

# COVER PAGES

#### FRONT PAGE

Tommy Shaw, of Atlanta, one of our better fishermen, likes to catch yellow perch. He has the best luck in the fall months when the perch are deep. As shown in the picture, they are beautiful fish and Tommy rates them with the best for table use.

#### BACK PAGE

Along the Oconee and Altamaha Rivers, Eddie Pollett of Uvalda, is operating some 30 legal fish baskets. In the boat with Eddie, are Pat Wolf and his dad, H. S. Wolf, who just wanted to see rough fish control work in action. Eddie has plenty of know-how and has been getting his share of catfish, carp, etc.

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# Game and Fish "PARTNERSHIP"

### By FULTON LOVELL, Director Game and Fish Commission

ATURE and Georgia are in a game and fish partnership that we like to think of as unsurpassed. Our appraisal and inventory has given us a proper perspective of what we really possess. Some years ago, there was talk of empty, fishless streams and forest bare of wildlife. Such talk today is rarely heard.

It has been said our quail are slowly vanishing to a point of possible extinction. Yet our last hunting season proved this statement without merit and completely false. It was generally agreed that Georgia had the greatest quail season in the history of the state.

Your Game and Fish Commission has been vigilant in keeping tab on all species of wildlife. It has been our objective to maintain a healthy game and fish program. Long ago we recognized man's efforts to grow a wildlife crop as futile. Only Nature can do the job of replenishing the renewable resources of game and fish. Our vital contribution has been and will continue to be an act of lending Nature a helping hand when it is needed.

It is a simple matter of arithmetic. One cow would perhaps thrive on an acre of fertile land but 6 cows on this same acre



FULTON LOVELL
Director, Game and Fish Commission

probably would starve. Wildlife must have food. Fish too.

Our assistance to Nature then has been concentrated in a serious effort to provide adequate food and cover.

Our skilled game technicians deserve much credit for our hunting successes. They seem to have a compelling thirst for more knowledge and research that will bring about better wildlife conditions. They carry on a never ending program of restocking, so successful that we now have deer in almost every section of the state.

In areas where wild turkeys disappeared years ago, the restocking program has brought them back. The wild turkey population is satisfactory in face of ever increasing hunting pressure. Our competent game technicians are an investment in insurance for a surplus crop of wildlife for the hunter to harvest and a comfort in the knowledge that an ample seed stock will remain.

The Game and Fish Commission is encouraged by the way our efficient fisheries biologists have brought calm out of chaotic fishing conditions. These trained, highly skilled experts rolled up their sleeves and went to work. They have the staggering problem of re-establishing good fishing in thousands of privately owned lakes

(Continued on Page 22)

#### GEORGIA GAME AND FISH

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# Outdoor Sportsmen Spend \$25 Million Dollars a Day

### New Lakes Attract Thousands; Peak Yet to Come

ALONG about this time of year there are just two kinds of people in Georgia. Those who have gone fishing, and those who are going. Within the past three years, fishermen in this state have tripled in numbers and the count includes more women and youngsters than ever before in history. In the future, the problem will be to find somebody who doesn't fish.

Without taking a thing away from the highly publicized sports such as football, baseball, etc.,—all of them could be packaged up and absorbed into the Number One sport—fishing—and the bulge would hardly show. Some sports pages crowd out and play down hunting and fishing. Many newspapers recognize the value of outdoor news and give it a high priority.

During the football season, the outdoor sportsman is often shown the back door so that more space can be given gridiron activities. But, compared to hunting, the Number Two sport in America, football would be like entering a lame jackass in the Kentucky Derby.

Let's view, with a clear mind, some facts. There are four major magazines published monthly on hunting and fishing. Every state turns out hunting and fishing magazines and there are countless others devoted exclusively to the subject. What other sport gets this attention?

Fishermen are not numbered among those who are always content to buy a ticket and watch somebody else participate in competitive sports. He prefers to get into the act and does. Proof of the popularity of hunting and fishing is wrapped up in the statistics that American sportsmen spend \$25,000,000 per day—the year around. A million dollar gate in boxing still is a sensational classic with months of newspaper, TV, and radio build-up.

Clark Hill waters alone will be visited this year by an estimated 200,000 anglers. Allatoona, on a good week-end, will entertain from 2,000 to 3,000 fishermen.

The new Sinclair Lake will get special attention from thousands, Blue Ridge, Burton, Nottley, Chatuge, Jackson, Rabun, Blackshear, and the Jim Woodruff Lake (they back up water this year) will not suffer for the want of fishermen. This is just partial coverage of our big lakes. Then too, there are some 28,000 lakes and ponds, many of them privately owned. The trout streams will be choked with anglers as usual. Salt water

(Continued on Page 22)

Bob Singleton (left) and Cecil McClure, of Clayton, have evidence of tackle bustin' Lake Burton bass. Lake Burton is being "discovered" every day. Hundreds of fishermen say it is the best fishing water in the nation. Where else can you catch whopping bass, fighting rainbows, five pounds or more, crappie, white bass, bream, yellow perch, catfish, all in one lake? You name it—chances are—it's in this marvelous lake.



# Why Take CREEL CENSUS?

By Fred J. Dickson
Chief, Fish Management

WHY take a creel census? A creel census to fishing is comparable to an inventory on the stock of goods by merchants. It reveals the kind, number, and size of fish taken by anglers. From these reports, the fisheries biologist may determine, for example, whether or not our mountain trout streams are producing good catches to the satisfaction of the ever increasing number of fishermen.

While some of the figures may seem unimportant or irrelevant, the biologist gets much vital information from the check-up showing the number of fish caught per hour of efforts, or perhaps per full day of effort. The number of fish caught can determine, in the report of a skilled fisheries manager, just how much fishing pressure is being put on practically any body of water, and what percent of the game fish are removed. With this information, the hatchery division better understands how much restocking is necessary and when.

Without the cooperation of the fishermen, a creel census



This also goes with fly fishing. There is always a twig, vine or leaf to snag a fly. This Wildcat Creek angler untangles his lure before working a pool below a waterfall.

ness of various restocking needs; type of baits or lures; time of day fish caught; and the meteorological conditions at the time when the angler was most successful. Later, fishermen will have all of this worthwhile knowledge upon request. We shall determine if a small percentage of the fishermen are catching a very large percentage of all the fish.

Warm water streams and lakes do not need restocking since warm water species possess the natural reproductive fishing these waters, be sure to look carefully for these tags. Prizes are offered for the return of all tags.

From the tags we will better understand such things as concerns migration, average size, weight, age, general conditions, and the percent of game fish removed. We sincerely hope each fisherman will cooperate wholeheartedly with the creel census clerk, as a good creel census is one of the tools of fish management that will show in facts and figures if a modification of management practices is needed.

## Activity report helps experts plan future

program is impossible. In the final analysis, all information assembled is for the benefit and enlightenment of the fisherman on what he can can expect for his fishing efforts, Biologists assigned to the job have highly complimented our fishermen for their willingness to provide statistics. Soon we may have a comparison of the different north Georgia streams. We are of the opinion that some of them are underfished while others have entirely too much fishing pressure.

This year we hope our creel census will tell us when and how many fish to restock; effective-

powers to maintain the number and weight that the stream will support. However, there will be a creel census conducted this year on parts of the Oconee, Ocmulgee, and Altamaha Rivers and on the Allatoona Reservoir mainly to fird out what percent of the game fish are caught. We are especially interested in finding out what percent of the rough fish are removed, and the extent the rough fish reduction improves sport fishing.

Various species of fish will be, or already have been, tagged and released in the above mentioned rivers and reservoirs. When

Beautiful Noontootly rushes by and this fisherman is slipping a black gnat (behind a spinner) into the dark recesses under overhanging vegetation. It's a hideout of big trout. Reports from these men will help make the creel census a big success.



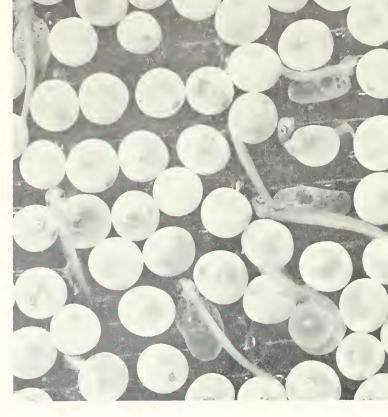
# Trout-

## The ARISTOCRATS

BING Crosby was asked to comment on the greatest thrill of his life and without hesitation named—not golf as would be expected but fly fishing for trout. He explained it was the rise of the trout to a dry fly, the explosion, the swirls or splashes in the sparkling, rippling waters of a mountain stream that caused his pulse to quicken and the tingle we call a thrill to race through his body.

Georgia has thousands of anglers, who feel the same way about it. The fly rod is a thing of beauty in the hands of a sportsman who knows how to use it. Some call it the post graduate degree of fishing. Georgia surely must rate among the top states in the nation for its number of skillful anglers. Some of them can drop a dry or wet fly on a dime at thirty paces and get a nickel change.

Why are so many people interested in trout? Perhaps the determining factors are many. No question about it, the trout family went swimming off with all the honors when it came to beauty. The colors of a rainbow trout—well, who has ever seen an unattractive or colorless rainbow. The name "rainbow" was perfect. One look at a rainbow just lifted out of the water is a sight you can't forget. The brown trout too has its flare for



color with those fire-ball red dots. Brook trout, under good conditions, sparkle like a rare gem.

Trout are the aristocrats of all fresh water fish. They dwell only in the purest of water, cold and unpolluted. But the mortality is high. This being true, all men who catch trout have ample reason to be proud of their catch.

Trout are reasonably fertile; the female pro-(Continued on Page 22)

Brand new life! These greatly enlarged photos taken by Jack Dermid show rainbows getting their first peek at this big old world. In the top picture, you see rainbow trout actually hatching from eggs. Look carefully. Watch them tumble out head first, tail first, or almost at once from the slit in the egg case. The eyes of troutdom are upon you! Note the eyes of unhatched fish showing through egg cases. Below, they are 24 hours of age now and as active as jello in an earthquake. There is scarcely any resemblance between these baby rainbows and the flashing, fighting adults they soon will grow to be.





voungsters talking about tapered lines, nylon gears and light action rods. Here is how future fishing experts are made. Bill Curry, (left) conducts one of his annual classes on the roof of a large department store. (2)—George Pendley, of Atlanta, shows a couple of good reasons why he likes to fish. He snapped these bass to attention with spinning equipment. (3) J. T. Shealy, (left) and Benny Johnson, of Savannah checked out this excellent shad catch in the Ogeechee River. Their wives were along to share in the trolling fun. (4) W. R. Meroney, of Warner Robins, had the fishing thrill of his life with this 8½ pound bass caught in Lake Jay near Perry. His 3-year-bid daughter Carolyn Lee proudly took charge. (5) Dan Wainwright and Bob Rowell, of Nahunta, visited the Satilla River for 12 Bass—the big one weighed 8 pounds.

# ASSASSIN!

### Armor-Plated Gar Slaughters Game Fish

# Killer Supplies Big Thrills For Anglers

SILENTLY it glides near the water's surface. Suddenly there is a flash, a swirl and another small fish joins the long list of victims of the fresh water assassin, the killer gar.

These elongated savages are every inch a killer ranging from the size of a pencil on up to the 200 pounders. Their long rows of sharp, needle-like teeth can deliver a quick, lethal blow to a game fish that might in a split-second of carelessness be off guard.

Gars are without fear. They are like well armored submarines, cruising about on the prowl for new victims. All small fish instinctively drift off to cover and give the gar plenty of passing room. Since the gar is relatively slow, it is a first class "sucker" and "duck-soup" for the cruel, crushing jaws of an alligator. But that's the way it is in the aquatic kingdom of fishes—eat and be eaten. The end is never far away.

You wouldn't say the gar is scarce in Georgia. In fact, we seem to have slightly more than our share. At present, we can do little about this impudent creature which has come down through the ages to claim fame for his species as one of the oldest forms of fish life. Our brand new rough fish control laws do not provide us with the weapons to declare war on this marauder. When the rough fish program proves its merit beyond question, our biologists then will ask the legislature to legalize the necessary tools to halt the widespread depredations of the gar. Meanwhile, he

will continue his free course of action and fatten up on a diet of game fish.

Where it regards eating gar, many fishermen sum it up thusly, "Ugh!" Others say the meat is delicious if properly flavored even if nobody has ever turned up with a recipe for that flavoring. There has been talk about garburgers—whatever that is.

There are a few of our fishermen who seek to satisfy a burning desire for thrills, adventure and excitement by fishing for gar. They use a wire noose that clamps tightly over that ugly extended snout. They also bait a hook with meat, let the gar hit it and take it away. They give him time to munch on this tidbit before they lunge back and set the hook. This is the time when Mr. Gar goes berserk, boils the water, performs acrobatics and puts on a great show. It's a guaranteed fishing thrill to hook and land a gar. Try it.

(1)—Those saw teeth of this long-nose gar can be sudden death to small fish. The alligator gar is said to have two rows of teeth.
(2) Roe shown in front had skin peeled off. Note the thousands of eggs that might have added a heavy population of small gar (rough fish) to otherwise good fishing waters. Wonder how many small bass

and bream were gobbled up in the development of all those eggs. It is reported, these eggs are toxic and if fed to a chicken—the chicken will die. Roe shown in the background is still covered by skin. The roe contents of two gar is displayed. These excellent pictures by Joe Medcalf, of Thomaston.





# Simple Application Of Woodcraft Vital Jactor

By Crawford F. Barnett, M. D.

T can happen to you, the wrong trail, a missed landmark and you are on your own; lost! That surge of panic can be fatal, so be prepared before it happens, with the all important "Know How." With this and a clear head, barring physical injury, you actually are only temporarily out of touch—never lost.

In planning a trip into unfamiliar territory, check with the weatherman, study your map, and above all else, tell some responsible person where you

are going.



L. C. Powers, of Madison, discovers the sad truth. He's lost!

#### BE READY FOR

# Survival! Wilderness

### **—TRAGEDY, PANIC UNNECESSARY**

If you are physically fit, dressed and equipped for a possible emergency; if you know simple fundamental woodcraft principles and can, to some extent, apply them, your misad-venture, while perhaps, embarrassing, need not be a tragedy. Make it your business to know what can be used for food and where to look for it. You should know how to care for your body, how to conserve energy, where to sleep, how to find or prepare shelter, and what things can harm you.

A check list of equipment is invaluable, otherwise, many useful items may be overlooked. Prepare yourself actually to survive should the need arise. The list of useful equipment is endless but a few things should be

"musts":—a small first aid kit, matches, (and they can be dipped in wax to waterproof), a good knife, a little card with fishhooks in it may be carried safely in the bill-folder with some strong fishing line. Some hard candy or a chocolate bar can be the difference between misery and comfort. Mole skin adhesive for blistering feet, a pencil, a flashlight in a waterproof container, and, last of all, a compass. These items will fit comfortably in your pockets.

The four cornerstones of survival are: (1) Think before acting, (2) Food, (3) Shelter, (4) Water. With these, wilderness survival is a certainty.

Sit down and think your problem through — weigh carefully in your mind whether you should try to find your way back or whether you should "sit tight" and wait for help. This is your most important decision so take your time about making it. Just how to evaluate how lost you really are, of course, depends on many things such as time, weather, distance, your familiarity with the locality and how you happened to be lost, plus the possibility of rescue attempts. If there is real doubt as to which course of action to follow, you won't regret swallowing your chagrin and embarrassment in awaiting help.

If, after careful thought, you are certain you can find your way back to civilization, first mark your location with broken branches, rocks, or with whatever material available, then set

your course by selecting a prominent landmark in the desired direction of travel that can be seen en route. Relate the position of the sun to yourself and distant landmarks. As you approach this landmark, line up another farther away.

Streams, ridges, trees, bluffs will generally guide you in open country. It is well to remember that most individuals are rightlegged just as they are righthanded, and so tend to take a longer step with the right leg with the result that they walk in a circle to the left or counterclockwise. Continue marking your trail as you go, always looking for familiar landmarks. Climbing a tall tree may aid in this. If you find a stream, creek or river, follow it either up or down until you find a path, which may lead you to someone or possibly some house. At a fork take the most traveled path.

Don't travel at night in strange wooded country except in an emergency. In open country it may be the only time to travel. A light should be used at night only to read a map or compass or in particularly rough or dangerous spots. Your eyes will adjust to darkness in a short time, while with a light you are blinded to everything outside the small area of illumination. Traveling on a ridge is often easier than hiking in a valley or along a stream. Vegetation is usually less dense, the ridge itself serves as a guide, outlooks are frequent, and there will be few streams or swamps to cross.

In the event you decide to "sit tight" and await help, start searching for food and water before you become too tired or exhausted to do so effectively. Make camp before darkness.



Our lost fisherman has the right idea. Sit down and think it over. It is the trademark of a good outdoorsman, the kind that never fail to get back home rich in experience and delighted with the thrill of a pleasant adventure.

it is winter, gather twice as much as you think you will need. To signal, add green or wet leaves or grass to a fire. The more smoke, the quicker your chance of being located. In extremely cold weather, build sev-

a large fire, then strip to the skin and dry your clothes while nude. Otherwise, the evaporation from wet clothes on the body while drying before the fire will seriously or even fatally lower the body temperature.

Emergency food is usually abundant if you are smart enough to forget your civilized eating habits. Any animal in the temperate zone is edible including mice, snakes, snails, lizzards, worms, bugs, fish, tadpoles, salamanders, bats, frogs, toads, turtles, clams, mussels, crayfish, crabs, shrimp, ants, termites, grasshoppers, locusts,

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# Use landmarks, streams to find way back

Fallen trees, caves, cliffs, and boughs, will provide shelter. Get out of the wind or rain if possible. Don't move your camp unless you have to since your chances of being found are much better if you "stay put."

Gather wood for a fire and if

eral fires, burn one to hot ashes, scrape them away and you have a hot bed to sleep on for hours. You will be reasonably comfortable instead of numbed by the cold. Repeat the procedure as necessary. Should you be drenched in an icy stream, build



# Good News!

# Lamprey Invasion No Cause for Alarm

By Dr. Donald C. Scott

MOST of us first heard of these strange lamprey creatures when they appeared in tremendous numbers in the Great Lakes. The Great Lakes lamprey invasion assumed considerable economic importance when it became apparent that these parasitic fishes were responsible for the decline of valuable commercial fisheries of those bodies of water, Reports of lampreys in Georgia waters have received widespread attention. It is only natural, that our fishermen should be alarmed by these reports. Much of this alarm seems unwarranted.

Superficially they resemble an eel, but close examination of characteristics will distinguish lampreys, not only from eels, but all other fishes.

The unusual lamprey mouth is in line with its peculiar feeding habits. Most lampreys are parasitic on other fishes. A lamprey can attach itself to the side of a fish with this suction-cup mouth and proceed to rasp away at the skin and scales of the victim with its tongue and teeth. From the wound thus made the lamprey draws the fish's blood for food.

Another unusual lamprey feature is its set of gills. The gills of other fishes are located under a gill cover but the lamprey has a series of muscular pouches containing gills. These pouches open to the outside separately by seven porthole-like openings on each side of the body just behind the head.

The life histories of various lampreys are unusual. Practically all lampreys ascend small, gravelly streams in the spring to spawn. Like our West Coast salmon they spawn only once, then die. They may spawn as pairs or groups of individuals. Both males and females participate in building a "nest" which is a shallow depression on a

gravelly riffle. Stones are often picked up by mouth and moved from the nest area while smaller materials are swept out of the nest by the vigorous fanning activities.

The female attaches herself by her mouth to a stone at the upstream edge of nest. The male then attaches himself by mouth to the body of the female and curls around the female. The vents are thus brought close together so that the eggs are fertilized upon release. The eggs, being sticky, pick up sand grains stirred up by the activities of the spawning pair. Thus weighted, the eggs fall into the nest and come to rest in the gravel. Within a few weeks, the young hatch out and are swept downstream by the current.

Once in a quiet backwater they burrow into the muddy bottom. The young lamprey is a blind, worm-like creature with a funnel shaped mouth. From its burrow it obtains food by straining tiny plants and animals from the mud and water. After several years of this blind, muddwelling existence, the young lamprey develops functional eyes, disc-like mouth and the olive or grey adult coloration. There are three general types: the sea lamprey, the freshwater parasitic lamprey, and the brook lamprey.

Sea lampreys emerging from their mud bank home of four or five years, move downstream to the ocean or some large body of fresh water. Here they take up a parasitic existence and grow at the expense of other fishes until they reach sexual maturity, a matter of one or two years. Then they ascend streams, spawn and die on the riffles as their parents did five or six years before.

These lampreys move downstream to large rivers where they feed on other fish until they reach maturity then return to the riffles of a tributary stream where they also spawn and die.

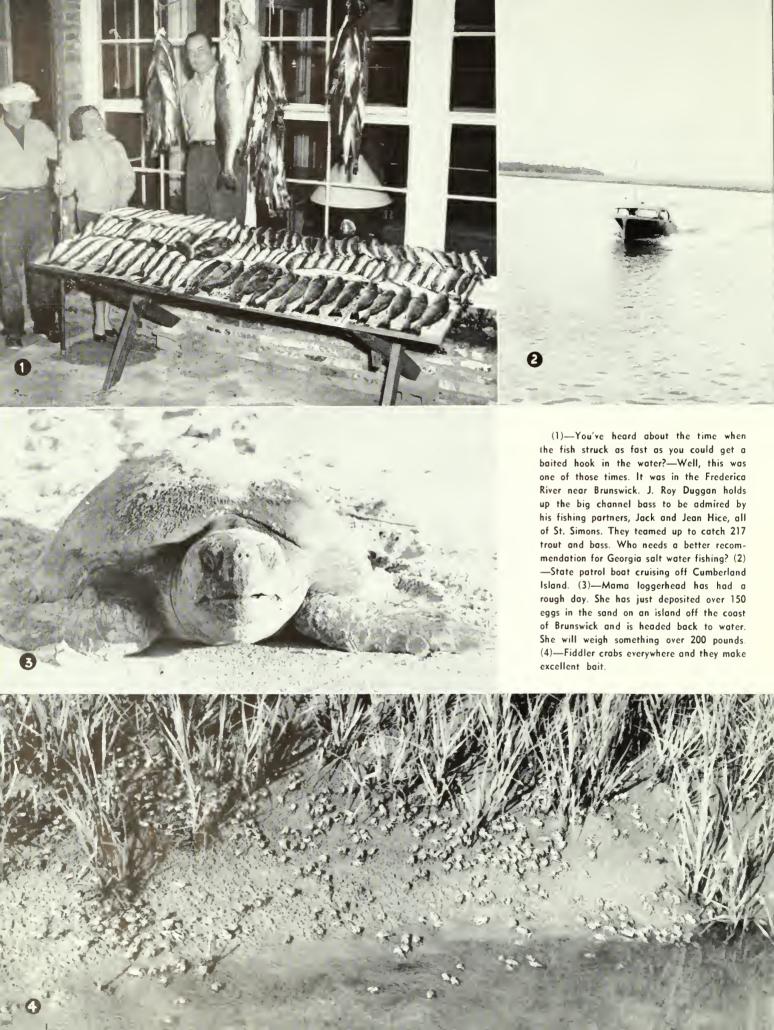
Unlike other lampreys, the brook lampreys are never parasitic. They do not feed at all after emerging from the mud but simply move upstream to a suitable riffle to complete their life cycle with spawning and death.

All three of the above mentioned lampreys have been taken in Georgia,

No specimens of the sea lamp-(Continued on Page 20)

Attached to the side of the jar, this lamprey shows how it would look on a fish. Note row of muscular pouches along side of body which incloses the gills.





# Coastal Waters Give Up Big Bass

#### JUST 16 REDS WEIGHED OVER 500 POUNDS

**S**ALT water fishermen are as plentiful in Georgia as ants at a picnic. It is amusing to see some of them hot-foot it great distances across the state line in search of the big spots (reds or channel bass) and speckled trout.

According to Wm. Penn Waller of Savanah, they are just running away from some of the best fishing on earth, right along the Georgia coast. Waller ought to know. Last October near Gaynors Banks, he and his three companions had to quit after catching 16 that weighed over 500 pounds. The boat was loaded.

Then in November, Waller's party went back to catch 23 bass that weighed over 700 pounds and left the fish still biting. The average was 32 pounds or more per bass. Almost any three of them would send the scales danc-

ing around the 100 pound mark. Don't believe it?—O. K., look at the top picture. There hang 23 of the prettiest salt water bass you'll ever cast your peepers ever. That's what our Georgia anglers are running madly to other states to find.

There are times when lady luck just won't smile, but occasionally she will laugh out loud if you are willing to take a chance. Shortly before day-break one morning at St. Simons, Bill Cullens (left) and Bob Kent (picture number 2) faced a problem. The winds were whipping and lashing around the Marina. Dark clouds above and the general weather outlook was for one of those days when anglers are least likely to succeed.

They decided to set caution aside and risk it. Off they went down the Hampton River and when the sun slipped up over the marsh, Bill and Bob were catching bass and trout and having a great time. It is by no means the biggest haul they have ever had but considering how it all started—it was a

wonderful day. That big bass Bob is holding was a 9 pounder.

What do these fellows think of our coastal fishing? Both agree, "It's great."

In picture number 3, Mrs. L. S. Miller of Brunswick and Mrs. C. L. Cannon of Macon hold a wonderful food fish known as "Tripletail" or Eddy fish. If you are an impatient angler, you'll like the Eddy fish. You can pull up to a buoy, drop your bait and if the "Triple-tail" is going to bite, it doesn't waste much time.

It just adds up to some great fishing along the Georgia coast. Stick around and enjoy it.

#### Izaak Walton Said-

"What would a blind man give to see the pleasant rivers, the meadows, the flowers, the glory of the sun and the many blessings which we enjoy each day and too often forget to praise God for them."





# Jull Scale Attack on

**7**HIS rough fish control program is not only a challenge but also somewhat of a mystery to

thousands of legal basket operators.

The challenge to trap manipulators is to take out enough rough fish so that bream, bass and other sport fish will show a progressive trend in new populations. This, the biologists assure us, will be done. Their faith is deep-rooted in an estimate of between 8,000 and 10,000 legal baskets in operation before the year is out. They figure basket fishermen will be taking 5,000 pounds of rough fish, or more, every day. The optimistic predictions are that we soon will begin to catch bigger bass and bream.

The mystery involves fishermen who work their baskets every 48 hours, reducing this to 24 hours when runs are high. Their traps produce an average of 5 pounds of fish each — day after day. Occasionally they get more, often they get less, but the mystery is—where do all these fish come from? The supply seems inexhaustible.

Opening day for legal baskets was April 1st when about 2,000 traps went down into our waters. For the first time in Georgia history we began to fight back against rampaging, destructive, over-populated rough fish.

The catch is mostly catfish. Catfish is in demand bringing 40c per pound, 45c dressed and for 50c you can pick them out. A few of the men operating 25 to 50 baskets could have \$50 to \$100 days. Some of them are saying, "Better enjoy these good times. Won't be long before we get all the fish."

The fact-finders know better. They insist the runs will continue unabated with more and larger fish getting caught as time goes by. They also say basket operations will take only a modest percentage of the available fish.

We chatted with Otho May, State fisheries biologist and rough fish project leader, as we drifted down the Altamaha River watching some





# OUGH FISH

of the boys pull up their baskets. Otho has been eperating baskets for the State Game and Fish Commission for a long time on the Oconee and other rivers in an experiment which proved the rough fish program sound and worthy.

"Could they possibly chop down these rough fish to a dangerous low?" Otho was asked. For a moment he was silent and pensive. With a sudden sweep of his hand, he declared, "take this river for example. It's big, long and loaded with rough fish. We will average far less than one basket per mile. If we had a dozen baskets per mile, there would still be a constant supply of millions of uncaught fish."

We asked Otho to throw more light on the subject. He did.

"When the boys really start producing, the price of catfish probably will drop. The urgent need right now is for an educational program to teach people how to operate baskets.

"The mouth of any basket should face down stream. Feeding fish usually swim up stream and too—the trap doesn't fill up with trash. Basket

(Continued on Page 22)

(1)—Eddie Pollet af Uvalda shaws Pat Wolf the new legal fish basket. His arm is extended through first funnel and touches trap daar af second opening. It is this little daor that keeps game fish out. Johnny Williams, Hazelhurst, an Oconee River fisherman, looks on. (2) Eddie and his helpers, Pat Walf in front and H. S. Wolf in center, start out to check baskets. Wildlife Ranger Chief Mallory Hatchett, in second boat with L. C. Fulford, goes along to see that baskets meet specifications. (3) Hooks an his line contact and lift wire that leads to basket. (4) Fish are depasited into large tub. Rangers check up. (5) Eddie operates 30 baskets scattered in Oconee, Ocmulgee, and Altamaha Rivers. The average catch per basket is 5 pounds. (6) A few suckers, caro and the rest are blue channel catfish. (7) Otho May, (left) state biologist, takes Carlton Morrison, Atlanta radia broadcaster, to interview rough fish operators with on-the-spot recordings. (8) Ranger O. J. Clark, (left) checks with John Hearn, of Lumber City wha likes to catch his catfish on a trot line.





# FISHING REGULATIONS FOR 1954-55

Effective April 1, 1954, and continuing in force until changed by law or proclamation, all of the fresh water streams, lakes, and ponds of Georgia will be open to legal fishing throughout the year with the following exception.

Exception: The trout streams of the following 12 mountain counties— Dawson, Fannin, Gilmer, Habersham, Lumpkin, Murray, Pickens, Rabun, Stephens, Towns, Union and White. Fishing in these waters is prohibited from November 15 through March 31, inclusive, each year. This regulation shall apply from the head to the mouth of said streams, and the mouth of those streams which flow into a lake shall be considered at the point where the stream reaches the body of the lake regardless of its level.

There is no closed season on taking shad fish with rod and reel, fly rod, or pole and line. The daily limit shall be eight fish per person. Sliad fish taken by the above methods cannot be sold. This covers all species of shad fish including what is commonly known as white shad and hickory

The restrictions and limitations upon the taking of fish in this State shall be as follows:

Rock fish or			
striped bass	10	in one	e day
Large-mouth			
black bass	10 i	in one	e day
Small-mouth			
black bass	10 i	in one	e day
Rock bass			
White bass			
Kentucky or			
Red-eye bass	_10 i	in one	day
Bream	35 i	in one	day
Perch	_35 i	in one	day
Crappie	_25 i	in one	day
Eastern Pickerel or			
Jack	15 i	in one	day
Wall-eyed Pike	3 i	in one	day
Muskelunge	2 i	in one	day
Brook Trout			
Rainbow Trout			
Brown Trout			
Red Breast Perch			
THE THE WASTE TELETINES		in one	uay

No person may take from that portion of the waters of Clark Hill Reservoir of this State or have in his possession any Bass fish of less than 8 inches in length measured from the tip of his nose to the fork of his tail.

Shad \_\_\_\_\_ 8 in one day

It shall be unlawful for any person to possess at any one time more than 45 fish in the aggregate of all species named; and provided that no more than 10 Bass of any and all species in the aggregate can be taken in any one day; provided that no more than 10 Trout of any or all species in the aggregate can be taken in one day.

### GEORGIA

#### Game and Fish Commission

412 State Capitol

HERMAN E. TALMADGE, Governor

The Commission is a constitutional body, responsible only to the Legislature and the Governor.

Eleven in number one from each Congressional District—the members of the Commission are appointed by the Governor for staggered terms of seven years and the Commission in turn appoints the director.

The present Commissioners are:

#### COMMISSIONERS

LEONARD BASSFORD, 10th District Chairman

J. O. BOWEN, 5th Dist. Vice-Chairman

CASON CALLOWAY, JR., 3rd Dist. Secretary

JAMES F. DARBY, JR., 1st Dist. RICHARD TIFT, 2nd Dist.

J. D. Pope, 4th Dist. BEN T. RAWLINS, 6th Dist. BILL AUSTIN, 7th Dist. ALVA J. HOPKINS, JR., 8th Dist.

Fred C. Jones, 9th Dist. FRED D. BEASLEY, Coastal

ADMINISTRATIVE

FULTON LOVELL, Director

W. H. Hodges, Enforcement JACK CROCKFORD, Game Management

C. C. James, Hatcheries

DAVID GOULD, Coastal Fisheries

FRED DICKSON, Fish Management

Tom Sanders, License Division

J. L. STEARNS, Information and Education

The heads of the various divisions and all employees are appointed by the Director on the approval of the Commission. The Director is a bonded state official and directs the entire program, which is established, and ways and means approved for its operation, by the Board of Commissioners at regular meetings.

# Ed Dodd Directs Drive on Pollution

Georgia's great conservationist, Ed Dodd, creator of Mark Trail, served in March for the third time as chairman of the National Wildlife Week. The principle purpose of Wildlife Week was to bring Americans up to date on the great threats to our streams and impoundments from sources of pollution, and the dissemination of information of proposed anti-pollution laws. The conservation specialists plan to keep pollution and its many problems in front of the public as a major project for the year 1954. Efforts were planned to encourage many states to tighten up on loose pollution laws.

# License Fees

Legal residents 65 years ald eligible for free hunting and fishing license.

For fishing in home county (pole, line ond worms), no license required.

Residents under 16 years of oge (stote), no fishing ar hunting license required.

State resident combination hunting and fishing license, \$1.25.

Stote nan-resident fishing license (onnual), reciprocol ogreement.

State non-resident fishing license (10 doys), \$3.25.

Stote non-resident fishing license (3 day), \$1. Stote resident commercial fishing license,

Non-resident commercial fishing license,

\$5.

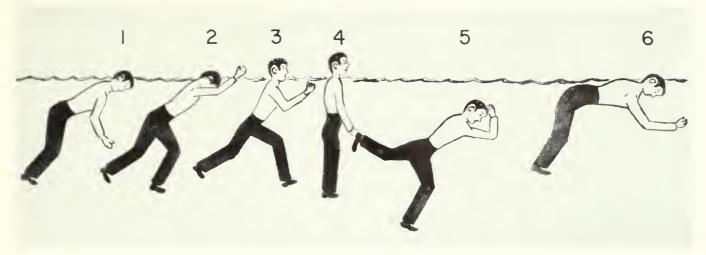
State resident shad fishing license, \$1. Non-resident shod fishing license, \$10. County non-resident season hunting license, \$10.25.

State non-resident seoson hunting license, \$20.25.

State non-resident hunting license, (10day), \$10.25.

State resident trapper's license, \$3. State non-resident trapper's license, \$25. State non-resident fur dealers, \$200.

Propagation permit, \$1.



1.-With lungs full, float face down with back of the neck on the surface. 2.—Get ready for a downward thrust using arms, legs, or both. Be sure mouth is empty. 3.—Exhale through nose WHILE raising head so that mouth is in the air, shoulders under. 4.-With head vertical, thrust downward for support during mouth inhale. 5.-With

lungs full, drop head forward, immediately thrust downward and backward. 6—Relax, with head, arms, and legs dangling, holding all air, while floating forward and upward. Learners rest three seconds here, experts rest ten seconds.

# "Drownproof Yourself!" Professor Fred R. Lanoue

PROWNING ranks second only to traffic deaths as a single cause of accidental deaths, yet a technique developed at Georgia Tech has proven that nearly anyone can easily be "drownproofed" for extended periods of time, certainly long enough to be rescued under ordinary circumstances.

To give an idea of the effectiveness of the Georgia Tech method, an experiment was conducted at Tech with sixty POOR swimmers. A third had their wrists tied behind their back, another third had legs tied in a



half bent position, and the remaining third were free. Average quitting time of these POOR swimmers was four hours and forty minutes, and sixteen of them reached the objective of EIGHT HOURS. It seems as though these folks approach "drownproofing."

#### **Breathing Technique**

"Drownproofing" is fundamentally the development of a technique of breathing while swimming in deep water with such an absolute minimum of energy expenditure that terrifying complications like multiple cramps, heavy clothes, disabling injuries, high waves, rough water, and long immersion have little or no effect on survival. Many of our NON-SWIMMERS who have never swum one length of our pool, have stayed up one hour in the crowded deep end of our pool, using this technique, which most of them learned in about a dozen lessons. As a beginner, would you rather have a pretty

These underwater photos show a Georgia Tech swimmer in positions 4 (left) and 5 as described in the above drawing.

stroke, or still be on the top an hour after an accident in the water.

Hunters, fishermen, boaters, swimmers—anyone who uses the water for recreation or work owe it to themselves, AND THEIR FAMILIES, to learn how to protect themselves in water. This technique is cheaper and better than any insurance or gadget you can buy, and it is guite easily self taught with a little practice.

#### Avoid Tiring

The new technique has its basis in physics. Specific gravity (Continued on Page 21)







#### Burton Hatchery All Dressed Up

Na explanation is needed for pictures 1-2-3-4—since these signs tell the stary. Many such signs have been put up by the Game and Fish Cammissian in various sections of the State. Spartsmen say these signs are an invaluable service. (5)—Warm water species such as bass and bream are prapagated in these Lake Burtan Hatchery paals. Lake Burtan is in the background. (6) These raceways turn aut thausands of traut for stacking in North Georgia streams. Mare raceways are being added. (7)—Thausands of little rainbows. When they get from 6 to 10 inches, they are released in traut streams.

# OTTERS

GAY CLOWNS
OF WILDLIFE

OTTERS, fun-loving clowns, probably are the most playful creatures in all wildlife. Life to them is an unending game of frolic, tag, roll and tumble both in and out of water. These parlous days of troubles throughout the world are not even remotely connected with the otter way of life. They just live to play and play to live.

The graceful, light-hearted animals are unaware of a good price on their rich, luxuriant, durable hide. Demands for otter fur makes this gay creature live rather dangerously. Trapped otters often tear themselves loose by the fury of sheer force. Some have been known to bite off the trapped portion of their legs to escape.

#### Fish Killer

This gay, carefree animal is said to leave in his wake, a story of fearful fish destruction. They fish for the sheer joy of catching fish. They catch bass, big and little ones. Even if not hungry, they will grab a bass, take it to shore, nibble a piece out of it to insure death and return to water for more fishing.

Not mony people hove ever seen a boby otter. This Okefenokee Swomp youngster is just o hondful of velvet-soft fluffy fur. One little chirp out of junior and momo ond poppo will come o-running, reody for trouble.





Reody for lunch! These Okefenokee Swomp Park otters never foil to snop to attention ot the sight of o fish—and it must be fresh.

In the Okefenokee Swamp, otters pursue their way of life undisturbed except for their natural wildlife enemies. In this refuge, their numbers have increased until now, sportsmen are accusing them of being the major contributor to the serious decline in game fishing. Some have reported seeing bass scales piled high on the banks—the handiwork of fun-loving, rampaging otters. They also say vultures follow otter activities with an attentive eve to conclude the bass dining habit where the otter leaves off.

#### Nomadic Nature

Being of nomadic nature, the otter is reported to travel as much as six miles in one night and may cover from 50 to 60 miles in a season. Where possible, otters will make and take advantage of a mud slide leading from a bank into the water. Over and over they skid, slip and slide into the water in a spirit of happy activity.

Otters have a certain refuge along the bank which they establish as a social center. Here they dry themselves, wallow and relax before resuming their endless games. They are mature at 2 years of age. Usually they have from two to four young. The newly born are blind, toothless and helpless for five weeks or more. The cubs must be taught to swim. Timid youngsters are dragged into the water by their parents.

The momma otter stands a constant vigil over her little ones. Not even poppa is allowed to come near until junior is several months old.

#### Annoys 'Gators

The otter is fearless. It has been known to dip and dive about alligators, nipping them in touchy spots just for laughs. The annoyed 'gator is no match for an otter where swimming is involved, else—it would be a different story.

Other than the fish diet ofters are known to eat crayfish, frogs, larvae of aquatic insects, worms, soft shell turtles and almost anything they can grub out of the mud. They prefer nocturnal activity and are seldom seen except at daylight or dusk.

After exhaustive studies by game technicians, it was con-

(Continued on Page 23)

# — Lamprey —

(Continued from Page 11)

rey were definitely known here until March 17, 1953 when a single small individual was taken from a buck shad in the Ocmulgee River by Leroy Tippens, of Rochelle. The sea lamprey was to be expected in Georgia since it has been reported from the St. Johns River in Florida and from tributaries of the Savannah River in South Carolina.

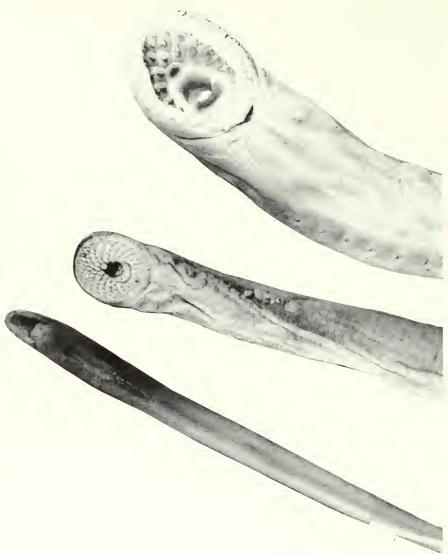
Sea lampreys are the largest and most destructive of the species. Fortunately, this species can be discounted in Georgia as a potential nuisance. It is apparently rather uncommon anywhere in the southern part of its natural range. There is some doubt that it ever spawns in Georgia since our only specimen appears to be an immature individual that hitched a ride on a migrating shad.

We do have two species of freshwater parasitic lampreys which appear to be locally abundant from time to time. One species is confined to streams in the Tennessee River drainage and the other in the Alabania River drainage. The latter species probably occurs in the Chattahoochee and Flint Rivers also.

It is difficult to determine just how much harm Georgia lampreys can do. They are smaller than the sea lamprey and, in general, do not kill their prey. Further, they seem to attack suckers and catfish in preference to bream or bass. Fish attacked by lampreys are not total losses. They may bear scars or sores but these would have no effect upon the usability of the fish unless some secondary infection occurred in the wound. In the latter case, the irfected area could be cut out and the rest of the fish eaten with perfect safety.

Since brook lampreys are never parasitic they are of no concern to the fishermen.

There seems to be no cause for alarm over lampreys in



(Top) This Seo lomprey hos proved it con wreok widespread destruction of gome and food fishes. Only one hos ever been found in Georgio waters. (middle) This parasitic or chestnut lomprey has been giving our fishermen a score. It is regarded as little more than a pest. (bottom) Nothing to warry about here. The Brook lomprey is harmless.

Georgia. We are not being invaded by lampreys—they have always been here. Actually, we can expect a decrease in our lamprey populations. As more and more dams are built, the parasitic lamprey species will be cut off from their spawning grounds in the headwaters. This might account for the numerous reports of lampreys in the Etowah River near Cartersville. These could be lamprevs spawned four or five years ago in small streams now inaccessible with the construction of Allatoona Dam. In attempting to reach their native streams these lampreys may be accumulating below the dam in the spring. Lacking suitable spawning areas, most of them will die without reproducing.

While we have a few specimens of lampreys and some scattered verbal reports, we need more definite information before we can adequately assess our lamprey problems. If you catch a fish with a lamprey on it, preserve the lamprey in 10 percent formaldehyde. Record when and where it was taken. If you are fortunate enough to observe lampreys spawning. write or call Donald Scott at the Department of Biology, University of Georgia. Your cooperation could provide us with information that would be valuable in dealing with a lamprey problem should one develop.

## "Drownproof"

(Continued from Page 17)

of the average human body is about .97, thus, only about five pounds of most individuals will float out of water even with the lungs full of air. The problem of people in a potential drowning situation is one of getting enough air to buoy one up, yet to do so in a manner to avoid tiring. This is best accomplished by using the Tech procedure as shown in the accompanying drawing.

Advantages of the Tech procedure are many. First, air provides all buoyancy needed, after putting the face back in the water, thus eliminating tiring, unnecessary movements. Second, the possibility of choking is minimized by not tipping the head back. Third, real relaxation and long rest periods are obtained by proper spacing of the arm and leg movements. Fourth, the method works nearly as well with arms or legs alone, or using only one of each—folks DO get cramps, disabling injuries, etc., while swimming.

One of the principal causes for drownings is panic. Panic causes poor swimmers to flail about and waste energy until they sink. It causes them to try to swim too fast. Distance without speed means literally nothing to a TRAINED swimmer. As long as the swimmer stays underwater, more than out of water, there is practically no strain. The best swimmers at Georgia Tech and at Emory University cannot hold fifteen pound weights out of water using legs alone for more than three minutes, although they can easily stay up for hours and swim miles, with their hands tied behind their backs. How silly it is for poor swimmers, or any swimmers, to try to hold a fifteen pound head out of water for any time. The Georgia Tech procedure makes air do all the work of flotation, minimizes choking, and really produces relaxation. It works equally well on he's or she's—old or young fat or skinny—tall or short, and, smart or dumb.



Director Fulton Lovell, of the Georgia State Game and Fish Commission, affixes his signature to the official papers that sealed the reciprocal fishing agreement between Georgia and South Carolina where it concerns the Clark Hill Reservoir. A. A. Richardson, South Carolina Director, awaits his turn to sign up. Senator L. L. Hester, of McCormick, S. C., watches the signing of the history making documents at Soap Creek Fishing Comp.

# Clark Hill Agreement

**7** HOSE dark clouds that hovered so long over Clark Hill were removed when Director Fulton Lovell, of the Georgia Game and Fish Commission, met with Director A. A. Richardson, of South Carolina at Soap Creek Fishing Camp and signed the long awaited reciprocal agreement.

The agreement solved the problems for the fishermen since licenses from either state will be recognized and honored on Reservoir waters.

It was an occasion of soft words, smiles and good humor, more important, it was Georgia and South Carolina shaking hands across Clark Hill's rich fishing grounds just as good neighbors always should do.

Here are a few details of the

agreement which all sportsmen must observe. All Georgians, age 12 to 65, must have a license. In all other Georgia waters (except Clark Hill) a license is not required of persons under 16 years of age.

The limit on bass is 10, plus 30 other game fish with a possession limit of 40 game fish. Basket, seine, trot line and net fishermen are classified as commercial operators and must comply with the laws of their respective states.

Any light stronger than a 5-cell flashlight is forbidden for fishing purposes. No person may use more than two lines at one time. No person may have a rifle in the boat and shooting rifles within 100 yards of the shore line is forbidden.

# Rough Fish

(Continued from Page 15)

success depends on location and what is used for bait. Then it's up to the fish.

"The best basket season is from May 15 on through the summer. Best catches come when the water is 65 degrees. When it is warmer or colder, the catch falls off. Yellow catfish often enter unbaited baskets. Occasionally a basket will take a gar or an eel. It takes about 2 hours to make a trap and cost about \$3. Legal baskets at hardware stores bring from \$6 to \$8.

"Our experimental rough fish control program started in December, 1951. Now it's all over. We will continue to trap a few fish but only for tagging purposes. We expect to tag and release 2,000 rough and 1,000 game fish. My favorite fish? That's easy—catfish, of course. Wonderful food!

"Have you noticed," Otho concluded, "the increasing numbers of signs, 'Catfish Dinners?' This is a sign of wise utilization of a valuable resource."

# Prosperity!

(Continued from Page 3) fishing has always had ample customers. It all adds up to fishermen thick as a pot full of blackeyed peas.

Economically, it would be unwise to pass up the dollar value of the dinners that will be the result of thousands of pounds of fish caught. More and more restaurants are featuring catfish and other type fish dinners.

Many Georgia fishermen have reached the revealing conclusion that it is unnecessary to leave the state to catch fish. They have realized our waters can give them results and they are taking advantage of it.

It all adds up to big business and still Georgia has not hit its fishing peak. Few states can offer trout, bass, and other warm water fishing, plus salt water fishing—all in one great big package. The out-of-state anglers are not asleep. Our non-resident license sales show we get anglers from every state in the nation.

# Aristocrats

(Continued from Page 5)

ducing about 1,000 eggs per pound of her weight. It has been figured that about 85 percent of the brown trout brood will be lost before they reach 18 months of age. Remember too, what a rough and tumble existence a trout lives in the average mountain stream. There is the wash down of sand and gravel, the sudden flash floods, and extremely high or bitterly cold water.

Only the alert and quick survive in their precarious dwelling. Much of the trout diet consists of insects which they take in sudden darts almost faster than the human eye can follow.

Then too, there is always that fellow in waders, hip boots, felt bottom or hob-nail shoes and probably wearing a ridiculous little hat stuck full of colorful flies. He will wave his magic wand and in a pool drops a fly that dances lightly on the water. The eyes of perhaps four or five trout watch every movement. Suddenly—Wham!

It is for this golden moment that grown men leave a busy office, a wife and children and drive over 100 miles. That's trout fishing!

### Who Eats Fish?

Some of the countries that lead as fish producers are among the world's poorest fish eaters. This is how they compare, on a per capita consumption basis:

Japan	83.3	lbs.
Iceland	63.3	lbs.
Norway	46.7	lbs.
Denmark	35.9	lbs.
United Kingdom	29.9	lbs.
Belgium	21.6	lbs.
Portugal	20.5	lbs.
Germany	19.8	lbs.
Holland	17.9	lbs.
France	14.8	lbs.
Canada	13.7	lbs.
Italy	12.6	lbs.
U. S	11.1	lbs.
China	6.0	lbs.

### **PARTNERSHIP**

(Continued from Page 2)

and ponds. They keep a careful check on our great reservoirs. They have put into operation a creel census study on the North Georgia streams with a view of bringing about better trout fishing and stream improvements. They have developed our hatcheries for greater fish production to meet greater demands. They stand guard over the rough fish control program. Their list of major and minor projects is long but they all add up to more and better fishing.

Our wildlife rangers have been a credit to the Enforcement Division.

We are not without vexing problems. We are gravely concerned with pollution. It appears that Georgia may be slowly committing an aquatic suicide by allowing poison to enter the water veins of the state. Water is certainly one of the greatest essentials for the continued existence of all animal life. Man seems to be the only creature intent on the destruction of this vital resource.

Perhaps we have lost our respect for water. How much longer can we afford to ignore the life blood of the state? One day, we must come up with the right answers to heal these infected wounds that are constantly pouring poison in our life streams.

Each year, irate citizens demand surcease to the wholesale slaughter of fish due to pollution. We are powerless to act since we have no law to invoke. Complaints are highest in hot weather when water is low and robbed of its oxygen content. Impure water carries disease to men, livestock, fish, and wildlife to exact a devastating toll.

The remedy is forthcoming. It will provide for industry, municipalities and clean water existing in a compatible state of well being for the benefit of all concerned. Meanwhile, every true conservationist hopes that all the sand will not have fallen through the hourglass before we get the correct, intelligent answer in the form of a law that can be enforced.

# SURVIVAL

(Continued from Page 9)

bird eggs, birds, and other animals. Plants, whether water or land, furnish edible fruits, seeds, bark tubers, buds, leaves, flowers, sap, pods, nuts, acorns, stems, roots, and shoots. If possible, some cooking will make most of these more easily digested and less likely to cause sickness. This can be done by roasting in ashes or on hot rocks if you have no container.

In general it is safe to try foods that you observe being eaten by birds and mammals. Never eat large quantities of a strange food without first testing it. A small quantity of even a poisonous food is not likely to prove fatal or even dangerous, whereas a large quantity may be. Unknown plant foods with milky juices should be avoided. Any plant parts with an unusually bitter or otherwise disagreeable taste may be definitely harmful. Mushrooms or toadstools are dangerous unless you are an expert. Remember that while you may gag over an unpalatable morsel, many savages would smack their lips over it. There is a choice of starve or eat. If you are hungry enough, you'll eat anything you can catch or overtake.

#### Water Most Important

Water is the most important single factor for survival. Without it, the presence or absence of food is of little importance. You can survive many days if you have water. Fortunately in the southern states, finding water usually is no difficult problem. However, certain points other than purity are worth remembering. When looking for water remember that the watertable is usually near the surface and can be reached with a little digging in low forested areas, along the seashore, and in the flood plane of rivers. The watertable tends to follow the contours of the land surface.

Drinking water usually can be obtained along the seashore by scooping out holes in the beach at low tide. Fresh water will be found first when you dig since it is lighter than salt

## Recipe For A Man

A handful of freckles on a turned up

Patched up jeans and muddy toes, An old cane pole and a battered can Dad's old straw hat and baked on tan. A faithful pup less pedigree A vacant space where a tooth should

A vacant space where a tooth should be,

A secret place to sit and dream A fishin' hole on a noisy stream. The birds, the frogs, the bugs and snakes

And grub like only Mother makes
And special times when Dad can come
To fish and talk till day is done.
It's such as these that link the span
From a freckle nose kid to a worthwhile man.

-Paul Thygeson Gilbert

water. Water too brackish to drink frequently can be made palatable by running it through a sand filter several times. Drinking sea water in any quantity when the body is dehydrated is extremely dangerous. It should be remembered that body fluids of salt water fish when strained through a cloth can supply the human body as a water substitute and sustain life.

#### When Not to Eat

Don't eat if you lack water, as eating uses up the body's water reserves. Don't drink alcohol as it increases the risk of frost bite. Snow should be taken sparingly and should be melted in the mouth before swallowing. Sap is chiefly water and from many plants it is both fit to drink and usually available. This is particularly true of many desert plants. In our area one source, easily found, is the grapevine.

Your wilderness survival is in direct proportion to the know-ledge you have at your immediate command, your ability to improvise, and intelligently to apply specific information in supplying your immediate need. When it is all over, you will recall your experience as a refreshing visit in the great outdoors and rich in adventure. Keep always in mind the old Indian who, when he could not find his way back to camp said "Indian not lost, wigwam lost."

Lost fishermen are especially well equipped since they possess the tools to secure food, strayed hunters can use their guns to solve the food problem.

# **OTTERS**

(Continued from Page 19)

cluded that otters are beneficial in spite of their fishing habits. Their fish diet often includes catfish and others coming under the classification of rough fish. They are especially valuable where the waters are overstocked with stunted fish.

In the better informed circles, the stories of otters killing beavers are taken with a grain

of salt.

The otter reputation as a fighter is known and respected by its enemies. The teeth are rather large and strong. They can crush the bone in a dog's leg as a person might bite through a chocolate bar.

In summary, the otter is all of these things—gentle, happy, a killer, a great swimmer, fearless, fun-loving, care-free, alert, vivacious, quick, devoted to family, ever playful, steadfast in death and for the sheer joy of just being alive—it is the happiest living thing on earth.

### Clark Hill Fish Named

What kind of fish are found in the Clark Hill waters?

In a fish population study conducted by Fred Dickson, the following species were found: small and largemouth bass; chain pickerel (jack); yellow perch; black and white crappie; bluegill; warmouth; shellcrackers; redbreast; roundflier; channel, brown bullhead, and flat bullhead catfish; redhorse sucker, carp; gizzard shad, johnnie darter; hog and chub suckers; goldfish, green sunfish, white catfish, golden shiners; spot-tail minnow; silver shiner; pirate perch; eel, and long nosed gar.

Since this population study, there have been reports of striped bass and white bass being caught. Walleyed pike are known to be in the waters that feed the Clark Hill Reservoir and soon these wonderful game fish may be caught in the big lake. It may take a year or two for the walleyes to reach Clark Hill water.

# BOOK -REVIEWS-

#### SALT WATER FISH OF FLORIDA AND THE SOUTHERN COASTS

By Vladimir Walters

24 pages. Drawings or color pictures on every page. Published by Caribou Press, Box 236, Bronxville, N. Y. Price 50c.

This pocket sized booklet is beautifully done in bright, gorgeous color illustrations. It is perfect as a reference for the identification of salt water fishes. You will read every word and find yourself getting acquainted with such things as the Rainbow Parrotfish, Pearl Fish, Hog Choker, Cowfish, Lionfish, Batfish, French Angel and many others that will stir your imagination.

#### AN ANGLER'S ANTHOLOGY By Eugene Burus

147 pages, Illustrated with sketches by Louis Macoillard, Published by Stackpole Company, Harrisburg, Pennsylvania, Price \$5.

It isn't necessary to be a fisherman to appreciate this excellent book. It is in prose and poetry with some of the best pieces of many of the most beloved figures in English literature. It also contains choice selections of many well known contemporary writers.

This is a valuable addition to any sportsman's library. It certainly will be a comforting companion for the angler in his leisure hours. It is the kind of reading enjoyed for perhaps a half hour before bedtime and it can be read over and over again. Between the covers you have reference, history of angling and words of wisdom from such famous writers as Robert Browning, William Shakespeare, Robert Louis Stevenson, Henry D. Thoreau and many others.

The change of pace in subject matter is superb.

#### FISHING TACKLE DIGEST By Charles R. Jacobs

148 pages. Packed with illustrations and pictures. Produced by Crown Publishers, 419 Fourth Ave., New York, N. Y. Price \$1.50.

Probably the most complete book of its type ever published, It deals with every type fishing tackle for fresh and salt water. The stories by outstanding writers are well done and in the language the fisherman understands best.

It is full of hints, suggestions and methods for catching all types of game fish using the equipment of your choice. There are game fish identifications along with pictures, plus the history of the species even down to what they like to eat. It's a book you won't just read—you'll study it

# - Letters to the Editor \$\times-

THE WHITE HOUSE

Washington

February 15, 1954.

Dear Mr. Lovell:

Thank you very much for your letter of February twelfth, granting me hunting and fishing privileges in Georgia. I am most appreciative of your courtesy.

I enjoyed to the full my too brief weekend expedition. The weather and the quail were most

cooperative.

With best wishes, Sincerely, Dwight D. Eisenhower

Dahlonega, Ga.

Dear Mr. Stearns:

Have been reading your publication for some time now and I think that it is a fine magazine. It gives the sportsmen of the state a lot of general and special information, plus some interesting reading.

I would appreciate it if you would include my name in your subscription lists. I manage to get most of the issues from other people to read, but I would like to keep a back file on the issues so that I can refer to them when I want to do so.

\* Thanking you in advance for the subscription, I remain,

> Yours truly, James H. Wood Attorney-at-Law

Georgia Game and Fish Commission Atlanta, Georgia Dear Sirs:

I have just received a copy of Georgia Game and Fish, and I wish to congratulate your department on this splendid magazine.

All the various articles are very interesting and good; and I really appreciate being able to keep up with the wildlife and good fishing news from my old home state through these wonderful publications.

Sincerely yours, Leonard H. Henry 1468 Church Street Beaumont, Texas Dear Mr. Stearns:

Just had my first opportunity to see "Georgia Game & Fish." It is wonderful! I couldn't stop 'til I had read the entire edition from cover to cover!

The articles were very well written and quite timely. The photographs certainly add to

reader interest.
Your magazine is

Your magazine is by far and large the very best of its type I've seen.

Sincerely, Dr. LeRoy Harris Zone Chairman Lions International Box 143, Griffin, Ga.

Athens, Ga.

Dear Sirs:

I have been reading your Georgia Game and Fish Magazine, which I obtained from my local ranger, Mr. Thornton.

I have found, after reading several magazines on this subject, that your magazine furnishes the most complete and profitable information in this field.

I believe that your article introducing the game law enforcement officers to the public is the best step in gaining the full support of the hunters and fishermen.

I would appreciate being on your regular mailing list.

Sincerely yours, Robert M. Harris

Chicago 9, Ill.

Dear Mr. Stearns:

I have just received an issue of "Georgia Game and Fish."

First, I want to congratulate you on a very fine job of publishing this wonderful edition. In my opinion your wonderful magazine surpasses all books you find on the newstand.

Secondly, I want to thank you for your most kind assistance for helping me with my vacation problems.

Sincerely yours, Richard Antolik 5325 S. Marshfield Chicago 9, Illinois



# Federal Chief Walter Gresh Wins Praise

/F you have ever met Walter Gresh, Regional Director of the U. S. Fish and Wildlife Service, you are not likely to forget him. His job is to handle Federal business in 11 Southeastern states where it pertains to game and fish. This job he does with superb diplomacy, skill and efficiency.

Walter's quick response to help settle problems, his marvelous spirit of cooperation and good fellowship has endeared him to every wildlife director in the 11 states.

One of the true signs of greatness is what fellow workers say and think of "the boss." All through the ranks of the U. S. Fish and Wildlife Service they regard their Director as not just their Chief but a close personal friend. He is never too busy to talk over problems, large or small, with his employees. They all say of Walter, "the greatest guy in the world."

What a story they could have on Walter for, "This is Your Life." He is not only rich in friendships but wealthy in background and experience. He has been through the mill. His first

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## Hard Work Won Job as Chief For Hatchett

MALLORY Hatchett, Chief of Ogeechee District with headquarters at Vidalia, came up through the ranks. Starting in 1948, he worked under Chief Thomasson, of Macon, who said of Mallory, "He is one of the best wildlife rangers I've ever seen."

Hatchett is married and has one son. He is a veteran of 14 years of Army service most of which he served as a member of the Military Police. He was in the Philippines during the last war and was on occupation duty in Korea after the war.

Mallory likes to fish and hunt but admits he prefers to see a deer galloping off into the woods than draped over an automobile fender.

While Hatchett is soft of voice, those who know him are not misled by this characteristic. He does not ask his men to do any job that he will not do himself. He has won the admiration and



wholehearted cooperation of all his associates.

Perhaps it was his Army training that taught Mallory to master surprise tactics. Without notice, he will call his men to-

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# Cliff Palmer, The "Iron-Man" Of Mountains

CHIEF Cliff Palmer, with 13 wildlife rangers in his division, operates in 12 North Georgia counties including vast parts of the Chattahoochee National Forest. He lives at Suches, Georgia, with his wife, Hazel, and three sons, Paul, Pete and Rex. Cliff proudly reports his boys have already graduated from the pole and line division to the rod and reel class although Rex, the youngest, is just four.

Born in Nicholson, Cliff must have known as a boy that he would somehow always have a part in conservation and the outdoors. As a barefoot lad, his greatest joy was fishing and hunting.

The Chief never once complains about the 24 hour duties demanded by the job he has held for 7 years. He rather enjoys the extra work. Few men can keep up with the pace the Chief sets. He moves effortlessly and tirelessly over mountains and down rugged trout streams.

His job is demanding since he must constantly check many of the North Georgia reservoir lakes, several hundred miles of trout streams, stand guard over the wildlife Management Area,

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#### Walter Gresh

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wildlife job was with Pennsylvania back in the 30's. He then shifted over as a game technician with the TVA. Later he was Regional Supervisor of Pittman-Robertson programs. Then he moved into Chicago for a better position with P-R.

After more P-R work in Minnesota, he came to Atlanta as assistant to James Silver, Regional Director. Upon Silver's retirement, Walter stepped into

the top job.

His hobby is woodworking in a little shop back of his home in Smyrna. For his own amusement, he turns out items that reflect superior craftsmanship. His wife, Mrs. Mardie Gresh, is delighted with Walter's talent. She dreams it up and Walter builds it. They have one son who at present is in the U. S. Coast Guard.

Walter's broiled steak and barbecued chicken cooked on an outdoor pit, comes under the heading of gastronomical delight. When time permits, he enjoys hunting and fishing. He is an

expert at both.

It is common knowledge that Walter Gresh is one of the best informed wildlife men in the nation. It isn't by accident that he comes up with right answers. He is a profound thinker and the smallest details do not escape his

steel-trap mind.

As a youngster, Walter traveled abroad in forestry work. He seldom forgets anything except his hat. These he loses frequently. If a spare hat turns up in certain restaurants, they automatically send to to Walter and usually it's his.

How does he like Georgia? When he is away, he gets homesick for the entire Southeast and especially Georgia. Pennsylvania

is his native state.

Few men have such a rare sense of timing. He catches trains and planes within the last minute of departure. And he never misses.

He has litle patience with wildlife violators. Few of his closest friends know that while trying to catch a Pennsylvania violator, Walter was painfully wounded by a rifle shot in the

#### Cliff Palmer

(Continued from Page 25)

take on a major role in the annual Management Area deer hunt and run down illegal night hunters.

The big problem he faces concerns "self-hunting" dogs that have seriously damaged deer herds in the mountain areas. Time and again Cliff has caught the dogs and returned them to their owners only to have to catch them all over again.

"I just wish," Palmer said, "these dog owners could see their pets run down a doe — many times with a fawn—and cruelly slash the poor animal to death. A man would have to own a strong stomach to watch that kind of show." Cliff owns two dogs and is proud of them. They are not deer killers.

The Chief's life as a ranger is never dull. Many times he has been in wild automobile rides in pursuit of violators. His spring steel leg muscles quickly overtake violators. It is almost useless to run if Cliff is in the chase.

One fellow sent word to the Chief that he intended to hunt when he pleased and at his own convenience. He challenged the Chief to do something about it. The man had built a deer blind in the top of an old house on the rim of the Management Area. At 2 a.m. one moonlight night, he came down out of his blind, right into Palmer's waiting arms. The next stop was the court room.

shoulder. The man was caught and received a stiff sentence.

If you want to find Walter at the Atlanta office of the U. S. Fish and Wildlife Service, just look for a fellow with a big smile and a large "hello."

#### Baked Fish

Rub trout or rough fish with salt and pepper. Stuff with sliced onion and a small amount of garlic. Place trout in pan and slice two or more onions over the top. Lay a few slices of bacon over the trout and 2 or 3 bay leaves. Pour canned tomatoes over the fish, covering well. Bake in a moderate oven until trout are tender.

# Chatuge Rated Among Best

POPULATION studies at Lake Chatuge by Fred Dickson and his staff of biologists and 12 rangers late in 1953 told a pleasant story for our sportsmen.

In a nut shell, the lake was found to be in excellent shape and well balanced. The big surprise was the crappie population. In all the years of his experience Fred couldn't remember when he had seen such big, healthy crappie. His statement was substantiated later when a teen-age lad hauled out a crappie over 4 pounds

Some of the Lake Chatuge species examined included bass (large and smallmouth), crappie, bluegill, warmouth, shell-crackers, redbreast, yellow perch, channel catfish (big ones), milktail shiners, carp and goldfish.

Chatuge is one of the few lakes in the state where the game fish outnumber the rough fish. The prediction is for great fishing and outstanding catches.

#### **Mallory Hatchett**

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gether and spend the night on a river in search of illegal devices or hunters and fishermen violating the laws. Violators feeling secure and confident of a "clear field" suddenly find Hatchett tapping them on the shoulder.

The Chief believes our game and fish future is in the hands of youngsters. He never passes up an opportunity to spend time with boys and girls and tell them the story of conservation.

So far as Chief Hatchett is concerned, he has the greatest job in the world. He explains it thusly, "I'm doing the type of work I like to do and when you like what you're doing—you are happy. I just like the great outdoors and everything in it."

His work as chief has reflected credit to the Game and Fish Commission. In his new territory he has many new friends and has had excellent cooperation from court officials.

#### Georgia Cooperative Wildlife Areas -- Georgia Game and Fish Commission and Chattahoochee National Forest

OPEN DATES

#### Blue Ridge Management Area

ROCK CREEK

ROCK CREEK
Saturdays & Sundays: April 24 & 25, May 1 & 2, 8 & 9, 15 & 16, 22 & 23, 29 & 30, July 3 & 4, 10 & 11, 17 & 18, 24 & 25.

Wednesdays and Thursdays: June 2 & 3, 9 & 10, 16 & 17, 23 & 24, August 4 & 5, 11 & 12, 18 & 19, 25 & 26.

Also: September 4, 5 & 6.

Directions from Atlanta: Go to Dahlonega, travel for approximately 3 miles on Hy. 19 toward Cleveland, turn left on Coopers Gap dirt road and travel approximately 14 miles to Hightower Gap. Permits may be bought here from Ranger Cleve Harper.

NOONTOOTLEY CREEK
Wednesdays and Thursdays: May 5 & 6, 12 & 13, 19 & 20, 26 & 27.
July 1, 7 & 8, 14 & 15, 21 & 22, 28 & 29, 31.
Saturdays and Sundays: June 5 & 6, 12 & 13, 19 & 20, 26 & 27, 30,
August 1, 7 & 8, 14 & 15, 21 & 22, 28 & 29.
Directions from Atlanta: Go by way Blue Ridge, Morganton, to Dial,
Georgia, Go to Noontootley Creek which is near Junie Stevens'
residence, Permits may be secured from Ranger Mullinax. Also
from Ranger Harper at Winding Stair Gap.

from Ranger Harper at Winding Stair Gap.

NIMBLEWILL CREEK
Saturdays and Sundays: May 1 & 2, 8 & 9, 15 & 16, 22 & 23.

Wednesdays and Thursdays: August 4 & 5, 11 & 12, 18 & 19, 25 & 26.

Directions from Atlanta: Take Hy. 19, just before Dahlonega, and travel to Nimblewill Church, go by the church on the left fork, and travel to Nimblecreek bridge where permits may he bought from Ranger H. C. Rider.

MONTGOMERY CREEK
Wednesdays and Thursdays: May 5 & 6, 12 & 13, 19 & 20, 26 & 27, July 31.

Saturdays and Sundays: August 1, 7 & 8, 14 & 15, 21 & 22.

Directions from Atlanta: Just before reaching Dahlonega, take Hy. 19 and travel to Nimblewill Church, turn to the right at the church, the first creek is Jones Creek, the second is Montgomery Creek, Permits may be bought at the bridges from Ranger H. C. Rider.

JONES CREEK

JONES CREEK

JONES CREEK
Saturdays and Sundays: June 5 & 6, 12 & 13, 19 & 20, 26 & 27, July 3 & 4, 10 & 11, August 28 & 29.
Also: September 6.
Directions from Atlanta: Just before reaching Dahlonega, take Hy. 19 and travel to Nimblewill Church, turn right at the church. The first creek is Jones Creek, Permits may be bought from Ranger H. C. Rider at the bridge.

#### Chattahoochee-Chestatee Management Area

Chattahoocnee-Chestatee Management Area

CHATTAHOOCIIEE AND SPOIL CANE CREEKS

Saturdays and Sundays: May 1 & 2, 8 & 9, 15 & 16, 22 & 23, 29 & 30, July 3 & 4, 10 & 11, 17 & 18, 24 & 25, 31.

Wednesdays and Thursdays: June 2 & 3, 9 & 10, 16 & 17, 23 & 24, August 1, 7 & 8, 14 & 15, 21 & 22, 28 & 29.

Also: September 5 & 6.

Directions from Atlanta: Go to Helen, Georgia, continue northward on Hy, 17 & 75 until you cross the first river bridge, turn to the right. Permits may be obtained from Ranger Frank Hedden.

DIMES CREEK

DUKES CREEK
Wednesdays and Thursdays: May 5 & 6, 12 & 13, 19 & 20, 26 & 27,
July 1, 7 & 8, August 4 & 5, 11 & 12.
Saturdays and Sundays: June 5 & 6, 12 & 13, 30.
Directions from Atlanta: Go to Helen, Georgia, continue northward on
Hy. 17 & 75 until you cross the first river bridge, turn to the
left and travel approximately 6 miles to the creek, permits may
he bought from Ranger Frank Hedden.

SMITH CREEK

Saturdays and Sundays: June 19 & 20, 26 & 27.

Wednesdays and Thursdays: July 14 & 15, 21 & 22, August 18 & 19.

25 & 26.

Directions from Atlanta: Go to Helen, continue travelling northward one mile to Robertstown, travel eastward approximately 2 miles to the upper end of Unicoi State Park Lake, where permits may be obtained from Ranger Frank Hedden.

DICKS AND WATERS CREEKS
Saturdays and Sundays: May 1 2, 8 & 9, 15 & 16, 22 & 23, 29 & 30.

July 3 & 4, 10 & 11, 17 & 18, 23 & 24.

Wednesdays and Thursdays: June 2 & 3, 9 & 10, 16 & 17, 23 & 24.

Also: September 4, 5 & 6.

Directions from Atlanta: Travel 14 miles north of Cleveland on Hy.

11 to Turners Corner, travel southward one-half mile on Hy. 19

& 9, turn right at church and school house. This road will lead to Ranger R, C. Byer's residence, where permits may be obtained.

BOGGS CREEK AND CHESTATEE RIVER
Saturdays and Sundays: June 5 & 6, 12 & 13, 19 & 20, 26 & 27.
Wednesdays and Thursdays: August 4 & 5, 11 & 12, 18 & 19, 25 & 26.
Directions from Atlanta: Travel 14 miles north of Dahlonega on Hy, 19
to Turners Corner. Permits may be bo ght from Ranger Byers.

#### Lake Burton Management Area

WILDCAT CREEK

WHDCAT CREEK
Saturdays and Sundays: May 1 & 2, 8 & 9, 15 & 16, 22 & 23, 29 & 30,
July 3 & 4, 10 & 11, 17 & 18, 24 & 25.
Wednesdays and Thursdays: June 2 & 3, 9 & 10, 16 & 17, 23 & 24,
August 4 & 5, 11 & 12, 18 & 19, 25 & 26.
Directions from Atlanta: Go to Clarkesville, take Hy, 97 to end of pavement, turn to left and pass Buford LaPrade's Camp, pass the first creek to the top of the first hill, turn to the left on dirt road.

This will lead you to Wildcat Creek, where permits may be bought from Ranger T. E. Hollifield.

MOCASSIN CREEK

DICKS CREEK

Wednesdays and Thursdays: May 5 & 6, 12 & 13, 19 & 20, 26 & 27. Directions from Atlanta: Go to Clarkesville, turn to left on Hy. 97, travel past Lake Burton Fish Hatchery to the first creek. Permits may be hought here from Ranger Hollifield.

#### Cohutta Management Area

JACKS RIVER

Saturdays and Sundays: May 1 & 2, 8 & 9, 15 & 16, 22 & 23, 29 & 30, June 5 & 6, 12 & 13, 19 & 20, 26 & 27, July 3 & 4, 10 & 11, 17 & 18, 24 & 25.

Wednesdays and Thursdays: August 4 & 5, 11 & 12, 18 & 19, 25 & 26.

Also: September 4, 5 & 6.
Directions from Atlanta: Go to Ellijay, take Hy. 52 & 76 westward, travel approximately 6 miles, turn to right on the Holly Creek Road, go to top of the mountain, turn right, Travel approximately 8 miles to Ranger Cleo Andrew's home, where permits may be obtained.

CONASAUGA RIVER

Wednesdays and Thursdays: May 5 & 6, 12 & 13, 19 & 20, 26 & 27, June 2 & 3, 9 & 10, 16 & 17, 23 & 24, September 1 & 2. Saturdays and Sundays: July 3 & 4, 7 & 8, 14 & 15, 21 & 22, 28 & 29, 31, August 1, 7 & 8, 14 & 15, 21 & 22, 28 & 29. Directions from Atlanta: Go to Ellijay, take Hy. 52 westward, travel about 6 miles, turn to right on Holly Creek Road, to the top of meuntain, turn left where sign directs to Consauga and go to Betty's Cabin, where permits may he bought from Ranger Clyde Crove

LAKE RUSSELL MANAGEMENT AREA (No permit required)

May 5, 8 & 9, 12, 15 & 16, 19, 22 & 23, 26, 29 & 30, June 2, 5 & 6, 9, 12 & 13, 16, 19 & 20, 23, 26 & 27, 30, July 3 & 4, 7, 10 & 11, 14, 17 & 18, 21, 24 & 25, 28, 31. August 4, 7 & 8, 11, 14 & 15, 18, 21 & 22, 25, 28 & 29. September 1, 4, 5 & 6, 8, 11 & 12, 15, 18 & 19, 22, 25 & 26, 29.

No permit required. (Warm water fish) Fishing from sun-up until sundown only. Directions from Atlanta: Go to Cornelia, take the road to the right, at Cornelia's swimming pool, and follow to Lake Russell.

Permits and Fees: A special permit costing \$1 per day per person, regardless of age, is necessary in addition to a regular State Fishing license. State license is unnecessary for children under 16 years of age or for a person fishing with earthworms in his county of residence. Permits are valid only on specified streams, and open portions of tributaries thereof, and on date for which purchased.

Fishermen must obtain license and permit before they begin fishing.

Permits can be obtained from the Wildlife Rangers on the areas specified.

Persons found fishing without first obtaining permits will be liable for legal action.

Gate at Cooper's Gap will be open at 4:00 p. m. on day preceding each open period so that fishermen may enter in the Blue Ridge Management Area for camping.

Manner of Fishing: Fish may be taken only with rod and line. Any type of bait or lure may be used. Each permittee shall have in use at any one time on the area not more than one rod and line, held in hand.

Edmundson Pond will be reserved for the exclusive fishing use of women, children under 16, and physically handicapped persons.

Fishing Time: Fishing shall be permitted only between the hours of daylight and sundown of the same day.

Creel Limit: The maximum catch in any day and the maximum number in possession of one person shall not exceed ten fish of any one or all species, of any size,

Creel Census: Each trout fisherman must leave his fishing heense at checking station to be held until his return, at which time the fishing license will be returned to the owner. The purpose of this is to obtain a creel census from every fisherman, so we may know when to restock the stream or streams for the benefit of the fishermen. From a creel census other information will be obtained, such as, the number of hatchery-reared, and the number of native-reared trout that have been captured. This and other information is needed in formulating stocking lists.

FOR OTHER INFORMATION ask your Wildlife Ranger in the area whom you will find courteous and helpful at all times.

