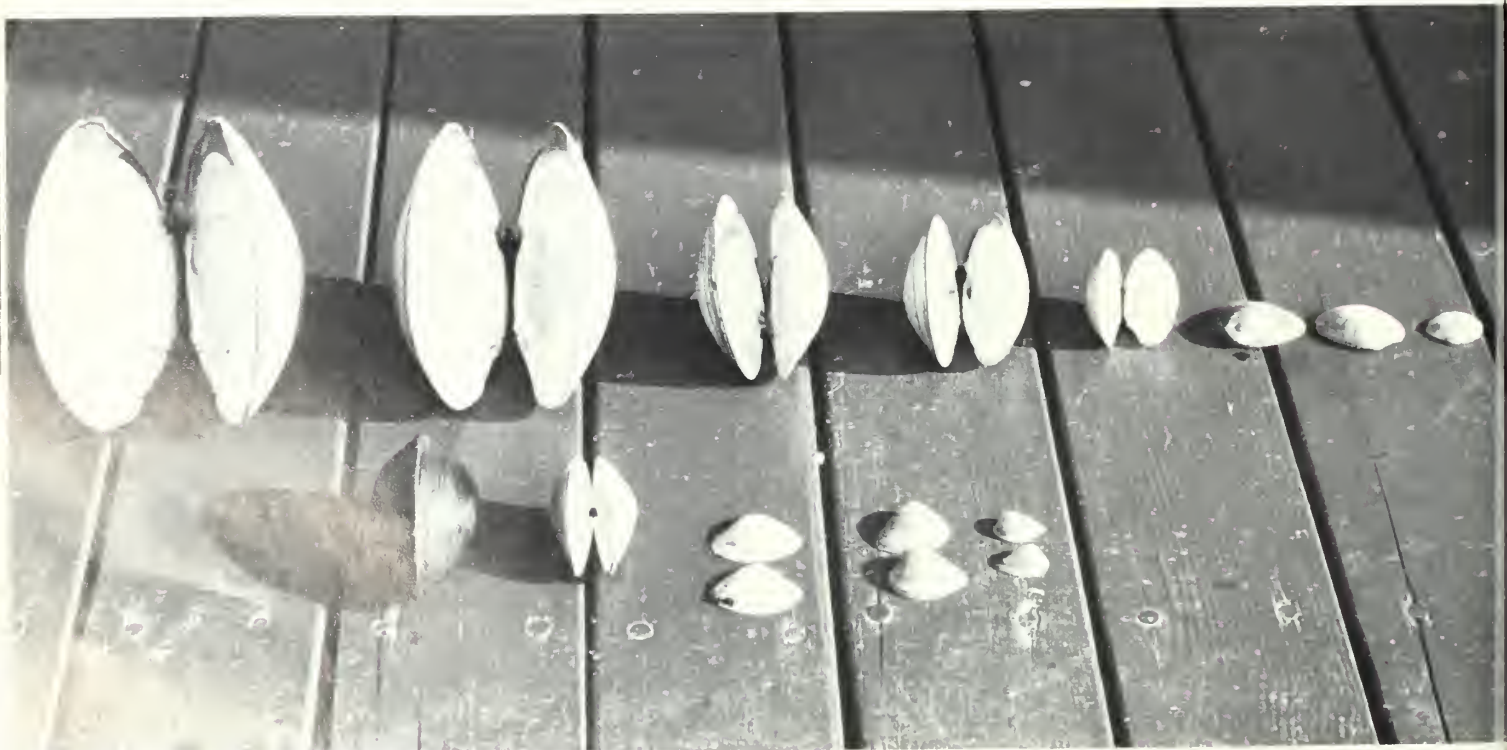
How does pollution affect clams? Clams feed on very small particles called bacteria. And there is a chance that some of the bacteria they take in could come from the pollution. These





In shallow water these long handled "clam rakes" are used to gather clams.

Small clams grow up to be big clams. A row of different sized quahog clam shells from the bay area. Different sized marsh clam shells make up the bottom row.



bacteria could be of a communicable disease variety, the typhus bacterium for example.

Some biologists believe a natural limitation makes it impossible for large clam concentrations to be found along the Georgia coast. When clams are very young they are called larvae. At the early stage of their life they are free swimming in the water and not stuck in the mud or sand of the bottom. These biologists think clam larvae need relatively calm water to attach to such objects as seaweed, stones, shells, or even grains of sand, at least for a period of time, to start their transformation to the true, two-shelled clam. And the constantly moving tidal rivers and streams along the coast caused by two high and two low tides daily, do not provide an environment that is good for clams. Not all biologists agree on this limitation; however, it hasn't been proven either way.

Clam Chowder — Georgia Style

Every treasure hunt is burdened with a number of if's. But if something didn't outweigh the if's, there wouldn't be a treasure hunt.

There is an enormous amount of mud and sand to rake through, but the State Game and Fish Commission believes that in two years they will have a clearer picture of the Georgia clam.

Really they can't lose. It will be great if they find concentrations. But if they don't, they still win. All the data they will gather is a veritable treasure.

So, maybe in the future, we will be eating clam chowder — Georgia style. Maybe — two years should tell the story.

meet your commissioner:

CLYDE DIXON

Clyde Dixon represents the Ninth District in the conservation and development of Georgia's wildlife resources



□ When the first deer were restocked on the State Game and Fish Commission's Lake Burton Game Management Area in 1939, Ninth District Commissioner Clyde Dixon of Cleveland was there.

"I was just a kid then," Dixon recalled. "We went with them up to what they call the Blue Fields at the head of Wildcat Creek to turn loose a buck and two does. They were part of 27 deer imported from Pennsylvania and stocked on the refuge. I'd never seen a deer before that."

Dixon was on hand seven years later when the first deer hunt was held on the Lake Burton area. "It was 1946, the first year I was out of the service when I went on the first hunt, and I've hunted the area every year since," Dixon proudly recalls. Of the eight deer that Dixon has bagged, most of them came from the Burton area, including in eight pointer three years ago. He once went six years in a row without failing to bag a buck each year.

Although Commissioner Dixon is primarily a deer hunter himself, he is quick to defend the rights of hunters of other species. "The Game and Fish Commission should consider the interests of all types of sportsmen," Dixon stresses. "What a man likes to hunt is what he's interested in. I think that it's the job of the Game and Fish Commission to provide an outlet for all of the sportsmen in the state, whether they are bass fishermen, deer hunters, fox hunters, or rabbit hunters — whatever it might be. The Game and Fish Commission owes it to the people to provide that outlet. If a man buys a hunting or fishing license, it shouldn't be restricted to just two or three phases of it."

Dixon likes to do some rabbit hunting himself with beagle dogs in Banks, Franklin, and White counties, although he doesn't own any beagles. "That's the most underrated sport there is," Dixon says.

"I'm a winter time fisherman," Clyde

says enthusiastically. "I do most of my fishing in the winter on Lake Burton for spotted bass and largemouth bass. Last winter my uncle Buford LePrade and I caught more than 100 bass during the winter, fishing together one day a week. We even caught 36 in one day, but of course we had to put some of them back. I'm mostly a spring lizard fisherman."

Clyde says the largest bass he ever caught out of Lake Burton was a seven pound, two ounce. He once landed a six pound walleye out of the lake, where he owns a five-room cabin on the Dick's Creek arm of the lake known as "Dixon's Long Branch," the site of many weekend gatherings for Clyde's numerous fishing friends.

In addition to bass fishing, Clyde likes to do some trout fishing in the spring, as well as fish for bream in the Altamaha River, which he describes as "some of the greatest sport that I've ever had. That's really fishing. Some of those bream down there are bigger than both of my hands held together!" Clyde also enjoys an occasional saltwater fishing trip offshore for king mackerel.

"I like to fish for spotted bass and redeye bass in the Chattahoochee," Clyde says with a smile. "There's not much better sport than going down that

Chattahoochee in a flat bottom boat, fighting those rapids, and fishing as you go!"

Always physically active, Dixon at 41 still enjoys skiing behind his 16 foot fiberglass boat, propelled by a 75 horsepower outboard. For fishing, he prefers his light 14 foot aluminum boat with an 18 horse fishing motor.

Now the executive vice-president of the People's Bank in Cleveland, Clyde is a native of Clarkesville. He joined the Coast Guard after graduation from high school, spending 22 months in the South Pacific as a signalman first class on a freighter carrying supplies to troops from New Guinea to the Philippines.

Before entering the service, he was engaged to his childhood sweetheart, Margaret Kenney. Happily married for 21 years, the Dixons have three children: Sam, 19, is a junior at the University of Georgia, majoring in journalism and law. Francis, 18, is a freshman at Truett McConnell College in Cleveland, while his youngest son Joe, 9, attends Cleveland Elementary. ("He's a character," chuckles his father.)

After working for three years as a cashier in the Cleveland Bank, Clyde graduated in 1954 from the Atlanta

continued on page 16

Bass fishing on Lake Burton, where sportsman Clyde Dixon, of Cleveland, Georgia, owns a five-room cabin on the Dick's Creek arm of the lake known as "Dixon's Long Branch."



MEET YOUR COMMISSIONER

continued from page 15

Division of the University of Georgia, now known as Georgia State College, majoring in Business Administration. In addition to serving as executive vice-president of the People's Bank in Cleveland for the past 14 years, Clyde owns and manages the W. C. Dixon Fire and Casualty Insurance Agency in Cleveland, and is a partner in the Nix-Woods Ford Company in Toecoa.

In addition to serving on the State Game and Fish Commission, Clyde is a member of the White County Board of Education and the Selective Service Board, and chairman of the Planning and Zoning Commission of the City of Cleveland. He is a member and past president of the Cleveland Kiwanis Club, on the board of directors and twice past president of the White County Chamber of Commerce, and past worshipful master of the Masonic Lodge. He is a Baptist.

Since his appointment to the State Game and Fish Commission in Febru-

ary by Governor Lester Maddox, Commissioner Dixon has not missed a single meeting of the Commission. Plunging into his new duties with unusual enthusiasm, Dixon has already personally met every employee of the Commission in the Ninth Congressional District, beginning with a get-acquainted chicken supper that he sponsored for them at his Lake Burton cabin. Since then, he has visited every game management area in his district, and has personally ridden on patrol with several rangers. He makes a point of consulting Commission biologists about their projects, getting their views on any possible new Commission regulations. With their support, he asked for and received approval from the other Commissioners at his first meeting to set a 14 inch size limit on newly stocked trout in Lake Burton, Blue Ridge, Rabun, and Lanier. ("Those lake trout grow awfully fast — let's at least give them a chance to grow 14 inches long before we start taking them out," Dixon says.)

Already, Commissioner Dixon has won the admiration and confidence of

Commission personnel in his district, who are proud of the fact that he always takes time out of his busy personal life to discuss their problems and the problems of the Department. "All if he believes something is the right thing to do, he'll fight for it!" they say.

Clyde has established the same good relationship with the sportsmen of his district since his appointment, averaging one or more speaking engagements a week. "I've covered pretty well all of my district putting on programs from Fannin County to Madison," Clyde says. "I average getting three or four calls a day from sportsmen. I think it's important to listen to what they have on their minds, and to let them know that you aren't too busy to hear what they think."

"We've got to look to the future to provide people with hunting and fishing areas," Clyde cautions. "We must work closely with the Forest Service and even buy some land ourselves to be sure that we have a place in the future. People in urban areas have a place to go. It's the duty of public agencies to provide it."

REGISTER ALL BOATS?...

continued from inside front cover

pay a small fee of from three to four dollars each every three years would help to finance the additional lake patrolling by rangers that will be necessary in future years if deaths on the water are to be held down to the present level, especially in the face of rapidly increasing numbers of boats on the water.

Such enforcement efforts are not inexpensive. On the average, it costs more than \$10,000 to add a new ranger for patrol duty, including his boat, two-way radio, vehicle, uniform, gun, badge, gasoline, travel expense, and salary.

Obviously, any such registration of rowboats, etc. should not apply to private lakes, farm ponds, etc., since no Commission safety efforts are carried out on these waters. Under present laws, all rental boats at marinas, fish camps, etc. (livery boats), must be registered with the Commission.

Alabama already registers all motorboats and sail boats, as do many other states.

As it should be, the final decision on whether or not all boats should be registered lies with the wisdom of the members of the Georgia General Assembly, who convene for their next session this coming January. In the meantime, a House committee is holding regular meetings to draw up a complete proposed revision of all State laws pertaining to boating safety and game and fish. It would be well for members of this committee, other members of the

General Assembly, the Governor, boat owners, and the public at large to seriously consider revision of the boating safety laws to provide for the registration of all boats, and the payment of a small fee to help finance boating safety efforts.—J.M.

SWEET SONG OF THE RIVERS

continued from page 7

channel catfish. The Conasauga and the Oostanaula are also good for the spotted bass or redeye.

In the middle Georgia area, the Flint River is undoubtedly the most famous fishing stream of all, primarily because of the unusual species of redeye or coosa bass that is found only in the Flint and that is usually called the Flint River smallmouth bass. This fish grows larger than the average stream bass, going up to six pounds and more. They are especially prevalent with large-mouth bass on the many shoals of the Flint River above Thomaston, as well as the section below the Blakeshear Dam to Lake Worth at Albany. Fishing for redbreast, the most common stream bass, is also excellent in August, September, and October, along with fishing for bluegill and catfish.

To the east, fishing in the Ocmulgee River above Macon is good for large-mouth bass and bream, but with little or no fishing for miles below Macon. Fishing in the Hawkinsville section is excellent, and the world's record large-mouth bass was taken from an oxbow lake on the Ocmulgee between Lumber

City and Jacksonville in Telfair County.

In southeast Georgia, the Ogeechee is a famous black-water fishing stream. Fishing is good all year in the upper reaches, with some seasonal variation in the lower section, which is well known for its redbreast and largemouth bass fishing, along with chain pickerel and channel catfish.

The Altamaha is well known for monstrous bream fishing, including present state record bluegill bream. Satilla has excellent fishing for bass, bream, with few fishermen. The Marys is one of the finest freshwater streams in the United States, and good saltwater fishing at its mouth. The Satilla and the other coastal streams. Portions of the Savannah unpolluted areas offer good bream and catfishing.

In central south Georgia, both Suwanee and the Apalachee River are famous for bass, bream, jackfish, and bowfin. Further west, the Flint continues to provide excellent bass and bream fishing. Especially in South Georgia, exceptional small stream fishing is found in creeks like Ichawaynochaway and Kinehafoonee.

And, if you can read over a list of that and not have an irresistible urge to make a beeline for the nearest river with fishing rod in hand, the chances are you're just a frustrated dove hunting and counting the days until the season opens. As for the rest of us stream fishing fools, why not make August the month to sing "Shall we gather at the river?"

Sportsmen Speak...



Short, thought-provoking letters from readers are welcomed. Because of space limitations, not all letters can be printed. The editor reserves the right to edit the length of letters to bring out the cogent points and to insure clarity.



McDUFFIE FISHING AREA

I thought you might be interested in a picture of some fish that came from one of your recent projects.

This string of 40 bream weighed 17 pounds, and were caught at the McDuffie County Public Fishing Area on May 18. We have caught several nice strings since and before.

My wife and I caught these and I made the picture of her with them at the checking station on the area. We really enjoy fishing there.

Willard Allen
Wrens, Ga.

The McDuffie Fishing Area was featured in the July issue of *GAME & FISH* ("Familiar Fishing Fun," by Dean Wohlgenuth on page 6)—Ed.

GAME & FISH MAGAZINE

I have examined rather fully the copies of *Georgia Game & Fish* which you sent me, as well as those which arrived later.

To say that I am delighted with the progress made since our survey is putting it mildly. My congratulations to all of you who carried the load involved.

And I was especially pleased to note the fine job Jim Morrison and his aides are doing with the magazine.

The special editorial in the December, 1966, issue was most timely. Governor Sanders did just what he assured me he would do when I visited him prior to undertaking the survey for the "Bowdoin Commission", and I am happy to note the special editorial thanking him.

The monthly articles on the members of the Commission are also desirable. The readers of the magazine have a right to know their Commissioners better.

Seth Gordon
General Counsel,
International Association
of Game, Fish, and
Conservation Commissioners
Sacramento, California

Seth Gordon is an internationally known authority on wildlife conservation who formerly served as director of the Pennsylvania Game Commission and of the California Department of Fish and Game. In 1963, he headed a group of seven special consultants selected by the Governor's Efficiency Commission to make a study of the operation of the Georgia Game and Fish Commission. One of the recommendations of that report was that

the Department begin publishing this magazine.—Ed.

I continue to hear favorable comments on your publication of *GEORGIA GAME & FISH*.

I have one suggestion that should help increase circulation. If you would place several copies at each location where hunting or fishing licenses are sold and then arrange the license application to include the following question: "Do you wish to subscribe to *Georgia Game & Fish Magazine*?", with a place to answer yes or no and to indicate either a one-year subscription or three-year subscription. The applicant could then pay for his subscription at the same time he purchases his license.

I feel that most sportsmen, once they know about this magazine, will wish to subscribe and that this method will not only expose them to the magazine but will provide a simple and painless method of subscribing and eliminating a lot of the procrastination which seems to afflict us all.

Richard L. Starnes, Jr.
State Representative
District 13, Post 3
Rome

Representative Starnes' suggestion merits careful study. One possible problem is the length of time required to get subscriptions back in from license dealers. Bonded agents are required to report their license sales to the Commission each month, which would mean a two months delay for subscribers in receiving their first issue. Cash agents are not required to report their sales of licenses until the end of the year, which would be unreasonable for subscribers. However, a special poster with postage-paid subscription envelopes has been placed on the counter of every license dealer in Georgia to enable subscribers to receive rapid processing of their subscription. Any ideas from readers to help increase the circulation of *Georgia GAME & FISH* are certainly welcome.—Ed.

Let me be among the many to extend congratulations and praise on the *GEORGIA GAME AND FISH Magazine*. I feel that my thoughts would most surely represent the many thousands of Georgia sportsmen who sincerely appreciate the conception of this new magazine. I will look forward each month with enthusiasm to the time that will be spent reading this publication. No doubt many other persons have seen the importance of such a magazine, but needless to say, the action to see that it is followed through is what is important—you have done this. I wish you much success in the future.

I am not yet on the mailing list for this publication; however, a friend of mine showed me an issue. I would appreciate it if you would place me on your mailing list for the back issues, and you will very shortly receive my check for a three (3) year subscription.

John F. Hoffman, Jr.
Dunwoody, Ga.

Certainly am enjoying your magazine. It's a really professional and interesting publication. As you probably know, I subscribed for the maximum period.

Max Hunn
Miami, Fla.

Max Hunn is a well-known writer in the outdoor field who's articles frequently appear in national and regional publications.—Ed.

Sportsman's Calendar



SEASONS NOW OPEN

TROUT

Mountain Trout

Open Stream Season—April 1, 1967 through October 15, 1967.

Creel Limit—Eight trout of all species per person per day. Possession limit 8 trout.

Fishing Hours—30 minutes before sunrise to 30 minutes after sunset.

No night trout fishing is allowed on trout Streams open during the regular state trout season. Trout fishing at night on Reservoirs is permitted.

Special Regulations—Coleman River below Forest Service Road No. 54 restricted to artificial lures only, 10 inch minimum size limit on brown and rainbow trout, 7 inch minimum size limit on brook trout. Chatahoochee River below Buford Dam to the Old Jones Bridge restricted to artificial lures only with a 10 inch minimum size limit for all trout species. Fishermen on artificial lure only streams may not possess live or natural bait.

Management Area Stream Season—May 3, 1967 through September 4, 1967 on designated days only. Write for detailed schedule.

Lake Trout Season—There is no closed season on trout fishing in Georgia Lakes with the exception of Amicalola Falls and Vogel State Park Lakes, and Dockery Lake.

Special Regulations—14 inch minimum size limit on all species of trout in Lakes Blue Ridge, Burton, Clark Hill, and Lanier. No size limit on other lakes.

SEASONS OPENING NEXT MONTH

DOVES

Season—Sept. 9 through Oct. 7, 1967 and Dec. 6 through Jan. 15, 1968.

Bag Limit—12 Daily, possession limit 24.
Shooting Hours—Noon to Sunset. See federal regulations available at Post Offices for details.

MARSH BENS

(Gallinules & Rails)

Season—Sept. 2 through Nov. 10, 1967.

Bag Limit—15 Daily, possession limit 30.

Coming Migratory Seasons

DUCKS AND GEESE

Season—To be announced in August. Watch your local newspaper.

SNIFE, WILSON'S

Season—Nov. 27 through Jan. 15, 1968.

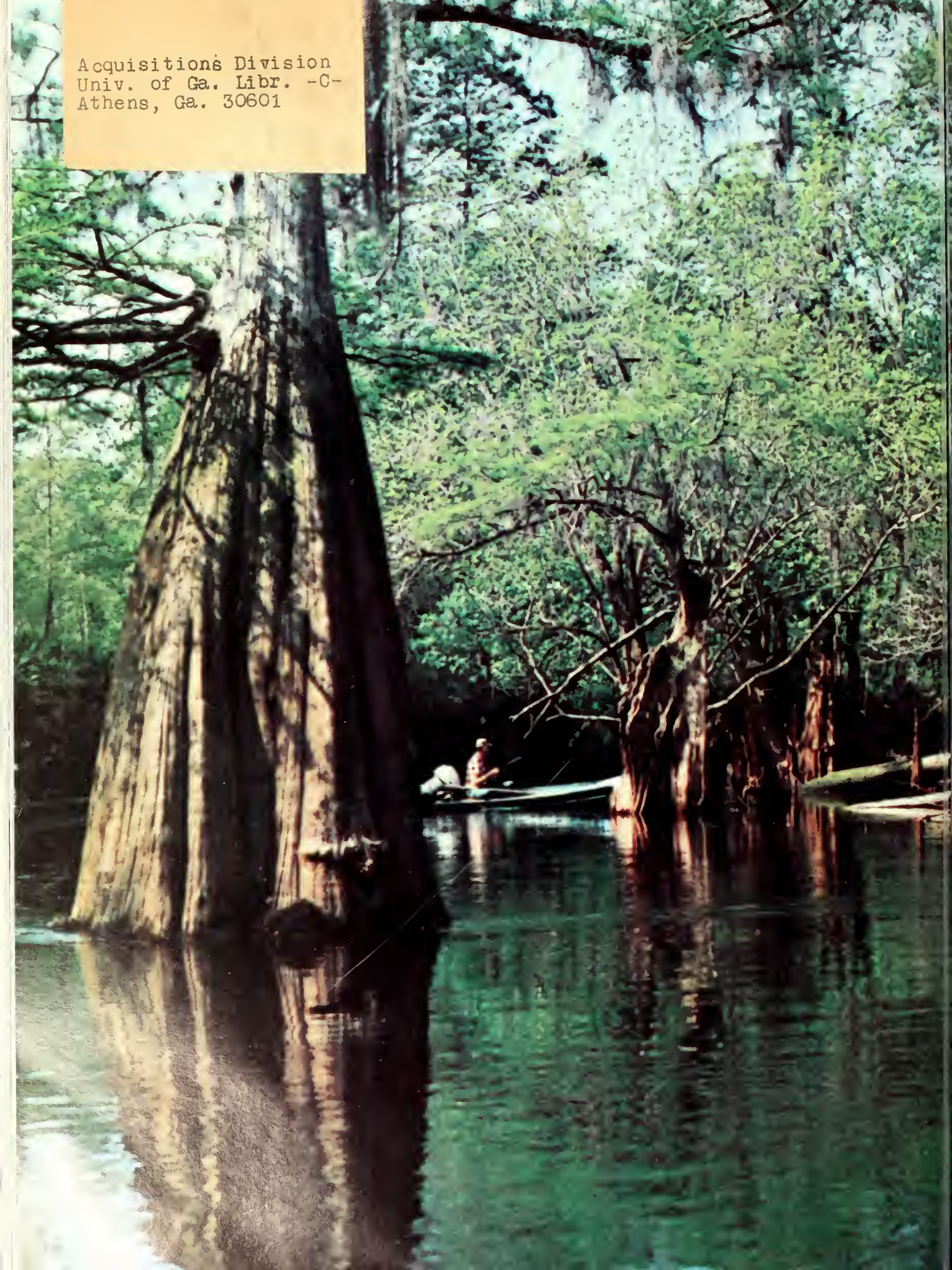
Bag Limit—8 Daily, possession limit 16.

WOODCOCK

Season—Nov. 28 through Jan. 31, 1968.

Bag Limit—5 Daily, possession limit 10.

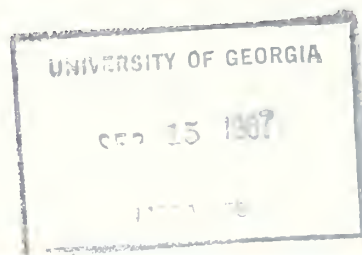
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GAME & FISH





GEORGIA

GAME & FISH

September 1967

Volume II

Number 9

Contents

| | | |
|--------------------------------|-----------------|----|
| The Short Hot Season | Jim Morrison | 1 |
| Blundering Blunderbuss? | Dean Wohlgenuth | 5 |
| A New World's Record | Dean Wohlgenuth | 7 |
| Hidden Fame of a Famous River | Jim Tyler | 8 |
| Multiplication | Dean Wohlgenuth | 10 |
| Fair Safari | Jim Tyler | 12 |
| Band Together For Conservation | Jim Adams | 13 |
| The Outdoor World | | 15 |
| Sportsmen Speak | | 16 |
| Sportsman's Calendar | | 17 |

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Governor

George T. Bagby
Director, State Game & Fish Commission

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* * *

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Buy public hunting lands now!

The handwriting is on the wall for wildlife conservationists that the time has come to begin a crash program by all government agencies, especially the State Game and Fish Commission, to purchase as much land as possible for public hunting and fishing.

This is especially important in a time when extensive acreages of private land once open free of charge to the public for hunting are disappearing. A short drive through counties with a good deer population located near a large metropolitan area will soon illustrate the fact that most private landowners have already posted their property in such areas, and those who have not already done so will soon. This process is hastened by the careless and irresponsible actions of a small minority of hunters who don't ask for permission to hunt and who show no respect for private property.

In many portions of Georgia, the only land still open to the public for hunting is either on a public hunting area or on private timber company land. Constant pressure is being placed on these companies to post their lands entirely, to lease them to a small group of individuals or a club, or to control hunting by selling permits. Increasing taxes on timberlands are driving paper companies toward fee hunting in the future. If this happens, trespassing and vandalism on small private landowners in surrounding areas will multiply.

All of these trends, when combined with the rapidly increasing urban population with its landless hunters, spell trouble for the future of hunting as a popular recreational sport in Georgia. At the same time, much good hunting habitat is being lost through construction of new highways, subdivisions, reservoirs, and industrial areas.

In any case, it is obvious that the average hunter must rely more and more in the future on fee hunting or the State and federal government to provide him with land on which to fish and especially hunt. If these agencies do not immediately accelerate their efforts to acquire such lands by purchase or lease, the acreage available to them for future acquisition will decline as land values increase.

A study recently completed by the State Game and Fish Commission bears this out. By examining past data on the numbers of licensed hunters and fishermen, Commission figures indicate that hunters will increase by more than 60,000 by 1975, from the present 309,925 hunters to 374,432, greatly increasing the hunting pressure on a declining number of acres of land still open for public hunting without charge.

But even more significant than this is the Commission estimate that the number of licensed fishermen by 1975 will increase by more than 325,000, an increase of more than 30 per cent, as compared to more than 20 per cent for hunters. The main reason for this difference is that hunters will have fewer additional places and opportunities to hunt, while new reservoirs and waters are constantly being planned and constructed, and existing public fishing waters are not in most cases now being over-utilized. Hunting cannot be expected to continue or to expand as a significant source of outdoor recreational activity for Georgia's rapidly expanding population, unless government agencies step in to provide hunting opportunities on government owned land.

Arguments have been made, and continue to be made, against State or federal agencies buying land, especially on grounds that private owners pay taxes on their lands, while the government does not have to pay such taxes. However, these arguments fail to take into consideration the fact that many government agencies, including the U. S. Forest Service and the U. S. Fish and Wildlife Service, now pay counties where they are located payments in place of taxes from the receipts of timber sales on their lands, up to 25 per cent. These payments match and usually greatly exceed the tax revenue that could be derived from the lands if they were in private ownership. Game and fish com-

continued on page 12

ON THE COVER: Georgia's second most popular game bird, the mourning dove, is a real speedster when he takes off on his twisting, swooping flight with the flock over a harvested corn or millet field. He'll give hunters a run for their shells with the opening of the first major fall hunting season, September 9. Photo by Dr. W. D. Sudia. **ON THE BACK COVER:** A warm fire, good companionship, and *Game & Fish*. What more could you ask for a pleasant evening at home? It won't be long before St. Nick makes his rounds again, so why not be thinking about that special friend or relative that you'd like to give a gift subscription of *Game & Fish*. Photo by Dan Keever.

PHOTO CREDITS: Ted Borg 1, 2, 3; Dan Keever 4, 10, 11; J. Hall b.r. 8, b. 15; Sylvester Local t. 15; Jim Tyler b.l. 8, c. & t. 8, 12; Dean Wohlgenuth 5, t.l. 6; Keith Wohlgenuth b. 6, t.c. 6, t.r. 6.



The Short Hot Season

By Jim Morrison

*Georgia's game biologists are zeroing in on
the dove season controversy.*

It was a hot, sweaty day.

*The yellow flies were buzzing around in annoying
circles, and back in the bushes, blood-thirsty
mosquitoes lurked in hiding.*

*Out on the bare ground of what had been a
cornfield before the silage cutter chopped it down,
heat waves rose in a crazy dance over the scattered
grains. The breeze, if there was any, never
quite seemed to decide whether to blow or not.*



Except for these distractions, there was little to keep the attention of half-a-hundred hunters crouching around the fence row, muscles strained from kneeling or sitting with outstretched neck, eyes constantly scanning the skies.

Suddenly, the early afternoon stillness was broken by the loud explosion of a shotgun, followed by a chorus of yells.

"Blam."

"Behind you! Here they come!"

"Blam! Blam!"

Then it was quiet again for a few minutes, punctuated only by the scuffling sound of hunters hurrying to retrieve a downed bird before the next flight arrived, again setting off a volley of shouting and shooting, sometimes a thunderous roar, sometimes an insignificant pop, depending on the distance of the shooter.

It's been that way for years in Georgia on the opening day of the dove season, and it'll probably be that way again for years to come . . . maybe.

If there's ever been a species of wildlife that caused more controversy than mourning doves, most hunters and wildlife conservationists don't know what it is, and probably don't want to know. They've already got their hands full arguing over the dove season, the dove bag limit, the dove shooting hours, the dove baiting regulations, the dove . . . well, that's enough to fight about for now. Get the idea? If you don't, then you've never hunted doves in Georgia, or the southeast.

If you have, it won't take you long to run into a dove hunter, especially if he's from south Georgia, who's complaining about the season opening too soon, when the weather's too hot, the insects are too hungry, the snakes too big, and the doves too little.

Next you'll hear him raising Cain with the Game and Fish Commission for not setting a sensible season. Next he'll be told that the dove is a migratory bird who is under control of the federal government, which won't allow Georgia to set a sensible season that will suit both north and south Georgia. By this time you'll hear that dove hunting regulations can't be set to please Georgians without considering the effects on hunters in other states, and have some questions raised about whether Georgians and the rest of the nation's dove shooters are already taking more than a wise number of birds under the existing regulations.

By this time, you may have begun to be a little bit confused. Unfortunately, some sportsmen who only have a few of the facts available to them do a great deal of unjustified complaining about the dove regulations and what is being done about them.



More than 4,000 doves a year are being banded in Georgia as a part of a new \$25,000 study of possible zoned dove seasons. Game biologist Jim Scharnagel of Gainesville is in charge of the project.

To make a long story short, (See "The Dove Season is too Early-Late," December, 1966, *Georgia Game & Fish*) doves reach their peak population in huntable flocks in North Georgia in September when most grain crops mature and are harvested, so hunting is best at this time, declining in October as many birds migrate out of the northern part of the State with advancing cold weather and food shortages.

Doves are also plentiful in South Georgia at this time, but are generally not as large as they are later in October, when hunting weather and comfort conditions are better. Later in December and January, even more doves migrate in from the eastern seaboard and mid-western states, making hunting even better, in south Georgia.

However, under current federal regulations, both sections of Georgia must be opened for hunting at the same time, if hunters are to enjoy their full 70 half-days of dove hunting allowed in a two or three period split season between September 1 and January 15, the current framework which the federal government gives Georgia to set its season dates.

The U. S. Fish and Wildlife Service opposes giving each section of Georgia a separate 70 half-day season of its own, with separate opening and closing dates, on the grounds that this would drastically increase hunting pressure on the birds. This supposedly could occur if the season was open for more than 70 to 140 half-days, if the two season dates did not overlap, and could also result in hunters migrating to the section of the state that was open at the time with the best hunting, increasing and perhaps doubling hunting pressure and the numbers of birds killed by hunters. If this occurred, the breeding population of doves needed every spring to maintain the same population the following September all over the eastern United States could possibly be seriously reduced.

In order to collect biological and statistical data to prove whether these contentions are valid, the State Game and Fish Commission began a dove research project with matching federal aid funds last year and this season to reach some factual answers. Undertaken in cooperation with the other southeastern states, this project is de-

signed to determine what effect changes in the dove regulations have on dove populations. One method for this end is to measure dove populations over a four year period using band returns, wing collections, and mail surveys of hunters.

During the first two years of the study, the federal government has agreed to make no changes in the current quota of half-day shooting, the bag limit, or the baiting regulations. During the second two years, some significant change will be made in the federal regulations, allowing data to be collected and measurably compared with the first two years of the study under the old regulations, hopefully giving some indication of the wisdom of continuing the change or not.

Exactly what change will be made in the regulations in the 1970-71 season hasn't been decided by the federal government, but it probably will be either more or less half-days of shooting, or a larger or smaller bag limit. Since these are all controversial issues in Georgia, the results of the study will be eagerly awaited by Georgia dove hunters and conservationists alike.

Still unanswered would be the age-old arguments for zoning, a proposal which only Georgia presently seems to be interested in. Now, thanks to Georgia Senator Richard Russell, a special study devoted solely to the dove zoning question for Georgia alone has been set up, using a straight non-matching federal grant of \$25,000 obtained by Senator Russell as a part of a new quarter of a million dollar federal study of non-waterfowl migratory bird species at the request of the southeastern states, all members of the Southeastern Association of Game and Fish Commissioners.

Two Georgians were instrumental in the Association's efforts to secure approval of Congress and the U. S. Fish and Wildlife Service for the new studies: Leonard Foote, southeastern field representative of the Wildlife Management Institute, and Jack Crockford, assistant director of the Georgia Game and Fish Commission.

The new zoning study will be headed up by Jim Scharnagel, the State Game and Fish Commission's leading dove biologist, now stationed at Gainesville. Scharnagel's study hopefully will be extended for a period of three years. It is designed to collect data to show what the potential effect of zoning without loss of days would have on doves in Georgia without actually zoning the state to find out . . . a difficult task, but not impossible.

Biologists working on the project will utilize information obtained from the dove project they are already working on, but will be able to considerably beef up their efforts in dove banding,



Scharnagel releases a bird caught in a trap set by Game and Fish Commission personnel, after banding it. Returns of the bands by hunters will help indicate how many doves are present in north or south Georgia during the two split seasons.



Most arguments for a zoned dove season revolve around the two sections of the state above and below the fall line, the point where most Georgia rivers drop rapidly as they leave the Piedmont section and enter the coastal plain area.

wing collections, and survey work, especially by increasing telephone surveys of hunters and field bag checks of hunters by wildlife rangers, along with roadside counts of doves, to compare results and insure accurate information.

The study will have two major features: to determine exactly when peak huntable flocking populations of doves occur both above and below the fall line in Georgia, and how much hunter movement there now is between the two areas of the State. Hopefully, some estimate could then be made of how much hunter migration would occur if the state actually was zoned.

The study represents a definite step forward in what has been a long and tiresome argument between Georgia and the federal government, frequently generating a lot of heat and not much light, especially in the way of scientific facts to prove or disprove the contentions of either side.

As a matter of fact, after all the dust has settled and the facts are in, it's not impossible to imagine that Georgians might decide they are better off with the season that they have now, imperfect as it may be. Surveys to date by game biologist Bob Croft using a mailed questionnaire show that south Georgians already enjoy fabulous dove shooting, especially in comparison to that of their northern brethren. For in-

stance, in last year's early season, South Georgia only had about half the state's dove shooters, yet this group shot twice as many doves as the other half in north Georgia, bagging 67 per cent of the birds! In the late season, the percentage of hunters dropped sharply in north Georgia from 50 per cent of the licensed dove shooters to a little more than 25 per cent, with a decline in the bag from 33 per cent in the early season to only 21 per cent in the late season.

On the other hand, south Georgia hunters dropped only slightly in the second season, and took a greater percentage of the doves bagged, increasing from 67 per cent in the early season to a whopping 79 per cent of the late season take! On a state wide basis, 59 per cent of the doves were killed during the first season, with 41 per cent in the second. The estimated total kill was 3,440,000 birds, more than any other state in the eastern United States.

The main reason that dove shooters are twice as successful in south Georgia than in North Georgia is because the two main waves of migrating doves entering Georgia from more than 20 northern states cross paths in South Georgia, constantly replenishing the native population of doves, while most of North Georgia's early and late seasons apparently are primarily native birds.

If south Georgia did have a separate zoned season of its own opening in October, it is still a subject of argument whether any more doves would be taken, since mortality in juvenile birds in September would probably equal what little production could be expected. Possibly, more doves would die of natural causes during the time lapse than would be saved for hunting as mature birds by waiting until most doves stopped nesting.

As a matter of fact, studies in Tennessee showed that only three per cent of birds still secreting pigeon milk were bagged by hunters, indicating that birds that are still nesting ordinarily do not join a feeding flock on a harvested field, and are seldom shot, except at water-holes. By the same token, young birds of the year seldom go to fields until they reach about 35 to 40 days in age, regardless of when the season opens or closes.

Undeniably, hunting in October would be more pleasant for south Georgia hunters than hot September weather and disturbing pictures in the newspaper of six-foot rattlesnakes! And the doves bagged would be bigger and fatter. More might be shot even though fewer doves are still alive, because they might be better fed late on early winter rains, etc., and planted at that time. Food is not as plentiful for

the birds as it is in September, which scatters the birds out over a larger number of fields, making hunting more difficult.

But on top of these standard reasons for a zoned season, a much more substantial possible future reason for zoning has been brought out by some Georgia game biologists. Their theory is that as the number of dove hunters constantly increases, the number of doves will either remain about the same to a certain point or begin to decrease, unless dove habitat drastically increases as a result of man's use. If the dove population remains the same or decreases while the number of hunters steadily increases, some change must be made to preserve the dove breeding population: either by decreasing the number of hunting days, reducing the shooting hours, reducing the bag limit, or zoning to reduce hunting pressure by the selection of dates.

Exactly how much shooting doves can stand is a matter of considerable argument. Some noted authorities say doves can't be hurt by hunting pressure. Others say they can, and are being hurt right now. Actually, information isn't really available now to show if doves are increasing or decreasing, and whether or not hunting is responsible for this. Call counts of cooing males in the Spring made by biologists and rangers over the past years indicate that the Georgia population may be declining.

In any case, the dove season has been increased in the last 10 years from 40 half-days of shooting to 70 half-days, and the bag limit has climbed from 8 birds a day to 12, and baiting regulations have been liberalized, yet the dove population probably has not increased at the same time. It may have decreased as a result of overhunting. More hunters in the future will compound the problem.

Anyway, zoning could be used to reduce the dove kill if necessary, while increasing the quality, but not quantity, of doves in the bag, at the same time that hunter objections to an early south Georgia season could be eliminated.

For the purpose of argument, suppose North Georgia were zoned and given a split season of 40 days from Sept. 10—Oct. 20 and 25 days from Dec. 7—Dec. 31. Then give south Georgia 25 days from Oct. 1—Oct. 25 and 40 days from Dec. 7—Jan. 15. Thus each section would get an equal number of 65 days at the times and season length when hunting is usually best there, in the opinion of hunters. This would result in the dove season being opened for 85 half days somewhere in the state, rather than 70 as now or up to 140 with two non-overlapping zoned seasons.

Current studies by the Commission show that less than six per cent of Geor-



Are too many doves being shot each year already? Could the season be longer or the bag limit higher? Game biologists hope to determine the answers to these and other important questions about doves through studies now underway.

gia dove hunters apparently now migrate to the other section of the state to hunt doves. This figure could be expected to increase some if North Georgia alone opened first but probably would drop, some biologists feel, during the second season when South Georgia alone was open. This is because many native game seasons would still be open closer at home for North Georgia sportsmen, and because of limited funds after the holiday season for long trips. In addition contacts with landowners and getting permission to hunt are difficult problems.

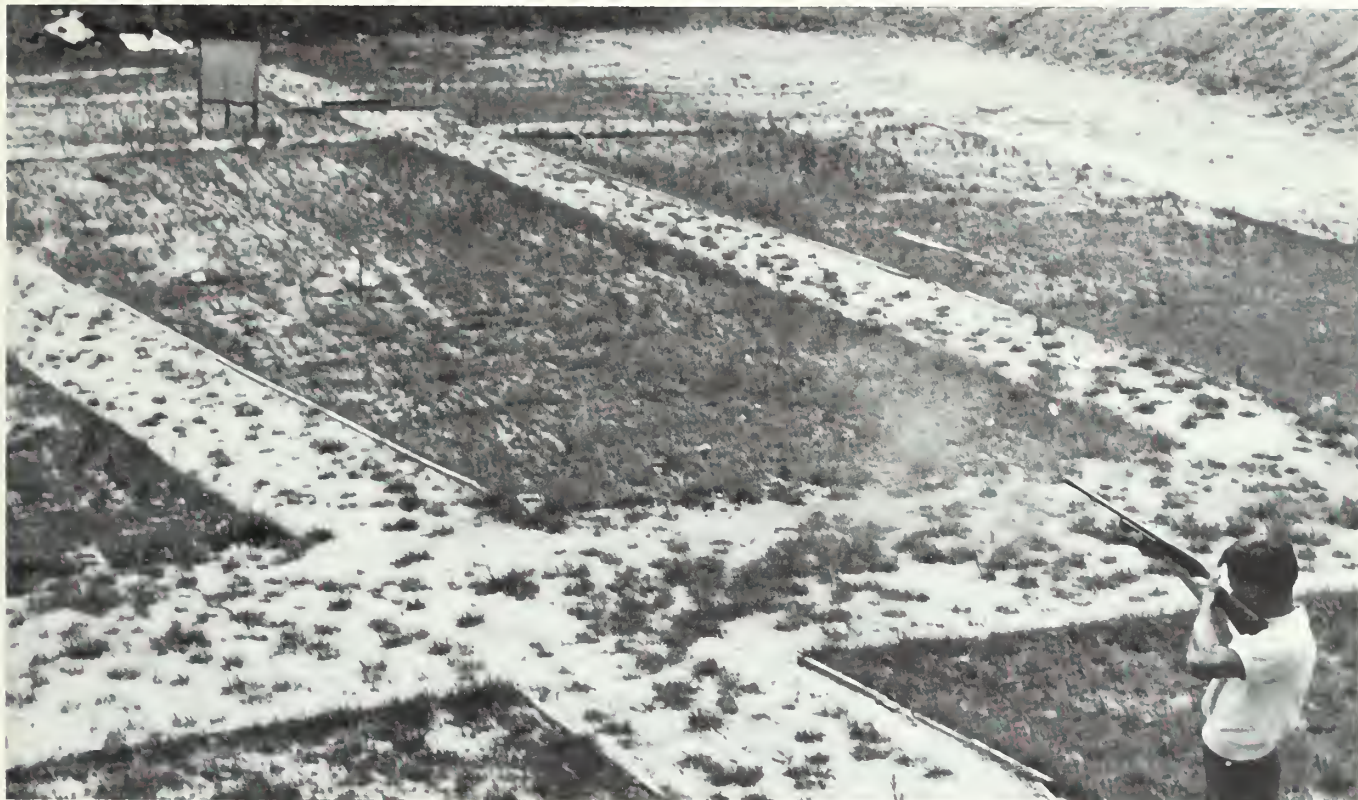
If you think that you have just read the longest, most detailed article on dove management that you could hope for, you're wrong! This is just a sample scratch of the surface into the complexities of a real biological riddle-dilemma. But now that you see that it's not really as simple as you thought, why not just try to take out your legal limit on the doves this season and wait on the biologists to come up with the answers! After all, that's what you're paying them for. ✕

BLUNDERING BLUNDERBUSS

By Dean Wohlgemuth

Pattern Your Shotgun for Better Shooting...

Wondering what happens to the shot 40 yards from the muzzle? The best way to find out is to shoot at a large piece of paper, then check to find what kind of pattern you're getting. Be sure you have a safe place to shoot, such as DeKalb County's Recreation Department public range.



■ "Why should I pattern my shotgun? I've had it for years, and I have no trouble hitting with it. I get my share of game."

If you can say that, perhaps you'll just be wasting your time reading this article. But if you have just acquired a scattergun, and particularly if you're not connecting often enough, or getting wounded game instead of clean kills, this is for you.

Have you tried patterning your shotgun? That just might answer some questions. Properly done, patterning can show you just what that shot does when it gets out there 30 yards. It can mean a lot of difference in the weight of your game bag at the end of a day's shooting.

Basically, what patterning does is to show you at what range your gun is most effective. You might learn that you're trying to reach too far with your favorite blunderbuss. It might even show you that you're simply too fast on the trigger—that your shot isn't spreading out enough at the ranges you're shooting.

You might discover that the choke of your gun isn't quite what you thought it was. This may not hurt you too badly

if you are only aware of it and thus you can concentrate on getting your shots at the proper range.

You may also learn that your gun throws its load above the point of aim. Perhaps you've been shooting too high. Or maybe too low.

Going a step farther—and this is important, too—you might learn that No. 7½ shot is more deadly in your gun than No. 6 at 35 yards, simply because the shot size happens to pattern better in your particular gun. Or maybe, too much powder behind the shot tends to blow the pattern apart a bit, leaving a hole in the middle for the birds to fly through.

Although mass produced, there is still some individuality in every weapon. How can you really be certain what your choke is, unless you've checked it? And gun makers vary on what they call full choke—or modified, or so on.

So, with just a very few days to go before you start burning up powder at doves, how about unlimbering your gun and your trigger finger at a piece of paper.

Where to start? First get some long, thin strips of wood. Strips measuring a half by an inch are suitable. You need

a frame large enough to tack on a piece of fairly heavy paper at least 40 inches square. Larger paper wouldn't hurt, preferably four feet square.

The frame must be built so that you can stand it up, to present the paper to you as a target.

Then, measure off 40 yards and blast away at the middle of the paper with the load you use most. It pays to fire several rounds—all at different pieces of paper of course—so you can find out how much variance there is between shots with the same load and same distance. Some experts recommend firing as many as 10 or 15 shots with each load.

I must confess here and now, that while doing such things may be desirable, I believe the average gunner can find out what he needs to know without going to all the detail the experts do. Two or three shots with each load should tell you a lot about your gun. If they all appear to give you about the same shot distribution, you're on the right track.

Next, draw a 30-inch circle on the paper that will include the greatest number of shot. To find out exactly what choke you're shooting, you'll have

to count the number of holes in the circle, and figure the percentage that were within it.

An accompanying chart shows you how much shot should be in the various loads.

But what's as important as anything, and there's no slide rule to prove anything, is just looking at the paper. If, in your own judgment there is good, even distribution of shot with no holes for game to get through, you've got a good pattern.

At 40 yards, a full choke gun should pattern about 70 per cent of its load into the 30-inch circle. A modified should have about 60 per cent, and an improved cylinder bore around 45 per cent. A true cylinder bore will have some 35-40 per cent.

Now, if yours is a modified, cut down the range to perhaps 30, or maybe 25 yards. Or both. Check them out, to see just where you get a good, tight pattern. This also applies to all other chokes, even the full choke. That "full" may pattern better at a shorter distance than you thought. Since most shots are at shorter range than 40 yards it pays to check your choke at the range you most often shoot. If you're getting a 65-70 per cent pattern at your range, your gun is choked right for you.

Incidentally, that old bromide about testing the choke with a dime in a 12 gauge muzzle may tell you if the end of the barrel has been sawed off, but it's actually not a good choke gauge. It might even slip through a muzzle that patterns full. And so what if it does show you the muzzle has been cut? It doesn't show what choke you now have, or how the gun will pattern. Don't rely on the dime. You can't buy a good pattern that cheaply.

Already, you've found out what choke you have, and at what distance your gun patterns best with your favorite load—which is really what you need to know. And chances are, by now you've noticed that if you shot at the center of the paper, quite a lot of shot seem to be going over the top of the paper. To get a good, solid hit in the middle of the paper, you may have to shoot toward the bottom of the paper.

If you're not sure about this, go ahead and mark the circle on two pieces of paper before shooting. Put an X in the center of one circle, and on the other, put an X at the bottom of the circle. Then shoot at the X on each. Which fills the circle best?

If your gun fills the circle best shooting at the bottom, it may be that your gun was made for trap shooting, not for field shooting. In the field, you may find your gun shoots a little too high. It may even be that the particular way you shoulder a gun or the way the stock is shaped, a regular field gun may



Building a frame to mount the paper on is a simple matter. Small strips of woods are sufficient. There should be at least one brace on the frame, to hold it upright, presenting an easy target. The paper is tacked to the frame.



One shot per piece of paper is all you get. Keith Wohlgenuth checks to see how well his shot filled the paper.



Mark each paper with the size of shot, amount of powder and the distance. Then, with the paper on a large, smooth surface, trace a 30-inch circle. A pencil tied to a piece of string 15 inches long, with a thumbtack to hold the other end of the string, works fine. Make sure the circle includes as many of the holes as possible. Now, you'll need to count the holes to determine what percentage of shot you're getting in the circle.

shoot a little too high or too low. You'll have to learn to compensate.

You have already learned a great deal about your gun, probably a lot that you didn't know. But there is still an eye-opening lesson to be learned.

Just because your gun behaves the way it is supposed to with 7½ shot and medium loads, there's no reason for you to be confident that it will do the same with No. 4 heavy loads, or No. 8 light loads. Try all the various shot sizes you expect to use, at various ranges, and see how they pattern out.

And if you have a gun equipped with a variable choke device, then you really need to spend some time on the patterning range. It'll take a lot more shooting, because you have to do all I've already said, for each of the various chokes. But it will be time and money well spent.

So, after doing all this, you discover that Ol' Faithful was actually performing as advertised, all the time. Should you be mad at me because I told you to use up all that good ammo that could have been used on game? I don't think so. You'll be surprised how much more confidence you'll have in your scatter-gun. From now on, you can't blame misses on the gun. You'll know that it's you who's making the blunderbuss blunder! ➤

Number or shot per weight of load in shot shells:

| Size of shot | ⅞ oz. | 1 oz. | 1 ⅛ oz. | 1 ¼ oz. |
|--------------|-------|-------|---------|---------|
| No. 2 | 77 | 88 | 99 | 110 |
| No. 4 | 119 | 136 | 153 | 170 |
| No. 6 | 195 | 223 | 251 | 279 |
| No. 7 | 262 | 299 | 336 | 374 |
| No. 7½ | 302 | 345 | 388 | 431 |
| No. 8 | 358 | 409 | 460 | 514 |
| No. 9 | 512 | 585 | 658 | 731 |

Formula: If you're shooting a load of ⅞ of an ounce of No. 6 shot (195 pellets in this load), and at 40 yards your 30-inch circle includes 125 shot, divide 125 by 195;

$$\begin{array}{r} 125 \\ 195 \overline{) 125.00} \\ \underline{117 } \\ 8 \\ \underline{78 } \\ 20 \end{array}$$

Thus you're shooting a pattern of slightly better than 64%. This figures out to be an improved-modified choke, or between full and modified. Full should pattern 70 to 80 per cent, modified should be 55 to 60 per cent, improved cylinder, 45 per cent, and true cylinder bore, 35 to 40 percent. Another "in-between" choke would be quarter choke, about 50 per cent, fitting in between modified and improved cylinder bore.

A World Record

Georgia Striped Bass Tops Freshwater Mark

By Dean Wohlgemuth



Kelly A. Ward, left, of Dublin, holds his new world record 63-pound striped bass, while Game and Fish Commission Wildlife Ranger J. D. Hogan of Laurens County looks the monster in the mouth.

■ Georgia has added a third entry to the world's record fish catches, a 63-pound striped bass taken in the Oconee River near Dublin.

Kelly A. Ward, who for the last 20 years has been depleting the numbers of the big sea-going fish in this stream, is the man who tallied the whopper.

The previous world record for a striped bass caught in freshwater was a 55-pounder taken by race driver Tiny Lund out of the Santee-Cooper lakes in South Carolina.

Ward, of Rt. 5, Dublin, battled the

fish 40 minutes before it finally died at the end of the struggle and was pulled in. He used the same battered saltwater Penn No. 109 reel and searred saltwater trolling rod that has landed him quite an impressive number of stripers over the 40-pound mark. His next largest catch was a 50-pounder taken about seven years ago. Had that fish been entered at the time, it might possibly have been a world record.

The record for a saltwater-caught striper is 73 pounds. Ward's fish measured 43½ inches in length, was 30½

inches around the girth, and its tail was 13 inches broad, even without being extended, reported Wildlife Ranger J. D. Hogan of Laurens County.

Ward, a veteran of the Normandy Invasion of World War II, landed his prize on 25-pound-test monofilament.

The fish will be entered in national magazine contests to be authenticated as a world record. In the meantime, Ward presented the fish to the Game and Fish Commission to be mounted for use in exhibits. >



1. Dwarfed by the twisting beauty of a Suwannee cypress tree, two fishermen languidly enjoy a Suwannee fishing trip.
2. The Suwannee River produces an amazing number of fish. Here, even an inexperienced angler can catch a lot of fish.
3. Monsters lurk in the Suwannee! This ten pound bowfish speaks for itself.
4. Scooping a thrashing fish from tea-colored Suwannee water can happen with regularity during the spring and fall seasons.



HIDDEN FAME of a FAMOUS RIVER

By Jim Tyler

■ The truth of the saying "Beauty is only skin deep" depends on the beholder and what he is beholding. Take a non-fisherman and place him on the bank of the lava flowing Suwannee River and he couldn't help but see and feel the rare beauty of the river cutting its own delightful narrow world through Georgia flatland forest. "Here is a beauty," he would mumble. Place a fisherman on the same spot on the stream bank and he too would be sure of the beauty, but he would be wondering if that beauty was skin deep. "Here is a beauty," he would mumble, and quickly add, "wonder how the fishing is."

It's GOOD!

Seven of us started a Suwannee float fish trip about 9 a.m. on an April sun-warm morning. We put four boats (two to a boat, one left over) in where the Suwannee flows under US Highway 441 at Fargo, Ga. Once on the river, we entered Suwannee Land. Floating with the current, the tea colored water carried us quietly over sandy bottom and between and amongst gigantic water swollen cypress trunks. At low water the swollen footed cypresses ride high in the water, mostly exposed. Some of the bigger ones are over 10 feet across at the water level. Casting into the pools created behind these giants or snaking a spoon into a quietly moving pool snuggled against the river bank and, soon, wham!—a sample of Suwannee wealth would be raising fits with a lure.

"The Suwanec produces an amazing amount of fish," says Georgia Game and Fish Department fish biologist C. B. O'Neal. "And if a person wants to catch fish, this is the river. Here, even an inexperienced angler catches a lot of fish. Good sized fish. Many of them will probably be bowfin, and you couldn't ask for a better fighting fish." Sprinkle the catch with jackfish (a pike fish also called a chain pickerel) and warmouth and flier (both sunfishes) and oftentimes the inexperienced fisherman will end a day with a respectable stringer of popular game fish. He will surely experience the excitement of battling the lure-twisting bowfin.

A fisherman in the know can have a ball with jackfish, sunfish, and occasionally a largemouth bass. And, although he may curse the occasional bowfin he hooks, he couldn't help but respect the fight of the creatures. One of our group landed an eight pounder with a fly rod and reel outfit. Another hoisted a ten pounder into the boat I was fishing from. With awe, we watched the monster do his best to beat a hole in the bottom of the boat.

We fished until noon and then beached on a white sand bank for lunch. We cleaned and cooked a morning catch of jackfish that more than filled everybody. During the morning we had also taken a few warmouth and fliers, and one bream. Everybody had his turn with bowfin, the two big ones being the highlights of the trip. After gorging ourselves on tasty deep-fried jacks, we "piddle" fished awhile with little success, and then boated back upstream to load our boats.

We were at the river at the best time of the year, usually the early spring, March or April, when the water level is low. Another good season usually runs from June through September when the spring rains have emptied from the river.

From its birthplace in the Okefenokee Swamp, the river meanders for some 30 odd Georgia miles before it crosses the state line and enters Florida. There are a few other places along the river to put a light boat in, but the place where we put in is easily accessible and gives you a run upstream or downstream. Take your pick. No launching ramps have been constructed yet on the Suwannee, but one is planned.

Talking to Barney Cone, a native of the area, and a biological technician for the U. S. Fish and Wildlife Service who works in the Okefenokee Swamp, Barney said the droughts of the mid thirties and fifties changed Suwannee fishing considerably. Before the 1954 drought, which reduced the river to a series of standing pools, largemouth bass fishing was great, and you could always fill


a boat full of jackfish with absolutely no trouble. And previous to the 1934 drought, he said many redbreasts were taken.

C. B. says there are still a few, a very few, redbreasts taken in the Georgia Suwannee although, without explanation, in Florida the Suwannee gives up a considerable number of them. To see if there is some natural barrier that prevents redbreasts from flourishing in Georgia's Suwannee, or if a shot in the arm will boost the redbreast population, he hopes to stock about 200,000 fingerling redbreast this fall when the river is high and running out of its banks. He wants to plant the fish at this high water time to cut down the possibility of the many fish now in the river from making a hasty meal of the little fish. And, he added, this autumn planting will give the small fish a chance to grow a little larger.

In October, 1966, C. B. and fish biologist Herb Wyatt made a population study on a two acre slough area of the Suwannee. These slough areas jutting off and connected to the river are common along the upper reaches of the river, but below the bridge on U. S. Highway 441, they become a rarity. Anyway, out of this 2 surface acre area, they took 3582 fish weighing 1608 pounds. This, of course, said C. B., is not typical for the whole river, but it does show the river's tremendous productivity. The main fish taken was the bowfin—742 of them weighing 1377 pounds! But 121 pounds of the fish were of the popular eating type—14 jackfish weighing 13 pounds, 3 largemouth bass weighing 2 pounds, 9 crappie weighing 6 pounds, 32 speckled catfish weighing 48 pounds, 33 bullheads weighing 7 pounds, 263 warmouth weighing 12 pounds, and 142 fliers weighing 16 pounds.

Other fish taken in the slough included redbfin pike, spotted gar, dollar sunfish, bluegill, pirate perch, blue-spotted sunfish, banded sunfish, gambusia, star-head topminnows, darters, madtoms, spotted suckers, and chub chuckers. One big bunch of fish!

Looking at the picture through a biologist's eyes, namely C. B.'s, there appears to be a great many of the bigger "fish that eat fish," and not enough of the smaller "fish that are eaten." C. B. believes the river's tremendous population of crayfish provides a great portion of the bigger fish's diet. The fish are eating, that is apparent. They are all healthy and fat.

No matter. The Suwannee is a big healthy fish raiser and the fish doctors will look after her. So next time you hear the familiar Suwannee tune or gaze upon the peaceful waters of Suwannee land, make a date to "hook up" with its concealed beauty. 

MULTIPLICATION

THAT'S THE NAME OF THE GAME

By Dean Wohlgemuth



■ Five more management areas have been added to the list for deer hunts this year, as the State Game and Fish Commission's annual hunting program continues to get better and better.

These new areas were stocked five years ago, and since each have good deer populations, the gates will be thrown open to the public for their use.

In addition to the new counties open this year for the first time for open county deer hunts, the picture is brighter than ever for Georgia deer hunters, with more quality hunting available.

Federal aid was used in stocking the managed areas, and because of this, federal regulations requiring a waiting period of five years before opening them to hunting must be observed. It would not be feasible to open them sooner anyway, since it takes that long for a herd to increase to huntable size, even in these highly managed areas.

Areas which will be open to deer hunters for the first time this year are Swallow Creek and Coleman River in north Georgia, Bullard Creek and Waycross State Forest in southeast Georgia, and Oaky Woods in middle Georgia. All five will be open for the Thanksgiving week hunts, Nov. 20 through 25.

The other areas, normally open at that time, will again hold hunts on those same dates. They are Blue Ridge, Cedar Creek, Chattahoochee, Chestatee, Clark Hill, John's Mountain, Lake Burton, Lake Russell, Piedmont Experiment Station and Warwoman management areas.

Allatoona area will again be open for three days, Nov. 20 through 22. This hunt will be limited to 400 hunters. All these hunts are for bucks only, and rifles or slug-loaded shotguns, 20 gauge or above, may be used.

Also, an equally good variety of hunts is scheduled for the coming season. Archery hunts are scheduled for five areas. Archers may hunt Oct. 23-28 at Clark Hill; Oct. 30 through Nov. 4 at John's Mountain and Lake Russell areas; Nov. 6 through 11 at Blue Ridge, and Nov. 27 through Dec. 9 at Suwanoochee.

Hunts with primitive weapons—including long bows, cross bows and muzzle loading firearms—are slated for Oct. 16 through 21 at Warwoman, Oct. 23 through 28 at Piedmont Experiment Station, Nov. 22 through 25 at Chickasawhatchee, and Dec. 27-30 at Cedar Creek.

Either sex hunts will be held Nov. 27 at Chestatee and Lake Russell, and antlerless-only hunts will be Jan. 1, 1968, at Clark Hill and Cedar Creek. The number of hunters in the either sex and antlerless hunts will be limited, and drawings will be held to determine the lucky hunters. The limit was set at 500 for each of these hunts except the Clark Hill antlerless hunt,

where 300 will be permitted.

Another limited hunt, a repeat feature, will be three hunts of two days each at Chickasawhatchee. Also by drawing, 300 hunters will be allowed to participate for each two-day hunt. Only buck deer may be taken.

All of these limited hunts—including the Allatoona buck hunt, the either sex hunts on Chestatee and Russell, the antlerless hunts, on Clark Hill and Cedar Creek, and the Chickasawhatchee buck hunt—will be handled by drawings. Hunters wanting to participate must mail their application, along with a check for \$5 for each person applying. Applications must be mailed between Nov. 6 and Nov. 11. Drawings for all hunts will be Nov. 15. Hunters whose names have been drawn will be notified and their \$5 fee will not be returned, even if they do not show up for the hunt.

The \$5 fee will be returned to those whose names aren't drawn. No more than five persons may apply in one letter, and the fee must be enclosed for each person listed on the application. Hunters are further cautioned that if a person's name appears on one application, he may not apply again. If he does, all names on the second application with his name on it will be disqualified.

In general for all hunts, hunters must have appropriate current hunting licenses which must be exchanged for permits at the checking stations at the start of the hunt. Permits are available only at checking stations, and may not be picked up in advance elsewhere.

Hunters must check out each time they leave the area. However, a hunter may return at a later time during the hunt, and reclaim his permit. So if, for example, he hunts Monday and has to return home Tuesday, he must check out. Then, if he sees he can return Thursday, he may reclaim his permit. But when he leaves again, he must once more check out. If he fails to check out, he will lose his hunting license for the remainder of the year, and be barred from future managed hunts. One of the big reasons for this is to assist the Commission in assuring that no hunter is left lost and possibly injured on the managed area.

On archery hunts, hunters must have a bow of at least 40 pounds draw weight, with broadheads at least $\frac{7}{8}$ inches wide. Archers must have a valid archery license.

Primitive weapons must be muzzle loaders only, loaded with a single ball, including shotguns. Rifles must be .40 caliber or larger.

On the Suwanoochee area, no fees will be charged, but hunters must obtain a free permit at the checking station, and must check out upon leaving.



More hunters in Georgia to bag a buck is on a managed hunt of the State Game and Fish Commission.



ing. On one compartment of the Suwanoochee area, hunters may use only shotguns loaded with buckshot, while on the other, only rifles, or shotguns with slugs, may be used.

Hunters who want to try the two new mountain areas, Swallow Creek and Coleman River, had better make up their minds beforehand that they like rugged terrain. Access to these areas leaves something to be desired—there's not too much use trying to go in without a four-wheel-drive vehicle. "If you're not willing to face the rugged conditions of these areas," said Hubert Handy, coordinator of game management for the Commission, "you might as well stay home." The Swallow Creek area will be open for deer hunting on the same permit as the older Lake Burton area, which adjoins Swallow Creek. Hunters may use the same permit on both areas.

Access is better at the Oaky Woods area, but roads are still under development. This area offers some fine bottom land hardwood hunting country, along the river.

While Waycross State Forest has a good herd of deer, hunting will be somewhat difficult because of chest-high palmettos. Hunters likely will experience best success by using tree stands, or hunting near food plots, fire breaks and similar openings, where deer are extensively using these areas.

The Bullard Creek area is on the flood plain of a river bottom that is full of hardwoods. Pines, however, have been planted in recent years. The area has some big deer with good racks.

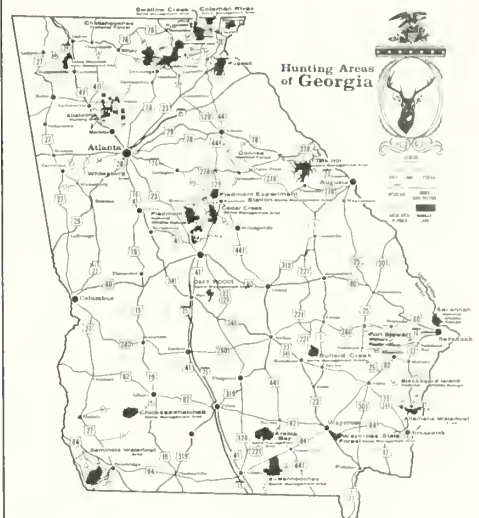
In all these five new areas, hunters may find it takes time to become oriented to the strange country, going in cold. However, careful hunting in these areas may produce good results before the week's hunt is over.

Those who want to try new land this year, however, do have some new choices, and may find—especially in all the southern management areas—that there are less hunters than on some of the old favorites.

Actually, since several new counties are opened for hunting this year, some of the pressure may be relieved from some of the more heavily hunted managed areas.

Deer populations are holding their own in the managed areas, with no decrease reported in any of them. This is despite the fact that this year has been an especially bad one for losses of deer to wild and free-running dogs. The food supply has increased, and this is a highly important factor in upholding the numbers of deer.

So a good supply of healthy deer is on tap for Georgia deer hunters when they go out to partake of their favorite sport this season, in the managed hunts.



Game Management areas in Georgia

(Hunts marked "QH" with a number are limited quota hunts. Number of hunters allowed is indicated. Hunters will be determined by drawings in advance of the hunt.)

MANAGED DEER HUNTS

PRIMITIVE WEAPONS (Either Sex)

| Dates | Areas |
|------------|-----------------------|
| Oct. 16-21 | Warwoman |
| Oct. 23-28 | Piedmont Exp. Station |
| Nov. 22-25 | Chickasawhatchee |
| Dec. 27-30 | Cedar Creek |

ARCHERY (Either Sex)

| Dates | Areas |
|----------------|--------------------------|
| Oct. 23-28 | Clark Hill |
| Oct. 30-Nov. 4 | John's Mt., Lake Russell |
| Nov. 6-11 | Blue Ridge |
| Nov. 27-Dec. 9 | Suwanoochee |

BUCK ONLY

| Dates | Areas |
|------------|--|
| In season | Altamaha and Lake Seminole |
| Nov. 20-22 | Allatoona (QH 300) |
| Nov. 20-25 | Blue Ridge, Bullard Creek, Cedar Creek, Clark Hill, Capital Shoals, Chocomahee, Coleman River, John's Mt., Lake Burton, Oaky Woods, Piedmont Exp. Station, Russell, Swallow Creek, Warwoman. |
| Dec. 7-9 | Chickasawhatchee (QH 300 each 2 days) |
| Dec. 11-16 | Waycross State Forest |
| Dec. 18-30 | Suwanoochee (permit required on Dec. 18-20) |

EITHER SEX

| Dates | Areas |
|---------|--|
| Nov. 27 | Chocomahee (QH 500), Lake Russell (QH 500) |

ANTLERLESS ONLY

| Dates | Areas |
|--------------|---|
| Jan. 1, 1968 | Cedar Creek (QH 500), Clark Hill (QH 300) |

FAIR SAFARI

By Jim Tyler

■ Since 1644 agricultural folks in the United States have got together and organized fairs. Of course the first ones were devoted almost exclusively to exhibition of livestock and agricultural products; and some trading took place. But as the social significance of these gatherings grew, and more and more entertainment features were tacked on and carried under the banner of "a fair," city folks joined in the fun.

Nowadays you can find most anything at a fair... crazy, jolting carnival rides, girly shows, buy a funny hat, have a hawker guess your wife's weight, look at some prime swine, see a miniature "old McDonald's farm" (Ei-Ei-O), marvel at an unbelievably hefty bull.

And I imagine, even back in the time when fairs took place that are mentioned in the *Old Testament*, somebody would lug in an outstanding specimen of a wild animal he had captured to show off to his neighbors. Say a cobra, for example. And folks would gather to "oooooh" and "aaah" their fascination.

Well, the same holds true today. The Game and Fish Commission exhibits wild animals at many fairs throughout the state. People gather and "oooooh" and "aaah". One of the main attractions are the live snakes. People are drawn to view snakes (securely caged) as irresistibly as moths are drawn to a light at night. If an old maid could bottle-up whatever the attractive force a rattlesnake (caged) possesses, and could add a cuddly ingredient, well, her problems would be over. But a snake out of a cage is a different critter. Whether poisonous or not, the effect is just opposite; people DO scatter.

Next time at a fair, consider, how did that snake you're looking at get there.

"I'll tell you, I hate to have even a non-poisonous snake bite me," says Wildlife Ranger Arthur Abernathy. Art puts on a good portion of the wildlife exhibits, and had spent most of the day snake hunting near the town of Bainbridge. After driving over several miles of south Georgia sandy roads, he had come upon a bullsnake crossing the road and was putting the captured snake in a box. "See how this one tries to get loose." The snake twisted, and wiggled free from Art's right hand. His left hand still had ahold behind the snake's head. The four-foot snake coiled around his left arm. Art is discreet with nonpoisonous snakes.

And when handling poisonous snakes,

he is extremely careful, cautious, and quick. "A big diamond-back rattler is awfully hard to hold. I know how much venom a big one has," Art said.

You might think it takes some kind of kook to mess around with snakes. Art is not wild about the idea, but he is convinced it is worth the effort if Georgians enjoy looking at them. Each summer for the past five years he has made a safari to south Georgia to gather animals and snakes for the fairs. Sometimes he is lucky and can borrow creatures from other rangers putting on fairs in south Georgia (they, in turn, will borrow Art's animals) or from the Swamp Park at Waycross. And sometimes he catches his own.

On his trip this summer, Wildlife Ranger Gordon Wilkin of Colquitt had a six foot alligator waiting for him. With much alligator hissing, tail swatting, and snapping jaws, the gator was loaded on Art's pick-up truck and headed for the north Georgia fairs. To his south Georgia captures, Art adds snakes and animals he has captured in north Georgia.

Maybe you will see them at a fair. ☞



Top: You can tell by the look on Wildlife Ranger Arthur Abernathy's face that handling a snake is serious business. A large rattler, like this one, can hold a good sized slug of venom.

Bottom: Art has a problem. How do you get a six foot alligator into a three foot cage? Much to the alligator's dislike, another three foot cage was shuffled over him from the tip of his tail into a position adjoining the first cage.

The Georgia Sportsmen's Federation was organized in 1955 by a group of dedicated sportsmen who decided to band together their various local sportsmen's clubs to put forth a united effort in the field of conservation. Today it is the largest single conservation group in the state of Georgia.



Band Together for Conservation

By James Adams

President, Georgia's Sportsmen's Federation

■ The Federation is made up of some sixty local wildlife, boating, and archery clubs scattered throughout the State. It has 5,000 individual members. The Federation is affiliated with the National Wildlife Federation, which has some 1¼ million members, and is the largest conservation organization in the world.

The activities of the Federation are directed by its president, its ten congressional district vice presidents and

its board of directors, all of whom are elected on an annual basis by the general membership of the Federation. All of the Federation's officers serve without pay, except for one staff employee who is paid a nominal salary to handle correspondence, public relations, and the state newsletter, which is sent to all club officers.

The Federation's activities have been many and varied during its 12 years of existence. During these years it has

worked untiringly to strengthen Georgia's water pollution laws, and was influential in obtaining a recent increase in the hunting and fishing license fees so that the Game and Fish Department could obtain a larger budget to carry out its many programs.

The Federation and its officers maintain a close working relationship with the Game and Fish Commission and its personnel, the Georgia Water Quality

Control Board, and the various other state and federal conservation agencies. This is done in an effort to keep the sportsmen of Georgia constantly in touch with the programs of these agencies, and to help see that Georgia's natural resources are properly managed and conserved. The Federation also keeps its members in close touch with pending legislation, both on a state and federal level, so that they can inform their elected representatives of their positions on proposed legislation.

In an effort to bring about a greater public awareness of the conservation activities taking place in Georgia, the Federation has for a number of years sponsored in cooperation with the Sears-Roebuck Foundation an annual conservation achievement awards program which recognizes outstanding professional and lay conservationists who have made major contributions to the conservation of Georgia's natural resources.

Recipients of the awards are recognized each year at an awards banquet held in conjunction with the annual convention of the Federation, scheduled this year for December 2 and 3 at the Dempsey Hotel in Macon. The convention features speakers from the various conservation agencies, especially the State Game and Fish Commission, and is open to any interested sportsman to attend, regardless of club membership.

In addition to the annual convention, the Federation board of directors, including all club presidents, and interested club members, have quarterly meetings in all sections of Georgia to keep informed throughout the year on conservation issues and needs. These meetings are usually held on a Sunday morning, preceded on Saturday by a hunting or fishing trip for those who are interested, along with a fish fry. The State Game and Fish Commission is represented at each director's meeting to pass on news of Department projects and ways in which clubs can be of help to the Department.

The next meeting of the board of directors will be held at Stone Mountain Park, October 7 and 8, hosted by the Tucker DeKalb Sportsmen's Club. Representatives of clubs that are interested in affiliating with the Federation or individuals who are interested in starting a club are invited to attend any director's meeting or annual convention.

The Federation is for the first time this year sponsoring jointly with the *Game and Fish Magazine* a "Big Fish Contest" and is also working out arrangements to sponsor a "Big Deer Contest" again in cooperation with *Game and Fish Magazine*.

One of the interests of the Federation has been to bring hunter-landowner re-

lations and thereby open up additional lands for public hunting. In a unique experiment which has been going on for several years the Federation and its Clinch and Echols County affiliate sportsmen's clubs have worked with paper companies and other local land owners in their counties to make available for public hunting approximately 240,000 acres of land. The FAIR (Federation and Industry Recreation) Program has proved to be a great success and hopefully it can set the pattern for similar programs in other parts of the state. Under the present setup, a nominal fee is charged for the privilege of hunting on this property with the proceeds from these fees being used to make improvements to the habitat and to hire a game warden to patrol the area. Last year a large number of Georgia hunters from throughout the state participated in this program.

In order to create a more effective voice for the sportsmen and conservationists of Georgia, the Federation has as its goal the formation of at least one affiliate sportsmen's club in each of Georgia's 159 counties. To help reach this goal, the officers of the Federation will be happy to assist any group in organizing a club anywhere within the state. They have various materials available from the Federation that will be extremely helpful to groups wishing to form clubs. In addition, county agents, VO-AG teachers, Soil Conservation Service technicians, and Game and Fish rangers and other personnel are in a position to offer assistance to groups wishing to form local clubs.

The Federation's officers and directors are convinced that the only way the sportsmen of this state can be adequately represented is to have a large and effective statewide organization that can speak with a unified voice for the sportsmen's interest. For this reason, the time to organize is here. The increasing human population of our country and the many problems that go along with population growth make it imperative that the hunter, the fisherman, and the nature lover band together to protect and conserve for themselves and for future generations the God-given right of association with the things of His creation in the great out-of-doors. ➤



ABOUT THE AUTHOR

James L. (Jim) Adams has served as president of the Georgia Sportsman's Federation since 1966.

Jim is an ardent bird hunter who owns five bird dogs and a jeep for hunting quail, primarily in Gwinnett, Franklin, and Hart counties. He is an active deer hunter, preferring middle Georgia.

He has hunted and fished in every section of Georgia at one time or another, giving him an excellent grasp of state-wide conditions. He is also an enthusiastic boater, with a 14-foot aluminum fishing boat and an 18-foot ski boat which he uses on Lake Lanier, where he is on the Board of Governors of the Lake Lanier Sailing Club.

Jim served as awards committee chairman of the Federation for two years before becoming its president, as well as president of the Tucker-DeKalb Sportsmen's Club and president of the DeKalb Council of Sportsmen's clubs.

Since becoming president of the State Federation, Adams has taken an active role, visiting old and new sportsmen's clubs in all parts of the state, initiating new projects for the Federation, and working closely to support the wildlife conservation program of the State Game and Fish Commission.

Now 30 years old, Jim is a native Georgian, born in Atlanta. He attended Druid Hills High School, and studied for his BA and LLB degrees at Emory University before beginning the practice of general law in Atlanta.

He and his lovely wife Marilyn and their two children, Lisa, 5, and Ben, 3, live at Route 2, Stone Mountain.

Persons interested in more information on the Federation may write Jim c/o 807 Fulton Federal Building, Atlanta, Ga. 30303.



the outdoor world

Commission gets Display-on-Wheels

The Georgia Game and Fish Commission has gone mobile in the display department. A new mobile home is being equipped inside to be used for a traveling display.

The huge mobile home, 12 feet wide by 44 feet long, was presented to the Commission as a gift by C. L. Cooper of Craftmade Homes Inc., Sylvester. He presented the keys to Gov. Lester Maddox, who in turn presented them to Commission Director George T. Bagby in recent ceremonies in Sylvester.

The exhibit will be used largely to orient school children on activities of the Commission and wildlife resources around the state. However, the exhibit will be used at any place where its use can be beneficial to the Commission, such as fairs, meetings, conventions and scout groups. On occasion it possibly will be used to promote Georgia in other states.

It will take some time for completion of the project, but the display-on-wheels should be hitting the road by next summer.

Specially designed for the Game and Fish Commission's use, the mobile home is a brand new model. It has panelling throughout, and has an entrance and exit on each end, so visitors may walk through with ease.

Commission Director Bagby expressed the deep appreciation of the Commission to C. L. Cooper, Craftmade Homes Inc., to the Georgia Mobile Home Association and to Rep. Bobby W. Johnson, Warrenton, a member of Georgia Mobile Home Association, for their cooperation in making the donation possible.

—Dean Wohlgemuth

* * * *

Jaycees Sell Subscriptions

The North DeKalb Jaycees have recently completed a successful project to raise funds for their organization by selling subscriptions to the State Game and Fish Commission's monthly magazine, *Georgia Game and Fish*.

According to Don Lynch, club president, most of the organization's 46 members were active in the project, and 150 subscriptions were sold in about three weeks. The Jaycees made \$150.00 on the project which they will use for other club activities.



C. L. Cooper, second from left, of Craftmade Mobile Homes, Inc., Sylvester, presents keys to a new mobile home display for the State Game and Fish Commission, to Gov. Lester Maddox.

Also present at the ceremonies were George T. Bagby, Game and Fish Director; Mrs. Maddox and Sylvester Mayor, Thomas Lawhorne, right.



North DeKalb Jaycee president Don Lynch (l) turns over 150 subscriptions to Georgia Game and Fish Magazine sold by the club to Jim Morrison, editor of the magazine. The Jaycees made \$150 from the subscription sales in just three weeks to be used for club projects. See the story on this page.

(State Game and Fish Commission Photo)

The North DeKalb Jaycees are only one of the many organizations throughout the state which have used the sale of *Georgia Game and Fish* subscriptions to raise funds. Mr. Lynch stated that the members had little difficulty in making sales. The magazine is attractive, utilizes many color photographs, and contains numerous articles each month which are of wide interest to Georgia fishermen, hunters and sportsmen of all types.

Your club or organization can earn \$1.00 for every \$2.50 new or renewal subscription for three years to *Georgia Game & Fish Magazine* that it sells. Fifty or more subscriptions must be turned in together to the State Game

and Fish Commission at the same time.

Your club simply makes the sale, collects \$2.50, keeps \$1.00, and remits \$1.50 with each subscriber's printed name and full mailing address, including ZIP code, to the State Game and Fish Commission, 401 State Capitol, Atlanta, Georgia 30334.

All checks sent to the Commission should be made payable to the State Game and Fish Commission. Groups of less than 50 subscriptions cannot be accepted at the reduced rate.

To obtain subscription blanks and sample copies of the magazine, send your club's request to the State Game and Fish Commission in Atlanta.

—J. Hall

Editorial Continued

missions in other states with active land purchase acquisition programs now make such payments on their lands, and there is no reason this could not be done in Georgia.

By selling the timber on commercial forest land, the State could manage the timber resources for the primary benefit of wildlife, but still not deprive paper companies of their source of wood on these areas. The timber there could either be harvested by private logging companies on an individual timber sale contract, as is done on U. S. Forest Service land, or the timber rights could actually be leased to a private timber company, as is done in Vermont. In this way, the company would be protected from increasing local property taxes, game could be managed extensively, and proceeds from the timber sales would still flow back into the local government in place of taxes. At the same time, the company would have a long-term source of wood guaranteed to them.

In the long run, it is better for hunters for land to be owned by the State and opened to the public for hunting and fishing than to be owned by private industry and closed to the public, which is a constant threat with companies. On many thousand of acres of creek and river bottom hardwood sections of low timber value, the economic value of recreational hunting activities exceeds the commercial timber value. Such areas are high producers of wildlife, especially deer, turkeys, squirrel, wood ducks, and raccoons.

For instance, Commission studies show that each deer bagged by Georgia hunters puts more than \$400 into the economy of the State through expenditures by hunters on gasoline, food, lodging, equipment, etc. Since more than 25,000 deer were bagged by Georgians last year, deer hunting alone in such areas was worth more than 10 million dollars to Georgia's economy. All Georgia hunting is worth more than 23 million dollars a year, which is a sizeable industry for Georgia that could be greatly expanded, if land is available.

An important consideration is that land owned outright by the State Game and Fish Commission can be managed primarily for the benefit of wildlife, with timber management taking an important but secondary role. On private lands, the reverse of this situation will probably always exist, unless charging for hunting rights becomes more economically profitable than growing timber.

At the present time, the State Game and Fish Commission actually owns only one of its 22 game management areas. The others are owned by agencies of the federal government or by private individuals and companies.

Many other states already own thousands of acres of land for public hunting, some as a result of the Depression. Others began active acquisition programs years ago. Georgia has not kept pace

with their efforts, and the hunters of the future, especially those in metropolitan areas who own no land of their own, will be the ones who suffer because of it.

Money is available now to the Commission from federal aid funds to begin purchasing land. Half a million dollars has been accumulated in a reserve fund which could be initially used, and at least 100 thousand dollars annually could now be spent each year from federal aid funds to buy lands.

Additional money could be devoted to land acquisition if additional sources of income for the program can be found. For instance, requiring deer hunters to purchase a special deer stamp for their license of perhaps \$2 a season would raise more than a quarter of a million dollars a year. This money could be used to replace money now being used for deer management and research so that it could be used instead to purchase hunting land for the benefit of all hunters, rather than one group alone.

Such a program justifiably could use appropriations of straight tax funds by the Governor and the General Assembly, since the addition of new hunting lands will directly benefit the economy of the State through increased expenditures by hunters and fishermen, which in turn increases state sales and excise tax collections.

Money from this source could be doubled through 50-50 matching funds available through the federal Land and Water Conservation Fund Act, or tripled through the Pittman-Robertson Act. In other words, for every dollar the State of Georgia puts up to buy land for outdoor recreation, the federal government will supply two or three additional dollars for the program.

One of the leading advocates of State acquisition of public hunting and fishing land is the Director of the Game and Fish Commission, George T. Bagby, who notes that "if all government agencies do not start an immediate program for the purchase of public hunting and fishing areas, in a short time there won't be any place for the average man to go."

"There are thousands of our citizens who live in metropolitan areas who own no land and have few contacts with landowners to hunt on their property, yet they pay thousands of dollars in hunting and fishing license fees which they may not be able to use in the near future, unless the State takes active efforts to provide them with a place to hunt and fish without fear of being arrested or prosecuted for trespassing," Bagby says.

Members of the State Game and Fish Commission have already given the green light to the Department to begin looking at hunting areas for possible purchase under existing federal aid programs, as well as studying methods of financing an accelerated program of land acquisition. These programs should be initiated and put into effect at the earliest possible date, with the full support of the people, private landowners, sportsmen, conservationists, the Governor, and the General Assembly.

If this is not done, many of our sons and daughters will never know hunting and fishing as we have known it. The time to act is now.

J. M.



COVER PICTURES

Is it possible to obtain a copy of the color picture on the back cover of the June issue of *Georgia Game and Fish*? I would like an 11 x 14 glossy color print.

Your assistance will be appreciated.

Fred Murphy, Decatur

Color prints of the front and back cover pictures in *Georgia Game and Fish* Magazine are now available if ordered within the month of publication. Copies of prints from previous covers may be obtained by ordering within the month of September.

Prices including sales tax are:

\$1.55 for one 8 X 10 glossy

\$7.73 for one 11 X 14 glossy

Send check or money order to Gifford
Bishop, 225 Bishop Street, N.W., Atlanta, Georgia 30318.

Allow six weeks for delivery. — Ed.

BACKLASH

Have been enjoying your magazine immensely. It's a beautiful piece of work, and the contents are "right to the point" so far as the outdoorsmen are concerned.

I find the letters to the editor very interesting in all magazines, and one can get the pulse of what a great many folks have on their minds in these little missives.

One a few days ago sort of "got to me". It was written by a Mr. Schuhoff of Valdosta, Ga. (*Game & Fish*, July, 1967).

Granted, a person has a right to speak out, but I believe he should not make allegations which place all persons in the same category. When he stated "Surely our so called sportsmen ruin our deer herd, tear down our farmers' fences, and kill everything that moves, day or night" then he's placing me and every man, woman or child who hunts and fishes in his same parcel. This I resent.

I do not know how long Mr. Schuhoff has been hunting and fishing, but I would suggest that he do a bit of research on the subject. I'm quite sure he will find he's talking of a very small minority.

Just because some demented farmer killed his family up in the remote section of Minnesota, or some bearded jerk got hold of a gun and used it illegally should not make murderers out of all of us who love to use a gun.

I doubt that Mr. Schuhoff really meant the item to sound as it did, but I could not help in protesting just a wee bit.

Keep up the good work.

Carl O. Bolton
Johnson City, Tennessee

Carl Bolton is one of the outstanding outdoor writers in Tennessee and the Southeast. His weekly column appears in seven Tennessee newspapers. He has written a number of columns about his hunting and fishing in Georgia.—Ed.

GUNS & BOATS?

I read with interest your editorial advocating the registration of all boats, (*Game & Fish*, August, 1967) primarily for purposes of raising revenue for the enforcement of boating safety laws and regulations. That is a good idea. Likewise, let me suggest that as a means of financing the enforcement of laws relating to the use and misuse of firearms, we require the registration of all firearms.

Michael J. Egan, Jr.
State Representative
Fulton County, District 141

Representative Egan is the author of several bills still pending in the General Assembly to increase the permit fee and amount of bond required to carry a pistol in Georgia.—Ed.

Seasons Now Open

TROUT Mountain Trout

Open Stream Season—April 1, 1967 through October 15, 1967.

Creel Limit—Eight trout of all species per person per day. Possession limit 8 trout.

Fishing Hours—30 minutes before sunrise to 30 minutes after sunset.

No night trout fishing is allowed on trout **Streams** open during the regular state trout season. Trout fishing at night on **Reservoirs** is permitted.

Special Regulations—Coleman River below Forest Service Road No. 54 restricted to artificial lures only, 10 inch minimum size limit on brown and rainbow trout, 7 inch minimum size limit on brook trout. Chattahoochee River below Buford Dam to the Old Jones Bridge restricted to artificial lures only with a 10 inch minimum size limit for all trout species. Fishermen on artificial lure only streams may not possess live or natural bait.

Lake Trout Season—There is no closed season on trout fishing in Georgia Lakes with the exception of Amicalola Falls and Vogel State Park Lakes, and Dockery Lake.

Special Regulations—14 inch minimum size limit on all species of trout in Lakes Blue Ridge, Burton, Clark Hill, and Lanier. No size limit on other lakes.

SEASONS OPENING THIS MONTH DOVES

Season—Sept. 9 through Oct. 7, 1967 and Dec. 6 through Jan. 15, 1968.

Bag Limit—12 Daily, possession limit 24.

Shooting Hours—Noon Eastern Standard Time (1 p.m. Eastern Daylight Time) to Sunset. See federal regulations available at Post Offices for details.

MARSH HENS (Gallinules & Rails)

Season—Sept. 2 through Nov. 10, 1967.

Bag Limit—15 Daily, possession limit 30.

ARCHERY DEER SEASON

Archery Pre-Season Deer Hunt—Sept. 30, 1967 through Oct. 28, 1967 in any county or portion of a county which has an open gun season for deer hunting in the 1967-68 season.

Bag Limit—As established by counties under the gun season regulations, except that archers may take deer of either sex during this special season.

—Bows can be used for deer hunting during the regular firearms seasons in the individual areas throughout the state where the gun season is open. All archers must conform to bag limits and sex regulations as established for firearm regulations during the regular gun season.

MANAGEMENT AREA HUNTS

All small game in season—Altamaha (Except Butler Island, which is open only for waterfowl on Tuesdays and Saturdays during regular duck season), Lake Seminole, Whitesburg, Allatoona. No permits required for small game hunting.

Dove—Sept. 9 through Sept. 30, Wednesdays and Saturdays only—Piedmont Experiment Station, Oaky Woods. \$1.00 daily permit required.

Sportsman's Calendar



FEDERAL REFUGE HUNTS

Deer — Archery Only — Sept. 30-Oct. 11, 1967. Piedmont National Refuge. Deer of either sex. No permit required.

SEASONS CLOSING THIS MONTH

Trout Management Area Stream Season—May 3, 1967 through September 4, 1967 on designated days only. Write for detailed schedule.

SEASONS OPENING NEXT MONTH

GUN DEER SEASON

Season A: Southeast Georgia Season—Oct. 14, 1967 through Jan. 2, 1968, in the following counties:

Brantley, Bryan, Bullock, Burke, Camden, Candler, Charlton, Chatham, Clinch County north of the Atlantic Coastline Railroad and east of the run of Suwanoochee Creek, Echols County east of U. S. 129 and south of Ga. 187, Effingham, Emanuel, Evans, Glascock, Glynn, Jefferson, Jenkins, Liberty, Long, McIntosh, Pierce County south of U. S. 82 and east of Ga. 121, Screven, Tattnall, Washington, and Wayne counties.

Bag Limit—Two (2) Bucks. Hunting with dogs is allowed in all of the above counties.

GROUSE, RUFFED

Season—Oct. 14, 1967, through Feb. 29, 1968.

Bag Limit—3 Daily, possession limit 6.

OPOSSUM

Season—Oct. 14, 1967 through Feb. 29, 1968, Exception: Coweta County opens Sept. 30, 1967 through Jan. 20, 1968.

No Bag Limit.

RACCOON

N. Ga. Season—Oct. 14, 1967 through Feb. 29, 1968, in Floyd, Bartow, Cherokee, Forsyth, Hall, Banks, Franklin, Hart counties and all counties north of these counties.

N. Ga. Bag Limit—One (1) per night per person.

S. Ga. Season—No closed season.

S. Ga.—No Bag Limit.

SQUIRREL

Season — Oct. 14, 1967 through Feb. 29, 1968.

Bag Limit—10 Daily.

MANAGEMENT AREAS

(For a copy of the complete hunt schedule and detailed regulations, write the State Game & Fish Commission, 401 State Capitol, Atlanta, Ga. 30334.)

Raccoon—Oct. 13, 14, 20 and 21 on Lake Russell; Oct. 20, 21, 27, and 28 on Chestatee. \$1.00 permit per night required.

Squirrel and Grouse—Oct. 14, 20, 21, 27 and 28 on Coleman River and Swallow Creek. No permit required.

Squirrel and Grouse — Oct. 20, 21 Blue Ridge, Chestatee, Lake Burton. \$1.00 daily permit required.

Squirrel and Grouse — Oct. 27, 28 — Blue Ridge, Chattahoochee, Chestatee, Lake Burton. \$1.00 daily permit required.

Deer—Primitive Weapons only—Oct. 16-21 —Warwoman; Oct. 23-28—Piedmont Experiment station. \$5 permit required for hunt.

Deer—Archery only—Oct. 23-28—Clark Hill; Oct. 30-Nov. 4 — John's Mountain, Lake Russell. \$5.00 permit required for the hunt.

FEDERAL REFUGE HUNTS

Turkey—Oct. 21, 23, and 24, 1967—Piedmont National Refuge. One turkey of either sex. Limited to 1,000 hunters to be determined by drawing. Applications for free permits must be received no later than 4:30 p.m., Sept. 11, 1967 at the Refuge Manager's Office, Piedmont National Wildlife Refuge, Round Oak, Ga. 31080.

Deer—Archery Only—Oct. 25-28, 1967—Blackbeard National Refuge. Deer of either sex. No limit on number of permits. Applications for free permits must be received by Oct. 20, 1967 at the Refuge Manager's Office, Savannah National Wildlife Refuge, Rt. 1, Hardeeville, S. C. 29927.

COMING MEETINGS

Board of Directors, Georgia Sportsman's Federation, Stone Mountain Park, Oct. 7 and 8, 1967.

Annual Convention, Georgia Sportsman's Federation, Dempsey Hotel, Macon, Dec. 2 and 3, 1967.



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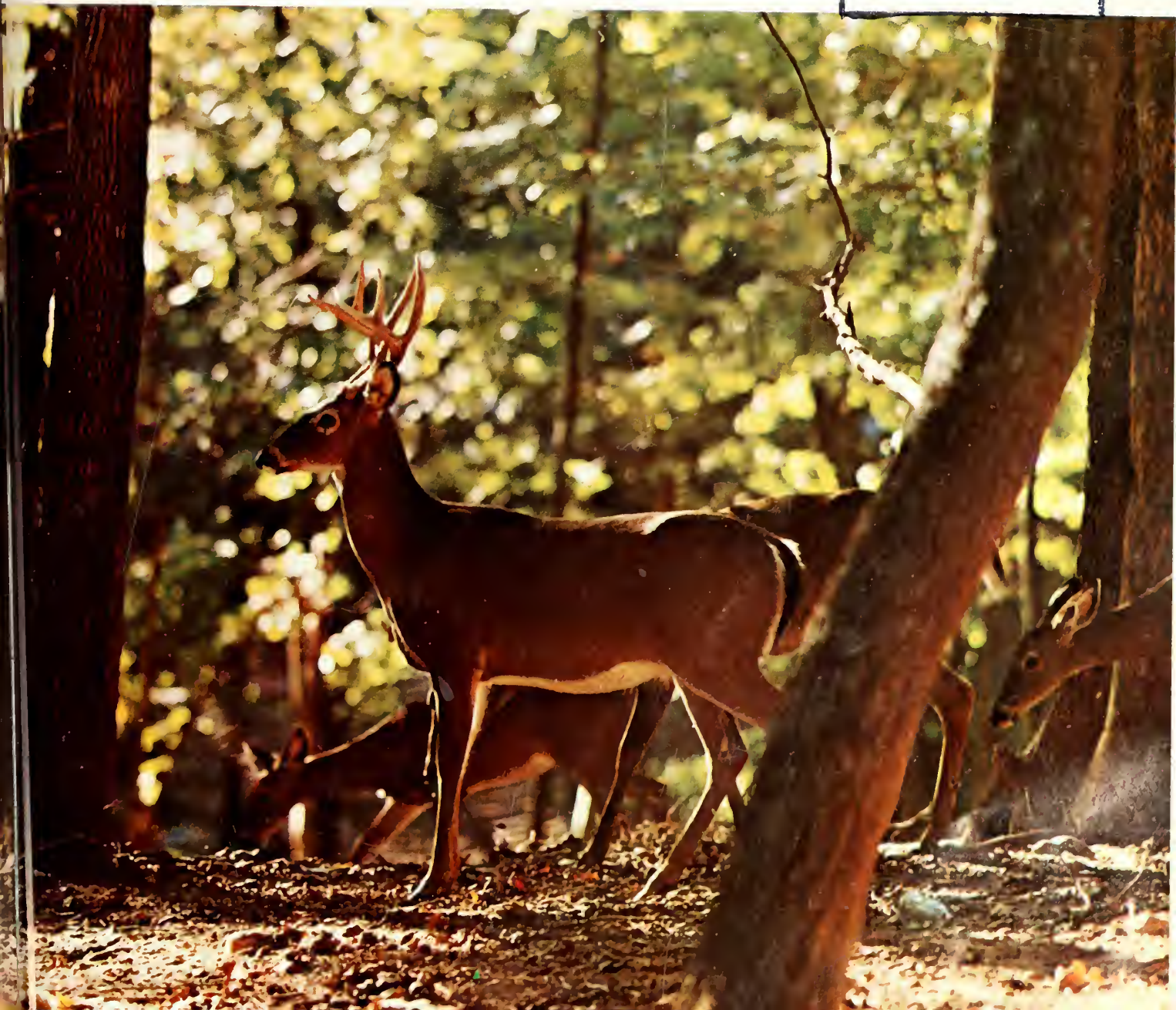
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October 1967

Volume II

Number 10

Contents

| | | |
|--------------------------|-----------------|----|
| Fur 'n Feathers Forecast | Dean Wohlgemuth | 1 |
| Tailored Duck Hunting | Jim Tyler | 4 |
| How to Have "Horns" | Art Rilling | 6 |
| Big Deer Contest | | 8 |
| Brewing Pond Magic | Jim Tyler | 10 |
| Men in Green | Jim Morrison | 13 |
| Sportsmen Speak | | 16 |
| Sportsman's Calendar | | 16 |

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George T. Bagby
Director, State Game & Fish Commission

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Better pay for rangers

At the heart of any wildlife agency is effective law enforcement. Without a trained, dedicated, conscientious, and adequately-paid force of wildlife rangers in Georgia, efforts to preserve or improve Georgia's hunting and fishing are doomed to failure. Achievement of that goal isn't being helped by the ridiculously low salaries now being paid Georgia's over-worked and under-paid wildlife rangers and other Commission personnel.

Believe it or not, the starting salary for a wildlife ranger is still only \$395 per month, or \$4,208 per year, lower than the national average of \$4,855 a year in 1965. This is the case even though the physical and mental requirements for being a ranger are almost identical to those of the State Patrol, which begins patrolmen at the rate of \$452 per month. Similarly, the Atlanta Police Department begins officers at \$457 per month, and State Revenue Agents begin at \$437 per month.

Under the present low salaries for wildlife rangers, it is growing increasingly more difficult each year to hold qualified, trained rangers in their jobs with the Commission, especially when higher paying jobs with less strenuous duties are easily available to them with other governmental agencies or in private industry. Many of the best rangers have already been forced to resign from the Department because of the need to improve their personal financial situation, and others will reach the same conclusion in the near future, unless something is done to ease their problem.

By the same token, recruitment of new rangers is becoming more difficult, especially in attracting young, aggressive, alert, and well-educated men who are qualified to meet the unusual demands that are placed on wildlife rangers in a field that is growing more sophisticated and complex every day, especially in the light of recent court rulings which tend to tie the hands of enforcement officers. With working conditions that include being on call twenty-four hours a day and working at least a six-day week, rangers should be more adequately paid. Since new rangers may not begin working for the Commission in their home county or an adjacent county, new men must sell their homes and pay the expenses of moving.

Each time that an experienced ranger leaves the payroll of the Commission, a considerable investment of time and money that was spent on his training and learning experience goes down the drain, never to be replaced. A new ranger may take many months to reach the peak of effectiveness that his predecessor reached through years of long, hard experience — the best teacher.

A similar situation exists with many other Commission employees, who are now readily able to find better paying jobs with industry, other states, or the federal government, because of the training and experience they have obtained with Georgia at much lower salary rates.

In at least a beginning to do something about the salary discrepancy and the drain of qualified personnel, Game and Fish Commission Director George T. Bagby has announced that he will ask the General Assembly next year to authorize raising ranger starting salaries from \$359 per month to \$396, still \$56 below the \$452 figure of the State Patrol. In addition, an across-the-board increase of 10 per cent would be given all existing rangers who are judged worthy of an increase. The top pay for rangers with six and one-half years seniority would also be increased from \$482 to \$531 per month.

Georgia's wildlife rangers have done an excellent job in the past, and they deserve to be compensated more fully for the important services that they are rendering to the State of Georgia and its sportsmen. —J. M.

ON THE COVER: This October, more than 120,000 hunters begin to turn to thoughts of deer, especially bucks with rocking-chair racks. Some archers are already guarding their stands with bow and arrow in hand. South Georgia hunters in the coastal section hit the woods with their guns on October 14, and almost all of the red-coat army of hunters will be in the woods in full force by November 4, opening date of the deer season in middle and north Georgia. Game biologists of the Commission estimate that more than 30,000 deer may be taken this year in Georgia by hunters.

ON THE BACK COVER: It's a happy birthday for Georgia Game and Fish Magazine, marking its first anniversary with this issue. After one whole year, just about everybody is reading *Game and Fish*, or at least the hunters in the know are, even if all of the deer haven't got the message. If you have a hunting or fishing friend who hasn't gotten the message about *Game and Fish*, now's the time to tell him, or to give him a gift subscription for Christmas. By the way, now that you've tried *Game and Fish* out for a whole year, why not go ahead now and subscribe for three more years? You'll save 50 cents — only \$2.50 for three years, and you won't have to worry about missing a single issue when your current subscription expires after the first of the year. Photos by Dan Keever.



Fur'n Feathers Forecast

By Dean Wohlgemuth

■ Making predictions about the weather is a living to some people. Making guesses about what a hunting season is going to be like is really going out on a limb!

There are so many factors that can get in your way. Even when armed with comments from men in the field who know their business, you can still make mistakes. And if you are wrong, here'll be plenty of unhappy sports-

men to point out the error of your ways.

You start assembling information for such a prediction well before season. In the meantime, there may come a flood, fire, famine or other such misfortune or malfunction.

Basing your findings upon results of previous seasons, along with reports of game biologists and wildlife rangers who watch for game and signs and

other factors, you assemble all of them to come up with a group of generalities.

But supposing the game is there, the weather is right, and food is plentiful, there's still another matter to consider when telling a hunter he'll have a good year. And that, of course, is the hunter himself. It's up to him, now, to find game and to hit it.

Actually, there is not a great deal of



change in the forecast this year over last year. Things looked better last year, and should generally be even better this season.

Deer hunting, in particular, has a very bright outlook for Georgia hunters. Deer herds continue to increase in North and Middle Georgia, thanks to good management and good food supplies. And the increase in deer is in spite of increased problems in controlling wild and free running dogs. If dogs could be controlled more effectively, there would most likely be a big jump in deer population just about everywhere in the state.

The area with the biggest problem is the southern portion of the state. Herds are remaining about the same there, with hunting getting no better, while other sections are enjoying better and better hunting.

In fact, populations are looking so good this year that many new counties will be open for the first time this season. The season will be shorter than in "older" counties, however, to prevent too great a harvest. Seasons are actually in three lengths in North and Middle Georgia. A full five sets of seasons were necessary throughout the state for gun hunters.

The archery deer season is Sept. 30 through Oct. 28 for any county or portion of a county that has a regular gun season.

The first gun season to open will be Oct. 14 through Jan. 2 in southeast Georgia. Southwest counties will be open Nov. 4 through Jan. 2. North and middle Georgia counties open Nov. 4, but the final day varies from Nov. 11, to Nov. 18 through Nov. 27. Check dates for the various counties in "Sportsman's Calendar," inside the back cover.

Small game hunters are not to be forgotten this year by any means. Hubert Handy, coordinator of game management for the Game and Fish Commission, says squirrels, in particular, are in abundance throughout the state this year. Best hunting will be in the northern part of the state, but good crops of mast this year have made hunting good everywhere. Areas with plenty of hardwoods will provide the best squirrel hunting.

Joe Kight, game biologist for the Southern Region, echoed Handy's forecast, adding that a good spring breeding season plus good food supplies will bring good hunting for just about all small game.

Quail hunting, while showing a gradual decline over recent years because of a change in land usage, still holds its own and is widely enjoyed. The state still proudly claims to be one of the Quail Capitals of the World.

Kight said quail hunting should be about as good as last year. Rabbits are more than plentiful in southern Georgia. Rabbits and bobwhites in north Georgia are considerably more scarce, however, Handy pointed out. Grouse populations look to be about like those of last year.

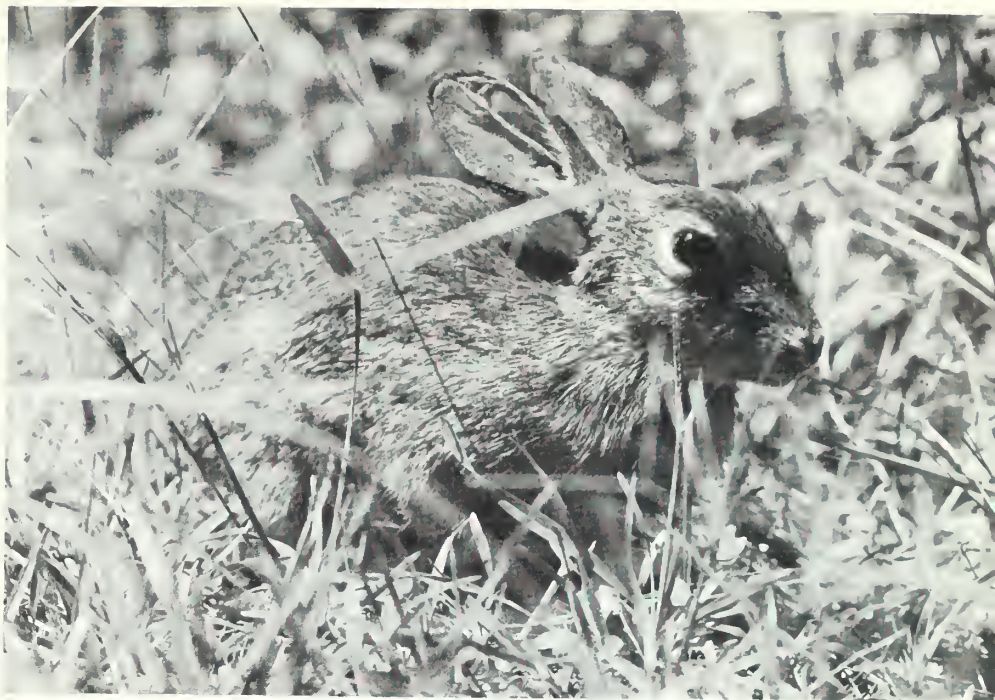
Along the coast, game biologist Oscar Dewberry said the duck picture is somewhat uncertain. The official outlook is for a season similar to last year. A poor crop of new ducks is reported. However, he said, Ducks Unlimited has indicated good flocks can be expected. Of course prognostications of duck hunting must be made on a flyway-to-flyway basis, and the Atlantic Coast flyway probably will not be among the most blessed.

Dick Whittington, game biologist for middle Georgia, said hunters in that area can expect good hunting for just about everything. Middle Georgia has some of the state's best deer hunting country. Squirrel and quail populations are good there, too, and rabbits are generally fairly good.

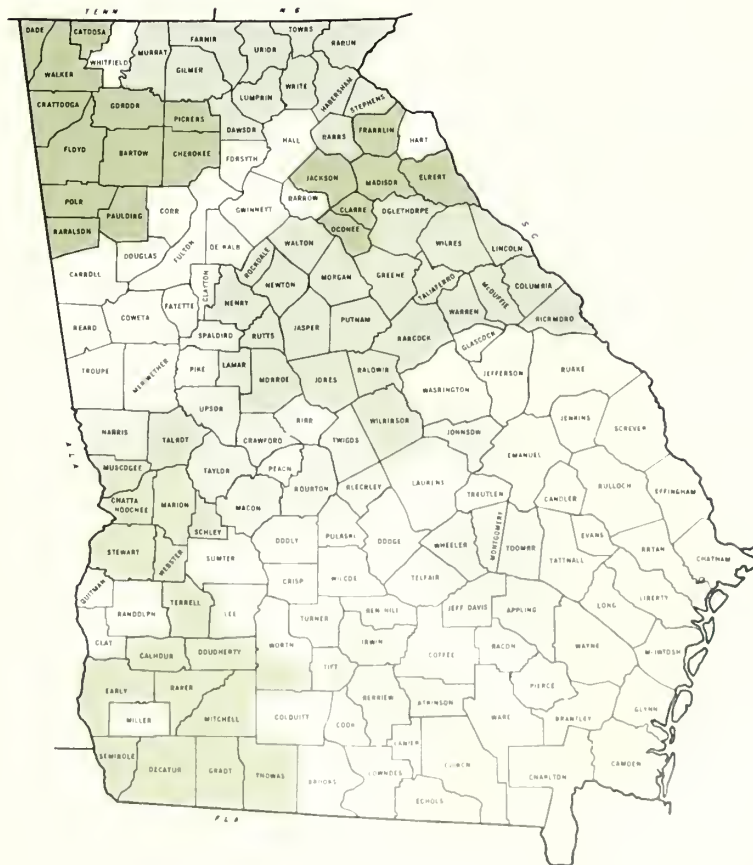
Wood duck populations are very good around the state, with a good hatch reported this year.

The first half of the dove season is just about history as this issue gets off the press, so a forecast is out-of-date as far as the first half goes. And probably, the results you've found so far are as good an indication as you can get.

But to get out on the limb as far as possible — since this was written before season — indications before the first shots were fired were for a very good year. Biologists saw plenty of doves around before season when coo-counts and trappings (for banding) were made. If food supplies remain good and weather favorable, the second half of the season should be very good, particularly in South Georgia. ➔



Cottontail rabbits are the rabbits you are most likely to see in the woods and fields of Georgia. The Georgia Game and Fish Commission is conducting a research project on the behavior of cottontail rabbits in Georgia. For more information, write to the Georgia Game and Fish Commission, P.O. Box 1000, Atlanta, Georgia 30301.



1967-1968

Deer Season

Season A: Oct. 14—Jan. 2

Season B: Nov. 4—Jan. 2

Season C: Nov. 4—Nov. 27

Season D: Nov. 4—Nov. 18

Season E: Nov. 4—Nov. 11

Closed Counties



LEGEND



Hunters on Butler Island find their blinds already built for them. A small boat provided by the Commission fits inside each blind.

tailored duck hunting

By Jim Tyler

■ The thump thump of a two cylinder John Deere tractor drowned out the noise coming from two smaller tractors plowing the field. It was a hot day for plowing, and would have been impossibly hot except for a steady breeze coming inland from the open ocean eight miles away. Billowy white clouds skated through a blue blue sky. The John Deere passed us, uprooting a thick growth of summer vegetation. It was August, and August on Butler Island means time to plant for ducks.

Come November, these fields of millet and other duck favorites will stand tall and wave a beckoning finger to migrating ducks winging their way southward. And by then the planted fields will be flooded by use of a dike system that was partially built many years ago. Could a traveling duck ask for more?

Let's put it this way. Could a duck hunter ask for more? "Yes," you say, "about a million ducks pouring down out of the sky to feast on this table set for them. And me, a duck hunter sitting comfortable in one of the fields."

Well, on Butler Island, the State Game and Fish Commission can promise everything to a duck hunter, everything but a million ducks rushing in to tie on a feeding napkin.

Here's the set up.

The Commission purchased Butler and several surrounding islands in 1954. Together, the islands are known as the Altamaha Waterfowl Management Area. This will be the third year managed duck hunts have been available on Butler Island.

Way back in the later part of the 18th century, Butler Island was converted to a rice plantation. A dike was built around the entire periphery of the flat island and gates were constructed in the dikes so the island could be flooded by high tides from the adjacent Altamaha River. Although affected by tide, the water is not very salty. There are only 3 parts of salt to a 1000 parts of water (in the open ocean the salinity runs about 35 parts per thousand).

Commission employees have added to the old dike system and now 1000 acres of the island's 1600 acres are separated into four diked-compartments. About 100 or so acres are tilled and planted with duck delights each year, but the entire 1000 acres can be flooded during hunting season. Flooded compartments have only about one foot of water covering them. This water depth makes it easy for "puddle" ducks to reach the bottom. Puddlers do not dive for food, but instead they stay on the surface, bob down, and hold a tail skyward position while they gather food.

Scattered throughout the hunt area,

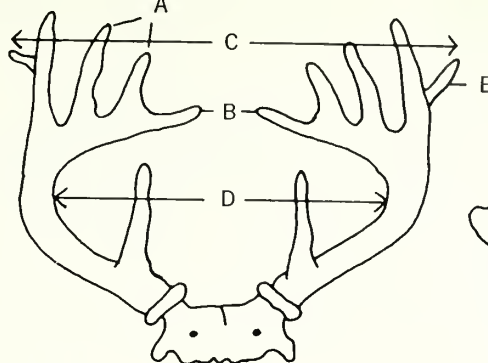
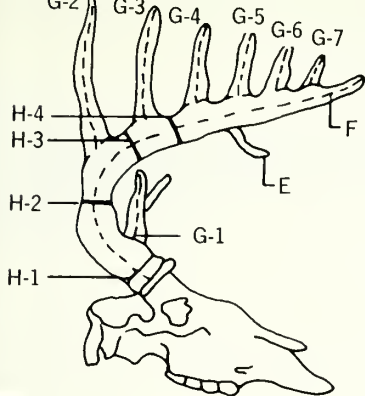
25 two-man duck blinds have been constructed. Each blind is at least 300 yards from the next one. Every blind is built so a small boat fits snugly inside. The boat is used by hunters to cross a six foot-deep, 15 foot-wide canal on the inside of each dike. In the wee hours of early morning, duck hunters find boats complete with paddles and seat cushion life preservers moored in the canals. All they do is scamper down the six foot-high dike, get in a boat, paddle across the canal, wade the flooded field, and get ready for daylight. Another item waiting in each boat is a gunny sack full of decoys. The only thing not provided is the ducks, and that's out of the direct control of the Game and Fish Commission. Wildlife is still wild, and ducks are no exception to the rule.

On designated hunt days, duck hunters meet at 5:30 a.m. in the checking station, a white building located on U.S. Highway 17 less than one mile south of Darien, Ga. They are then carried via a tractor pulled wagon, the mile or so to the hunt area. Bouncing along the dike, the tractor stops every time it reaches a moored boat. Two hunters get off and are told where their blind is located. The 25 blinds are assigned without partiality by drawing from a hat. The tractor continues on until all the hunters are unloaded. It then chugs back to the checking station.

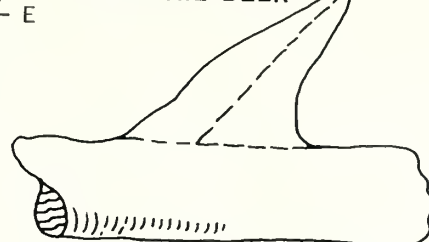
Hunters try their luck until noon. The hunt ends at noon and the tractor wagon makes the rounds again, this time picking up the hunters.

Each Tuesday and Saturday during duck season, 50 hunters can take advantage of such a hunt. Surprisingly the full daily quota of hunters has never been reached. It costs only \$5 a day for the whole show. The permit fees help cover expenses. Hunters write a letter of application before duck season and request dates they wish to hunt enclosing their \$5 daily permit fee. Applications are accepted from October 1 through November 1. Write to the State Game and Fish Commission, P. O. Box 1097, Brunswick, Ga. If by chance more than 50 hunters apply for any one day, a drawing will be held at the Brunswick office of the Commission on November 7. Losers will have their fee money refunded.

The last day of the 1966-67 season was the best day the managed hunts on Butler Island have ever seen. Forty seven hunters took home 141 ducks. Most of the ducks taken that day were scaup, but some mallard, greenwinged teal, black, and wood ducks were also taken. Oscar Dewberry, the biologist manager of the Area, believes there were two reasons for the outstanding success that day. "First," he says



WHITETAIL DEER



DETAIL OF POINT MEASUREMENT

| | Supplementary Data | | Column 1 Spread Credit | Column 2 Right Antler | Column 3 Left Antler | Column 4 Difference |
|--|--|----|--------------------------------------|--------------------------|-------------------------|------------------------|
| | R. | L. | | | | |
| A. Number of Points on Each Antler | | | | | | |
| B. Tip to Tip Spread | | | | | | |
| C. Greatest Spread | | | | | | |
| D. Inside Spread of MAIN BEAMS | Spread credit may equal but not exceed length of longer antler | | | | | |
| If Inside Spread of Main Beams exceeds longer antler length, enter difference | | | | | | |
| E. Total of Lengths of all Abnormal Points | | | | | | |
| F. Length of Main Beam | | | | | | |
| G-1. Length of First Point, if present | | | | | | |
| G-2. Length of Second Point | | | | | | |
| G-3. Length of Third Point | | | | | | |
| G-4. Length of Fourth Point, if present | | | | | | |
| G-5. Length of Fifth Point, if present | | | | | | |
| G-6. Length of Sixth Point, if present | | | | | | |
| G-7. Length of Seventh Point, if present | | | | | | |
| H-1. Between Burr and First Point | | | | | | |
| H-2. Between First and Second Points | | | | | | |
| H-3. Between Second and Third Points | | | | | | |
| H-4. Between Fourth Points or half way between Third Point and Beam Tip if Fourth Point is missing | | | | | | |
| TOTALS | | | | | | |
| ADD | Column 1 | | Remarks: (Mention any abnormalities) | | | |
| | Column 2 | | | | | |
| | Column 3 | | | | | |
| | Total | | | | | |
| SUBTRACT | Column 4 | | | | | |
| FINAL SCORE | | | | | | |

PRINT OR TYPE ALL INFORMATION

Please enter my deer in the (Check one or both)
☐ Weight Division ☐ Antler Division

When Killed _____ What County in Ga. _____
 Month Day Year

* Killed on a public hunting area, give name _____

Number of Points over one inch long _____

Total number of points if measured under Boone and Crockett instructions above _____

Field Dressed Wt. (See rules) _____ Live Wt., if known _____

If not weighted, give estimated field dressed weight (Antler Division Only) _____

Type of Scales _____ Location _____

Rifle or Shotgun Used (Make) _____ Caliber or Gauge _____

Number of Shots _____ Range _____

Make, wt., and type of bullet _____ Sights _____

Reaction of animal _____

Ill performance _____

Hunter's Name _____

Home Address _____
 (Street Town State ZIP)

Telephone No. _____ Hunting License No. _____

"I hereby swear that the following statements are true; that in taking this deer I complied with the contest rules, hunting regulations, and the witnesses hereto saw this deer weighed and/or measured. I consent to the use of my name in connection with the Georgia State Big Deer Contest."

Signature of Hunter _____

We, the undersigned, witnessed the weighing and/or measuring of the deer described above and verified the weight and/or measurements given.

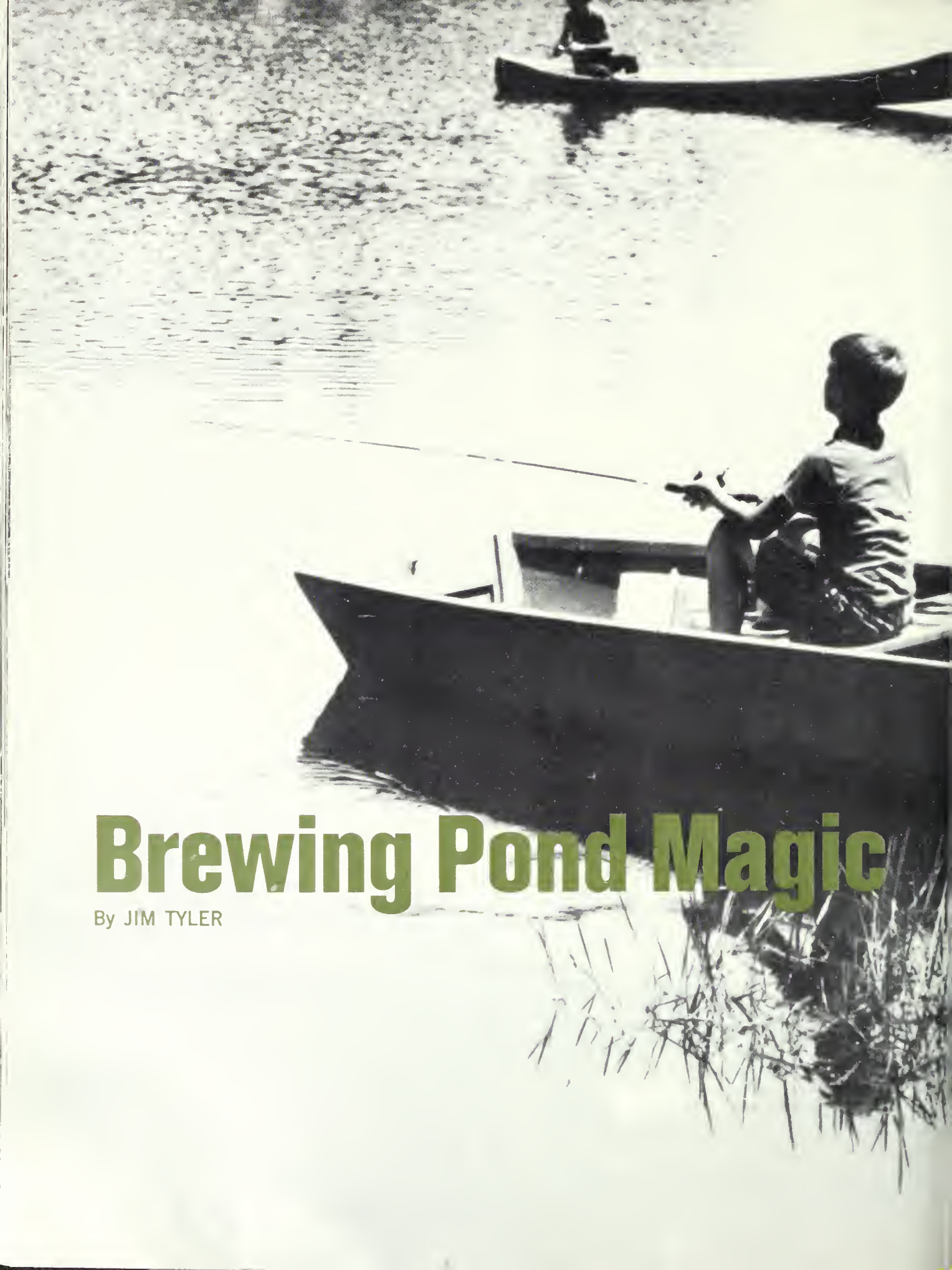
1. Signature _____
 Address _____

2. Signature _____
 Address _____

Sworn to and ascribed before me this _____ day of _____, 19____,

(Signature of a qualified officer--See Rule 5, Notaries please Seal)

Mail all entries and photographs to Big Deer Contest, 401 State Capitol, Atlanta, Ga. 30334.



Brewing Pond Magic

By JIM TYLER

■ Enthusiastically the young lad plopped his worm into a summer-beautiful little pond that in his young mind must surely be full of big fish. Later, as the youngster disheartedly hoists his stringer with a morning catch of three tiny fish upon his shoulder and shuffles down the path to the road leading home, the owner of the pond notices the boy. The man watches the boy for a minute then slowly moves his head in a "too bad" fashion and says to the nearest tree, "the big ones just aren't biting." This had happened before. Usually the pond owner would soon forget about the poor fishing. Or if he did give it a second thought, all he could see were tall dollar signs and trouble for him along the road to improving fishing in the pond.

But this time the little boy's bad luck spurred John Badpond into action. He asked around and picked up the nearest farm pond "cookbook" he could lay his hands on. After thumbing through a few pages, he picked out a page that shimmered with "just what his pond needed." And he began a one man assault against Nature.

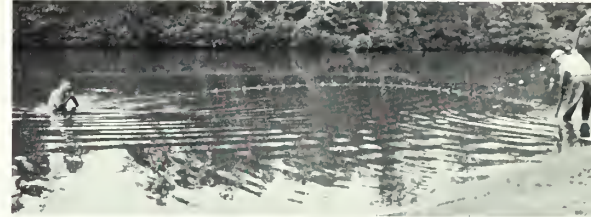
The book says add 40 pounds of 20-20-5 (Non acid forming) fertilizer to each surface acre of your pond. Well, he does. Of course he didn't notice the book said to add the fertilizer to the pond in the spring of the year, and to repeat the application at intervals throughout the year. And if the book said add 40 pounds, by golly, 80 pounds will make for twice as many fish. Page 10 of the farm pond book says adding lime to a pond can be important. The rule of thumb is to lime the pond if the soil around the pond needs lime. In fact, the book says, liming can cut the fertilizer bill as much as one half. "I'll try that next year," Badpond makes a mental note.

Caught on fire with making his pond a fishing pond, he reads on and finds on page 13, paragraph 3, that you stock a fertilized pond with 1,000 bream and 100 bass per acre. Without reading the paragraph before or after, he buys the correct number of fish and stocks his pond. Badpond is set now. His pond is going to be the "fishingest" pond in the county.

But the book says, in the appropriate chapter, it is important that no fishing be allowed until the stocked bass have successfully spawned; this is approximately one year after the addition of bass to a pond. That's a long wait for a man with his fishing fire stoked. A bell clangs knowing'y in Badpond's head. Sure . . . he remembers that Charlie Brown, down the road, didn't pay any attention to the government man telling him to wait a year before he started fishing his recently

stocked pond. And old Charlie sure had fun fishing the next spring before the weather warmed up. He had been meaning to ask Charlie how fishing was this year.

And then Badpond thought of Walt Dogood who lives a little farther down the road. Dogood keeps a perfect score of the number of fish caught from his pond. This reminded Badpond of a pool hall shark knocking



It's surprising how many pond secrets can be decoded by a biologist just looking at a seine catch fresh from a pond.

over a score bead on the string overhead every time he scored a point. All that trouble just isn't worth it, Badpond concluded. Yet he jumped every time he had a chance to fish Dogood's pond. Fishing was good there, for some reason.

A year later the same small boy shuffled down the same path away from Badpond's pond with the same small stringer of fish. Badpond just couldn't understand. His wife couldn't understand where their savings had disappeared.

Fisheries biologists would chant out in unison, "Mr. Badpond you can't just dump a bunch of ingredients into a pond and expect it to silently grumble awhile with satisfaction and then crank up the assembly line and roll out a continuous series of three pound bass." Each pond is a world of its own, be it a trashy little pond or a beauteous grass-rimmed pond. And whenever something is added to one pond and improves fishing there, this is no guarantee it will work in another pond. Of course, in managing a pond for fishing, there are cure-all methods. Everybody says add fertilizer for fishing, just like everybody prescribes an aspirin for humans with headaches. But, to illustrate the point, one person requires only one aspirin to drown a headache, another individual will require three tablets.

"Mr. Badpond," I said as he told me the sad story of the sad little boy, "let me tell you something about life in your pond." We were standing on the edge of his pond. He looked at the pond. Being a mind reader, I could see his eyes slip below the surface of the water. He saw schools of bream peacefully resting along the bottom in neat symmetrical patterns. A lazy fat bass finned by.

"It's a mean world down there!" I

said, "Everything eats something, things die every second!" There wasn't a ripple on the pond. The reflection of an oak tree on the far side was etched like a three dimensional mural across the middle of the pond.



Simple chemical tests tell biologists about the water of a pond. For example, is there enough oxygen?

Taking a deep breath I said, "did you know that that green color of the water is caused by millions of small floating plants called algae or phytoplankton? And tiny animals, small yet larger than the phytoplankton, eat the tiny plants for food. These are called zooplankton. Then, tiny fish and insect larvae (immature forms of some insects live in water) eat the zooplankton. Then, bigger fish like bass eat the tiny fish. In due time the big fish and the small organisms not eaten die, sink, decompose, and provide food for the phytoplankton. It's the circle of life in a body of water."

"I've lost you, Mr. Badpond. Let me draw you a picture." With artistic finesse I drew the picture for him (drawing number 1 accompanying this article). "Remember," I pointed out, "the sun has to bless this whole circle of life. Without "Old Sol" the little plants could not make their food.

"Now, Mr. Badpond, with this in mind, let's see what fertilizer does. Fertilizer adds basic nutrients: phosphorus, potassium, and nitrogen to the Phytoplankton, the tiny floating plants. These are the basic ingredients. They are the phytoplankton food.

And as there is now more of this food, there are more phytoplankton. More phytoplankton equals more zooplankton equals more large fish, and this is what the pond owner wants. Lost you again, Mr. Badpond. Let me draw you another picture." I scratched the first picture from the muddy bank and drew him another picture (see drawing number 2 accompanying this article).

"That's a very simple picture of the complicated life in a pond," I said. "But here is the catcher. If you want to have good continued fishing in a pond or even a lake, this cycle has to be kept in balance. For example, you know that bass eat bream. Well, you don't want too many bream in your pond. Here, let me draw you another picture." (See drawing number 3.) "See, it is important to keep the number and size of the bream in balance with the number and size of bass in the pond. Other species present can affect this balance—such as shiners, suckers, and minnows.

"I could go on and on about life in a farm pond and how biologists can manipulate it, but I hope you get at least a vague picture. Just remember, below the surface of your pond is a complicated, fascinating world, and each pond is a different world.

"Wonder of wonders," Badpond mumbled, thumbing through the pages of his farm pond booklet.

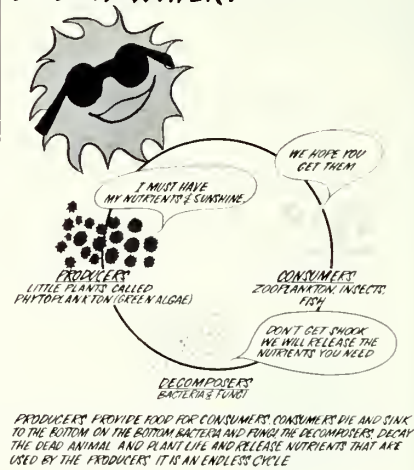
"That's a good book," I said. "With it you can understand what a fish biologist tells you about your pond.

"You've spent a good sum of money on your pond and fishing is lousy, right?" He looked up, miserably. "Well, why not contact your local wildlife ranger and he in turn will have a fisheries biologist come out and take a look at your pond. He'll tell you what is best. I'm sure he'll tell you it will take money to straighten out your pond and make it fish right, and it will take money to keep it in good fishing condition. And he will tell you the money is well worth it if you enjoy fine fishing in your backyard. You might also want to contact Henry Yawn at P. O. Box 505, Tifton, Georgia. Henry is a commercial fish consultant and knows his business. He specializes in pond work."

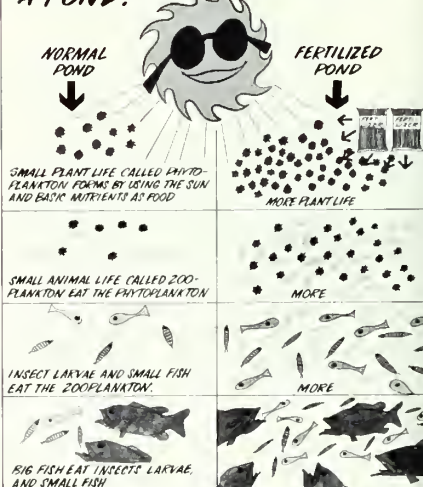
"And, Mr. Badpond, the State Game and Fish Commission has four Fisheries Management Bulletins you can have free of charge by writing to one of the Commission offices. It wouldn't hurt for you to get them, they are helpful."

The sun slid behind a cloud and the tree picture on the pond dimmed, changed colors. I picked up a stick, tossed it into the middle of the picture. "Wish that was a bass jumping," Badpond said.

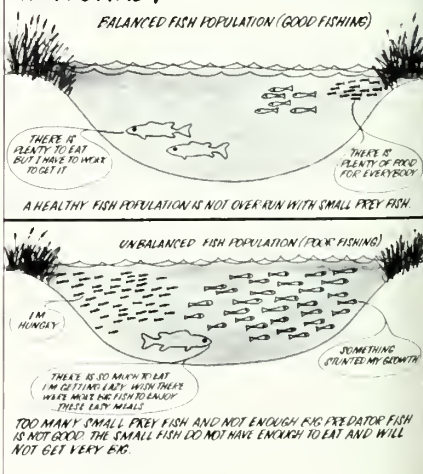
CONTINUING CIRCLE OF LIFE IN WATER.



WHAT FERTILIZER DOES TO A POND.



WHAT MAKES GOOD FISHING IN A LAKE?



The State Game and Fish Commission Has A Big Job To Do

It was Monday morning in one of the original old rooms of the State Capitol. Far below the ancient high ceiling, a pretty young secretary was opening the morning mail. From deep within a jumbled pile of newspapers, bills, newsletters, envelopes of assorted sizes, shapes, and colors, she selected the first letter of the day: a small personal stationery-sized envelope addressed in the painful scrawl of a young boy or girl. Inside, she found and unfolded a sheet of ruled notepaper.

"Dear Sirs," it began. "Would you send me all of the information that you have about the State Fish and Game Department? I am 11 years old. I like animals. Please send it right away, as I need it for my English class theme."

I feel sure that the eager youngster who penned that urgent note had no idea of the mental crisis that his simple request would create when it reached the tray on my desk, sandwiched among magazine articles to be read and edited, photographs to be selected, proofs to be corrected, requests for speeches to be filled, bills to be paid, sick leave slips to be signed, and dozens of similar requests for information from all over the United States and a few foreign countries!

How can anyone possibly expect to be sent "all the information that you have about the State Fish and Game Department?" I wondered, especially by return mail! Sifting through the mental files that I had made in four years of writing and talking about the diverse activities of the State Game and Fish Commission, my mind shuttered at the magnitude of such a task, just at the request of a small school boy. My first impulse was to gather up a copy of the current hunting and fishing regulations and a few sheets of information on animals and fish, jam them into an envelope, and mail them back to my young inquisitor.

That's probably what I would have done, except for the fact that my usually jangling telephone lay silent for a few magic moments, and there was no knock from an unexpected visitor at the office door. In the rare quiet interlude before the inevitable interruption, the sudden courageous thought flashed over my mind, "Why not try to answer this letter anyway?"

Quickly locking the door behind a "Do not disturb" sign and taking the telephone receiver off the hook, I sat down at my typewriter, inserted a sheet of paper, and began writing.

"Dear Johnny," I said. "Thank you for your interest in the *State Game and Fish Commission*. In your letter you called us the "State Fish and Game Department," but your confusion about the name of our organization isn't un-

usual. I've frequently been introduced as working for the State Fish and Game Commission, Wildlife and Fish Department, Game and Fish Service, Conservation Department, Wildlife and Parks Commission, Fish and Forestry Service, etc. But as Shakespeare said, "What's in a name?"

As a matter of fact, the present



New fishing opportunities for Georgians are created through the work of the Georgia Game and Fish Commission. Experimental stocking of cold-water mountain trout in Lakes Burton, Clark Hill, Lanier, and Rabun paid off, with fish up to seven pounds in size now being landed by fishermen.

Men in Green

By Jim Morrison, Editor
Georgia Game & Fish Magazine

State wildlife conservation agency known as the State Game and Fish Commission has gone under many such names in the past. Way back in 1874, the State Commissioner of Agriculture was authorized to appoint a "Superintendent of Fisheries." By 1910 the General Assembly created a State Game and Fish Board who selected a Commissioner of Game and Fish to run the Game and Fish Department. In 1924, it changed this arrangement to a Department of Game and Fish with a Commission appointed by the Governor. In 1931 the Board was abolished and the Commissioner retained, again appointed by the Governor. By 1937, the General Assembly created a

Department of Natural Resources, which included a Division of Wildlife, and separate divisions for forestry, mining, and parks. The head of the Department and the four division heads were all appointed by the Governor.

Six years later, in 1943, the General Assembly created the present Game and Fish Commission, which has lasted longer than any previous organizational pattern. Under this title, a Commission was created with one member to be appointed by the Governor for a seven year term from each of the congressional districts, plus one member from one of the six coastal counties. Commissioners must be confirmed by the Senate, and serve with no compensation, except for \$20 a day for Commission meetings and committee meetings, and expenses to meetings.

Although the Commission itself and the composition of its membership and method of appointment are provisions of the State Constitution, all of the powers and duties of the Commission are delegated to the State General Assembly, which determines what services the Commission may perform through the passage of laws, including appropriation of funds to operate the Department under the Commission.

Under the present State law, the Commission is authorized to select a Director of the Department and its employees, to buy land and water for wildlife and fish restoration and propagation, to put limits on the numbers of fish and game that may be taken by sportsmen and to set the seasons in which they may hunt or fish. Such rulings of the Commission are called regulations, and have the same effect as laws passed by the General Assembly, which may pass statutory laws dealing with wildlife if it chooses.

Customarily, the General Assembly has delegated the responsibility of setting seasons, bag limits, and methods of taking wildlife to the Commission. This is because wildlife populations are widely variable, and require more flexible and detailed laws than can be passed by the General Assembly, which meets only once a year and must deal with a great variety of problems, while the Commission can meet as often as necessary during the year, devoting its time exclusively to wildlife matters, and the recommendations of the public and its own trained and experienced wildlife specialists. Since one Commissioner is appointed by the Governor from each of the present 10 congressional districts in Georgia and from the six coastal counties, every Georgian has a personal representative serving on the Commission in his behalf, in addition to the control that he exerts over the Commission by electing

the Governor and the members of the General Assembly, as well as other elected local, state, and federal officials whose official duties partially control activities of the Commission.

What does the Department under the Commission do? That question has many answers. A thumbnail description would have to include law enforcement, game management, fish management, and public information. Each activity would make a series of articles as long as this one, and yet scarcely scratch the surface of what is going on.

From the standpoint of money spent and numbers of persons employed, the largest single activity of the State Game and Fish Commission is the enforcement of conservation laws and regulations passed by the General Assembly and by the Commission which are designed to insure a fair harvest of wildlife by all sportsmen. In addition, boating safety laws and regulations are enforced on Georgia's waters.

This important activity is carried out by a force of more than 150 law enforcement officers known as wildlife rangers, frequently called "game wardens," a title once officially used in Georgia and still utilized in many states, some of which call their men conservation agents, game agents, fish wardens, wildlife protectors, etc. (Forest rangers usually are connected with the state or federal agency charged with protecting timber from forest fires, etc. These men usually have no direct official connection with wildlife.)

Each wildlife ranger realizes that if wild animals, birds, and fish are to survive year after year, restrictions must be placed on the number of animals or fish that are taken each year by hunters and fishermen. Since wildlife is a crop that can be harvested each year, year after year, wildlife conservation laws and regulations are designed to see that an adequate population of wildlife is left each year after the hunting or fishing season to serve as brood stock for a new crop of wildlife, one that will be as numerous as the previous year. By this method, the highest sustained annual yield of wildlife and hunting and fishing opportunity can be given to the sportsman.

As an example, let's take Georgia's white tailed deer, one of the most popular game animals in the State. Game biologists say that under normal conditions, a deer herd will increase by approximately one-third its own number each year, unless too many animals are killed by men or dogs. If deer hunting is allowed during the entire year, usual method such as night hunting, and no limit was placed on the number of animals that any hunter could kill, there would be

few or no deer. This actually happened once in Georgia, when deer were almost entirely wiped out of the state by overhunting, poaching, and dogs, as well as destruction of their forest habitat. In order to restore the animals, game management programs were coupled with law enforcement. After deer are restocked in a depleted area with suitably habitat, the Commission passes a regulation closing the county for deer hunting of any type. After the population reaches a huntable number, the county may be opened by Commission regulation for hunting, usual-



Many times, the deer are taken in the woods. This is a white tailed deer, one of the most popular game animals in the State. Game biologists say that under normal conditions, a deer herd will increase by approximately one-third its own number each year, unless too many animals are killed by men or dogs. If deer hunting is allowed during the entire year, usual method such as night hunting, and no limit was placed on the number of animals that any hunter could kill, there would be

ly for a short number of days, called a season. Hunters may be restricted to taking only one or two deer a year in the area, usually only male or buck deer. They are not allowed to hunt at night, from an automobile or power boat, from a road, in a river or lake, etc. Later, if the deer population increases, the Commission may allow the taking of doe deer as well as bucks, if game biologists recommend. If, on the other hand, the deer decrease in number, the season may be shortened or closed entirely, the bag limit decreased, or the method of hunting altered.

In any case, the job of seeing that hunters and fishermen adhere to these regulations is given to the wildlife ranger. If he observes a violation of the laws and regulations, he must arrest the violator and either issue a citation or carry him to the nearest officer of the court in which wildlife cases are tried in the county where the violation occurred. This usually means a trip to the county courthouse or jail, where the violator is turned over to the county sheriff, who may either jail the suspect until trial, or with the authorization of a judge, accept money, known as "bond," from the

violator to ensure his return to the courthouse when his trial is held. Since wildlife violations are regarded as minor law violations known as misdemeanors, the bond in such cases usually is set so low that the violator will forfeit his bond money, rather than take the time and trouble to come back to court for trial. If he decides to fight the case, usually the solicitor of the superior court in that judicial circuit is called upon by the sheriff to go before the county grand jury to show that there is enough evidence against the suspect to warrant issuing a "true bill" indictment, which requires the suspect to stand trial at the next session of court. Once in court, rulings are usually made by judges without benefit of a jury, after the presentation of evidence by the solicitor and the defendant and his attorney, if any, and the possible hearing of testimony by the wildlife ranger and any other witnesses. If the defendant is found guilty, the judge generally may assess any penalty he wishes, depending on the circumstances of the cases, provided it does not exceed a fine of \$1,000 or more than 12 months in jail. Usually, only a small fine is levied, with the proceeds going first to pay the court costs. If anything is left, it goes into the county school fund, not back to the State Game and Fish Commission or to the arresting wildlife ranger.

Of course, the process doesn't always follow this pattern. The ranger may not have enough evidence to make a case. Perhaps he may only warn the violator not to commit the suspected violation. The sheriff, the solicitor, the grand jury, or the judge may not feel that there is sufficient evidence that the defendant committed a law violation, and the case may end there, giving more than adequate insurance that an injustice is not done to the defendant. More often, the guilty person may go free before he is punished because of the difficulty of prosecuting him.

In the performance of their duties, wildlife rangers may enter private property outside of buildings without a search warrant looking for evidence of wildlife law violations. They may confiscate automobiles and boats used for illegally hunting deer at night, items of illegal hunting or fishing equipment, or illegally taken game to be used as evidence in court. Rangers use all modern law enforcement methods, including two-way radios in their vehicles and boats, walkie-talkies, and airplanes. They wear easily recognized green uniforms with shoulder patches in the shape of the State of Georgia, along with their badges and revolvers.

Naturally, wildlife rangers do much more than enforce laws and make ar-

rests. Frequently, they are called on to help search and locate lost or injured hunters, fishermen, or boaters. They recover the bodies of drowning victims, help landowners manage their fish ponds and farm game by calling in trained Commission biologists, and pass information on to sportsmen about good places to hunt or fish. Frequently, they assist Commission biologists in their programs of research and development through fish population studies, dove coo call counts, deer track counts, hunter census interviews, deer kill reports, and investigation of wildlife crop damage reports. Many rangers conduct dozens of programs or show films each year before civic and sportsmen's clubs, schools, and church groups.

In fisheries, the Commission operates eight fish hatcheries for stocking public streams, lakes, and private ponds. Some of the species currently raised at Commission hatcheries include rainbow, brook, and brown trout, largemouth bass, bluegill bream, shellcracker, channel catfish, walleye, striped bass, and smallmouth bass. Before fish are stocked from State hatcheries, Commission biologists make scientific studies to determine if the waters in question are suitable for the species in mind, and if the addition of that species would result in improved fishing. As a rule, fish such as trout, walleye, or striped bass are not suitable for small private lakes, and are not available for stocking in them. By the same token, bass, bream, and channel catfish are not recommended for addition as a rule to ponds, lakes, or streams where they are already present, since natural reproduction is usually much greater than possible from man-made stocking, except in a new or renovated pond or a lake or stream where all or most of the native fish population has been destroyed.

College-trained Commission fish biologists conduct continuous research studies into the problems of maintaining high game fish populations in both large reservoirs, small ponds, and public streams, attempting to find ways to manage these bodies of water for maximum fish production through chemical or physical means, or by restricting the harvest, stocking new species, etc. An active extension program to help farm pond owners maintain good fishing is an important activity of Commission biologists.

A growing activity of the Commission is the purchase, construction, and operation of public fishing lakes and streams in areas where little or no public fishing water is available now. Another new program is the construction of public boat access ramps on good fishing streams and lakes.

On the Georgia coast, the Commission's marine fisheries biologists carry on active studies of commercial fishing in saltwater, to find ways to improve the harvest that commercial fishermen make of shrimp, crabs, oysters, clams, and other important seafoods.

In game management, the Commission owns or leases more than 23 public hunting and game management areas in all sections of Georgia. Many of these areas served as refuges on which deer and wild turkeys were restocked, eventually repopulating thousands of acres of surrounding land outside the management areas themselves. Now, most of these areas are open to the public for hunting, providing a good place to hunt for thousands of Georgians who own no hunting land of their own or who have no contacts with landowners who do. Some of these areas are open for hunting any species in season in the counties where they are located, while others are open only on selected days for a small fee. Some of the species hunted on them include deer, wild turkey, squirrel, rabbit, doves, quail, grouse, raccoon, fox, opossum, and ducks.

On these areas, scientific game management techniques are employed as needed, including restocking, habitat improvement, predator control, etc.

Commission game biologists are continually at work on research programs to determine new and more effective ways to manage wildlife to increase hunter success. Species which have been studied or that are now under study include deer, quail, rabbits, squirrel, ducks, turkeys, and doves. Research projects include such diverse factors as the effect of hunting regulations, hunter pressure, habitat manipulation by fire or chopping, food patches, effect of dogs and other predators, etc. In addition, Commission biologists are on call to landowners who want technical advice on improving game populations on their own lands, especially for quail.

In the field of public information, the Commission utilizes all of the conventional public information media

to enlist public cooperation and support of the law enforcement and scientific activities of the Department, as well as to help increase public enjoyment of good hunting and fishing opportunities created or discovered by Department activities. This is done through Department produced newspaper stories, news photographs, *Georgia Game and Fish Magazine*, daily radio hunting and fishing reports, a weekly radio program, television films, feature length movies and slide shows for showing to civic groups, speeches, pamphlets, folders, booklets, and maps.

Most of the public information programs of the Department are included in the Administrative Division, which also includes necessary house-keeping functions of the Department such as accounting, bookkeeping, personnel services, and collection of the license fees paid by sportsmen which pay for the activities of the Commission to a considerable extent, along with money from federal aid funds and direct State appropriations. Through this system, the hunter, fisherman, and the boater pay for most of the activities of the Department from which they benefit.

Yes Johnny, I realize that I still really haven't sent you *all* of the information that we have about the State Game and Fish Commission. Maybe I gave you more than you bargained for, but that's all that we have the room and time for now. If you're really interested in finding out more, maybe you'll talk your parents into subscribing to the Commission's monthly magazine, where you can read about it on the installment plan. But in any case, maybe now you know why your mom or dad buys that hunting or fishing license every year, and how those few dollars are going to help make sure that you and your children will be able to enjoy the same good hunting and fishing that you're having with your parents now. And maybe, thanks to the efforts of *your* State Game and Fish Commission, you'll have even better luck and more fun in the field than they did! Here's hoping. 🐾



Improvement of wildlife management and hunting conditions through the creation of public fishing lakes and streams. The Commission is constantly working to improve the quality of the fishing water in Georgia. The Commission is also working to improve the quality of the fishing water in Georgia. The Commission is also working to improve the quality of the fishing water in Georgia.

Sportsmen Speak...



WILD DOGS

The officers and directors of the Floyd County Wildlife Association, speaking for the Club and for ourselves, wish to go on record as willing to help in anyway that we possibly can in controlling wild dogs. This is a problem in our area and it looks like the only way it can be controlled is through legislative power.

If we can be of assistance in any way, please advise.

*Bud Higgins,
President, Floyd County
Wildlife Association
Rome*

All wildlife conservationists and hunters who believe Georgia needs more effective dog control laws are urged to contact their representative or senator in the General Assembly to express their views. It is estimated that thousands of deer and livestock animals are killed every year by dogs.—Ed.

OUT-OF-STATE SUBSCRIBERS

I enjoyed more than ever last month's issue of *Game and Fish*. The article on Clyde Dixon was well done. (*Game & Fish*, August, 1967)

A friend of mine, who is an avid sportsman and whose brother is past chairman of the Louisiana Game and Fish Commission, read over several issues while he was in Gainesville recently and was very impressed with the magazine. He and his brother are in the sea food business and enjoyed the past articles on shrimp fishing and the sea food industry in Georgia.

If out of state subscriptions to *Game and Fish* are taken, please add the name of . . . Robert Buquet, 401 Palm Avenue, Houma, Louisiana, zip code 70360 . . . to your mailing list. Also if any copies of the booklet on Georgia's hunting and fishing regulations are available, he would appreciate a copy.

Enclosed is a check for a one year subscription. If there is any additional out-of-state mailing charge, please let we know and I will forward you the amount requested.

*Mike Banks
Associate News Director
Radio Station WGGA
Gainesville*

There is no extra subscription cost for out of state subscribers.—Ed.

SALTWATER LICENSE

I would like to take advantage of the "Sportsmen Speak" column and comment on your article in the July Issue of *Game and Fish*, "Does Georgia Need A Saltwater Fishing License?" It was well written and indicates that you are obviously in favor of licensing saltwater fishermen along Georgia's coast.

I disagree with your statement, "It is up to the people of the Georgia coast, and of the rest of the State, to decide if the Georgia coast should have something for nothing, rather than paying for what it gets."

I find that most Georgia sportsmen are of a caliber that do not expect something for nothing, and we do pay for what we get! I congratulate you and the Commission for your article in *Game and Fish*. It is a

Gardner

Sportsman's Calendar

SEASONS CLOSING THIS MONTH TROUT

Mountain Trout

Open Stream Season—April 1, 1967 through October 15, 1967.

Creel Limit—Eight trout of all species per person per day. Possession limit 8.

Fishing Hours—30 minutes before sunrise to 30 minutes after sunset.

SEASONS NOW OPEN DOVES

Season—Sept. 9 through Oct. 7, 1967 and Dec. 6 through Jan. 15, 1968.

Bag Limit—12 Daily, possession limit 24.
Shooting Hours—Noon Eastern Standard Time (1 p.m. Eastern Daylight Time) to Sunset. See federal regulations available at Post Offices for details.

MARSH HENS

(Gallinules & Rails)

Season—Sept. 2 through Nov. 10, 1967.

Bag Limit—15 Daily, possession limit 30.

ARCHERY DEER SEASON

Archery Pre-Season Deer Hunt—Sept. 30, 1967 through Oct. 28, 1967 in any county or portion of a county which has an open gun season for deer hunting in the 1967-68 season.

Bag Limit—As established by counties under the gun season regulations, except that archers may take deer of either sex during this special season.

STATE MANAGEMENT AREA HUNTS NOW OPEN

All small game in season—Altamaha (Except Butler Island, which is open only for waterfowl on Tuesdays and Saturdays during regular duck season), Lake Seminole, Whitesburg, Allatoona. No permits required for small game hunting.

Bucks only in season—Altamaha, Seminole, and Brunswick Pulp and Paper.

FEDERAL REFUGE HUNTS

NOW OPEN

Deer—Archery Only—Sept. 30-Oct. 11, 1967. Piedmont National Refuge. Deer of either sex. No permit required.

SEASONS OPENING THIS MONTH GUN DEER SEASON

Season A: Southeast Georgia Season—Oct. 14, 1967 through Jan. 2, 1968, in the following counties:

Brantley, Bryan, Bullock, Burke, Camden, Candler, Charlton, Chatham, Clinch County north of the Atlantic Coastline Railroad and east of the run of Suwannee Creek, Echols County east of U. S. 129 and south of Ga. 187, Effingham, Emanuel, Evans, Glascock, Glynn, Jefferson, Jenkins, Liberty, Long, McIntosh, Pierce County south of U. S. 82 and east of Ga. 121, Screven, Tattnall, Washington, and Wayne counties.

Bag Limit—Two (2) Bucks. Hunting with dogs is allowed in all of the above counties.

GROUSE, RUFFED

Season—Oct. 14, 1967, through Feb. 29, 1968.

Bag Limit—3 Daily, possession limit 6.

OPOSSUM

Season—Oct. 14, 1967 through Feb. 29,

1968. Exception: Coweta County opens Sept. 30, 1967 through Jan. 20, 1968.
No Bag Limit.

RACCOON

N. Ga. Season—Oct. 14, 1967 through Feb. 29, 1968, in Floyd, Bartow, Cherokee, Forsyth, Hall, Banks, Franklin, and Hart counties and all counties north of these counties.

N. Ga. Bag Limit—One (1) per night per person.

S. Ga. Season—No closed season.

S. Ga.—No Bag Limit.

SQUIRREL

Season—Oct. 14, 1967 through Feb. 29, 1968.

Bag Limit—10 Daily.

STATE MANAGEMENT AREA HUNTS OPENING THIS MONTH

(For a copy of the complete hunt schedule and detailed regulations, write the State Game & Fish Commission, 401 State Capitol, Atlanta, Ga. 30334.)

Raccoon—Oct. 13, 14, 20 and 21 on Lake Russell; Oct. 20, 21, 27, and 28 on Chestatee. \$1.00 permit per night required.

Squirrel and Grouse—Oct. 14, 20, 21, 27 and 28 on Coleman River and Swallow Creek. No permit required.

Squirrel and Grouse—Oct. 20, 21 Blue Ridge, Chestatee, Lake Burton. \$1.00 daily permit required.

Squirrel and Grouse—Oct. 27, 28—Blue Ridge, Chattahoochee, Chestatee, Lake Burton. \$1.00 daily permit required.

Deer—Primitive Weapons only—Oct. 16-21—Warwoman; Oct. 23-28—Piedmont Experiment station. \$5 permit required for hunt.

Deer—Archery only—Oct. 23-28—Clark Hill; Oct. 30-Nov. 4—John's Mountain, Lake Russell. \$5.00 permit required for the hunt.

FEDERAL REFUGE HUNTS OPENING THIS MONTH

Deer—Archery Only—Oct. 25-28, 1967—Blackbeard National Refuge. Deer of either sex. No limit on number of permits. Applications for free permits must be received by Oct. 20, 1967 at the Refuge Manager's Office, Savannah National Wildlife Refuge, Rt. 1, Hardeeville, S. C. 29927.

SEASONS OPENING NEXT MONTH BEAR

Season—Nov. 4, 1967 through Jan. 2, 1968 in the counties of Brantley, Charlton, Clinch, Echols and Ware. The remainder of the State is closed.

Bag limit—(1) one per person per season.

DEER

Season B: Southwest Ga. Season—Nov. 4, 1967 through Jan. 2, 1968 in the following counties:

Baker, Calhoun, Chattahoochee, Decatur, Dougherty, Early, Grady, Lee County west of U. S. 19, Marion, Mitchell, Muscogee, Seminole, Stewart, Terrell, Thomas, Webster, and Worth County south of U. S. 82.

Bag Limit—Two (2) Bucks, except in that portion of Worth County south of U. S. 82 where the bag limit is one (1) buck. On the last day of the regular season, Jan. 2, 1968, Chattahoochee and Marion counties will be open for either-sex deer hunting.

Hunting with dogs is allowed, except in Chatahoochee, Muscogee, and Worth where hunting deer with dogs is prohibited.

Season C: North and Middle Ga. Season—Nov. 4, 1967 through Nov. 27, 1967 in the following counties:

Baldwin, Banks, Butts, Columbia, Dawson, Fannin, Gilmer, Greene, Habersham, Hancock, Henry, Jasper, Jones, Lamar, Lincoln, Lumpkin, McDuffie, Monroe Morgan, Murray, Newton, Oglethorpe, Putnam, Rabun, Richmond, Rockdale, Schley, Stephens, Talbot, Taliaferro, Towns, Union, Walton, Warren, White, Wilkes, Wilkinson.

Bag Limit—Two (2) Bucks, except that in order to harvest a bumper crop of deer, Baldwin, Greene, Jasper, Jones, Lamar, McDuffie, Monroe, Newton, Putnam, and Talbot counties will be open for either-sex deer hunting on the last day of the regular season, Nov. 27, 1967, with a bag limit of no more than one (1) doe deer. The regular season bag limits will also apply during this period, provided that no gun hunter during the entire year may take more than two (2) bucks or one (1) buck and one (1) doe by any method or methods.

Deer hunting with dogs is prohibited in all of the above listed counties, and it is illegal to run, chase, or pursue deer with dogs in any of these counties.

Season D: Counties open—Nov. 4 thru Nov. 18, 1967 in the following counties:

Appling, Atkinson, Berrien, Bleckley, Crawford, Harris, Houston, Irwin, Jeff Davis, Johnson, Laurens north of U.S. Highway 80, Macon, Montgomery, Spalding, Taylor, Tift east of Interstate Highway 75, Toombs, Twiggs, Upson and Wheeler counties.

Bag Limit—Two (2) Bucks. Hunting with dogs in the above counties is prohibited except in that portion of Atkinson County lying south of Atlantic Coastline Railroad and east of U.S. Hwy. 221 and that portion of Berrien County lying east of U.S. 129, south of the Alapaha River, north of State Highway 76 and west of State Highway 135. These sections of Atkinson and Berrien counties will be open for deer hunting with dogs on Nov. 16, 17, and 18, 1967 only.

Season E: Counties open—Nov. 4, 1967 through Nov. 11, 1967 in the following counties:

Bartow, Catoosa, Chatooga, Cherokee, Clarke, Dade, Elbert, Floyd, Franklin, Gordon, Haralson, Jackson, Madison, Oconee, Paulding, Pickens, Polk, and Walker.

Bag Limit—Two (2) Bucks. Hunting with dogs is prohibited.

DUCKS

Season—Nov. 28, 1967 through Jan. 6, 1968.

Shooting Hours: One half hour before sunrise until sunset. Consult the nearest office of the U. S. Weather Bureau for the exact time.

Bag Limit—Four (4) per day, including no more than two wood ducks, one canvasback, and two black ducks. In addition, hunters may take five mergansers daily, including no more than four American and red-breasted mergansers and one

hooded merganser. In Chatham, Bryan, Glynn, Liberty, McIntosh, and Camden counties, east of the Intracoastal Water, hunters may take two additional bonus scaup ducks per day.

Possession Limit—Eight ducks, to include no more than four wood ducks, one canvasback, and four black ducks. Possession limit for mergansers is 10, to include no more than two hooded mergansers.

GEESE AND BRANT

Season—Nov. 4, 1967 through Jan. 12, 1968, except in Liberty and McIntosh Counties, where the season is closed.

Shooting Hours—One half hour before sunrise to sunset.

Bag Limit—(Geese) Two per day. Possession limit is four. There is no open season on snow geese.

Bag Limit—(Brant) Six per day. Possession limit is six.

QUAIL, BOBWHITE

Season—Nov. 18, 1967 through Feb. 29, 1968.

Bag Limit—12 Daily, possession limit 36.

RABBITS

Season—Nov. 18, 1967 through Feb. 29, 1968.

N. Ga. Bag Limit—5 Daily.

S. Ga. Bag Limit—10 Daily.

North Georgia includes the counties of Harris, Talbot, Upson, Monroe, Jones, Baldwin, Hancock, Warren, McDuffie, Columbia, and all counties north of those listed. All counties south of those listed above on the fall line are considered part of South Georgia.

SNIPE, WILSON'S

Season—Nov. 27 through Jan. 15, 1968.

Bag Limit—8 Daily, possession limit 16.

WILD TURKEY—Fall Season

West Central Ga.—Season—Nov. 4, 1967, through Jan. 2, 1968 in the counties of Chatahoochee, Marion, Muscogee and Stewart.

Bag Limit—One (1) per season.

Talbot County—Nov. 4, 1967 through Nov. 28, 1967.

Bag Limit—One (1) per season.

Southwest Ga. Season—Nov. 20, 1967 through Feb. 29, 1968, in the counties of Baker, Calhoun, Decatur, Dougherty, Early, Grady, Miller, Mitchell, Seminole, and Thomas.

Bag Limit—Two (2) per season.

WOODCOCK

Season—Nov. 28 through Jan. 31, 1968.

Bag Limit—5 Daily, possession limit 10.

STATE MANAGEMENT AREA HUNTS NEXT MONTH

Deer-Archery Only, Either Sex—Nov. 6-11—Blue Ridge. \$5.00 permit required for the hunt

Deer-Archery Only, Either Sex—Nov. 27-Dec. 9—Suwanoochee. Hunters are required to pick up a free permit at the checking station.

The bag limit on all archery hunts is one deer of either sex.

Deer-Bucks Only—Nov. 20-21-22—Allatoona. Quota hunt limited to 400 hunters. Applications must be made by mail between Nov. 6 and Nov. 11, 1967. All applications must include the \$5.00 permit fee for each applicant up to five persons, and must be mailed to the State Game and Fish Commission 401 State Capitol, Atlanta, Ga. 30334.

Deer—Bucks Only—Nov. 20-25—Blue Ridge, Bullard Creek, Cedar Creek, Clark Hill, Chatahoochee, Chestatee, Coleman River, Johns Mountain, Lake Burton, Lake Russell, Oaky Woods, Piedmont Experiment Station, Swallow Creek, Warwoman. \$5.00 permit required per hunt. No limit on the number of permits.

Deer—Either Sex—Nov. 27 only—Chestatee, Lake Russell. Each hunt is limited to 500 hunters selected by drawing Nov. 15. Applications must be made by mail between Nov. 6 and Nov. 11, 1967. All applications must include the \$5.00 permit fee for each applicant up to five persons, and must be mailed to the State Game and Fish Commission, 401 State Capitol, Atlanta, Ga. 30334.

Deer—Primitive Weasons Only—Nov. 22-25—Chickasawhatchee. \$5.00 permit required. No limit on number of permits. *Small game in season*—Nov. 29-Dec. 23, Wednesdays and Saturdays Only—Cedar Creek, Clark Hill (Quail, squirrel, rabbit, doves, ducks in season) \$1.00 daily permit required.

Small game in season—Nov. 29, 1967-Jan. 31, 1968, Wednesdays and Saturdays only — Piedmont Experiment Station, Oaky Woods (Squirrel, rabbits, quail, and doves in season) \$1 permit per day required.

FEDERAL REFUGE HUNTS NEXT MONTH

Deer-Bucks Only—Nov. 4, 6, and 7, 1967—Piedmont National Refuge. Limited to 4,000 hunters to be determined by drawing. Applications for free permits must be received no later than 4:30 p.m. Oct. 9, 1967 at the Refuge Manager's Office, Piedmont National Wildlife Refuge, Round Oak, Ga. 31080.

Deer-Either Sex—Nov. 27, 1967—Piedmont National Refuge. Limited to 4000 hunters to be determined by drawing. Applications for free permits must be received no later than 4:30 p.m. Oct. 9, 1967, at the Refuge Manager's Office, Piedmont National Wildlife Refuge, Round Oak, Ga. 31080.

Deer-Archery Only—Nov. 20-25, 1967—Blackbeard National Refuge. Deer of either sex. No limit on number of permits. Applications for free permits must be received by Nov. 14, 1967, the Refuge Manager's Office, Savannah National Wildlife Refuge, Rt. 1, Hardeeville, S. C. 29927.

MEETINGS THIS MONTH

Board of Directors, Georgia Sportsman's Federation. Stone Mountain Park, Oct. 7 and 8, 1967.

IN MEMORIAM

William E. (Bill) Hobbs, Rt. 4, Blakely, Ga., died July 21, 1967. Mr. Hobbs was a wildlife ranger in Early County, and patrolled Lake Walter F. George. He first joined the Commission in March, 1955, and was with the Commission until his death, except for nine months of 1963, serving for 11 years in that capacity.

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November 1967 Volume II Number 11

Contents

| | | |
|------------------------------|-----------------|----|
| The Woodie: Mr. Georgia Duck | Oscar Dewberry | 1 |
| Hide and Seek | Jim Tyler | 5 |
| Trophies—or Sad Memories? | Dean Wohlgenuth | 8 |
| Call the Crows | Joe Kight | 10 |
| By The Numbers | Dean Wohlgenuth | 13 |
| The Outdoor World | | 14 |
| Sportsmen Speak | | 15 |
| Sportsman's Calendar | | 16 |

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Every year with the opening of the gun deer season in Georgia, a fierce debate rages across Georgia about the relative safety of allowing deer hunting with rifles versus shotguns.

In any debate of this kind, more heat than light is usually generated, and facts seldom stand for long against strong emotions of fear.

Part of the problem stems from the fact that many sections of Georgia haven't had any deer hunting within the last half century or more, since deer were wiped out. Now that the herd is expanding and new counties are being opened for deer hunting again, some sincere but misled people have become alarmed about the possibility of so-called "high powered" rifles being used to hunt them.

A detailed examination of the record of Georgia hunting accidents for the last ten years in the article on page eight shows that the shotgun has been involved in a much higher percentage of hunting accidents and fatalities, with only a handful of accidents involving big bore rifles. In fact, there has never been more than one fatality in a single year involving large caliber rifles.

Of 68 accidents in the ten year period from 1957-1966, shotguns were involved in 48 cases, or 71 per cent of all gun-related hunting accidents in Georgia. 14 accidents involved .22 caliber rifles for 21 per cent of the total, while larger caliber rifles were involved in only 6 accidents, or an almost insignificant 8 per cent of the total number of accidents, including both fatal and non-fatal accidents.

In fatal accidents alone, 62 per cent involved shotguns, 24 per cent .22 rifles, and 14 per cent large rifles. This record indicates that Georgians have little cause for alarm about the type of weapon that is used for deer hunting. The records show that the superstitiously feared "high-powered" rifle is not any more dangerous than the shotgun. It is the man behind the gun, not the type of gun itself, that is the most dangerous. Even so, considering the fact that there are well over a quarter of a million hunters in Georgia, hunting is safer than driving your automobile on the highways and streets to reach your destination. There are only five times as many licensed drivers in Georgia as hunters, yet more people are killed on the road each weekend than are killed all year in hunting accidents.

High velocity rifle bullets are capable of traveling more than two or three miles, but they seldom do, even if shot straight up in the air, which a deer hunter has no excuse for doing. Even in the flattest parts of south Georgia, it's difficult to shoot for a hundred yards without hitting a tree. Beyond that distance, the bullet falls rapidly to the ground, its trajectory showing the effect of gravity.

On the other hand, at a hundred yards, even one particle of buckshot is capable of killing a man. The buckshot shell contains 6, 9, 12, 16, 20 or more pellets, depending on the size and gauge, and the pellets spread out over a greater area than a single rifle bullet, thus greatly increasing the chances of accidentally striking another person, especially if the hunter mistakens another person for a deer.

Both the rifled slug and the buckshot pellet are relatively heavy, slow-moving objects which tend to bore through and penetrate leaves and brush more than the fast-moving, soft rifle bullet, which tends to splatter apart and lose momentum after striking even a small twig. Thus a "sound shot" at a noise in the bushes could be more deadly with the shotgun than the rifle. National Rifle Association statistics show that 90 per cent of the accidents in the past ten years where one hunter mistook another for game occurred within 100 yards, which is deadly range for even a single buckshot pellet. In Georgia, the average distance of fatal accidents is only 25 yards. Self-inflicted accidents occur much closer.

And undoubtedly, the rifle is the most efficient and accurate deer hunting weapon at normal deer hunting distances, anywhere from 10 feet to 200 or more yards in the hands of the average hunter. Many competent marksmen would never go deer hunting if they were forced to use the less accurate shotgun. We don't blame them.—J.M.

ON THE COVER: Two pair of ringnecks sweep into a quick landing on a South Georgia pond. The ringneck is one of the most common migratory ducks taken in Southwest Georgia by waterfowl hunters. The Georgia duck season opens November 28. Painting by George Reiney, Jr.

ON THE BACK COVER: "Take a boy hunting" might be a familiar phrase, but it's worth repeating, especially for results like the look of a young boy who has just bagged the first rabbit of his hunting career. The rabbit season opens on November 18. Photo by Lea Lawrence.

The woodie

MR. GEORGIA DUCK

By Oscar Dewberry
Game Biologist

■ The wood duck (*Aix sponsa*) is the most common wild duck that is found in Georgia the year round.

There is little doubt that among all waterfowl, the woodie is unsurpassed in beauty and color. The drake is truly a Beau Brummel. As in all birds, the male is more colorful. The drake woodie is recognized by the white band under the chin and the bright green and purple body feathers. The hen is drab or brownish and has lighter iridescent purple feathers, but at the same time has more color than lots of other female waterfowl. In flight the woodie can be recognized by the square tail and the head held higher than the body line.

No other duck has been so persecuted as the woodie. During the period of "fly-tying," the wood duck's feathers were in great demand. Because of their flocking habits in roosting, they have too often been subjected to heavy shooting pressure, and bag limits and legal shooting hours ignored. Wanton slaughter has taken place at wood duck roosts, and still continues because the birds will continue to come in even though they are being shot. The habitat necessary for these birds has been plundered for several decades. Ponds and swamps have been drained at a rapid pace, and trees that afford nesting cavities are being cut. Since the woodie never nests on the

ground, these losses must be compensated.

All these factors combined greatly reduced the wood duck population. In 1918 the shooting season was closed on this gorgeous bird in both the United States and Canada. The season remained closed until 1941. When opened, only one woodie was permitted in the hunter's daily bag. The present limit of two birds began in 1960. Probably with a continued increase in production in the state as well as throughout the Atlantic and Mississippi Flyways, there may again be an increase in the daily bag limit.

In order to sustain any wildlife population, a proper habitat must be provided. In too many programs, this habitat has received only secondary interest. Drainage programs as instigated by the Small Watershed Program (Public Law 566) can be very detrimental to wood ducks. Provisions should be included in these programs to compensate for the loss of habitat. These programs have destroyed sloughs, swamps, beaver and woodland ponds as well as marshes which are intricate parts of the woodies' environment in rearing, resting and roosting. Where drainage may not directly effect such surface water areas, it can and probably does reduce or eliminate seasonal flooding which is



Below: Beaver ponds have played an important role in bringing back the once nearly extinct wood duck. The flooded timber in the ponds provides ideal natural nesting and rearing areas, as well as a good place to hunt. The wading hunter on the right has bagged a drake and hen wood duck, while his companion holds a hen mallard.



Right: Game biologists making studies of migratory and native wood duck populations use wire traps to catch and band birds



necessary to sustain wetlands during or following periods of drought. Drainage also reduces the frequency and duration of flooding, as well as lowers the ground water table.

Following drainage, the timber stand is usually changed to a type more adapted to drier soils. In most cases this has been from a hardwood to a pine type or from cypress and tupelo gum, which provide prime wood duck habitat wherever found, to a tree species that does not compensate for the loss with the drier soil conditions.

Clearing land can also harm the wood duck. Since hardwoods are one of the main ingredients in the woodies environment, their removal destroys the potential of an area for providing nest sites and food.

Flood controls in Watershed Programs retard or reduce downstream flooding and reduce the frequency and duration of water over flood plain hardwood bottoms. After flood controls are initiated, land owners are encouraged to clear these bottoms for agricultural uses. Large reservoirs created by these flood controls destroy the shallow water ponds' original form, thus reducing wood duck habitat.

Pollution is also detrimental to ducks as well as fish. Chemical residue from

industry, municipal sewage, and silt from mining renders streams and ponds unsuitable for rearing waterfowl. Silt and chemical waste kill vegetative and aquatic plants that produce food for ducks. Residue from pesticides and insecticides used in controlling agricultural pests have reached drastic proportions in some localities and streams which are frequented by ducks at various times. Pesticide studies of samples taken from black duck wings at the Patuxent Research Center at Laurel, Maryland, indicate that black ducks are absorbing residues in their vital body organs which may someday be detrimental to this and other waterfowl species.

By knowing that the woodie utilizes various habitat types, we probably have accepted a false sense of security, especially when we consider the fact that major habitat changes are occurring and will continue in the future, due to changing industrial and agricultural programs. While statistics are not available for Georgia regarding the numbers of wood ducks or the acres of habitat available, estimates have been made by the Migratory Bird Population Station at Patuxent for both the Atlantic and Mississippi Flyways between 1962 and 1964. An average of 2.5 million birds



Author Oscar Dewberry examines an immature hen wood duck that he trapped this summer on Butler Island. The bird was banded on the leg and released unharmed.

were listed for each year. During the same period, hunters bagged 393,000 birds each year. It should be remembered that the bag limit is two birds and a 40 day season. Therefore, the question is how much habitat is required for 2.5 million wood ducks, and is the shrinking wetland problem decreasing at a proportioned rate that will offset the apparent indication that wood duck production is up from the past decade when 40 million acres were available in these flyways.

Although timber producers, some farmers, and other land owners have conflicting opinions regarding the economic importance of the beaver, he must be credited as being one stimulus to production of wood ducks in Georgia. By the mid-fifties beaver had spread over Georgia from the fall line south into sections of the Upper Piedmont and Limestone Valley sections. By his engineering ability, small impoundments had been created on creeks and other streams which were conducive to the wood duck's nesting habits. Timber flooded for indefinite periods soon dies, thus creating openings as well as tree cavities for nest sites, and providing roost areas and winter ponds, where most of the better wood duck hunting takes place.

The wood duck is one of the early spring nesters of the bird world, probably preceded only by the mourning dove in Georgia. Records indicate that a number of broods have been observed in March, however the earliest observation by this writer was a brood of four ducklings on the Altamaha Waterfowl Area at Darien on March 18 this year. By attributing a period of 10 to 15 days for laying four eggs in the clutch, and the 28 to 31 days for incubation, this would indicate Mama Woodie has to begin preparing her nest in January. By hatching in a hollow tree or man-made box, the elements probably are not as detrimental to nesting at this time of year as would be expected if the nest was exposed on the ground or on the limb of a tree.

Soon after hatching, the young ducklings flutter down from their nest home and join the mother. Nestings do not always take place over water. Broods of very young birds have been observed moving overland, possibly going to either a pond or stream. The mortality rate among young ducklings is extremely high because turtles, large bass, and other predators have appetites for young ducklings.

The survivors grow rapidly and are able to fly when they are about six weeks old. The small groups of three to seven birds occasionally observed during the summer and early fall usually indicate a family unit.

By late summer or early fall, these groups begin to congregate at roost sites, forming large flocks. The ingredients necessary to make a good wood duck roost are not known, because the same cover, water depth, and other habitat conditions do not hold the same attraction from one locality to another. Usually the requirements are shallow water over a portion of the site plus logs, fallen timber, or woody debris that the birds can sit on or use as resting perches.

The birds begin moving to these selected roost sites just before sunset and continue until dark and afterwards. On moonlight nights and during years when there is a heavy mast crop of acorns, nuts, etc., the birds are constantly moving during the night and carry on a continuous whistling or gabble of conversation. One of the favorite night feeding sites are nearby corn fields that have been harvested with mechanical pickers where shelled grain remains in the field. The period of leaving the roost begins early in the morning, just as it began the previous afternoon, with small groups beginning to leave long before daylight. By sunrise the roost is completely vacated, although several hundred or even thousands of ducks may have spent the night in the area. It is under the conditions of roosting and leaving the site that most of the woodies are killed. However, since this duck is not easy to decoy or call, most hunters think they are justified by shooting under these conditions, and it is legal to do so if the legal shooting hours and bag limits are observed.

In conclusion, the Beau Brummel of all waterfowl has made a remarkable recovery in population numbers since the Roaring 20's when the season was closed because the species was threatened with extinction. The present and future status of Mr. Duck in Georgia depends upon you and me, the sportsman, land owner, industrialist, birdwatcher or simply someone who appreciates natural beauty and the bird's ability to recover when the odds are against him. 🍷



**About The Author
OSCAR DEWBERRY**

It would be easy to envy Oscar Dewberry. What better life could a man have, when he loves waterfowl hunting, than to live in the midst of the best waterfowl hunting area in the state?

But then that area, so easily accessible to him in distance (or lack of it) is the very thing that keeps him from spending more time at his favorite sport. Oscar is the man who, since 1965, has operated the Butler Island Managed Duck Hunting Area for the Game and Fish Commission.

When the area is open to shooting, he's busy checking hunters in and out, collecting kill data and similar information which will help in the management program, and a host of other chores to keep the hunters happy.

Even so, living right on Butler Island is a very advantageous location for him. A large part of the work he carries on each year is right there on the island with him.

But the managed duck hunting area is not all his job. In addition to that, and handling the Altamaha public waterfowl area which surrounds Butler Island, he's game supervisor for the 22-county Coastal Region for the Game and Fish Commission. His office is at Brunswick.

But Oscar loves his work. He's been with the Commission 10 years now, starting shortly after receiving his BS in biology from Jacksonville State University, Alabama, in 1957.

His first assignment was at Metter, where he was assistant project leader in a farm game habitat restoration project. Then he went to Bainbridge, near Lake Seminole, in 1959, and there the native of Tallapoosa, Ga., began the Lake Seminole Waterfowl Development Project. Also, he was project leader of the Fire Ant Control Investigation Project. This was a three-year study on the effects of insecticides on quail populations in Southwest Georgia.

He has represented the Commission for the past two years at the Atlantic Flyway Council meeting in the Washington, D.C., area.

In addition to hunting ducks, Dewberry enjoys hunting all small game, especially quail. He likes fishing in saltwater for channel bass and sea trout, and freshwater angling for bream. He couldn't ask for a better location for all his favorite pastimes.

Completing the full picture for Oscar is his family, including his wife Bobbie, of Goodwater, Ala., and three daughters, Janet, 13, Deborah 11, and Jennifer, 20 months.



"HIDE AND SEEK"

By Jim Tyler

■ It's a big, rambling, tricky game of hide and seek. The quail are hiding. Wildlife biologist Ron Simpson is seeking.

This man-bird game covers 1400 acres of Dougherty and Baker Counties in quail rich southwest Georgia plantation lands. On this area there must be 7 zillion blades of grass, thousands of trees, bushes, and acres of croplands to help the quail be the winner. And when Ron starts for home at night after a day searching for quail and he is tired, sweaty, carrying the rattles from a recently killed rattlesnake, and making the umpteenth swat at eye-loving gnats, you know it is no game. You know it is work. Research work. Ron is quail project leader for the State Game and Fish Commission. He is poking and ferreting out some of the unknown facts about that little brown bird that stampees thousands of Georgia hunters' hearts.

Research, you know, is the key to continued hunting success. And Georgia quail have not felt the keen eye of research since the late 1920's when Herbert L. Stoddard conducted his now

famous studies in the Thomasville area.

The 1967 project started when plantation owners in southwest Georgia noticed something wrong with their quail populations. Having something wrong with the quail population in southwest Georgia is indeed reason to boom the cannon of concern. For the plantation lands are managed quite extensively for quail. He is king down there. Several thousand acres of land have been rearranged to look like and be a quail banquet. All that a quail needs to flourish is provided. This land is where quail hunters "commence to get nervous if they don't see a covey every 10 minutes," says Francis Frazier, biological aid on the project. Before starting to work for the Commission, Francis was a professional bird dog trainer for some 30 years. He knows the quail of southwest Georgia. He has worked with them, watched them, kept track of them. By using bird dogs, he has found quail densities as high as 1.9 quail per acre on plantation lands. Quail land not specifically managed for quail will have about one quail for every four acres.

It takes much effort and money to

manage land to hold such high numbers of quail. Therefore, many of the plantation owners keep a close watch on their coveted quail. Lately, instead of finding the usual 70-80% ratio of juvenile to adult birds among quail shot during hunting season, they found the ratio had dropped to around 50-60% juvenile. Here is a problem, they thought. Something is happening to our quail.

If you have a problem, call an expert. The State Game and Fish Commission was called. And a research project was started in southwest Georgia.

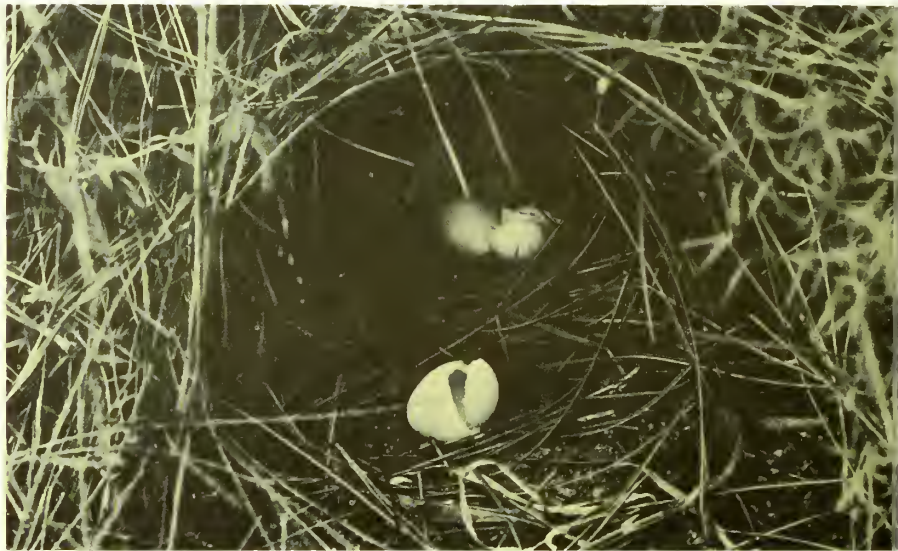
"The plantation people think they have a problem," Ron says. "We just do not know. We need to find out. If there is a problem, now is the time to find it out before the bottom drops out." Besides answering some pertinent questions about quail-managed plantation lands, the results may have far reaching implications. Ron says. "For the purpose of this study we needed a small area with a lot of quail so we could observe several quail." More needs to be learned about how a dense quail population gets along. "For an average quail

How many quail nests have you seen? Not many, we bet. They are hard to find. Some of the concealing vegetation was cleared from the entrance of this quail nest so a picture could be taken.

One of the few successful quail nests. Many are destroyed before the eggs hatch. Young quail get out from the inside of their egg by "pipping" out an escape hatch (egg in foreground).



Ron Simpson, wildlife biologist for the State Game and Fish Commission and quail project leader, tags captured quail with a leg band. When the tagged bird is recaptured or shot, his movements can be traced and his life span calculated.



area we would need so much manpower to cover the area, we just couldn't do it," Ron says. "For example, when I was studying at the University of Georgia I had a 780 acre area and didn't find the first nest on it." This past nesting season he found about 500 nests on the research area.

He also has past studies such as Stoddard's to help him evaluate the findings of his research.

Ron says, "when the data from this study are completed and analyzed, and the situation of a low ratio of juvenile to adult birds comes up again, we will be able to tell the landowners what is wrong."

One phase of the study will be a collection and evaluation of wings taken from quail killed during the hunting season. Biologists can find quail age and sex by looking at their wings. Wings will be collected from birds shot on plantation lands and from birds shot in the surrounding countryside. This will give Ron a comparison of the quail picture on 'plantation quail country' and 'average quail country'. If we find

50-60% of the birds shot on average quail country are juvenile, we will know we have a problem not limited to just highly managed areas," Ron says. "We do not know the present condition of the quail population in surrounding non managed lands, because we have no previous records. Nobody kept them."

Let's look at some of the nesting facts Ron has come up with so far. As mentioned, close to 500 nests within the 1400 acre study area have been found this past nesting season. Nesting success is important and is a big part of the research project. Ron and Francis spent many a hot grueling day looking for the almost-impossible-to-spot nests. Quail are clever nest hiders.

Quail start nesting in April and continue on into October. Ron found the peak nesting activity to be around June 15. By July 1, 257 nests had been located. Eighty-four of them (88.4%) had been destroyed by various causes. Three nests (3.2%) were deserted. And 8 nests (8.4%) were successful. Hatching success stayed at about 8% before July 1, then jumped to 28%. Even this



Top right: Ron baits quail traps with cracked corn. Quail feed on corn scattered outside the trap, continue eating along a trail of corn leading inside, and pass through a small opening into the inside. Once inside, the trap is rigged so the quail cannot come back out the entrance.

Top left: Francis Frazier, biological aid on the quail project, stands thigh deep in twisting concealment looking for another bobwhite nest. Ron and Francis located about 500 nests on the 1400 acre research area this past nesting season.

is below normal.

"The exact predator responsible for destroying a nest cannot always be determined, as no visible evidence may be left or several different predators may have visited the destroyed nest site," writes Ron in his annual report. Definite evidence was found (by July 1) in 68 nests. Skunks destroyed 24; opossum, 13; rats and mice, 11; snakes, 10; fox, 6; housecat, 1; and dog, 1.

If a quail nest with eggs is destroyed, the parents will build another nest and try again and again and again until they bring off at least one youngster, or autumn closes in. On two occasions Ron has found where a hen was dragged off the nest and killed right in front of the pile of eggs. The male came back, from wherever he might have been, and took up the egg incubation even though blood and feathers were strewn all around the front of the nest. Another time Ron found a nest with five eggs in it. Evidently the parents sauntered off somewhere to feed and while they were gone a predator, probably a snake, made off with two eggs. The parents returned and the hen continued to sit on the re-

maining three eggs. Putting it mildly Ron says, "quail have strong parental instinct."

They have a strong something, that is for sure. Maybe the low hatching success is just the way it is and always has been with an abundance of quail living amid ideal conditions. But it is too early to make concrete statements. Ron has gathered only a portion of his data. This is a two year project. He will observe many, many other quail traits. What is the difference in quail brood size of early and late hatches? And what is the difference in size of quail broods of young and old hens, for example?

It is like a jigsaw puzzle. Biologists need all the pieces before they can clearly see the whole picture.

The season after you successfully pull that shotgun in line with a fast vanishing bobwhite or even next summer when the bobwhite whistle warms your day, think how plucky the little bird is. Think how much we want the quail. And remember—research is the key that opens the door for continued high quail populations. ☺

TROPHIES..

The bush moved! There's a dark form there that looks like it surely must be a deer. The hunter isn't sure he'll get a chance to hunt again this year, and he may not get another shot today. So, just to be sure, he takes a shot.



So, what do you think that dark form was, that he saw in the bush? Well, let's take a look from the other side. A deer? Well, maybe if you spelled it differently. He's "dear" to his family, at least. But the guy who shoots into the bush without first being very sure of his target, may pay very dearly in the end. The guy behind the bush should have been wearing something bright red—or yellow or orange. Then he'd have been a lot easier to identify as another hunter.

...or sad memories

■ Instead of resulting in trophies, 12 incidents in Georgia last year during hunting season resulted in unhappy memories for someone. But some of the persons involved are no longer around to remember.

Gun accidents during the 1966-67 hunting season, from September of last year through February of this year, resulted in five deaths and seven injuries.

Three of the five fatalities involved shotguns. The other two involved a high powered rifle and a .22 rifle. Shotguns also figured in three non-fatal accidents, while the big rifles were involved in two non-fatal mishaps. Two non-fatal accidents involved .22 rifles.

Two of the deaths resulted from hunters stumbling. The one big bore rifle death fell into this category, when the hunter fell and shot another hunter. The .22 rifle fatality was self-inflicted. One of the three shotgun deaths occurred when a hunter shot a deer, ran after it, stumbled and was shot through the head with his own gun.

In another shotgun death, a hunter mistook another hunter for game, and in the remaining shotgun case, a hunter was removing a loaded gun from a car and shot another person.

Two of the non-fatal accidents were blamed on mistaking a hunter for game, in addition to the fatality in this category.

As usual, the leading causes of hunting accidents accounted for most of Georgia's mishaps for the year, including mistaking another person for game, taking a loaded gun from a car and stumbling.

These figures do, however, represent a big decrease over the previous year. During the 1965-66 season, there were 25 hunting accidents, 12 of which were fatal.

Here's a brief rundown of the non-fatal accidents of last year:

□ A boy, squirrel hunting, got lost and fired a shot as a signal. The bullet ricocheted, hitting him.

□ A hunter was shot in the thumb with a .22 rifle by another hunter.

□ A man was hit in the lip and arm with buckshot at a distance of about 100 feet.

□ A deer hunter mistook another hunter for a deer and shot him with a rifle at a distance of less than 50 yards.

□ A hunter shot himself in the foot, trying to put the wrong size shell in his shotgun.

□ A deer hunter with a rifle shot another deer hunter, mistaking him for game. The victim was dressed in brown, and had a white bandage on his arm. The shooter mistook the white for a deer's white tail.

□ A hunter stumbled on a wire fence and shot himself in the wrist.

That's how it happens. Be alert. Be sure of your target. Don't become a statistic this year. ☹

10 Year Record

Georgia Hunting Accidents

(With details on type of firearm used. Total non-fatal and fatal accidents are listed first. The number of fatalities included in that figure is shown in parenthesis. Compiled by the State Game and Fish Commission from accident reports filed by wildlife rangers.)

| | Total Accidents | Shotguns | .22 Rifles | Hi-Powered Rifles | Average Fatal Range |
|-------------|--------------------|------------|------------|----------------------|------------------------|
| 1957 | 9 (4) | 5 (1) | 2 (1) | 0 | 10 yards |
| 1958 | 3 (0) | 3 (0) | 0 | 0 | 50 yards |
| 1959 | 5 (3) | 2 (1) | 2 (1) | 1 (1) | 10 yards |
| 1960 | 1 (0) | 1 (0) | 0 | 0 | 30 yards |
| 1961 | No Reports | No Reports | No Reports | No Reports | No Reports |
| 1962 | 4 (2) | 4 (2) | 0 | 0 | 30 yards |
| 1963 | 12 (6) | 7 (2) | 2 (2) | 0 | 10 yards |
| 1964 | 13 (7) | 9 (5) | 1 (1) | 1 (1) | 30 yards |
| 1965 | 16 (6) | 11 (4) | 4 (1) | 1 (1) | 25 yards |
| 1966 | 12 (5) | 6 (3) | 3 (1) | 3 (1) | 25 yards |
| Totals | 75 (33) | 48 (18) | 14 (7) | 6 (4) | 25 yds. avg. |
| % of Totals | (44%) | 71% (62%) | 21% (24%) | 8% (14%) | |
| Guns—68 | (91%) | | | | |

Totals do not match on number of accidents, fatalities, and types of weapons used because seven accidents included did not involve firearms: falling from trees, drowning, bow and arrow, etc.)

Call the Crows

By Joe Kight
Game Biologist

■ The cold mist hanging over the slough was slowly creeping into my down filled jacket. This was blamed for the occasional shiver, but anticipation was probably as much the cause.

After several weeks of talking and planning, a long drive in the middle of the night, the cold boat ride up the lake, the final adjustment of camouflage in the blind—we could almost hear the whistling wings and see the downstretched heads looking things over. Almost.

The blackness eased into various shades of gray. A pair of brown thrashers started scolding in the thickets. A towhee started its morning search for food in the dead leaves under the sweet gum trees. I still wonder how such a small bird can make so much racket without hurting itself.

The grays were changing into colors. The ducks were overdue. We had hoped for a few mallards or blacks, but felt sure a flock of woodies would come by.

The sun was hitting the tree tops across the slough and the towhee was joined by a companion that must have had a foot the size of a snowshoe. The mist was starting to burn off and the woodland had settled down to the day's business. The ducks weren't coming.

Just as we were starting to climb out of the blind, a crow drifted by, cawing a greeting to friends somewhere up the slough. Perhaps the day wouldn't be a complete bust after all. I started slapping pockets and rummaging through my gear. Both calls were finally located in the pocket of my rain jacket: one call with a deep bell tone and the other with a higher rasping tone.

My partner looked at the calls, made a "what-the-heck, why-not?" sort of gesture, screwed his poly-choke to improved cylinder, and nodded. I shifted the model 12 to my right hand and held the deep toned call between thumb and fore finger of my left hand. This way I could still hold the call and operate the slide of the shotgun at the same time. More important, I could resume

immediately after shooting. Resuming could be done right handed while the left hand was holding the

I started making noises like I thought



a crow would make when it sees an owl trying to hide for a morning's snooze. Before we expected, a scout crow came diving over the trees with its wings half folded, headed straight towards us. Bill snapped a shot, missed. The crow back pedaled and climbed, but folded just as it topped the trees, when the second shot centered him. I had been calling all the time and now increased the tempo to a more frenzied pitch. A flock of crows came boiling over the trees, twisting, diving, circling the blind, looking for the cause of the trouble. I folded one, missed, dropped another. Bill was shooting in the opposite direction and I couldn't see how he was doing, but he was getting plenty of shots. I fumbled a shell trying to reload, calling all the time. Finally getting reloaded, I stood up in time to catch one coming in across the water. He hit so close to the blind that muddy water splattered in. The rest of the crows were beating their way over the tree line, objecting loudly to the whole proceedings. I looked at Bill and held up three fingers. He grinned, held up five.

We retrieved the dead crow next to the blind, reloaded, and got ready for more action. The crows had regrouped, called in more help, and were telling the world of their displeasure.

I started a frantic squall on the higher pitched call. The crows couldn't stand it. They came over en masse. It was obvious that these crows had not been called any time recently. They came in so close—diving, twisting, turning, flaring—that most of the shooting was point-blank. However, it didn't take long for them to realize they were being had.

Crows are among the smartest of birds. Although their curiosity has often led to their downfall, it is estimated that there are more crows today than there were when the Pilgrims were shooting them out of their maize fields. Granted, a crow is fond of grains and has on occasion given farmers a hard time. But considering present farming techniques in which about as much is lost as once was produced, the crow is a minor agricultural problem in this section of the country.



We moved on down the slough and topped about a mile away from the luck blind for one more try. A small flock came in with as much enthusiasm as the first bunch. After a flurry of hooting, a single crow drifted over almost out of range. Bill led him, touched off the shot. The crow shuddered, slowly tumbled on. He had obviously been hit hard. The crow's wing beats grew shallow and then stopped altogether. With wings outstretched, it started into a gradually steepening spiral and finally crashed into a clump of willows at the edge of the slough.

The sun was high now and it was time to head for home. Besides, we were out of shells! No meat for the pot, but then no birds to clean either. Just a morning of fast shooting with no seasons or bag limits to worry about.

The hunt a failure? A confirmed dyed-in-the-wool duck hunter might agree.

We didn't think so. 🦆

Above: Calling crows is the secret of the game. Electronic callers are fine if you can afford them, but the old-fashioned mouth call is inexpensive, easy to carry, and not too difficult to use.

Top Right: There's no season or bag limit on crows, but a hunting license is required, and shotguns must be plugged to limit their capacity to three shells.

Bottom Right: Head for cover! When they're under the gun, crows make a challenging target.



By the numbers...

Georgia's Game Management Areas are a good place to Hunt

By Dean Wohlgemuth

The largest trophy rack bagged by any hunter on a State management area in last year's hunts was taken by Rurel Waldrop of LaGrange, who felled this magnificent 11-pointer on the opening day at Piedmont Experiment Station near Eatonton. The rack had a spread of 24½ inches. Field-dressed, the animal weighed 186 pounds.

■ As the morning sun gradually peeps over the ridge and melts away the frost on a crisp November morn, time melts away, and if you'll think back to last year, it's a safe bet that the deer season disappeared before your very eyes, as it were, almost without your really being aware of it.

Trying to grasp back at it was like trying to see that deer again through the woods that seemed to evaporate instantly while you were straining to see if it wore a proud set of antlers, before putting your sights on him.

Why worry about it after it's gone? Well, if you could just recall all the details, you could see what you did right, and what you did wrong, so that next time you'd wind up with venison in the freezer instead of egg on your face.

It's a new day now. The sun is not quite up yet on the majority of Georgia's deer management season. It doesn't matter so much whether you scored last year or not. A new day is dawning, a new chance, a new experience.

Forget the past now, wipe the slate clean. Well, almost. But call on your experience to help you to success this time.

And chances are again better this year for you to get your deer on a management hunt. There are more deer just about everywhere in Georgia, on the management areas and off. And there are more management areas open for deer hunting this season.

But before plunging into the new season, let's cast an eye behind us to last year, and look over the results. Maybe it's like reading a box score after

the ball game is over. But by looking at the percentages, maybe it will help to find where chances are the best for scoring this time.

Just about one of every 10 Georgia hunters do at least part of their deer hunting on a management area. It's estimated that 125,000 persons sought to bring down a whitetail deer in Georgia last year. Management areas registered 12,787 hunters in all managed hunts combined.

Why are the managed hunts so popular? Because deer populations are carefully managed and controlled, so it's a sure thing that there are deer around you. The odds are swung in your favor. Proof of that is shown in that 1,195 deer were taken last year in the many hunts offered.

Overall, this is a success ratio of 8.5 per cent. That is, of every 100 persons hunting, 8½ got their deer.

These figures can be misleading, however, since included are everything from one-day either-sex and antlerless hunts, to week-long buck-only hunts.

So let's break it down a little. Archers numbered 815, getting 27 deer. In primitive weapons hunts, 196 hunters took 26 deer. These two are on opposite ends of the success ratio. Archers got only 3.3 deer per hundred hunters while muzzle loaders took 13.3 per cent.

In the regular modern firearms hunts, again lumping buck-only, either-sex and antlerless hunts together, the success ratio was 9.5 per cent. This category was the largest, embracing 11,756 hunters, and 1,099 deer killed.

Now, let's take a look at each area:

Archery Hunts

| Area | No. Hunters | Deer Killed | % Hunter Success |
|------------------|-------------|-------------|------------------|
| John's Mountain | 91 | 1 | 1.1 |
| Lake Russell | 223 | 6 | 2.7 |
| Blue Ridge | 71 | 2 | 3.0 |
| Clark Hill | 237 | 17 | 7.1 |
| Suwanoochee | 105 | 1 | 0.9 |
| Chickasawhatchee | 88 | 0 | 0 |
| Totals | 815 | 27 | 3.3 |

Primitive Weapons

| Area | No. Hunters | Deer Killed | % Hunter Success |
|------------------|-------------|-------------|------------------|
| Warwoman | 94 | 9 | 9.6 |
| Lake Russell | 74 | 17 | 23.0 |
| Chickasawhatchee | 28 | 0 | 0 |
| Totals | 196 | 26 | 13.3 |

Firearms Hunts (Both Sexes)

| Area | No. Hunters | Deer Killed | % Hunter Success |
|--------------------|-------------|-------------|------------------|
| Allatoona | 446 | 75 | 16.8 |
| Blue Ridge | 2,006 | 163 | 8.1 |
| Chattahoochee | 896 | 111 | 12.3 |
| Chestatee | 629 | 64 | 10.2 |
| John's Mountain | 1,000 | 46 | 4.6 |
| Lake Burton | 716 | 97 | 13.6 |
| Lake Russell | 1,492 | 128 | 8.6 |
| Warwoman | 381 | 48 | 12.5 |
| Cedar Creek | 1,901 | 170 | 6.0 |
| Clark Hill | 599 | 99 | 16.5 |
| Piedmont Exp. Sta. | 287 | 24 | 8.4 |
| Suwanoochee | 911 | 13 | 1.4 |
| Chickasawhatchee | 520 | 61 | 11.7 |



the outdoor world



A Record Hog? Ben Franklin, Jr., right, of Rt. 2, Millen, Ga., shows off his huge hog which he killed Sept. 10 on Henry Berol's DiLane Plantation in Burke County. Wildlife Ranger E. J. Davis of Millen takes a look at the hog, too. The monster, which Franklin killed with his trusty bow, weighed in at 540 pounds. "This is the one I have been after, over three years," said Franklin. "How about let's start a record book on these hogs!" Officials of the State Game and Fish Commission say they haven't heard of a bigger one.



Back to the Good Old Days! Georgia's Governor, Lester Maddox, gets some catching on how to use the bow and arrow. Ben Pearson, one of the more prominent bowmakers in the world, provides the instruction. Pearson recently presented one of his bows and a set of arrows to the Governor.

Rock Creek Bonanza—Big trout don't surprise wildlife ranger H. C. (Herbie) Cruce much anymore. The manager of the Blue Ridge Management area, Cruce is proud of fishermen on his area like Charlie Herndon, (c.) who has caught so many lunkers out of Rock Creek and the nearby Toccoa River that he needs a hand from his son and daughter to show them all. Cruce says that Charlie is "a real fisherman." His secret of success? "Fish for the big ones like they bite slow and easy." Cruce says that Herndon will be glad to pass on tips about catching the big ones to any fisherman at his store on Cooper's Creek at Ga. 60.



Some of the other big fish landed in Georgia's most popular management area stream, Rock Creek, include this five pound, three ounce rainbow caught by W. E. Purcell Jr. (b.) of Marietta, measuring 23½ inches. Two larger rainbows were landed in Rock Creek this summer, an eight pound, 10 ounce 27 inch that fell victim to a night crawler fished by George Bartlett of Smyrna, and a six and a quarter pound 23 inch rainbow landed by Boyd King of Cumming. A three pound, three ounce 17½ inch brook trout was also caught in Rock Creek, by R. M. Penland, Jr. of Decatur.

A management area stream, Rock Creek closed Labor Day weekend, and will open again for fishing next May. Anybody interested?



Sportsmen Speak...



GUN REGISTRATION

In reply to Representative Egan in the September 1967 issue of *Georgia Game and Fish*, Sportsmen Speak, I would like to say he should be more familiar with his subject before promoting gun registration to finance law enforcement. Undoubtedly Mr. Egan has never heard of the Federal Aid in Wildlife Restoration Act (Pittman-Robertson Act) and the Federal Aid in Fish Restoration Act (Dingell-Johnson Act) 1937 and 1950 respectively. Under the Pittman-Robertson program returns from the 11 percent manufacturer's tax on sporting firearms and ammunition are held in the Treasury until appropriated by Congress for disbursement to the states for wildlife restoration purposes. Dingell-Johnson funds come from a similar 10 percent tax on fishing tackle.

It is worthy of note that wildlife law enforcement is financed almost entirely by those who own and use firearms for the purpose of harvesting the wildlife surplus. In other words, it is the very people who desire to harvest wildlife for sport and recreation who put up the money to insure that the harvest will be adequately regulated so that no damage is done to the resource. In 1965 more than 90 million dollars were immediately and directly attributable to the hunter — the firearms user. Pittman-Robertson receipts contributed some 15 million dollars, and the sale of hunting licenses, tags, and permits exceeded 75 million dollars.

It is obvious that any firearms legislation which tends to interfere with or place unnecessary burdens on the person using a sporting firearm for recreational purpose could have a profound effect on the conservation and management of our wildlife resources.

Registration laws make it more difficult for the honest citizen to obtain arms for recreation and personal defense. They do not appreciably increase the difficulties encountered by a criminal in obtaining a weapon. Such laws do discourage the ownership of firearms by reputable citizens by imposing inconveniences, extra axes and contacts with the police which the average person prefers to avoid.

Thomas J. Harshbarger
Tifton

MANAGEMENT HUNTS

We sell game licenses in our hardware store, and several sportsmen have asked "Game and Fish" was going to feature an article on the results of individual management area deer hunts of last season. If it hasn't been planned, we think it would be good subject matter.

Also please send us a supply of management hunt schedules as soon as completed.

Stan Maples
Cohutta

See page 13 of this issue.

RECORD TURTLE?

Enclosed you will find a picture of five alligator snapping turtles that I and Tommie Hillman called you about. The second from the left is the one that you have. They were caught May 20 and 21, 1967 on trotline and limb hooks, using a No. 1 eagle claw hooks, while fishing for



Channel Catfish. We were fishing five miles below Newton, Georgia on the Flint River. They were caught by James W. McDonald, left in picture, and Bert Helms, right in picture, both of Thomaston, Georgia.

The largest weighed 85 pounds, the next 84 pounds, two weighed 55 pounds each, and one weighed 71 pounds. Total weight was 350 pounds.

James W. McDonald
Thomaston

The turtles pictures above are actually alligator snapping turtles, sometimes called loggerheads. They are found in most Georgia streams below the fall line, even though they are seldom seen by the average fisherman. A few turtles almost this large have been reported to the Game and Fish Commission, but the 85 pounder shown here is believed to be the largest ever taken in Georgia.

CONFISCATED CARS

In Vol. 2, No. 4 / April, 1967, I read the article about "Thieves in The Night." I enjoyed it very much.

I would like to inquire about the confiscated goods, in hopes that I might be able to get some good deals. I am mainly interested in how I can buy a jeep or some other vehicle.

Bill Elphinstone
East Point

It probably would be difficult for you to obtain one of these vehicles, because they are sold by the sheriffs of the county in which they are confiscated after being advertised for 20 days in advance in the local county newspaper.

Some jeeps and other vehicles are occasionally declared surplus by the various state departments including Game and Fish and are sold through the State Purchasing Department. If you would like to be on the bidder's list for these vehicles, I would suggest that you write either Mr. Clayton Turner, Director, or Mr. T. B. McDorman, Purchasing Agent, State Purchasing Department, 100 State Capitol, Atlanta, Ga. 30334, and request that you be advised of any future sales.

VIETNAM READER

I have just finished reading the August issue of the *Game and Fish*, and I would like to commend the staff for publishing an interesting book. Although stationed in Vietnam, I long to return to Georgia, and hunt and fish once again. Being a small boat owner, I thoroughly agree with you that all boats should be registered, and hope that the General Assembly adopts a bill, that will bring about safer boating.

PFC William G. Mitchell
4th Engineer Battalion
APO San Francisco 96262

RED BUGS

Your publication *Georgia Game and Fish* is one of the most well presented of its kind that I have had the pleasure of reading.

I am in hopes that you can help me obtain some information that I have not been able to obtain elsewhere. I spend quite a bit of my leisure time in woodlands hunting or just exploring, and I am one of those unfortunates that cannot

tolerate "redbug" bites. They leave welts, festers and scars that sometimes last for six weeks. I don't know the proper name for this pest, but perhaps you can identify it by the name I have given. It is so small until you have to use a magnifying glass or other type of visual aid to even see it.

I would like to know what method your wildlife protectors use and what do you recommend to hunters to prevent infestation by these little rascals or if you have some recommended remedy to remove them after an exposure.

Any help you can offer will be appreciated.

T. W. Erickson
Savannah

We are glad you enjoy our magazine and hope we can help you some with your redbug problem.

The small mite that can cause so much discomfort has several names. Most common are redbug, chigger, and harvest mite. Only the young chigger, the larval stage, attaches to man. Chiggers feed on fecal droppings of insects and other small creatures and dead organic matter. Apparently, however, the young chigger requires the blood or lymph of a living host.

Usually the larval chigger gets on a person around the ankle area and works its way upward. Sitting down in chigger country just gives the rascals less of a run to the upper body. Once on the flesh, the chigger runs about for several hours before it begins to feed. Therefore, one of the best precautions is to take a hot bath as soon as you get home, washing the chiggers off before they dig in. They do not burrow into the skin but insert their mouthparts and inject an anti-blood coagulant. This injection causes the swelling. Sometimes the chigger gets in hair follicles and as the skin swells up around the feeding chigger, it becomes covered. It can not be buried very deep or else it will suffocate from lack of air. A common remedy here, is to apply something, like fingernail polish, to cut off the chigger's air supply.

Once the chigger is on a person and feeding, household ammonia, rubbing alcohol, camphor, carbolized vasoline, chloroform, or iodine can be dabbed on individual welts to relieve irritation and destroy the chigger. For preventive measures commercial insect sprays and chemical dusts, such as sulphur, can be applied to clothing before entering the woods.

CONGRATULATIONS

I would like to take this opportunity to thank you and your staff for the wonderful work you are doing with your magazine to preserve Georgia's wild life and informing the public about Georgia's sporting paradise. Keep up the good work.

Allen J. Grezda

Attached is my entry for a Master Anglers Certificate.

I would like to thank you for the superb job you are doing with the *Georgia Game and Fish Magazine*. My friends and I look forward to it each month.

H. T. Davis
Toccoa

Sportsman's Calendar

SEASONS CLOSING THIS MONTH

MARSH HENS

(Gallinules & Rails)

Season—Sept. 2 through Nov. 10, 1967.
Bag Limit—15 Daily, possession limit 30.

SEASONS NOW OPEN

GUN DEER SEASON

Season A: Southeast Georgia Season—Oct. 14, 1967 through Jan. 2, 1968, in the following counties:

Brantley, Bryan, Bullock, Burke, Camden, Candler, Charlton, Chatham, Clinch County north of the Atlantic Coastline Railroad and east of the run of Suwannee Creek, Echols County east of U. S. 129 and south of Ga. 187, Effingham, Emanuel, Evans, Glascock, Glynn, Jefferson, Jenkins, Liberty, Long, McIntosh, Pierce County south of U. S. 82 and east of Ga. 121, Screven, Tattnall, Washington, and Wayne counties.

Bag Limit—Two (2) Bucks. Hunting with dogs is allowed in all of the above counties.

GROUSE, RUFFED

Season—Oct. 14, 1967, through Feb. 29, 1968.

Bag Limit—3 Daily, possession limit 6.

OPOSSUM

Season—Oct. 14, 1967 through Feb. 29, 1968. Exception: Coweta County opens Sept. 30, 1967 through Jan. 20, 1968.

No Bag Limit.

RACCOON

N. Ga. Season—Oct. 14, 1967 through Feb. 29, 1968, in Floyd, Bartow, Cherokee, Forsyth, Hall, Banks, Franklin, and Hart counties and all counties north of these counties.

N. Ga. Bag Limit—One (1) per night per person.

S. Ga. Season—No closed season.

S. Ga.—No Bag Limit.

SQUIRREL

Season—Oct. 14, 1967 through Feb. 29, 1968.

Bag Limit—10 Daily.

SEASONS OPENING THIS MONTH

BEAR

Season—Nov. 4, 1967 through Jan. 2, 1968 in the counties of Brantley, Charlton, Clinch, Echols and Ware. The remainder of the State is closed.

Bag limit—(1) one per person per season.



DEER

Southwest Ga. Season—Nov. 4, 1967 through Jan. 2, 1968 in the following counties:

Chattahoochee, Decatur, Dougherty, Early, Grady, Lee

County west of U. S. 19, Marion, Mitchell, Muscogee, Seminole, Stewart, Terrell, Thomas, Webster, and Worth County south of U. S. 82.

Bag Limit—Two (2) Bucks, except in that portion of Worth County south of U. S. 82 where the bag limit is one (1) buck. On the last day of the regular season, Jan. 2, 1968, Chattahoochee and Marion counties will be open for either-sex deer hunting.

Hunting with dogs is allowed, except in Chattahoochee, Muscogee, and Worth where hunting deer with dogs is prohibited.



Season C: North and Middle Ga. Season—Nov. 4, 1967 through Nov. 27, 1967 in the following counties:

Baldwin, Banks, Butts, Columbia, Dawson, Fannin, Gilmer, Greene, Habersham, Hancock, Henry, Jasper, Jones, Lamar, Lincoln, Lumpkin, McDuffie, Monroe, Morgan, Murray, Newton, Oglethorpe, Putnam, Rabun, Richmond, Rockdale, Schley, Stephens, Talbot, Taliaferro, Towns, Union, Walton, Warren, White, Wilkes, Wilkinson.

Bag Limit—Two (2) Bucks, except that in order to harvest a bumper crop of deer, Baldwin, Greene, Jasper, Jones, Lamar, McDuffie, Monroe, Newton, Putnam, and Talbot counties will be open for either-sex deer hunting on the last day of the regular season, Nov. 27, 1967, with a bag limit of no more than one (1) doe deer. The regular season bag limits will also apply during this period, provided that no gun hunter during the entire year may take more than two (2) bucks or one (1) buck and one (1) doe by any method or methods.

Deer hunting with dogs is prohibited in all of the above listed counties, and it is illegal to run, chase, or pursue deer with dogs in any of these counties.

Season D: Counties open—Nov. 4 thru Nov. 18, 1967 in the following counties:

Appling, Atkinson, Berrien, Bleckley, Crawford, Harris, Houston, Irwin, Jeff Davis, Johnson, Laurens north of U.S. Highway 80, Macon, Montgomery, Spalding, Taylor, Tift east of Interstate Highway 75, Toombs, Twiggs, Upson and Wheeler counties.

Bag Limit—Two (2) Bucks. Hunting with dogs in the above counties is prohibited

except in that portion of Atkinson County lying south of Atlantic Coastline Railroad and east of U.S. Hwy. 221 and that portion of Berrien County lying east of U.S. 129, south of the Alapaha River, north of State Highway 76 and west of State Highway 135. These sections of Atkinson and Berrien counties will be open for deer hunting with dogs on Nov. 16, 17, and 18, 1967 only.

Season E: Counties open—Nov. 4, 1967 through Nov. 11, 1967 in the following counties:

Bartow, Catoosa, Chatooga, Cherokee, Clarke, Dade, Elbert, Floyd, Franklin, Gordon, Haralson, Jackson, Madison, Oconee, Paulding, Pickens, Polk, and Walker.

Bag Limit—Two (2) Bucks. Hunting with dogs is prohibited.

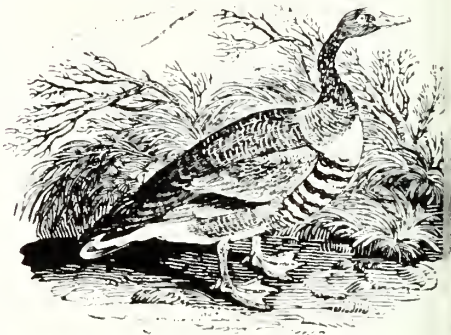
DUCKS

Season—Nov. 28, 1967 through Jan. 6, 1968.

Shooting Hours: One half hour before sunrise until sunset. Consult the nearest office of the U. S. Weather Bureau for the exact time.

Bag Limit—Four (4) per day, including no more than two wood ducks, one canvasback, and two black ducks. In addition, hunters may take five mergansers daily, including no more than four American and red-breasted mergansers and one hooded merganser. In Chatham, Bryan, Glynn, Liberty, McIntosh, and Camden counties, east of the Intracoastal Water, hunters may take two additional bonus scaup ducks per day.

Possession Limit—Eight ducks, to include no more than four wood ducks, one canvasback, and four black ducks. Possession limit for mergansers is 10, to include no more than two hooded mergansers.



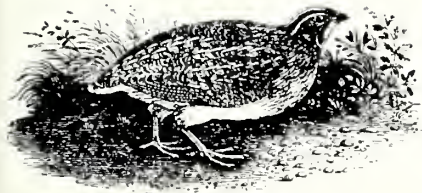
GEESSE AND BRANT

Season—Nov. 4, 1967 through Jan. 12, 1968, except in Liberty and McIntosh Counties, where the season is closed.

Shooting Hours—One half hour before sunrise to sunset.

Bag Limit—(Geese) Two per day. Possession limit is four. There is no open season on snow geese.

Bag Limit—(Brant) Six per day. Possession limit is six.



QUAIL, BOBWHITE

Season—Nov. 18, 1967 through Feb. 29, 1968.

Bag Limit—12 Daily, possession limit 36.

RABBITS

Season—Nov. 18, 1967 through Feb. 29, 1968.

N. Ga. Bag Limit—5 Daily.

S. Ga. Bag Limit—10 Daily.

North Georgia includes the counties of Harris, Talbot, Upson, Monroe, Jones, Baldwin, Hancock, Warren, McDuffie, Columbia, and all counties north of those listed. All counties south of those listed above on the fall line are considered part of South Georgia.

MOVING?

Be sure that you notify *Game & Fish* when you change your address, so that you won't miss a single issue. 30 days before you move, send your new address and your old address or mailing label, complete with zip code, to *Georgia Game & Fish Magazine*, 401 State Capitol, Atlanta, Ga. 30334.

SNIPE, WILSON'S

Season—Nov. 27 through Jan. 15, 1968.

Bag Limit—8 Daily, possession limit 16.

WILD TURKEY—Fall Season

West Central Ga. Season—Nov. 4, 1967, through Jan. 2, 1968 in the counties of Chattahoochee, Marion, Muscogee and Stewart.

Bag Limit—One (1) per season.

Talbot County—Nov. 4, 1967 through Nov. 28, 1967.

Bag Limit—One (1) per season.

Southwest Ga. Season—Nov. 20, 1967 through Feb. 29, 1968, in the counties of Baker, Calhoun, Decatur, Dougherty, Early, Grady, Miller, Mitchell, Seminole, and Thomas.

Bag Limit—Two (2) per season.

WOODCOCK

Season—Nov. 28 through Jan. 31, 1968.

Bag Limit—5 Daily, possession limit 10.

STATE MANAGEMENT AREA HUNTS NOW OPEN

All small game in season—Altamaha (Except Butler Island, which is open only for waterfowl on Tuesdays and Saturdays

during regular duck season), Lake Seminole, Whitesburg, Allatoona. No permits required for small game hunting.

Bucks only in season—Altamaha, Seminole, and Brunswick Pulp and Paper.

STATE MANAGEMENT AREA HUNTS OPENING THIS MONTH

(For a copy of the complete hunt schedule and detailed regulations, write the State Game & Fish Commission, 401 State Capitol, Atlanta, Ga. 30334.)

Deer-Archery Only. Either Sex—Nov. 6-11—Blue Ridge. \$5.00 permit required for the hunt.

Deer-Archery Only, Either Sex—Nov. 27-Dec. 9—Suwanoochee. Hunters are required to pick up a free permit at the checking station.

The bag limit on all archery hunts is one deer of either sex.

Deer-Bucks Only—Nov. 20-21-22—Allatoona. Quota hunt limited to 400 hunters. Applications must be made by mail between Nov. 6 and Nov. 11, 1967. All letters of application must include the \$5.00 permit fee for each applicant up to five persons, and must be mailed to the State Game and Fish Commission 401 State Capitol, Atlanta, Ga. 30334.

Deer—Bucks Only—Nov. 20-25—Blue Ridge, Bullard Creek, Cedar Creek, Clark Hill, Chattahoochee, Chestatee, Coleman River, Johns Mountain, Lake Burton, Lake Russell, Oaky Woods, Piedmont Experiment Station, Swallow Creek, Warwoman. \$5.00 permit required per hunt. No limit on the number of permits.

Deer—Either Sex—Nov. 27 only—Chestatee, Lake Russell. Each hunt is limited to 500 hunters selected by drawing Nov. 15. Applications must be made by mail between Nov. 6 and Nov. 11, 1967. All applications must include the \$5.00 permit fee for each applicant up to five persons, and must be mailed to the State Game and Fish Commission, 401 State Capitol, Atlanta, Ga. 30334.

Deer—Primitive Weasons Only—Nov. 22-25—Chickasawhatchee. \$5.00 permit required. No limit on number of permits. *Small game in season*—Nov. 29-Dec. 23, Wednesdays and Saturdays Only—Cedar Creek, Clark Hill (Quail, squirrel, rabbit, doves, ducks in season) \$1.00 daily permit required.

Small game in season—Nov. 29, 1967-Jan. 31, 1968, Wednesdays and Saturdays only—Piedmont Experiment Station, Oaky Woods (Squirrel, rabbits, quail, and doves in season) \$1 permit per day required.

FEDERAL REFUGE HUNTS OPENING THIS MONTH

Deer—Archery Only—Nov. 20-25, 1967—Blackbeard National Refuge. Deer of either

sex. No limit on number of permits. Applications for free permits must be received by Nov. 14, 1967 at the Refuge Manager's Office, Savannah National Wildlife Refuge, Rt. 1, Hardeeville, S. C. 29927.

SEASONS OPENING NEXT MONTH DOVES

Season—Dec. 6, 1967 through Jan. 15, 1968. See federal regulations available at U. S. Post Office.

Bag Limit—12 daily, possession limit 24. See federal regulations, especially for baiting restrictions. Migratory bird stamp not required.

WILD TURKEY—FALL SEASON

Southeast Ga. Season—Dec. 2, 1967 through January 2, 1968 in the counties of Brantley, Bryan, Bulloch, Camden, Charlton, Chatham, Effingham, Evans, Glynn, Liberty, Long, McIntosh, Pierce, Screven, Tattnall, and Wayne.

Bag Limit—Two (2) per person.

GAME MANAGEMENT AREAS OPEN NEXT MONTH

Deer-Buck only—Dec. 8-9, 15-16, 29-30—Chickasawhatchee (Limited quota hunts, 300 hunters each two-day hunt.) Letters of application must be made by mail between Nov. 6 and Nov. 11, 1967. All applications must include the \$5.00 permit fee for each applicant up to five persons, and must be mailed to the State Game and Fish Commission 401 State Capitol, Atlanta, Ga. 30334.

Deer—buck only—Dec. 11-16—Waycross State Forest. \$5 permit required.

Deer—buck only—Dec. 18-30—Suwanoochee (permit required, no fee).

Small game (quail, squirrel, rabbit, doves, duck (in season))—Dec. 2, 6, 9, 13, 16, 20, 23—Cedar Creek, Clark Hill. \$1 permit required per day.

Small game (grouse, squirrel, rabbit)—Dec. 1, 2, 8, 9, 15, 16, 22, 23—Blue Ridge, Chattahoochee. \$1 permit per day. *Small game* (quail, squirrel, rabbit)—Dec. 4-9—Bullard Creek. \$1 per day.

Small game (grouse, squirrel, rabbit)—Dec. 4-16—Swallow Creek, Coleman River. No permit required.

GAME MANAGEMENT AREAS OPEN IN JANUARY

Deer-Antlerless only—Jan. 1, 1968—Clark Hill (Limited quota hunt, 300 hunters. Letters of application must be made by mail between Nov. 6 and Nov. 11, 1967. All applications must include the \$5.00 permit fee for each applicant up to five persons, and must be mailed to the State Game and Fish Commission 401 State Capitol, Atlanta, Ga. 30334.

MEETINGS NEXT MONTH

Annual Convention, Georgia Sportsman's Federation, Dempsey Hotel, Macon, Dec. 2 and 3, 1967.

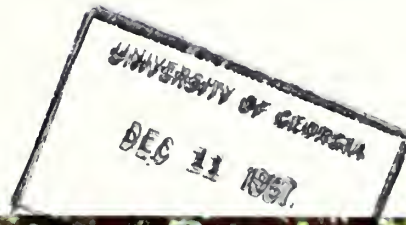
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GAME & FISH





GEORGIA

GAME & FISH

December 1967 Volume II Number 12

Contents

| | | |
|--------------------------|-----------------|----|
| December Doves | Dan Keever | 1 |
| Sporting Christmas | Dean Wohlgemuth | 3 |
| Heap Big Hunting Ground | Jim Tyler | 4 |
| Deer and Their Habits | Lindy Copelan | 6 |
| Meet Jones | J. Hall | 8 |
| What Are You Looking At? | J. Hall | 9 |
| Build a Box | J. David Almand | 12 |
| The Outdoor World | Staff | 15 |
| Sportsmen Speak | Readers | 16 |
| Sportsman's Calendar | | 17 |

Lester G. Maddox
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Pollution "accidents" don't just happen

Georgia's present water pollution control laws are a vast improvement over previous legislation, but two gaps still remain that should be filled by the General Assembly this January.

The present law specifies that industrial and municipal water users must obtain a permit from the State Water Quality Control Board to continue using water, and that a permit will not be issued until adequate treatment facilities are constructed and placed into operation to prevent harmful pollution of the stream. If this is not done or the facilities are not properly operated, the Water Quality Control Board can revoke the permit to discharge wastes of the water user—a severe penalty that might be used against an industry, but that scarcely seems possible for a municipality.

The present law makes no provision for the industry or town that constructs a treatment facility, but allows some "accident" to occur in which the facility does not operate properly for a short period of time. Regardless of the length of time the facility is not operating, great damage can be done to the water quality of the stream, killing fish, killing micro-organisms that are in the fish's food chain, and making long-lasting harmful changes in the stream.

When such an "accident" is allowed to occur because of carelessness, the facility is frequently back into proper operation by the time an investigation of the pollution can take place, so there is little grounds to take the severe action of revoking the industry's permit to discharge wastes. The law makes no provision for invoking a fine of many thousands of dollars on the company, especially to serve as a deterrent to future "mistakes".

And on top of this, there is no provision in the law to recover damages from companies who kill thousands of dollars worth of valuable sport fish. In streams where fish have been completely killed out, restocking is often necessary, at great expense to the people of the State of Georgia, yet the polluter is not required to pay anything for the fish he has killed.

This situation was illustrated by two severe fish kills that occurred this year in Georgia, one on Muckalee Creek in Sumter County, the other nearby on Gum Creek in Crisp County.

The Muckalee Creek fish kill, the worst of the entire year in Georgia, occurred after a fertilizer plant at Americus washed out several tanks that had contained hydrofluoric acid into the creek over a three to four day period, in violation of the regulations of the Water Quality Control Board. The resulting slug of acid moving down the creek killed every visible sign of life in the stream for 15 miles—including bass, crappie, bream, catfish, bowfin, gar, and even crayfish, mussels, and insects.

Exactly how much the fish killed in Muckalee were worth is difficult to determine, but the 15,000 largemouth bass fingerlings that the Game and Fish Commission restocked in the creek cost over three thousand dollars alone. Additional stocking of bluegill bream, shellcracker, and channel catfish will be necessary at additional cost, and there will be no fishing in the creek for at least a year or more.

The other major fish kill occurred this fall in the Commission's Harry P. Williams public fishing lake, adjacent to the Cordele Fish Hatchery. More than 12,000 pounds of fish valued at over \$10,000 were killed in the lake after an unsecured barrel of insecticide fell off of a flatbed truck in Cordele and city firemen washed the deadly chemical down an open ditch into Gum Creek, the major tributary of the lake. If high water conditions had occurred at that moment in the creek, the poison could have washed into the spring which serves as the water supply of 800,000 channel catfish in the hatchery.

In both cases, carelessness, indifference, negligence, or ignorance were the culprits. If the laws of Georgia had provided that the companies involved could be penalized several thousand dollars by the Water Quality Control Board for negligence and required to pay the Game and Fish Commission for the value of the fish that they killed and the expense of restocking, neither "accident" would have been as likely to have occurred. The mere presence of such a law would serve as an effective deterrent that would seldom have to be used—J. M.

ON THE COVER: The wild turkey is one of the most elusive of all Georgia game birds or animals. The wily old gobbler or hen is a beautiful sight that is seldom seen by most hunters. The birds are very shy, with considerable aversion to people. The turkey season opens this month in 16 southeast Georgia counties, and remains open in 14 other southwest Georgia counties where the season opened in November.

ON THE BACK COVER: Christmas is one of the finest times of the year, especially for a boy who's just been given his first gun. There's no finer way that we can think of to bring up a boy and keep him out of trouble than to take him hunting or fishing with his father. Naturally, with the gift of a gun goes an obligation by the father to teach his son the fundamentals of safe gun handling, sportsmanship, respect of private property, and conservation. Pictured are Claude Robinson and his son, Claude, of Lithonia.

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Think that 11 years old is too young to take a boy hunting? Then you haven't seen Monty Montgomery of Rome in action on late season

December Doves

Photographed by Dan Keever

Perhaps the 11-year-old has an advantage over his elder hunting companions. He fits into a hygear field perfectly and is nearly invisible in his camouflage clothing.



1. Five birds in the hand of 11-year-old Monty Montgomery of Rome are worth eight fired 20 gauge shells. That's not a bad average for any hunter.

2. Ranger Ferrell Barton says Monty and his father, Jack Montgomery, are two of the finest sportsmen in Floyd County. Barton is holding Monty's 20 gauge pump which has a special short stock.

3. Like any good sportsman, Monty asks permission of neighbor B. C. Morgan before hunting on Morgan's field. B. C. hunts from a wheelchair ever since a farming accident—and he still bags his limit. Monty learned a lot about shooting from him.

4. The gun swings with the eye, gets dead on the bird and blam! The dove plummets to the ground. One more for the bag, rounding out a good day's shooting.





John Q. Sportsman is trying his best to get the message across that this is just the gun he needs to fill out his arsenal, and Christmas would be a wonderful time to take care of it. The salesman is in favor of the idea, too. But the Missus? She's indifferent, maybe even cold to the plan. To her, it seems much more urgent that a sufficient amount of powder gets put exactly in the right place.

Sporting Christmas

by Dean Wohlgenuth

■ 'Twas a month before Christmas, and all through the sportsman's lodge, members were sitting around with visions running through their heads, hodge podge.

Alternately, they saw Christmas trees, one moment decorated with shotgun shells, shooting gloves, hunting socks, fishing rods, lures, tackle boxes . . . and the next moment, the tree hung heavy with weird neckties, shirts the wrong size, dress socks the wrong color, and . . . well, I could go on and on.

As the visions alternated, so did the expressions on their faces. First, there would be dreamy smiles. Then you'd hear groans, as frowns pushed the smiles away.

"Man, I sure wish I could find a way to get it across to the Little Lady that I need some new hunting clothes for Christmas," one of the fellows said.

"Yeah," said another. "And my wife's folks, too. They always come up with these weird sport shirts. I NEVER wear sportshirts like those. And I'd love to have a new set of duck decoys."

"Well, we've got to come up with some sort of answer to this problem," a third member said, "or else we'll just have to resign ourselves to another gloomy Christmas."

"Hey, Dude," one of them shouted. "You got that new 20 gauge pump you wanted for Christmas last year. How'd you swing that?"

Dude grinned slyly. "Well, you see, I convinced my wife that the reason I can't take her along is because I don't have an extra gun for her to use. And for good measure, I pointed out that our young son would be old enough in a few years to need a gun of his own. And to top that off, I reminded her that here's no way to be sure we'd have he right to buy guns much longer, the way these senators and all are messing round trying to change gun laws."

Dude paused.

"So she bought you one?" asked Charlie.

"No," Dude replied. "I bought HER one!"

It was only a couple of seconds after the laughter died down, that someone asked, "Dude, how'd that work out?"

The smile on Dude's face subsided. "Well, now that you mention it, it could've turned out better. I've got to take her hunting now. But that's not the bad part. When I want to use it myself, I have to ask her permission!"

A general groan filled the room.

"Well, we gotta do something better than that," Charlie reasoned.

"I got it!" shouted Bill.

"What? What?" joined in the others.

"Well," Bill started, "Let's get together a list of suggestions of gifts for sportsmen, and get it published in Georgia Game and Fish Magazine!"

"Great!" exclaimed the others.

"And let's go one farther," Dude suggested. "Let's categorize the gift ideas, so the wife of a fisherman, or bird hunter, or whatever, will have better ideas."

"And then, we'll all be sure and leave the magazine laying around, open to that page where the wife will see it," Charlie chimed in.

The motion carried easily, and they set to work to compile the list. And here it is, fellows:

Bass Fisherman: barometer, lures, tackle boxes, reels—spinning, casting, spincasting, rods—same as reels, fishing line—monofilament or braided—cheek preference, weight test, landing net, fishing boat, outboard motor (portable), electric outboard motor, depth finder & gift certificate from taxidermist

Trout Fisherman: fly rod, fly reel—single action or automatic, spinning rod and reel, spinners, dry flies and wet flies, fishing vest, hip boots or chest high waders, innertube float rig, fly box & leader box

Fishing—General, Panfish, etc.: fishing jacket, rainsuit, rods and reels—spinning, fly fishing, spincasting, life preservers, fishing boat, outboard motor, anchor & boat lights

Bird Hunter: hunting pants, shirt, socks, shotgun shells (light loads, cheek gauge of his gun; No. 7½ or 8 shot for quail and doves), hunting boots, shotgun shell vest, shotgun (check his preference, 12 or 20 gauge, pump, automatic, double barrel), hunting cap & bird dog

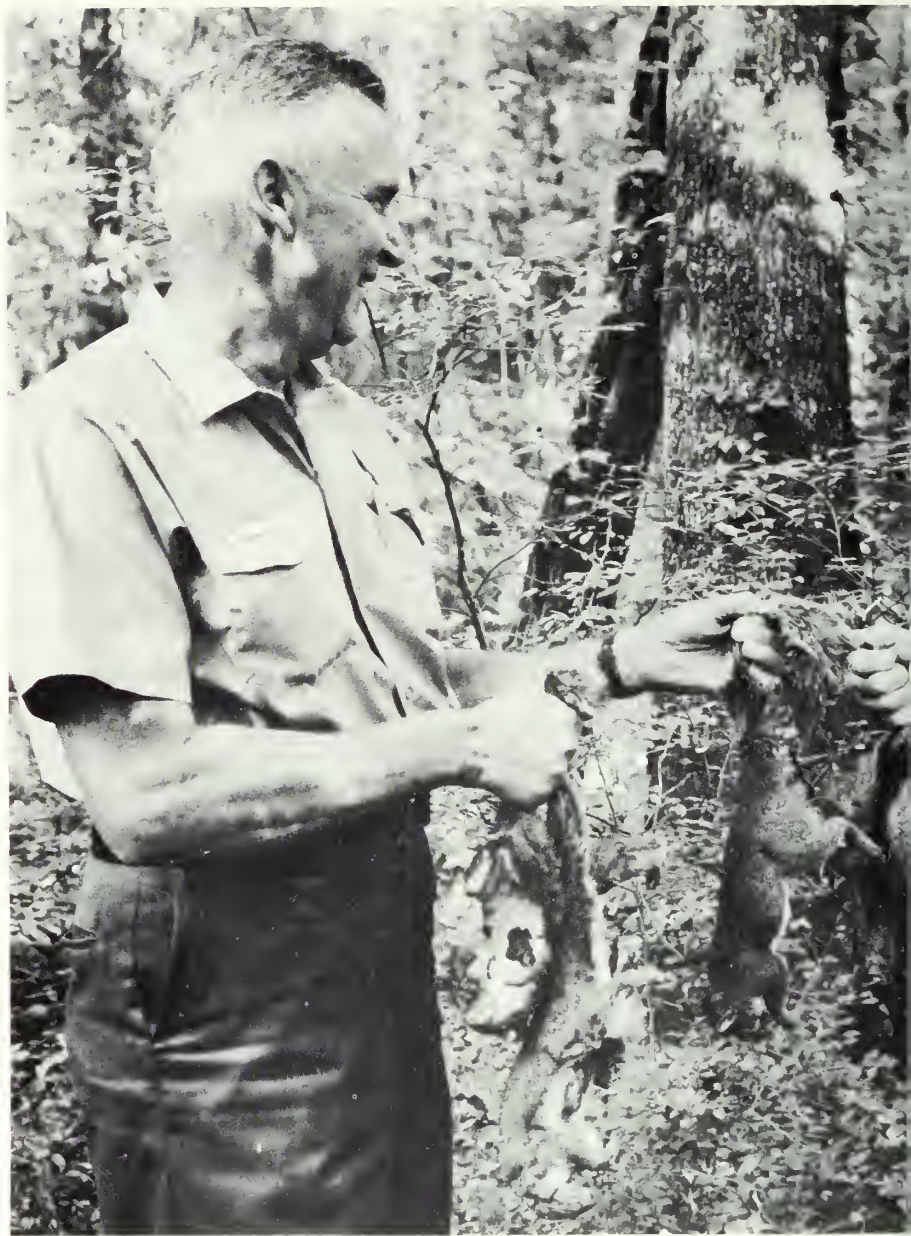
Deer Hunter: portable tree stand, rifle, camouflage suit, electric socks, hand warmer, hunting gloves, insulated underwear, telescopic rifle sight and mounts, ammunition (check rifle caliber), deer silhouette targets & gift certificate from taxidermist

Small Game Hunter: shotgun (12, 16 or 20 gauge, single, double, over-under, auto, pump), ammunition, hunting pants, jacket, shirt, socks, boots, cap, shell vest with game pocket, rabbit dog, gun cleaning kit, .22 rifle & varmint rifle

Campers: tent, camp cots, sleeping bags, tent heater, camp stove, camp ice box, cooking kit, freeze-dried camp and trail foods, hiking boots, camp sneakers, canoe, outdoor clothing, lantern & compass

Archers: hunting bow and arrows, archery arm guard, finger tab or glove, deer silhouette target, camouflage hunting clothes, camouflage bow cover, camouflage head net, deer lure, broadhead sharpening kit, bowfishing reel and arrow, quiver & bow string

* A note to the wives is, we hope sufficient: Go to a reputable sporting goods dealer, and if you need to, don't be afraid to ask questions. And don't fail to pump your husband for necessary information about sizes, styles, types, gauges, calibers, so forth. He'll be glad to oblige, and usually won't catch on. And if all else fails, try gift certificates. He'll be glad you did. ۞



Heap big Hunting Ground

by Jim Tyler

1 Oscar Dewberry, coastal region game biologist, has made deer track count studies in the area and says deer hunting should be good.

2 The new hunting area near Jesup has some tree squirrel hunting, especially along the Altamaha River. Dan Shuftrine, wildlife ranger for Wayne County, has a look at squirrels bagged in the Sansavilla Tract by L. Roy Adams, Brunswick.

3 Several sections throughout the paper company area have been clear-cut, felled, and replanted in pine trees, providing good quail hunting spaces until the trees get too high for shooting.

■ A new public hunting area, 40,500 acres in size, is now available to all Georgia hunters. Located near the coastal city of Brunswick, the Brunswick Pulp and Paper Area, provided by



2.

Atlantic Coastline Railroads intersect. Chalk up 6,000 acres in the Harrington Tract. Oscar says hunters will find more of a squirrel and deer hunting area on this tract, and not much quail hunting.

North of Harrington Tract and some distance removed, is Tyler Tract, some 9,000 acres. Good squirrel and deer hunting can be found there. Driving along one of the many sandy roads found throughout the new Area, you begin to see why Oscar says quail hunting will be good in the northern three tracts—Tyler, Sansavilla, and Atkinson. Much of the land is open, free of tall trees—the result of timber clear-cutting—and in various stages of growing back up. Islands of cypress hammocks spot the open areas. In the open areas you can find new vegetation ranging from eight inches on up to several feet high on different sections depending on how long it has been since the clear-cutting operation. Oscar says it will be rather hard going when quail hunting the planted cut-over plots. The soil on all these individual areas has been plowed and manipulated to form ridges on which small pine seedlings have been planted. It looks like a giant comb has been raked through the soil leaving a pattern of furrows and ridges. A short leg and long leg would be fine for quail hunters using these areas, Oscar says jokingly.

About a mile from the northern boundary of the Tyler Tract, U.S. Highway 25 cuts its way from Jesup down to Brunswick. Highway 25 forms the south border for the fourth tract of the Area, the Sansavilla Tract. The Altamaha River is the north border. The river, with its hardwoods and hardwood swamps, provides good squirrel hunting habitat.

The Sansavilla has two compartments, A and B. Compartment A will have probably the best quail hunting. Oscar says there is a good deer population on the entire tract. Sansavilla is the biggest tract with 16,000 acres.

Southeast of and adjoining the Sansavilla, is the Atkinson Tract with 3,300 acres. It also has the Altamaha River as its north border. Squirrel hunting along the river continues good and deer hunting will be good throughout the tract. Quail hunting on the pine seedling areas will be good until the growth, as it will on all such areas, gets too high.

Deer Hunts

The Commission opens and regulates public hunting areas to provide areas where any Georgian can come to hunt. And, on each of these areas, the Commission sets regulations they believe are best suited to the animals living there and the hunters that will hunt them.

On the Brunswick Pulp and Paper Area, deer season, this year, is October

14 through January 2, 1968. These are the same deer hunting dates as the inclusive counties: Wayne, Glynn, and Camden. Lampa Doshia, Harrington, and Atkinson Tracts and part of the Tyler Tract will be open for still-deer hunting only, Mondays through Saturdays. No permit required. State deer hunting regulations will apply.

Part of the Tyler Tract (compartment C) and both A and B compartments of Sansavilla Tract will be open for dog-deer hunting on Mondays, Wednesdays, and Saturdays during the season. Only one hunt party per week, however, limited to 25 hunters, will be allowed on each of the three dog-deer compartments for a day hunt. For example, if Sansavilla compartment A is dog hunted on a Monday, there will not be a dog hunt in that compartment until the following week. Which compartment will be hunted which day during any given week will be decided by the Commission.

Dog-deer hunters, one per party, must apply for a permit to the Brunswick office of the State Game and Fish Commission either in person or by mail at least three days in advance of the desired date. There is no fee for the permit. Applications must list all hunters' names and addresses.

Still hunting for deer and small game *will be allowed* on the specified dog-deer areas on Tuesdays, Thursdays, and Fridays. No hunting is allowed anywhere on the Brunswick Pulp and Paper Area on Sundays.

During dog hunts, firearms are restricted to shotguns with buckshot or slugs. Parties cannot switch compartments. A detailed list of regulations and a more detailed map is available from the Brunswick office of the Game and Fish Commission.

Small Game Hunts

Small game hunting will be allowed on all tracts in accordance to state regulations, with the exception of compartment C of Tyler Tract and A and B of Sansavilla being closed to small game hunting on Mondays, Wednesdays, and Saturdays during deer season. No fee or permit is necessary for the small game hunter.

The five tracts have yellow boundary signs, and the same signs are located along roads as they enter the tracts. There are sections of private land inside the Harrington, Tyler, and Sansavilla Tracts posted with boundary signs.

So, tack on these 40,500 acres to the lands you can hunt, regardless of connections. Give them a try.

the State Game and Fish Commission's public hunting program, offers both deer and small game hunting.

Actually, the Area consists of five separate land tracts leased from the Brunswick Pulp and Paper Company. Let's take a look at each of them.

The Lampa Doshia Tract, 6,200 acres, is located southwest of Brunswick. An arm of the Satilla River forms its north boundary, the marsh its south. Oscar Dewberry, coastal region supervisor of game for the State Game and Fish Commission, says deer hunting will be good and there will be good quail hunting in the hammocks and long small branches flowing through the tract. Not many open areas are found in the Lampa Doshia, so not much quail hunting is available.

The Harrington Tract sits northwest of Brunswick and has its southern border at Bladen where the Seaboard and

DEER

And their habits

by Lindy Copelan

Greene County 4-H Club Member



■ Did you get your buck last year? If not, don't give up hope. There's probably a much better chance you'll bag your venison this year.

For several years now, Georgia's deer hunting trend has been one of improvement. Each year the state's deer herd gets larger and chances are better for a hunter to get his game.

Before I go any further, I would like to explain why I am writing this article. I have been in the 4-H Club for 5 years. During my second year I decided I would like to take wildlife as one of my projects, which was a new 4-H project at that time. I knew I could get some help on completing this project because my father is the wildlife ranger for Greene and Oconee counties. When the time of year came for all 4-H'ers to prepare demonstrations on their projects, I decided I wanted to give a demonstration on deer. With the help of Mr. M. H. Shurling, my county agent, and my father, I got up a demonstration en-



LEFT Lindy Copelan of Greensboro used this collection of deer antlers and jawbones to illustrate his talk and paper on deer and their habits which won the first State 4-H Wildlife Project award this year.

CENTER Lindy looks at the remains of two bucks who locked their antlers in mortal combat during the rutting season. More than 12,000 boys and girls like Lindy are enrolled in the new 4-H Wildlife Project.

RIGHT Lindy is the son of Greene County wildlife ranger Charles Copelan, who is admiring the shotgun given Lindy by the Georgia Power Company, sponsor of the 4-H Wildlife Project.



titled "Deer and Their Habits."

I gave this demonstration at Rock Eagle 4-H Club Center and placed first among Northeast District Cloverleaf 4-H'ers. I did this for the next three years, using my original demonstration as a guide. However, this last year has meant the most to me because it gave me the opportunity to attend the State 4-H Congress in Atlanta, where I was named State Wildlife Winner and awarded an automatic shotgun by the sponsor of the 4-H Wildlife Project—The Georgia Power Company.

Here is a summary of my demonstration.

In Greene County 80 percent of the land is in forest. This makes it an ideal habitat for deer. Deer are classified as "browsers". This means they are animals which feed on honeysuckle, leaves, twigs, and acorns. In some cases deer will damage gardens, pea and potato patches.

There are two reasons why we have so many deer in our county—because of strictly enforced hunting regulations and the fact that in 1955 the State Game and Fish Commission released approximately 150 deer in Greene County.

During the first deer season in 1962 there were 49 deer reported killed in Greene County. In 1966 there were approximately 250 deer reported killed in our county.

By having strictly enforced regulations, our deer population has been pro-

tected from poachers; but our worst enemy of deer is dogs. A pack of wild dogs can kill a doe heavy with fawn or kill the young fawn after birth. Another enemy of deer is the old abandoned well. Sometimes deer will fall into these wells and die.

Hunters spend many, many hours trying to get a buck with a prize rack. Racks are of no real monetary value to the hunter, but are a treasured trophy to be hung over a fireplace or in a den.

Many people believe the age of deer can be determined by the number of points on the antlers. However, for decades man has known how to judge the age of domestic livestock by the replacement and wear of teeth. Wildlife biologists have found that deer can be "aged" the same way.

The way to tell the age of a deer is by its teeth. In determining the age, the 3rd pre-molar, third molar, and wear on dentine line are important. If the 3rd pre-molar is three-rooted the deer is less than 18 months old. When the 3rd pre-molar becomes 2-rooted and wear begins to show on the 3rd molar and dentine line, the deer is over 18 months old. There are very few deer killed in our area that are over 3½ years old.

The size and number of points on a rack is determined by the amount and kind of food a deer eats. For instance, a deer that doesn't get enough of the right minerals during the time of year his antlers grow, may have a small, deformed rack.

Each year in February, bucks usually shed their antlers, and around May 15, start forming new ones. The velvet on the antlers will become hardened around September 1st and will come off when rubbed on small trees and bushes. When this happens, scarred places can be found on trees and bushes. A good hunter will look for this type of sign when hunting a place to hunt deer. This kind of sign is known as horning or "hooking."

The antlers are of no value to the deer except to help protect them during the mating season. A few years ago on Cedar Creek Wildlife Refuge a pair of locked antlers was found. The probable story behind this was that two bucks had been fighting during the mating season and had managed, while in combat, to lock their antlers together. They couldn't get them apart, so they died of starvation. Their skeletons and antlers were the only remains of a once violent battle.

One of the main reasons you do not find too many antlers in the woods after deer shed them is because rodents such as rats and squirrels eat them for calcium.

If you come to Greene County during deer hunting season, I hope you are fortunate enough to bag a buck. 🐾

The 4-H Wildlife Project

The 4-H Club Wildlife Project is one of the newest additions to the over-all 4-H Club program. The project is so designed that urban members can compete on an equal basis with rural members. There are opportunities to study all phases of wildlife; for instance, some may wish to study a certain wildlife species or group while others may wish to learn more about management practices for various game and fish species, to make plaster casts of animal tracks, to raise birds, animals or fish baits, to stuff birds or animals or to build birdhouses or feeders. There is a wide selection from which to choose.

The 4-H Club program gives our youth from the fifth through the twelfth grades a chance to learn by doing. Presently there are over 12,000 boys and girls over the state enrolled in the wildlife project, and its popularity is rapidly increasing.

The project is divided into three age categories: cloverleaf, junior, and senior. Each year, the 4-H'ers compete on a county and district basis. The seniors, however, go on to compete on a state, and in some cases, a national basis. More information on the 4-H Club Wildlife Project can be obtained from your county extension office.



Meet Jones by J. Hall

Patrolling Lake Lanier is just one of the many jobs of Ranger George Jones of Flowery Branch, named "Ranger of the Year" by the State Game and Fish Commission.



As a trained SCUBA diver, Jones is often called on for rescue operations and in the search and recovery of drowning victims in

Lake Lanier and other lakes patrolled by wildlife rangers in an effort to prevent accidents.

■ George M. Jones, 33, Hall County wildlife ranger, has been named "Ranger of the Year" for 1967 by the State Game and Fish Commission.

In the ceremony commending him for loyalty and meritorious service, Jones was awarded the recognition at the Southeastern Conference of Game and Fish Commissioners held in New Orleans, La. He was selected from the more than 130 Rangers of the Georgia Game and Fish Commission.

George is certainly well suited for his job as a wildlife ranger. He has spent most of his life outdoors. As a youngster in Cherokee County, he spent most of his time hunting, fishing, and trapping. He laughingly says he almost didn't graduate from high school because he spent more time in the woods than he did in class. Later, he made his living trapping, commercial fishing, and hunting, and farming. George says his

greatest ambition is to go to Alaska and become a trapper.

In the five years since he was first commissioned as a ranger, George has served in the Calhoun District, and on the Lake Russell game management area, and as manager of the Warwoman game management area at Clayton, Ga. He was assigned to the Hall County area in 1964.

George is no stranger to commendation awards. In 1964, not long after his assignment to Hall County, he was presented a certificate of commendation from the Game and Fish Commission for saving the lives of two teenagers on Lake Lanier.

While on routine boat patrol, George spotted several youngsters swimming across a channel from one island to another. Then he heard a call for help. One of the swimmers, a young girl, had become exhausted and sank, pulling her

male companion under with her. Jones was able to maneuver the patrol boat within range and pull the girl and boy from the water. Witnesses stated they would surely have drowned without his quick action.

As a not-so-pleasant part of his rescue work, however, George is frequently called on to recover bodies of drowning victims around the state. He is one of two rangers who are presently qualified as SCUBA divers, and has assisted rescue teams and law enforcement agencies in search and recovery of numerous bodies in Lake Lanier and other areas.

Ranger Jones attended Cherokee County High School, then known as Canton High. He and his wife Mildred, whom he met and married in Rabun County when he worked on the Warwoman management area, live at Flowery Branch, where Mildred is a secretary at the Georgia Shoe Manufacturing Co.

What are you looking at?

by J. Hall



The first step in conservation of resources begins at the grass roots level. SCS technician Julian Dupree explains the conservation plan developed for the Joe Weatherington farm, an outstanding co-operator of the Alapaha Soil & Water Conservation District. The men kept looking hungrily at that lake, constructed according to SCS land use recommendations, and well stocked with bass and bluegill.

■ We stood on the edge of the highway, a woebegone-looking group dressed in an oddly assorted collection of rain gear and makeshift cover, while rain drops slowly trickled down our noses. We were looking at the roadbank.

That's right, the roadbank. Just a plain cut where the roadway had been graded. There are thousands of miles of cut banks just like that one in Georgia.

As we stood there, a farmer, driving an old pickup truck, approached at high speed. He swerved, twisting his head back to stare at us, an expression of astonishment on his face. Then he slammed on brakes and skidded to a stop, fenders flapping wildly. I walked over to the window.

"What y'all doin' over there?"

"We're just looking at the roadbank."

He snorted in disgust and wrenched the truck into gear. Just before he roared away in a cloud of oil smoke, I heard him muttering.

"Dern fools! Standin' out there in the rain lookin' at a roadbank! See one roadbank, you see 'em all!"

We had thought so too. But suddenly, standing there in the drizzling rain, we were looking at something we had never really seen before. For in the vari-colored soil of that very ordinary roadbank was a cross section of some forty million years of Georgia history.

And that's the way it went. During three of the busiest weeks any of us had

spent in a long time, we began to see our state, instead of just looking at it. We were students in the Natural Resources Institute, held each summer at Valdosta State College and Shorter College in Rome, Georgia.

It all began soon after I started to work for the Game and Fish Commission in July of this year. Jim Morrison, Chief of Information and Education and our "Fearless Leader," decided that since I had experience as a teacher, I would serve as instructor and coordinator of the Commission segment of the Institute. And the best way to find out about the Institute was to attend as a student-observer.

That was O.K. with me. In fact, it



Teachers teaching teachers to teach! Sounds confusing, but that's just what goes on at the Resources Institute. Emphasis is placed on helping teachers develop ideas and teaching aids for classroom instruction. Dr. Ernie Provost, about to skin a hamster, shows teacher-students how to prepare a stuffed animal mount. (Nobody got sick!)

sounded like a vacation. How about that! Here I had just started to work and I was going to get three whole weeks all to myself! I blissfully envisioned a couple of hours in class each morning and then endless sunny afternoons of fishing and loafing. Boy, was I in for a shock!

The action began with the first day. After registration, we reported to class. A short orientation talk by Dr. Clyde Connell, Chairman of the Department of Biology and head of the Resources Institute at Valdosta State College, and incidentally, a really inspiring man, and then a lecture on geology by Mr. Wayne Faircloth, professor of biology at Valdosta, started off the course and set the pace to come. And a fast-moving pace it was.

Each "segment" of the course was conducted by a different state organization dealing with an aspect of Georgia's natural resources. Each new subject that was introduced was developed from the preceding one, and laid the foundation for the next to come.

The pieces fit together like a well-contrived jigsaw puzzle. We began with geology and the understanding of how the physical basis of our state was formed. We were surprised to learn that at some period in history, every part of

our state has been submerged beneath the sea. Following the segment on geology, we were next introduced to the soil upon which we live, and upon which all life depends. We were told that more than a thousand years are required to build only a mere inch of precious topsoil, and that may be lost in a matter of seconds because of poor land management. This part of the course is conducted by the U.S. Soil Conservation Service.

From the soil, it was but a short step to acquaintanceship with what grows upon it, and certainly what Georgia has become noted for . . . our forests. Instead of "Peach State," we might well be called the "Pine Tree State," for we learned from the Forestry Commission that Georgia leads the world in production of naval stores and forest products. Our timber lands boost Georgia's economy by more than a billion dollars annually!

The days flew by, and fact was heaped upon new fact. Through the study of water, air, and the increasing problem of pollution which we must face. On to wildlife, and here, at last, I thought I was on safe ground until Dr. Ernie Provost of the University of Georgia began talking about wildlife ecology, game

populations and conflicts in conservation.

From him, and game and fisheries biologists of the Game and Fish Commission, we learned that wildlife must be thought of in terms of "populations" or total numbers, rather than individually. And just as a crop is harvested or a garden is thinned to make room for new growth, so must our wildlife crop be annually "harvested" in order to survive in a rapidly dwindling habitat as our urban areas expand.

We learned about recreation, and here, certainly, I thought I was home. Then we were told that recreation is no longer a question of leisurely loafing, but becoming a vital industry within our nation. The demand for recreational lands and facilities is growing greater with each year in an expanding population with more and more leisure time on its hands. No wonder it has become necessary to create governmental agencies to regulate and develop resources for this mounting problem of our society.

During each new segment of the course, we students were taken on field trips to actually see what our instructors were talking about. Here, we soon learned that any attempts to be dainty or stylish were to be forgotten. Rough togs were the order of the day, and sturdy shoes an absolute must. After the first day in the field, I invested in a pair of boots, and proud I was to have them. I began to think I also needed a rain suit, for those "sunny" afternoons I had dreamed about were few and far between. Valdosta was apparently in the throes of an annual monsoon season while we were there.

But fast as the pace, rough as the going was, I quickly realized I wasn't going to hear any complaints. Every one of those sweet and tender "school marns" was so fascinated by the new worlds that were unfolding right beneath our feet that they wouldn't have dreamed of grumbling. And as for us men, even if we hadn't been absorbed in what we were learning, we certainly had the ladies to set us an example.

The Resources Institute is a course set up for teachers, and we had all types, from elementary to secondary school. Most of the teachers at the Valdosta Institute were specialists in some field of science, but the course is not confined to science teachers alone. In fact, it would be ideal for history, social studies and even English teachers, for there is a world of theme material to be gained from the information.

Students in the course may receive three and a half semester hours or five quarter hours of undergraduate or graduate credit toward a Master of Education Degree. Students desiring graduate credit must apply for admission to the graduate program. A \$10.00 admission

fee is required, which must be paid by the student. If a student is already admitted to a graduate program at another university, he may take the course at Valdosta or Shorter and have the credits transferred, with the approval of his parent institution and either of those colleges.

The Institute will also fulfill requirements of additional hours for teacher certification. The dates for the 1968 Institutes, beginning June 10 through 28 at Shorter, June 17 through July 5 at Valdosta, have been set in order that students may enroll for an additional course during the second summer session at Shorter or another college if they desire. Valdosta does not have a split summer program.

The total cost of the course, including tuition, food, and lodging for three weeks, is \$150.00. If they wish, students may apply for a grant-in-aid through their local school system to the State Department of Education. If accepted, the student pays the fee and is later reimbursed by the state.

A few scholarships are available through the various state organizations which participate in the course. These scholarships are made possible by the contributions of supporting community groups, such as Soil Conservation Districts, sportsmen's clubs, women's clubs, garden clubs and other organizations which make the Institute an annual civic project. Applications for scholarships should be addressed to: Mr. Jim Morrison, Chairman, Georgia Natural Resource Education Council % State Game and Fish Commission, 401 State Capitol, Atlanta, 30334.

Any way you look at it, it was an experience to remember. Our group, which started as an assemblage of strangers, ended as a closely knit company of friends who had shared a few hardships and many fascinating impressions. There was so much to be learned, so much that we realized we should already have known but just really hadn't taken the time or the interest to think or wonder about it, that sometimes it seemed we couldn't take everything in. But as we thought about it later, giving the impressions time to sink in, we all had a much better understanding of what a tremendously wonderful and complex thing this old world of ours is.

And we all left the campus in a fervor to tell what we had learned. In the words of Mrs. Jeanette Sullivan, a tenth grade biology teacher at Bainbridge, "There is so much our children need to know . . . have to know, if they're going to be able to manage in a world of so many increasing problems and growing demands. I only hope I can bring these experiences back to them so they can see our world as we have been taught to look at it." 🐸



About the Author

At 32, J. Hall has had a wide range of experiences, from working on a cattle ranch breaking Brahma bulls, to driving ambulances. He served aboard a submarine while in the Navy, later enlisted in the Army as a military policeman, and has written numerous stories and articles based on his encounters.

Before becoming radio-television editor for the Game and Fish Commission, J. was an engineering and design draftsman for several years. He worked in radio and television, and has written for several newspapers and magazines. He was information specialist for the U. S. Soil Conservation Service in Athens, and later owned an advertising and

public relations agency. He served as executive director of two Georgia Chambers of Commerce, and exhibits coordinator for the Florida Development Commission. J. also taught high school English in Jacksonville, Florida, and was later appointed chairman of the Department of Exceptional Child Education, working with mentally retarded and physically handicapped children.

J. is a graduate of the University of Georgia with an A B degree in journalism and a minor in English and creative writing. He attended the University of Georgia School of Law, the University of Florida, studying animal husbandry, and began working toward a master of science degree at Florida State University in 1966.

J. is an avid fisherman and outdoorsman. As a water safety instructor, he has taught swimming, life saving, and aquatic survival techniques. He enjoys shooting as a sport, and began competitive target shooting at the age of eight. Later, he won in Unit competitions in the Army, and was a letterman on the varsity rifle team at the University of Georgia.

J. and his wife, Jackie, have three children, Sue, 12; Johnny, 9; and Mary Frances, 2. Jackie is a graduate of Jacksonville University, and teaches third grade.

LIST OF CONTRIBUTORS TO GEORGIA NATURAL RESOURCE EDUCATION INSTITUTES—1966 & 1967 CONTRIBUTORS OF 1 OR MORE SCHOLARSHIPS OF \$150 EACH

(The figure in parenthesis indicates the number of years the organization has contributed to the program.)

Businesses:

Sears-Roebuck (2)
Georgia Power Company (2)
Southern Bell Tel. & Tel. Co.

Garden Clubs:

Ga. Federation Garden Clubs
Garden Club of Georgia, Inc.

Soil & Water Conservation Districts:

Atlanta Soil & Water Conservation District
Coosa River Soil & Water Conservation District
Pine Mountain Soil & Water Conservation District
Ohoopsee Soil & Water Conservation District
Towaliga Soil & Water Conservation District
Upper Chattahoochee River Soil & Water Conservation District
Middle Georgia Soil & Water Conservation District

Businesses:

Gainesville National Bank
Cordele Sash, Door & Lumber Co.
Mathis Lumber Company
Planter's Bank

Garden Clubs:

Garden Club of Georgia, Inc.

Soil & Water Conservation Districts:

Lower Chattahoochee River Soil & Water Conservation District
Upper Ocmulgee River Soil & Water Conservation District (2)
Georgia Soil Conservation District Auxiliary

Sportsmen's Clubs:

Echols County Sportsmen's Club
Creek Sportsman's Club
SW Georgia Sportsman's Club
Stewart Co. Sportsmen's Club
Izaak Walton League
East Point Sportsmen's Club

Women's Clubs:

Augusta Junior Women's Club
Second District Georgia Federation Women's Clubs

Coastal Soil Conservation District
Satilla River Soil & Water Conservation District
Coosa River Soil & Water Conservation District
Alapaha Soil & Water Conservation District
Middle S. Georgia Soil & Water Conservation District

Sportsmen's Clubs:

Georgia Sportsmen's Federation (2)
Bartow County Sportsmen's Club
Bulloch County Sportsman's Club
Laurens County Sportsman's Club
Upon County Sportsmen's Club
Cherokee Sportsmen's Club
North Georgia Sportsmen's Club
Floyd County Wildlife Association
Macon Motor Boat Club

Women's Clubs:

Lesche Woman's Club

Others:

Society of American Foresters (2)
Kiwanis Club of Sandy Springs

PARTIAL SCHOLARSHIPS

Georgia Federation Women's Clubs—4th District

Dalton Junior Woman's Club
Macon Junior Woman's Club
Smyrna Junior Woman's Club
LaVista Woman's Club
Northside Junior Woman's Club
Cochran Woman's Club
Marietta Junior Woman's Club
Jeffersonville Woman's Club
Moultrie Junior Woman's Club
Moultrie Woman's Federated Guild
Lerura Judd Woman's Club
LaVista Junior Woman's Club
Warner Robins Junior Woman's Club
Sandersville Woman's Club
Uncle Remus Woman's Club
Columbus Junior Woman's Club
Thomasville Junior Woman's Club
Cairo Woman's Club
Tunnel Hill Junior Woman's Club
Bainbridge Woman's Club
Stone Mountain Woman's Club
Sandy Springs Junior Woman's Club

Others:

Don Shedd
Virginia Shiflett

Build a Box

By J. David Almand
Wildlife Specialist
Cooperative Extension Service
University of Georgia

"HOO-EEK, HOO-EEK"

■ If you've ever been ambling along a wooded stream or pond and saw a bird about the size of a crow uttering this strange cry, you've probably just run up on one of our most beautiful waterfowl—the wood duck.

The male "woodie" is admired by all who see him. He is easily recognized by his white throat and chin strap and bright green and purple feathers. The female, like most lady ducks, is brownish in color. She has a white throat patch and a prominent white eye ring. Both male and female have well-defined head crests and long, dark, square tails that can be used as a mark of identification in flight.

Wood ducks are very good to eat, and may be prepared in a number of ways. For information on cooking wood ducks and other game, refer to Extension Bulletin 648, "Cooking Wild Game", available from Georgia county agents. Wood ducks, especially the male, also make excellent trophies, and the feathers are highly prized for tying artificial fishing flies.

Although wood ducks regularly nest in Georgia, our greatest populations occur in December and January. This is due to an influx of birds from the northern portion of the country during this time of year.

Bill Julian, refuge manager of Piedmont National Wildlife Refuge near Round Oak, Ga., says that 1,040 wood ducks have been banded on that refuge since 1960.

Band returns and recoveries from ducks banded in Georgia have revealed that our wintering wood ducks come from a number of other states, including Arkansas, Missouri, Mississippi, Michigan, Wisconsin, Ohio, Indiana, New York, Maine, Massachusetts, New Jersey, Pennsylvania, and Virginia. A few of our banded "woodies" have also been recovered in the Canadian provinces of Ontario, Quebec, and Manitoba, indicating that we do, indeed, play host to an international resource.

Not only is the wood duck the only species that regularly nests in our state, but it is also one of the few ducks that nests in hollow trees. In fact, it may spend considerable time perched in trees during the breeding season.



House hunting is an easy job for a hen wood duck with a nesting box like this around to pick from. Lack of good natural nesting sites is one of the primary reasons wood ducks aren't more numerous.

IF IT

Watching a wood duck come in for a landing is enough to unsettle any landlubber's nerves. Dashing up at breakneck speed, the bird agilely lands on the narrow perch, before clambering inside the surprisingly small entrance hole.



Wood ducks begin nesting in Georgia as early as February. Studies conducted on the Piedmont National Refuge, however, revealed that nesting does not reach its peak until April.

Size of the cavity makes no difference so long as it is large enough for the female to nest. The depth may range from five inches to five feet, and the height might range from five to seventy or more feet above the ground.

In searching for a place to nest, both the male and female fly through a wooded area until they spot a likely looking tree cavity. Or they may decide to alight on a limb and look until they find a cavity. As soon as the female sights a likely one, she flies off to inspect it. If the cavity is suitable, she will set up housekeeping.

The female does not bring any nest material to the cavity. Instead, she uses decayed wood, leaves or other loose material in the bottom of the cavity. She normally lays one egg per day, usually in the early morning. Each time she leaves the nest she covers the eggs with the loose nest material. About the time she lays her seventh egg, she plucks a small amount of down from her breast and adds it to the nest. She adds more down each day until she has finished laying.

Wood duck eggs look a great deal like chicken eggs, except they are slightly smaller and dull white in color. The number per nest may range from 5 to 19. The average nest has 10 or 12.

When more than one female lays in the nest, the number of eggs may be much larger. Such nests are called "dump" nests, and may contain up to 40 eggs. Because the females are unable to incubate this many eggs properly, it is unlikely that any will hatch. These nests are often deserted by the females.

The eggs hatch in about 30 days. The newly hatched ducklings remain in the nest for about 24 hours. This allows their down to dry completely. When the female is convinced that they can get out of the nest safely, she calls them from the ground or from a nearby limb. With webbed feet outspread and tiny wings beating, the ducklings jump, unafraid of the distance to the ground. They have been known to jump from nests 70 feet high. After all ducklings are accounted for, the female leads them to the nearest water where they stay until they can fly. This is about eight weeks later.

Ideal wood duck rearing habitat consists of water, abundant vegetative

growth and low hanging bushes. This combination provides the greatest abundance of insects, spiders and vegetable matter which make up the diet of these birds at this time of year. Beaver ponds are an excellent example of this type habitat. In fact, the growing number of beaver ponds has been an important factor in increasing wood ducks in our state.

The peak wood duck hatching period in Georgia is during May. A smaller peak also occurs in June due to re-nesting by females whose earlier nests were destroyed or deserted as a result of predator activity.

Shortly before the eggs hatch, the male leaves his mate and joins other males on secluded woodland ponds or swamps. Here they lose their flight feathers (primaries) and grow new ones. During this period, the males cannot fly. Thus, they are open to attack by predators. Because of this, they are very secretive during this molting period.

Wood duck nests are preyed upon by a variety of animals. The eggs may be eaten by raccoons, snakes, and opossums. The egg shells may be punctured by starlings and woodpeckers or cracked by squirrels. A nest is usually deserted when one or more eggs have been cracked or punctured. Sometimes the female may be trapped and killed inside the nest by a raccoon. In one instance in an eastern state, raccoons destroyed eggs in 20 out of 24 nests and killed an incubating wood duck on one of the four remaining nests.

A number of animals and reptiles also eat young wood ducks while they are growing up. These include snakes, mink, raccoons, snapping turtles, large frogs, large bass, and, to a lesser extent, hawks and owls. Many baby wood ducks are also lost during bad weather. Studies have shown that only about half of the young wood ducks that make it to the rearing area live to reach flying age.

Erecting wood duck nesting boxes is not a new idea. Attempts to increase wood duck numbers by putting up nest boxes dates back to the 1930's. Since then, many thousands of boxes have been put up by various conservation agencies and groups.

Boxes have been made of both wood and metal. Wooden nail kegs, wooden ammunition boxes, and metal grease drums have been tried with varying degrees of success. Wooden boxes are better for use in Georgia. 🐾



Beaver ponds are ideal wood duck habitat both for nesting and for feeding. They make good places to install wood duck nest boxes.



Cypress, redwood, or treated pine boxes will last 5 to 10 years or longer. For more information on wood ducks and nest boxes, see your county agent and request a copy of Extension Bulletin 649, "WANTED: More Wood Ducks In Georgia."

A number of individuals and groups in Georgia have already erected nest boxes for wood ducks. In fact, several sportsmen's clubs including those in Laurens, Bulloch, and Troup Counties have undertaken this as a club project. Cleon Tankersley at Ocilla, Georgia, provides an outstanding example of individual success. Three nesting seasons ago he erected 14 nest boxes in a small pond. Three were used by wood ducks. The following season he increased the number of boxes to 29, seven of which were used. He really hit the jackpot this last nesting season. Recently, he informed me that according to his records, his boxes harbored at least 15 nests this season.

Cleon is really enthused about his project and understandably so. Today, he is busily expanding his successful operation and is even going so far as to provide a special rearing pond for the baby ducks. Cleon's efforts show what can be done with a little effort.

With the increased drainage of creeks and swamps and general destruction of wood duck habitat, nesting boxes can help make up for the loss of natural habitat. Although nest sites are only one requirement in managing wood ducks, natural cavities are so scarce that nest boxes are an important and logical way to contribute to the welfare of this important bird.

The possibilities for increasing the wood duck population in Georgia are unlimited. With increased numbers, wood ducks can absorb a greater portion of the rising hunting pressure. There is little doubt that these ducks will play a significant part in adding to the local economy through income from hunters and nature lovers.

It should be remembered that wood duck nest boxes may do more harm than good under certain conditions. For instance, unless protected by predator guards, the boxes may become a death trap for the female. Only through a sound, well-planned program will nest boxes be of any value.

Here's hoping that we will hear the "hoo-eeek" sound ringing over our wooded lakes and streams for a long time to come and that you, too, will thrill to the sound and sight of these beautiful birds.

Top: After hatching, wood ducklings show no fear of heights, sometimes jumping from nests as high as 70 feet to the water or ground below.

Small left photo: The average wood duck clutch contains about 10 to 12 eggs that are

dull white in color and slightly smaller than a chicken egg.

Raccoons and snakes are the greatest predators of wood duck eggs. The snake leaving the nesting box is a black rat snake.



the outdoor world



Handy



Morrison



Wohlgenuth

G and F Men Elected

Three staff members of the State Capitol office of the Game and Fish Commission were elected to offices in professional organizations this fall.

Hubert Handy, game management chief of the Commission, was elected chairman of the forest game committee of the Southeastern Section of the Wildlife Society, meeting in conjunction with the Southeastern Game and Fish Commissioners at New Orleans, La.

At the same meeting, Jim Morrison, coordinator of information and education for the Commission and editor of *Georgia Game and Fish*, was elected president of the Information and Education Section of the Southeastern Game and Fish Commissioners. Morrison was

recently named a member of the board of directors of the American Association for Conservation Information, and was just re-elected chairman of the Georgia Natural Resource Education Council, which sponsors two summer courses in conservation for Georgia teachers. (See article on page nine.)

Dean Wohlgenuth, *Game and Fish* staff writer and an information officer of the Commission, was elected secretary-treasurer of the Southeastern Outdoor Press Association at their meeting at Nags Head, N.C. Wohlgenuth has also been named chairman of the annual convention of the Outdoor Writers Association of America, to be held at Callaway Gardens June 23-29, 1968.

Handgun Tax for Ranges, Gun Safety?

A bill has been introduced in Congress by Representative John Dingell of Michigan to allocate the 10 per cent excise tax on pistols and revolvers to the states for target ranges and firearms safety training programs, and for wild life restoration.

Under the present law, the tax on handguns goes into general revenue funds and does nothing for sportsmen or gun owners. By contrast, the 11 per cent tax on sporting rifles, shotguns, and factory ammunition goes into the Federal Aid to Wildlife Restoration Act (Pittman-Robertson Act) and is given back to the State game and fish agencies, including Georgia for wildlife restoration, development, and research projects.

In 1966, the tax on handguns collected more than \$3,300,000 and is expected to go even higher in 1967. In the last ten years, the tax collected more than 25 million dollars than went into the general tax treasury of the federal government.

The general principles of the Dingell bill have been endorsed by the National Wildlife Federation, Wildlife Management Institute, National Rifle Association, and the National Shooting Sports Foundation.

Georgia Game and Fish Commission Director George T. Bagby and Assistant Director Jack Crockford have written letters of support for the bill to Congressman Dingell, but they urged that the entire excise tax on handguns be used solely for target ranges and firearms safety training programs. Their letters pointed out that the need in Georgia is now greatest in these two areas, and the relative amounts of money that the states would each eventually receive for wildlife restoration would not be significant, compared with the existing federal program which gives Georgia alone almost \$400,000 a year for wildlife projects.

Congressman Dingell is best known for his co-sponsorship of the Dingell-Johnson Federal Aid in Fisheries Act, through which Georgia receives close to \$100,000 annually from the federal government for fisheries projects.

Sportsmen, target shooters, and gun owners who are interested in the Bill, H.R. 11190, are urged to contact their congressmen and senators in its support.



A Whale of a Tale

Georgians witnessed a rare, unexplainable event of the sea as a whale floundered in shallow waters and beached itself on Jekyll Island Oct. 20. The animal, a pygmy sperm whale, is only the third on record to strand in Georgia and the first in the Jekyll Island area.

Officials of the Jekyll Island Authority issued a call to the Georgia Game and Fish Commission and the state agency notified Marineland of Florida when it became apparent the creature would become stranded.

While marine biologists and a crew of

collectors drove the 130 miles from the marine attraction to Jekyll Island, Game and Fish Commission biological personnel toiled at their task of mercy. Digging a large hole around the whale, they bucketed water up the beach to keep it wet. Meanwhile a crane moved into position to hoist the animal.

Unfortunately, the whale hemorrhaged and died just before the truck arrived.

Marineland's curator, Dave Caldwell, said that the mammal was a male and measured ten feet, four inches. Records of sightings and strandings of whales are maintained internationally, he said.

Sportsmen Speak ...



LAKE JACKSON

Most of the spare time I have off is spent on Jackson Lake or in a private pond. I have a lot of spare time off, because I don't believe in letting "my work interfere with my fishing." (Ha, Ha.)

My first love besides my family is fishing, bass and trout fishing, that is. There is nothing any more rewarding than to latch into a nice bass or trout.

I would like to express my appreciation and that of hundreds of other people in this area that I have talked to for the wonderful job the Game and Fish Commission did and is doing when you stocked Jackson Lake with shad. The fishing for all species has improved 75 per cent in the last year and a half. I have fished the Lake since I was about eight or nine years old, and never before can I remember fishing as good as it has been in the last one and a half years.

A couple of my friends and I go to different reservoirs every spring and fall to fish for bass. But now, we can stay at home and fish "Old Faithful," thanks to what you and the Commission have done.

Also, I would like to commend you and the Commission for the fine job you are doing in Georgia GAME and FISH. This is an outstanding magazine.

I am sending a picture of a string of bass my buddy and I caught one afternoon back in the spring.

Stanley E. Edwards
Covington, Ga.

ANTLERS AND QUAIL

I enjoy reading the GAME and FISH Magazine each month. I really enjoyed the October issue article on "How to Have Horns" by Art Rilling. I learned a lot about bucks and their antlers.

In one of this fall's issues, I would like for you to explain the life of a quail. I am a quail hunter and a deer hunter.

Charles L. Whidly
Haddock, Ga.

See the article on quail in the November issue, "Hide and Seek," by Jim Tyler. Game and Fish plans future articles on the life histories of Georgia's most common wildlife species and fish. If any reader has a suggestion for a good story or would like to write one himself, we're all eyes and ears.

—Charles L. Whidly

I would like to call your attention to a couple of errors in the June '67 issue of Game and Fish.

On page seven you stated the boat to the right always has the right of way. This only holds true when both are under power and neither is a sail boat. A sail boat always has the right of way over one under power.

On page nine you have out some false information on how to put on a seat cushion type life preserver. Your head goes through one strap and one leg through the other. This leaves both arms and both legs free to swim or help someone.

This type of information could cost someone their life. I think you need to send your writer to a power squadron class to learn the rules of the road. And ask the manufacturer how to wear a life preserver.

Those were the only two articles in the book I read. I didn't care to finish.

I think you owe it to the public to print corrections.

Earl Bacon, Jr.
Atlanta

Apparently Mr. Bacon is referring to the caption under the photograph on page seven of the July Issue, "Next Time ... Will There Be Another?" by Dean Wohlgemuth. It is true that sailboats have the right-of-way over power boats, but the picture in question does not show a sailboat, only two power boats...therefore it is illogical to deduct that the caption of the photograph is referring to sailboats. If a sailboat had been shown in the picture with a powerboat, then the caption would have been in error. As it was used, the caption is correct and Mr. Bacon is in error.

As far as the proper method of wearing a seat cushion type of life preserver goes, the method shown of placing the cushion on the chest with the arms through the loops is the method accepted and advocated by the American Red Cross in their excellent water safety courses, which Mr. Bacon might consider taking himself. The method he mentions of putting one arm (not the head) and one leg through the loops was once misguidedly advocated by some cushion manufacturers who illustrated their packages with that method. Unfortunately, it tended to result in the wearer's head ending up lower than his feet—well under water, especially if he is accidentally knocked unconscious. In addition, it is nearly impossible for a person in the water to put a cushion on over one leg and one arm. On the other hand, he can easily pull a cushion to his chest and stretch his arms through the loops. Of course, a life vest is much more desirable than a cushion for a life preserver, if a boater will wear it.

Incidentally, writer Dean Wohlgemuth has twice successfully completed the U.S. Power Squadron's Piloting and Smallboat Handling Course. He is a small boat owner himself.

It's regrettable that Mr. Bacon didn't even get around to reading the article with the two short photograph captions that met with his disfavor, since by reading it with a more open mind, he could have picked up some valuable information on how to save lives on the water.

GUN POLL

At approximately 8:00 p.m., Tuesday, September 26, I received a telephone call

from a friend who informed me of a poll being taken by WMAL-TV (Channel 7, Washington, D.C.). The polling apparently had started with the news broadcast at 7:00 p.m. and continued until 10:00 p.m.

At the close of each scheduled program between these hours, the question: "Should Congress enact a strict gun control law?" was projected for approximately one minute. Two telephone numbers—one for a "yes" vote, and one for a "no"—were provided for each political subdivision—District of Columbia, Maryland, and Virginia.

No comment, editorial or otherwise, except for an oral repetition of the question, was made by the announcer, although the scheduled "N.Y.P.D." police drama program at 9:30, apparently through coincidence, had a theme that could be construed as being strongly antifirearms.

Upon calling the number listed for Maryland for the registering of a "no" vote the recorded voice replied: "Thank you for voting no in the WMAL-TV listeners' poll" or words to that effect. Votes were tallied electronically.

The results of the poll, announced at 11:30 p.m. and confirmed by a telephone call to the station were:

No: 62% Yes: 38%

Total number of calls completed: 4,282

In addition, there were 7,447 calls made during the polling period that resulted in busy signals.

The combined percentage totals for Maryland and Virginia alone showed 66% "No" and 34% "Yes."

James B. Trefethen
Wildlife Management Institute
Washington, D. C.

Is Your SUBSCRIPTION EXPIRING?

If you were one of the 15,000 subscribers to Georgia Game and Fish who subscribed last year by February 1, 1967, your subscription may be about to expire. Check the date on your mailing label to see what month you will receive your last issue if you do not renew in time. To make sure that you don't miss a single issue of **Game and Fish**, send in your renewal subscription now in the postage-paid envelope attached to this issue. A minimum of 30 days notice is required to renew your subscription. Beat the rush! And this time, why not subscribe for three years and save half a dollar!

Three years—\$2.50

One year—\$1.00

Send your name, address, and zip code with your check made payable to the State Game and Fish Commission, 401 State Capitol, Atlanta, Ga. 30334.

DO IT NOW!

Sportsman's Calendar

SEASONS NOW OPEN

BEAR

Season—Nov. 4, 1967 through Jan. 2, 1968 in the counties of Brantley, Charlton, Clinch, Echols and Ware. The remainder of the State is closed.

Bag limit—(1) one per person per season.

GUN DEER SEASON

Season A: Southeast Georgia Season—Oct. 14, 1967 through Jan. 2, 1968, in the following counties:

Brantley, Bryan, Bullock, Burke, Camden, Candler, Charlton, Chatham, Clinch County north of the Atlantic Coastline Railroad and east of the run of Suwannee Creek, Echols County east of U. S. 129 and south of Ga. 187, Effingham, Emanuel, Evans, Glascock, Glynn, Jefferson, Jenkins, Liberty, Long, McIntosh, Pierce County south of U. S. 82 and east of Ga. 121, Screven, Tattnall, Washington, and Wayne counties.

Bag Limit—Two (2) Bucks. Hunting with dogs is allowed in all of the above counties.

Season B: Southwest Ga. Season—Nov. 4, 1967 through Jan. 2, 1968 in the following counties:

Baker, Calhoun, Chattahoochee, Decatur, Dougherty, Early, Grady, Lee County west of U. S. 19, Marion, Mitchell, Muscogee, Seminole, Stewart, Terrell, Thomas, Webster, and Worth County south of U. S. 82.

Bag Limit—Two (2) Bucks, except in that portion of Worth County south of U. S. 82 where the bag limit is one (1) buck. On the last day of the regular season, Jan. 2, 1968, Chattahoochee and Marion counties will be open for either-sex deer hunting.

Hunting with dogs is allowed, except in Chattahoochee, Muscogee, and Worth where hunting deer with dogs is prohibited.

DUCKS

Season—Nov. 28, 1967 through Jan. 6, 1968.

Shooting Hours: One half hour before sunrise until sunset. Consult the nearest office of the U. S. Weather Bureau for the exact time.

Bag Limit—Four (4) per day, including no more than two wood ducks, one canvasback, and two black ducks. In addition, hunters may take five mergansers daily, including no more than four American and red-breasted mergansers and one hooded merganser. In Chatham, Bryan, Glynn, Liberty, McIntosh, and Camden counties, east of the Intracoastal Water, hunters may take two additional bonus cap ducks per day.

Possession Limit—Eight ducks, to include no more than four wood ducks, one canvasback, and four black ducks. Possession limit for mergansers is 10, to include no more than two hooded mergansers.

GEESE AND BRANT

Season—Nov. 4, 1967 through Jan. 12,

1968, except in Liberty and McIntosh Counties, where the season is closed.

Shooting Hours—One half hour before sunrise to sunset.

Bag Limit—(Geese) Two per day. Possession limit is four. There is no open season on snow geese.

Bag Limit—(Brant) Six per day. Possession limit is six.

GROUSE, RUFFED

Season—Oct. 14, 1967, through Feb. 29, 1968.

Bag Limit—3 Daily, possession limit 6.

OPOSSUM

Season—Oct. 14, 1967 through Feb. 29, 1968. Exception: Coweta County opens Sept. 30, 1967 through Jan. 20, 1968.

No Bag Limit.

QUAIL, BOBWHITE

Season—Nov. 18, 1967 through Feb. 29, 1968.

Bag Limit—12 Daily, possession limit 36.

RABBITS

Season—Nov. 18, 1967 through Feb. 29, 1968.

N. Ga. Bag Limit—5 Daily.

S. Ga. Bag Limit—10 Daily.

North Georgia includes the counties of Harris, Talbot, Upson, Monroe, Jones, Baldwin, Hancock, Warren, McDuffie, Columbia, and all counties north of those listed. All counties south of those listed above on the fall line are considered part of South Georgia.

RACCOON

N. Ga. Season—Oct. 14, 1967 through Feb. 29, 1968, in Floyd, Bartow, Cherokee, Forsyth, Hall, Banks, Franklin, and Hart counties and all counties north of these counties.

N. Ga. Bag Limit—One (1) per night per person.

S. Ga. Season—No closed season.

S. Ga.—No Bag Limit.

SQUIRREL

Season—Oct. 14, 1967 through Feb. 29, 1968.

Bag Limit—10 Daily.

SNIPES, WILSON'S

Season—Nov. 27 through Jan. 15, 1968.

Bag Limit—8 Daily, possession limit 16.

WILD TURKEY—Fall Season

West Central Ga.—*Season*—Nov. 4, 1967, through Jan. 2, 1968 in the counties of Chattahoochee, Marion, Muscogee and Stewart.

Bag Limit—One (1) per season.

Southwest Ga. Season—Nov. 20, 1967 through Feb. 29, 1968, in the counties of Baker, Calhoun, Decatur, Dougherty, Early, Grady, Miller, Mitchell, Seminole, and Thomas.

Bag Limit—Two (2) per season.

WOODCOCK

Season—Nov. 28 through Jan. 31, 1968.

Bag Limit—5 Daily, possession limit 10.

SEASONS OPENING THIS MONTH

DOVES

Season—Dec. 6, 1967 through Jan. 15, 1968. See federal regulations available at U. S. Post Office.

Bag Limit—12 daily, possession limit 24. See federal regulations, especially for baiting restrictions. Migratory bird stamp not

required.

WILD TURKEY—FALL SEASON

Southeast Ga. Season—Dec. 2, 1967 through January 2, 1968 in the counties of Brantley, Bryan, Bulloch, Camden, Charlton, Chatham, Effingham, Evans, Glynn, Liberty, Long, McIntosh, Pierce, Screven, Tattnall, and Wayne.

Bag Limit—Two (2) per person.

GAME MANAGEMENT AREAS

OPEN THIS MONTH

(For a copy of the complete hunt schedule and detailed regulations, write the State Game & Fish Commission, 401 State Capitol, Atlanta Ga. 30334.)

All small game in season—Altamaha (Except Butler Island, which is open only for waterfowl on Tuesdays and Saturdays during regular duck season), Lake Seminole, Whitesburg, Allatoona. No permits required for small game hunting.

Bucks only in season—Altamaha, Seminole, and Brunswick Pulp and Paper.

Deer-Archery Only, Either Sex—Nov. 27-Dec. 9—Suwannee. Hunters are required to pick up a free permit at the checking station.

The bag limit on all archery hunts is one deer of either sex.

Small game in season—Nov. 29-Dec. 23, Wednesdays and Saturdays Only—Cedar Creek, Clark Hill (Quail, squirrel, rabbit, doves, ducks in season) \$1.00 daily permit required.

Deer—buck only—Dec. 11-16—Waycross State Forest. Permit required. No Charge.

Deer—buck only—Dec. 18-30—Suwannee (permit required, no fee).

Small game (quail, squirrel, rabbit, doves, duck (in season))—Dec. 2, 6, 9, 13, 16, 20, 23—Cedar Creek, Clark Hill. \$1 permit required per day.

Small game (grouse, squirrel, rabbit)—Dec. 1, 2, 8, 9, 15, 16, 22, 23—Blue Ridge, Chattahoochee. \$1 permit per day.

Small game (quail, squirrel, rabbit)—Dec. 4-9—Bullard Creek. \$1 per day.

Small game (grouse, squirrel, rabbit)—Dec. 4-16—Swallow Creek, Coleman River. No permit required.

FEDERAL REFUGE HUNTS OPENING THIS MONTH

Deer—Archery Only—Dec. 27-30, 1967—Blackbeard National Refuge. Deer of either sex. No limit on number of permits. Applications for free permits must be received by Dec. 21, 1967 at the Refuge Manager's Office, Savannah National Wildlife Refuge, Rt. 1, Hardeeville, S. C. 29927.

GAME MANAGEMENT AREAS OPEN NEXT MONTH

Small Game (quail, rabbit, squirrel)—Jan. 1-6, 1968—Suwannee. No permit required.

Small Game (grouse, rabbit, squirrel)—Jan. 5, 6, 12, 13, 19, 20, 26, 27, 1968—Blue Ridge. \$1.00 permit required per day.

Small Game (quail, rabbit, squirrel)—Jan. 8-13, 1968—Bullard Creek. \$1.00 permit required per day.

Small Game (quail, rabbit, squirrel)—Jan. 8-20, 1968—Waycross State Forest. No permit required.

Small Game (quail, rabbit, squirrel)—Jan. 22-27, 1968—Arabia Bay. No permit required.

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