

CONSERVATION & DEVELOPMENT



Industry Spoken Here

North Carolina's 18-man Commerce and Industry team of location engineers, headed by Wm. R. Henderson (Center), has a specialist for just about any "language" industry may speak —or any question you may ask. This team includes chemical, civil and mechanical engineers, research analysts, smallindustry specialists, and other experts qualified to provide basic information on plant sites.

Give this team your challenge. It will be met in complete confidence, entirely without obligation, with a promptness that may surprise you.

For information about plant locations in North Carolina you can communicate in confidence with Governor Luther H. Hodges, Chairman of The Board of Conservation and Development, Raleigh, North Carolina.



To His Excellency The Honorable Luther H. Hodges Governor of North Carolina

In compliance with the Statutes of North Carolina, I am transmitting herewith the report of the Department of Conservation and Development for the biennium ending June 30, 1960.

Respectfully,

WILLIAM P. SAUNDERS, Director

THE COVERS

Representative North Carolina advertisements produced by the Advertising Division are shown on inside front and back covers. During this biennium there were 820 advertisements that appeared in 138 publications with circulation of 405,404,930.

BOARD OF CONSERVATION & DEVELOPMENT

(As of June 30, 1960) Governor Luther H. Hodges, Chairman

Miles J. Smith, Salisbury 1st Vice Chairman W. B. Austin, Jefferson D. G. Bell, Morehead City F. J. Boling, Siler City ¹ Orton A. Boren, Pleasant Garden H. C. Buchan, Jr., North Wilkesboro Scroop W. Enloe, Jr., Spruce Pine Voit Gilmore, Southern Pines Amos R. Kearns, High Point Gladys J. Gooch, Walter J. Damtoft, Asheville
2nd Vice Chairman
H. C. Kennett, Durham
R. W. Martin, Raleigh
Lorimer W. Midgett, Elizabeth City
Hugh M. Morton, Wilmington
³ Edwin Pate, Laurinburg
W. Eugene Simmons, Tarboro
³ B. C. Trotter, Leaksville
T. Max Watson, Spindale

Gladys J. Gooch, Secretary to the Board

Board changes during 1958-1960 biennium

¹ Succeeded R. M. Hanes, deceased; ² succeeded Leo H. Harvey, deceased; ³ succeeded Charles S. Allen, deceased.

COMMERCIAL FISHERIES ADVISORY BOARD

 A. W. Daniels, Cedar Island & Charlotte, Chairman
 Eric W. Rodgers, Scotland Neck
 W. H. Mason, Oriental Dick O'Neal, Swan Quarter Lewis Hardee, Southport Monroe Gaskill, Cedar Island Ralph Meekins, Wanchese

DEPARTMENT OF CONSERVATION & DEVELOPMENT

William P. Saunders, Director

J. Edgar Kirk, Ass't Director

DIVISIONS AND DIVISION HEADS

Advertising	Charles J. Parker
Commerce and Industry	William R. Henderson
Commercial Fisheries	C. G. Holland
Community Planning	Robert D. Barbour
Forestry	F. H. Clardige
*Geodetic Survey	P. C. Doran
Mineral Resour c es	Jasper L. Stuckey
State Parks	Thomas W. Morse
Auditor	Sidney C. Holden
Public Information	
* Division activated July 1960	

* Division activated July, 1960.

CONTENTS

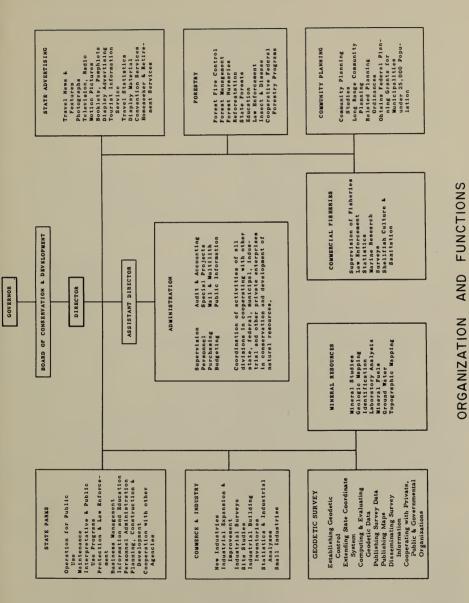
The Board and Department	2
Foreword	4
Table of Organization	5
Advertising	6
Commerce and Industry1	3
Commercial Fisheries	9
Community Planning	2
Forestry2	5
Mineral Resources	5
State Parks	0
Personnel5	1
Budgets6	2

FOREWORD

The mission of the Department of Conservation and Development is to conserve and develop and to promote the wise use of the natural resources of North Carolina for the common good of all her people.

This report is an account of the department's stewardship for the biennium ending June 30, 1958.

In the interest of readability, much detail has been omitted. Those persons wishing more information about specific phases of the department's program need only to contact the Department or the Division directly concerned.



DEPARTMENT OF CONSERVATION AND DEVELOPMENT OF THE

DAINIZATION AND TO

- 1

Over a billion advertising messages about North Carolina reached readers, viewers and listeners throughout the nation in the 24-month period from July 1958 through June 1960.

Over two and a half million booklets and pamphlets about the State's attractions for industry, tourists and living in retirement were distributed, and there were 4,217 showings of Variety Vacationland motion pictures.

The North Carolina story was further told in 273 news and feature releases and in 10,946 photographs distributed throughout the nation and to several foreign countries.

The Advertising Division answered 348,182 requests for information about North Carolina as a place in which to live, work and play.

Dividends from this enterprise were reflected in the greatest number of tourists ever to visit the State, and the largest number of new industries established in any biennial period.

MISSION AND RESOURCES

The assignment of the Advertising Division is prescribed by General Statutes 113-15 in which it is declared to be the duty of the Department of Conservation and Development "to map and carry into effect a systematic plan for the nationwide advertising of North Carolina, properly presenting, by the use of all available media, the true facts concerning North Carolina and all of its resources."

The Division's budget for the two years was:

	Advertising	Printing	News, Photo, Promotion and Administration
1958-59	\$375,600	\$43,500	\$88,375
1959-60	385,000	\$63,900	\$84,589
Biennium	\$760,600	\$107,400	\$172,964

Average staff was 11 persons as follows: advertising director, administrative assistant, travel editor, 2 photographers, 2 secretaries and 4 inquiry and mail clerks. Major operations included:

ADVERTISING AND PUBLIC RELATIONS

All State advertising was placed through Ayer and Gillett Advertising of Charlotte under contract for two years renewed as of July 1, 1959. Under the new contract, the advertising agency was responsible not only for preparation and scheduling display advertising, but for public relations projects as assigned. These included assistance with industrial missions to Europe and to New York, Chicago and Philadelphia; travel promotion missions carried on in cooperation with the Carolina Motor Club, and other projects described under the Special Projects section.

156 industrial advertisements were placed in 23 magazines and 9 newspapers with circulation of 75,828,765. These were:

MAGAZINES

American Banker Apparel Manufacturer America's Textile Reporter Business Week Blue Book of Southern Progress Chemical Week Electronics Electronic Industries Factory Food Engineering Food Processing Footune

Foundry Industrial Development Iron Age Newsweek New Yorker Plant Location Plant Site Selection Handbook Science Steel Time U. S. News & World Report Chicago Tribune Frankfurter Allegemenie Zietung Journal of Commerce New York Herald Tribune New York Times Philadelphia Bulletin Philadelphia Inquirer Philadelphia News Wall Street Journal

664 travel and "Living in North Caroling" advertisements were placed in 35 magazines and 71 newspapers with circulation of 329,576,165 as follows:

MAGAZINES

American Motorist Christian Herald Detroit Motor News Field & Stream The Fisherman Golf Digest Golf World Grade Teacher Holiday Holiday Household Journal of Lifetime Living Keystone Motorist Look National Geographic National Press Photographer New York Motorist New York Times Magazine New Yorker

Akron Beacon Journal Army, Navy, Air Force Times Atlanta Journal-Constitution Augusta Chronicle Baltimore American Baltimore Sun Baltimore Sun Birmingham News Herald Bridgeport Post Telegram Charleston (W. Va.) Gazette Charleston News Courier Chicago American Chicago Sun Times Chicago Sun Times Chicago Tribune Christian Science Monitor Cincinnati Enquirer Cincinnati Enquirer Cleveland News Cleveland News Cleveland Plain Dealer Cleveland Press Columbus (Ohio) Citizen Columbus Ledger Enquirer Columbus News Ledger Columbus Ledger Enquire Columbus News Ledger Detroit Free Press Detroit News Detroit Times Ft. Lauderdale News Grit Grit Hartford Courant Indianapolis Star Indianapolis Times Jacksonville Times Union Louisville Courier Journal Madison State Journal Miami Herald Miami News

Ohio Motorist Outdoor Life Parade Pittsburgh Automobilist Popular Photography Readers Digest Redbook Salt Water Sportsman Saturday Evening Post Scholastic Teacher Sports Afield Sports Illustrated This Week Magazine Travel USA True Wilson's Library Bulletin Woman's Day

NEWSPAPERS

Milwaukee Journal Milwaukee Journal Montgomery Advertiser New Orleans Times Picayune New York Herald Tribune New York Journal American New York Mirror New York News New York News New York World Telegram New York News New York World Telegram Newark News Newark Star Ledger Newark Times Newport News Time Herald Orlando Sentinel Star Philadelphia Inquirer Philadelphia Inquirer Philadelphia News Pittsburgh Post Gazette Pittsburgh Press Pittsburgh Sun Telegraph Retired Officer Pittsburgh Sun Telegraph Retirement Life Richmond News Leader Richmond Times Dispatch Roanoke Times Savannah News Press South Bend Tribune St. Petersburg Times Toledo Blade Wachington News Washington News Washington Post Times Herald Washington Star Wilmington News Journal Youngstown Vindicator

The following radio stations carried 210 paid announcements:

WSB, Atlanta WLW, Cincinnati WLAC, Nashville WTAR, Norfolk WRVA, Richmond WSLS, Roanoke WTOP, Washington

The grand total was 820 advertisements in 138 publications with circulation of 405,404,930. Cost for space and production was \$744,284.93. There were 210 radio broadcasts over 7 stations costing \$5,363.00.

Copies of all advertisements are preserved in the permanent files of the division. In addition to paid advertising, the State also received considerable space at no cost through "house" advertisements of McGraw Hill Publishing Co. in ADVERTIS-ING AGE, BUSINESS WEEK and other publications.

PUBLICATIONS

Demand for publications about North Carolina continued to increase with new emphasis of specific information. This resulted in relative increase in distribution of publications such as "Living in North Carolina", "Fishing and Hunting", "Facts About North Carolina", "Historic North Carolina", and the "Travelbook", which lists accommodations, as compared with the old standby "Variety Vacationland", which for years was our principal mailing piece.

The more discerning public also is requiring its information fresh, and it is now necessary to revise most of our publications at least annually. In years past an edition lasted two or more years, but now fresh editions may be required as frequently as quarterly, as in the case of the Travel News Bulletin. Since we do not have the resources to revise all publications completely with the frequency required, we have to resort to extensive face-liftings. This is particularly true of the "Variety Vacation-land" book, in which process color engravings are very expensive and we must make multiple use of them to come within our printing budget.

In all, the Advertising Division produced 267 separate booklets, bulletins and pamphlets (both printed and multilithed) during the biennium. Total number of copies produced was 2,004,273. Distribution, which includes some publications produced by others, totaled 2,663,611. Average monthly inventory was 759,000 pieces of literature. A list of printed titles with number produced and cost follows:

No. Copies	Title	Cost
260,374	Variety Vacationland	\$39,780.87
305,100	Tar Heel State	4,552.13
63,400	Historic North Carolina	4,079.25
60,000	North Carolina Travelbook	9,000.00
30,000	Fishing and Hunting	8,284.82
100,000	Governor's Mansion	1,810.55
50,000	Capitol	996.61
25,000	Living in North Carolina	1,860.00
30,000	4-color travel folder	1,289.56
5,000	Industrial Development reprints	7,670.50
10,200	How's Business, Governor Hodges	5,471.09
329,100	4-color envelopes	2,761.15
4,000	4-color posters	1,311.50
209,400	Variety Vacationland Travel News	3,520.85
20,000	Travel Survey	978.16
7,550	Southern Governors' Conference	2,705.01
25,000	Fishing and Hunting envelopes	493.92
12,500	Time Magazine reprints	116.34
199,500	Facts About North Carolina	1,425.82
5,000	State and Local Taxes	248.40
200,000	Reply cards	574.20
10,000	Outer Banks	560.00
25,000	Great Smoky Mountains National Park	181.05
1,271	European Mission	561.50
5,000	Golf Digest reprints	500.00
13,990	Postcards of Capitol and Mansion	181.88
	Miscellaneous bulletins	1,220.97
	Total	\$102,136.13

INQUIRY SERVICE

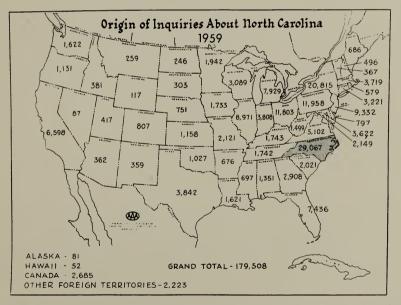
All 50 states and 60 foreign countries were heard from in the total of 348,182 inquiries during this biennium, an increase of 28,961 over the previous biennium. 153,715 of these inquiries were traceable directly to paid advertising, the remaining

194,467 did not carry key numbers, and could have been the result of advertising or the public relations program other than paid advertising carried out by the Advertising Division through its News, Photo and Special Projects sections. Origin of inquiries is shown in the following table:

Alaska Arkansas California Colorado Connecticut Delaware District of Col Florida Georaja	umbia	105 762 1,204 1,831 1,515 5,445 4,121 1,3852 5,648	Nebraska Nevada New Hamp New Jerse New Mexi New York North Carc North Dak Ohio Oklahoma Oregon Pennsylvar
District of Col Florida Georgia Hawaii Idaho Indiana Indiana Indiana Indiana Iowa Kansas Kentucky Louisiana Maryland Massachusetts Michigan Mississippi Mississippi Missouri	umbia		Oklahoma Oregon

Nebraska Nevada	152 912 5,519 590 5,719 4,960 469 2,856 1,839 1,956 2,913 1,110
South Carolina	3,872
South Dakota	604
Tennessee Texas	3,812
Utah	
Vermont	649
Virainia	9,928
	2,991
West Virginia	2,785
Wisconsin	246
Canada	5.515
Other foreign and overseas territories	4,230
34	8,182

WHERE THE INQUIRIES ORIGINATE



This map, showing origin of inquiries serviced by the Advertising Division during the calendar year 1959, is reproduced through the courtesty of Carolina Motor Club, which prepared it as a public service for inclusion in the 1959 Travel Survey sponsored by the Travel Council of North Carolina.

PHOTOGRAPHY

Under a contract instituted in March 1959 with Modern Talking Pictures of New York, the first nation-wide distribution of the "Variety Vacationland" movie produced by Hugh Morton in 1958 was accomplished. Combined with the distribution through the film library of the University of North Carolina, which had been our major outlet dating from 1952, this national service resulted in a sensational increase in our motion picture distribution.

At the ending of the biennium, the following films were in circulation: 115 Variety Vacationland, 14 Tar Heel State, 3 Unusual Hunting. Total 132. They were shown to 4,202 audiences (live and television) in 48 states. Of these, 4,217 showings were to live audiences and 135 television shows.

Distribution of still pictures was 10,946 as follows: black and white prints 10,390, color transparencies 416, negatives 140.

In addition to pictures produced for publication by newspapers and magazines and other publications throughout the world, the photographic section produced art for our own publications. This required frequent field trips on assignments covering every section of the State. The photographic library of more than 50,000 negatives must be up-dated constantly.

NEWS AND FEATURES

In many respects, the Travel News section is the backbone of the entire operation of publicizing North Carolina. Without its production, which includes booklets and pamphlets as well as press releases and bulletins, accurate and current information for the paid advertising program would be lacking.

During the biennium 273 news and feature stories were produced for world-wide distribution. The news staff worked with editors on assignment from national newspapers and magazines. A few of the publications in which North Carolina material originated with the North Carolina News Bureau appeared were TIME, LIFE, RED-BOOK, READER'S DIGEST, GOLF DIGEST, HOLIDAY, SATURDAY EVENING POST, NEWSWEEK, TRAVEL, INDUSTRIAL DEVELOPMENT, BUSINESS WEEK, NEW YORK TIMES, CHICAGO TRIBUNE, WASHINGTON POST, OUTDOOR LIFE, SPORTS AFIELD, FIELD & STREAM, WASHINGTON NEWS, MILWAUKEE JOURNAL, McCALL'S, GLAMOUR, MADEMOISELLE and many trade publications and house organs. Editorial assistance was given NATIONAL GEOGRAPHIC, READER'S DIGEST, SATURDAY EVENING POST and SPORTS AFIELD on stories to appear in the next biennium.

The Travel News section produced 154 radio broadcasts and 6 television shows.

BULLETIN SERVICE

In addition to printed promotional publications and news releases, the Division issued 90 multilithed bulletins on subjects ranging from golf facilities to importation of flowers, shrubs and trees. These are strictly informational bulletins and are revised frequently. The largest of these projects is the "North Carolina Travel News", a four-page news type publication that is issued seasonally and has a world-wide circulation. 211,420 copies of this were distributed during the biennium.

SPECIAL PROJECTS

Special projects are myriad. They range from supplying a North Carolina flag to an Army outpost in Korea to provide information service for the Southern Governors' Conference and the Southeastern Conference of the Council of State Governments which held meetings in the State. Servicing North Carolina delegations to out-ofstate conventions with literature and display materials is another important function. Organizations so serviced during the biennium included Lions International, Kiwanis International, Junior Chamber of Commerce and many others. Advance mailings were undertaken for a number of national conventions holding their meetings in the State.

These Special Projects totaled 505. 174,898 pieces of literature were required to service them.

The Tar Heel lapel pins and Tar Heel neckties were designed by the Advertising Division with the cooperation of the N. C. State College School of Textiles for the industrial missions, and public relations services were provided on these missions. Two tours of travel editors and counselors, one of the mountains and the other to the coast, where conducted in cooperation with the Carolina Motor Club. One of these was the "Land-Sea Cruise" to the Outer Banks and Northern and Central Coastal Plains, April 26-May 2, 1959. The Division's staff assisted with arrangements for meetings of Honorary Tar

The Division's staff assisted with arrangements for meetings of Honorary Tar Heels at Lake Logan and Cape Hatteras, and cooperated with the Hatteras Marlin Club in staging the first international blue marlin tournament at Hatteras. A special project was worked out with the Denison-Johnson Corp., manufacturer of fishing reels, for publication of a display ad featuring North Carolina and production of a fresh water fishing movie in which North Carolina will share top billing with two other states—Wyoming and Minnesota. Color photographs and lay-out materials for the State Highway map were also supplied by the Advertising Division.

SERVICE TO INDUSTRIES

Increasingly, North Carolina industries are requesting services of the State Advertising Division. Western Electric at Winston-Salem and Olin Mathieson at Pisgah Forest used our literature extensively during this biennium in their professional recruitment program. Chemstrand used our publications for orientation of employees moved to the Research Triangle from Alabama. Westinghouse, General Electric, DuPont, American Enka, Lithium Corporation of America and others are heavy users of Advertising literature and display materials in providing vacation information to their employees. This type of distribution is relatively new, but it is effective and justifies increased printing production that it entails.

COOPERATIVE ENTERPRISE

Another new type of distribution of our printed matter was begun during the biennium, and it is working out very well as a cooperative project with the State Highway Commission. The Highway Commission built special racks on all its ferries and keeps them stocked with vacation information supplied by the Advertising Division. The highway map, on which the Advertising Division cooperated with the Highway Commission by supplying illustrations and artwork, is also a popular item in this distribution.

The Advertising Division worked with the U. S. Information Agency and the National Association of Travel Organizations in producing North Carolina folders especially designed for foreign distribution during "Visit USA Year". This is a long range project, but the potential for foreign travel to North Carolina appears so good that we feel this program should be continued.

"LIVING IN NORTH CAROLINA"

The cooperative arrangement with the North Carolina Association of Realtors was continued with increasing momentum during the biennium. 16,183 inquiries resulting from advertisements about retirement living in North Carolina were serviced with general literature about the State, including an especially prepared brochure entitled "Living in North Carolina", and the inquiries were then referred to the real estate association, which circulated them to realtors throughout the state through a special bulletin. An increasing number of specific property sales directly traceable to this campaign were reported. All travel advertising and some industrial advertising generated "living" inquiries. In addition, some specific retirement copy was run in publications including NATIONAL GEOGRAPHIC, WALL STREET JOURNAL, CHRISTIAN SCIENCE MONITOR and ARMY, NAVY AND AIR FORCE TIMES.

SOURCE MATERIAL

The Advertising Division is a major source for current reference materials about the State, both by encyclopedias and yearbooks and by writers for newspapers and magazines. Among the reference books to which the Division supplied text and illustrations were the INTERNATIONAL YEARBOOK, ENCYCLOPEDIA BRITAN-NICA, WORLD ALMANAC, COMPTON'S YEARBOOK, INFORMATION PLEASE, BOOK OF KNOWLEDGE, STATESMAN'S YEARBOOK (London), BLUE BOOK OF SOUTHERN PROGRESS and Fifth District Federal Reserve Bank BULLETIN.

TRAVEL COUNCIL

The Travel Council of North Carolina, organized by a special committee from the travel industry appointed by Governor Hodges in 1955, cooperated closely with the Advertising Division and rendered invaluable assistance by assuming the responsibility for projects beneficial to the promotion and development of the multi-million dollar travel industry. These include the economic survey of the travel industry directed by an out-of-state authority which for the first time developed authentic statistics on the travel-serving industry in North Carolina and revealed its dollar volume for 1959 at \$775 million dollars to make it the third largest industry in the state. Other major Travel Council projects conducted in cooperation with the Advertising Division were: The "Travel Bulletin" issued periodically with a circulation of approximately 3,500 to a mailing list including the press and all segments of the travel industry in the State; "Keep North Carolina Beautiful" (the anti-litterbug campaign), the "Host Schools" for training travel-serving personnel, and "See North Carolina Month" observance. The Council, being a non-stock, non-profit corporation operating on a very low overhead, depended heavily on the Advertising Division for staff work. The arrangement was both cordial and increasingly beneficial to the travel industry.

COMMERCE AND INDUSTRY

In prospective new jobs, capital expenditures committed, and indicated new payrolls, the biennium of 1958-60 was the greatest on record in North Carolina, according to figures compiled by this Division.

New plants and expansions during the two-year period indicated that a total of 64,567 workers would be required for their operation. The payrolls for these jobs were estimated at a total of almost \$210,000,000 annually.

Capital expenditures committed for the new and expanded plants amounted to some \$503,876,000, exceeding the next highest biennium by well over one hundred million dollars, the previous high being \$381,880,000 in 1956-58.

The biennium also set a record in the number of projects, new and expansions. The total for 1958-60 was 1,057 as compared with 668 for 1956-58.

Summarized below are total proposed new and plant expansion figures for the bienniums 1958-1960 and 1956-1958.

BIENNIAL SUMMARIES 1958-1960; 1956-1958

	New	Investments	Payroll	Employees
1958-'60	423	\$252,532,000	\$124,391,000	38,448
1956-'58	337	206,932,000	72,063,000	22,843
	Expansions			
1958-'60	634	\$251,344,000	\$ 85,442,000	26,119
1956-'58	331	174,948,000	40,931,000	13,303
	New and Ex	pansions		
1958-'60	1,057	\$503,876,000	\$209,833,000	64,567
1956-'58	668	381,880,000	112,994,000	36,146

Utilities expanded during 1958 and 1959 by expenditures of approximately \$250,000,000. These completed utility projects and their costs are not included in the above manufacturing totals for the biennium.

All tabulations in this report are based on the U.S. Department of Commerce S. I. C. codes.

Outstanding gains over the 1956-58 totals were made.

Percentage Gains 1958-'60 over 1956-'58

No. projects (New and Expanded)	58.23%
Investments (New and Expanded)	31.95%
Payrolls (New and Expanded)	85.70%
Employees (New and Expanded)	78.62%

The following table presents biennium data on the ten leading industrial classifications (not including Miscellaneous reporting:

INDUSTRIES
EXPANDED
AND
PROPOSED,
AND
NEW

10 Leading Classifications, Biennium 1958-1960

Classification	Number New Exp	dumb	er Exp	Investment (+ 000) New Exp	Payroll (+ 000) New Exp	Emp	Employees New Exp
Textile Mill Products Totals	80	283	203	\$68,241 \$138,906	\$45,109 \$71,209 \$26,100	13,978	8
Chemicals & Allied Products Totals	25	48	23	\$76,955 \$ 92,923	\$12,474 \$16,435 \$ 3,961	2,575	3,577 1,002
Fobacco Mf. Totals	٩z	18	٩N	\$10,000 \$ 66,668	\$ 2,170 \$11,752 \$ 9,582	572	3,252
Metalworking Totals	69	138	69	\$31,520 \$58,344	\$22,915 \$32,070 \$ 9,155	6,478	9,095 ^{2,617}
Stone, Clay, & Glass Totals	19	44	25	\$29,206 \$ 53,684	\$ 4,839 \$ 9,467 \$ 4,628	1,429	2,413
Furniture & Fixtures Totals	59	143	84	\$ 8,340 \$ 22,811	\$ 9,873 \$ 18,724 \$ 8,851	3,221	6,129 ^{2,908}
Apparel & Finished Goods Totals	48	108	60	\$ 9,873 \$ 16,878 7,005	\$16,427 \$ 28,311	6,662	11,367 4,705
Food & Kindred Products Totals	33	100	67	\$ 8,322 \$ 15,479 \$ 7,157	\$ 3,024 \$ 5,372 \$ 2,348	1,123	2,164
Paper & Paper Products Totals	6	21	12	\$ 738 \$15,137 15,137	\$ 1,116 \$ 5,375 \$ 5,259	311	517 828
Lumber & Wood Products Totals	33	12	38	\$ 4,132 \$ 7,912 \$ 3,780	\$ 2,229 \$ 3,980 \$ 1,571	769	1,441 672

From the attached tabulation of new and expanded figures for the two fiscal years, 1959-60; 1958-'59 and the biennium, it will be seen that textiles occupy first place in all classifications listed, except for new investments, which fell to chemicals. The ''NA's'' in the tabulations indicate projects too small in number to list for fear of revealing individual company figures. Some of the new names added to the North Caroling list of manufacturers during

Some of the new names added to the North Carolina list of manufacturers during the biennium are as follows: E. Ingraham; Fletcher-Southern, Inc.; Crown Aluminum; Gilson Brothers; AMP, Inc.; Duff-Norton Company; Proctor & Schwartz; Tenney Engineering, Inc.; Republic Foil, Inc.; and C. M. Hall Lamp Company—all in the metalworking field.

Others in various classifications include: Ball Brothers and Laurens Glass Works; Gerber Products Company; Reasor Chemical Corp.; Amcel Propulsion, Inc.; Chemstrand; Samuel Hird & Sons; Glenoit Mills, Inc.; B.V.D. Company; Gibbs Underwear; Filatex Company; and proposed plants by Ideal Cement Company; and Dixon-Southern Chemicals, Inc.

ADMINISTRATION

During the period for which this report is written the previous trend of rapid turn-over in the administrative head of the Division continued. Three Industrial Development Administrators have served during the two years.

William R. Henderson, the current occupant of the position, assumed office on September 15, 1959. Others serving in the same capacity were Walter W. Harper, who resigned to become Director of the South Carolina Development Board on July 31, 1959. H. P. Cotton succeeded Mr. Harper but served only until September 15 when he became Assistant to the President of the Norfolk and Western Railroad in charge of its industrial development program. Both Mr. Harper and Mr. Cotton began their careers in the field in which they are now engaged with the Division of Commerce and Industry.

In addition to the rapid turn-over in the administrative staff, there has also been during the biennium a considerable number of changes within the staff. G. F. Albright, formerly head of the Small Industries Section, currently the Community Development Section, went to South Carolina to take over the similar work under the direction of Mr. Harper.

Reorganization of Division—In order to attempt to increase the efficiency of the operations of the Division, a plan for more definite organization was carried out soon after the assumption of the office of the Industrial Development Administrator by Mr. Henderson. This also involved the enlargement of the scope of the operations of certain of the functions of the Division.

The sections created within the Division were General Development, Community Development and Research and Statistics. One of the most important functions given more emphasis by the reorganization of the Division was service to existing industry and also more specific cooperation and assistance to the communities in their industrial programs. These activities are covered more fully in the sections of this report devoted to the various sections. Also, additional facilities were made available to the Research and Statistics Section, including enlargement of the site study program and the general facilities for research and development. During the latter part of 1959 and early in 1960, a ten point program to

During the latter part of 1959 and early in 1960, a ten point program to strengthen and expand the activities of the Division was proposed by the Industrial Development Administrator and approved by the Board.

These features included the continuation of the group industry hunting trips to the major industrial centers of New York, Chicago, and Philadelphia; regional development seminars; a staff training school; the construction of two display panels for use within and outside the State; and several others.

One of the pleasing developments of the biennium has been the increase in the number of full time industrial development representatives in the communities. At the beginning of this report period, 14 communities were organized with full

At the beginning of this report period, 14 communities were organized with full time representatives employed for the special purpose of attracting industry. During the two years, five began these programs and four others were organized but had not filled the positions, making a total of 23.

The Division extends its full cooperation toward the creation of these local agencies and works closely with the victious organizations after they are in operation. Efficient local programs add materially to the effectiveness of the State's development activities and a strong State program helps the local activities, since each supplements the other.

GENERAL ADMINISTRATION

Industry Hunting Trips-Two industry hunting trips were carried out during the biennium. These were to New York and Philadelphia. Preparations were underway for another—to Chicago—at the end of this report period. The latter mission was planned for the month of September but was postponed until the first week in October.

With the completion of the Chicago mission, five trips of this nature will have been carried out by the Division, two each to New York and Chicago and one to Philadelphia.

Each of these missions has been led by Governor Hodges. Arrangements were carried out in the Dept. of Conservation and Development. Representatives of the Department were joined by other representatives of the State, communities, and private business ranging in number from about 50 to 115. Expenses of the trips were paid by the various organizations represented. Every member of the various teams, however, represented the State at large.

As a result of these trips, the attractions of North Carolina were brought to the personal attention of top executives of hundreds of the highest ranking manufacturing firms in the country, including many with which the Division had previously been working on side studies. Numerous new prospects for new industries have been devel-

oped. These contacts are expected to bear fruit over a period of years. **European Trade and Industry Mission**—Sixty-eight North Carolinians, headed by Governor Hodges, crossed the Atlantic during the period October 31-November 15, 1959, in the interest of trade and industrial development.

This mission was said by U. S. Government agencies to have been the first statesponsored undertaking of its character and scope. The Tarheels carried the "North Carolina Story" directly to some 1,600 business leaders in ten cities in England, The Netherlands, Germany, Switzerland, France and Belgium. A total of 276 of these Europeans indicated a defnite interest. Of these, 79 showed an interest in the State's ports; 12 in the Research Triangle; 26 in manufactur-

ing; 41 in sales or similar arrangements; 7 in the production of various items under licensing agreements; and 83 general with no particular fields specified.

European Follow-up Mission—A follow-up mission to Europe, making possible more specific conferences with companies expressing an interest in the State during the original trip was carried out on March 13-April 29, 1960.

This mission was directed by J. Edgar Kirk, Assistant Director of the Department, with Voit Gilmore, a member of the Board, J. Henry Dowdy, Robert D. Higgins, Jr., and J. M. Wasson, participating as volunteers. Others who made the trip later and who contributed by development calls on behalf of the State included the Hon. E. J. Evans, Mayor of Durham, Watts Hill, Jr., and Dr. John F. Lee.

Although normally immediate results would not be expected, it is pleasing to report that some were evident within a few months. For instance, one of the German firms called on, Pleuger Submersible Pump Co., had a North Carolina plant under construction around the close of the biennium. It is expected to be in operation before the end of 1960.

Two of the chemical firms visited have optioned sites in North Carolina, one for manufacturing purposes. A machinery company currently doing business in the State is acquiring property for expansion. Other European manufacturers have definitely scheduled trips of inspection to the State for the purpose of considering the establishment of various types of operations.

A word of appreciation should be extended to the U.S. Departments of State and Commerce which cooperated wholeheartedly with the missions. The North Carolinians who contributed so importantly to the project by contributing their time and efforts and defraying their own expenses deserve an expression of gratitude.

RESEARCH AND STATISTICS

During the 1958-60 Biennium significant advances were made in many areas of the State in the collection and more effective presentation of industrial development information. There still remain, however, communities and sections of North Carolina where little or nothing has been accomplished in the first, and one of the most important segments of the development program.

most important segments of the development program. The Research and Statistics Section of the Division, has been shorthanded in trying to promote a fuller and more active role by local development agenciesparticularly in the field of local survey preparation. Greater and more effective work will now be possible under the joint attack on this problem by this Section and the Community Development Section.

In time the efforts of the Division and of local development groups - cooperating on a planned program to assemble necessary data in all parts of North Carolinashould equip every community to compete for new and expanding industries. Major emphasis during the next several years will be given to this program.

With the rapid growth in recent years of diversified manufacturing in North Carolina, and the general technological advancements which have opened up new and spectacular fields of industrial endeavor, it is believed that the time has come for a reappraisal by our State of its opportunities and potentials in the decade on which we have now embarked.

decade on which we have now embarked. The Research and Statistics, because necessity has required it, devotes a major part of its efforts to the preparation of current data for industrial prospects being handled by the Field force and of other agencies likewise engaged. This work should not be curtailed, and many have to be enlarged as conditions require. However, the Section feels strongly that a general study, under its sponsorship and direction, should be made by some qualified engineering firm to point up these new and more significant opportunities and potentials, which in turn can be valuable guideposts in the over-all industrial program.

In the above connection, the component and parts survey made in 1958 by N. C. State College under the Section's sponsorship, covering the electrical machinery and equipment industry in North Carolina, is an excellent example of individual studies which may be developed from a broad general survey.

It is felt that similar surveys should be made in the Chemicals, Foodstuffs, General Metalworking and other standard classifications. A general study, however, should reveal facts to indicate in what order these separate studies should be made, the amount of time and effort required, and show some details on the best approach and survey procedures needed.

The Section has underway at this time plans to revise completely the standard "Industrial Location Factors" brochure. The present brochure, rewritten several times with no major changes being made in its contents and format, was initially issued in 1957.

Industrial site studies prepared by the Section have been greatly improved especially in appearance and data presented. Although emphasis has continued on the larger surface water sites, the Section has expanded its work in this field to include local industrial park areas and larger potential acreages in and near communities not immediately adjacent to major streams or rivers.

COMMUNITY DEVELOPMENT

As of January 1960, the Community Development Section came into being. Previously, its personnel had been members of what had been the Small Industries Section.

With its new name, came new fields of work. In addition to assisting the communities in the development of new local industries, the Section has two new and important functions. These are, (1) Working with communities in a program of Community preparation for industrial development, and (2) working with existing industries in an effort to prove to them that the State is as concerned with their continued success as with those new industries moving into the State. This is a service job, asissting industry in new markets, new products, raw material supply, component supply, expansion, and in other services, particularly those related to State functions.

The work of the Section in new industry development goes on. During the past biennium, many community groups and individuals have been assisted in their efforts to establish new local manufacturing or proposed plants. Several of these proposed plants are now in operation and others will follow. Among the new firms now in business, either as a result of direct or indirect assistance by staff members, are firms providing the following: quartz aggregate or precast building slab, peanut blanching, metal stampings for furniture and electronics, corn starch, hydraulic scaffolds, frozen food, processed poultry, processed seafood, fruit juices, pumps, bank supplies, and several other products and services.

juices, pumps, bank supplies, and several other products and services. During the biennium just passed, 216 new locally developed industries were established in North Carolina. Many are in production and the remainder are either under construction, or in the planning stage. These new industries represent an initial investment of \$26,366,100 and employment for 7,825 people. These new plants are located in all sections of the State, and manufacture a wide variety of products.

Other than working directly with the establishment of new local industry, personnel of the Section has been assigned to work that is pertinent to over-all development program of the State.

One staff member was chosen to assist in coordinating the Trade and Industry Mission to Europe in 1959. In this connection he made two trips to Europe - once in preparation and again with the full group. In addition, he was instrumental in the decision of the Pleuger Submersible Pump Company of Hamburg, West Germany, to locate a plant in Statesville.

Four Industrial Development Conferences, held in four locations across the State were planned and carried out by the Section. These were in Goldsboro, Raleigh, Salisbury, and Asheville. These were considered as highly successful and were attended by approximately one thousand persons interested in industrial development.

While carrying out their regular duties, it often became necessary for members of the staff to be assigned work with out-of-state industrial prospects. Plants locating in North Carolina over the biennium with which staff members worked, represent an initial investment of \$13,175,000 and employment for 512 people.

represent an initial investment of \$13,175,000 and employment for 512 people. As far as the newly assigned work of the Community Development Section is concerned, it is progressing nicely. One staff member has been assigned to the job of service calls on existing industry. During the two months of the biennium that he has held the assignment he has called more than 67 firms. The results achieved so far bear out the importance of this service. Despite numerous handicaps such as hurricanes, long periods of other types of unfavorable weather and other factors, North Carolina's commercial fishing industry ended the 1958-60 biennium on a brighter financial side than it did for the preceding biennium.

In dollar value the fishermen for the shellfish, food fin fish, and menhaden they took from North Carolina controlled waters, the total for the 1958-60 period was \$15,451,894 compared with \$15,046,380 for the preceding biennium. Sharp increases in all species of shellfish except shrimp were made during the

Sharp increases in all species of shellfish except shrimp were made during the 1958-60 biennium to help boost the dollar value to fishermen. A sharp increase was also noted in the catches of menhaden, a species of fish caught by the millions in North Carolina waters and used for industrial purposes.

in North Carolina waters and used for industrial purposes. Catches of food fin fish during the 1958-60 biennium were almost on a par with those for the 1956-58 biennium, but in dollar value to fishermen was considerably under the amounts received during the 1956-58 period. The dollar value of food fin fish during the 1958-60 biennium was \$3,641,488 compared with \$4,166,555 for the preceding biennium.

The sharp increase in oyster production during the two-year period was most encouraging to those who are working to help make this facet of the State's seafood industry to reach even greater potentials.

Almost 100,000 more tubs of oysters were taken from North Carolina waters during the past biennium than were taken during the 1956-58 biennium.

This increase in oyster production is attributed in large measure to increased emphasis being placed on efforts being made to rehabilitate the State's oyster industry under the Oyster Rehabilitation Act passed by the 1947 General Assembly and under which seed oysters and used oyster shells are planted annually in areas known to be most favorable for growth of this species of seafood.

Liberal appropriations made by the General Assembly have been of increasing benefit in this oyster rehabilitation program. Services rendered by the Institute of Fisheries Research under the direction of Dr. A. F. Chestnut are of mounting benefit and importance to the entire seafood industry of the State. More efficient methods of growing and harvesting of oysters are being employed by the industry.

Dealers, oystermen, and others interested in and working for the further development of the commercial fishing industry of the State in general are of the opinion that this rehabilitation program augurs well for the future of oyster production. Also, and largely as a result of, the fact that North Carolina now ranks third among states on the Atlantic Seaboard in oyster production is attributed to the rehabilitation program.

Also of mounting importance to the State's seafood industry is the steady rise in production of hard crabs. This is a fast growing business in North Carolina. Several plants along the coast are now engaged in processing fancy grades of crabmeat which is shipped outside the state for the most part and which brings good prices. It is also an industry that is providing an increasing number of jobs to men and women in the State's coastal area.

Some indication of the growth of the hard crab industry is seen in the fact that during the 1958-60 biennium a total of 22,871,315 pounds of hard crabs were taken from State-controlled waters compared with 14,226,000 pounds the preceding biennium.

Production of clams is also on the increase. During the past biennium 79,069 bushels of clams were taken from State waters against 54,429 bushels during the preceding biennium. As a result of research programs carried on by the U. S. Bureau of fisheries, a big bed of Bay Quahog clams was found during the past biennium off the coast. Its discovery caused renewed interest to be shown in the clam industry. Efforts are being made to discover other clam beds.

Growth is also being shown by the escallops industry. There was an increase of 3,650 gallons of escallops during the biennium over the preceding one. A bed of calico escallops was found off the State's coast for the first time, thus accounting in large part for the increase in production of this species of seafood.

However, ocean escallops can only be taken in very cold weather and each boat has to be limited to its catch. The U.S. Fish and Wildlife Service has an improved method of taking the meats from escallops and the dealers are looking for new markets for this delicious seafood. The bay or inside escallop production became almost extinct a few years ago because the grass on which the spat clings was for some mysterious reason completely destroyed in inside waters. However, production of the bay escallop has been showing some improvement as the eel grass becomes more abundant.

Least active during the biennium was the soft shell crab industry. It is an industry limited in scope because the dealers are in operation only about five weeks before the competitive markets of Virginia and Maryland open. However, there was an increase of 11,000 dozen soft crabs during the biennium over the preceding one.

The production of menhaden showed a great increase despite curtailment of operations in the Fall of 1959. This industry is likely to be somewhat inactive unless some relief is given from the competition of fish meal import from foreign countries.

Stormy and cold weather are believed to have been largely responsible for the drop in shrimp production.

More than ? ? ? are licensed to carry on commercial fishing activities in Statecontrolled waters. This is an increase of over the preceding biennium.

It is a matter of noteworthy importance to all who eat and enjoy North Carolina seafood to know that the U. S. Public Health Service has been giving its high rating of more than 95 per cent in its annual evaluation of the over-all shellfish sanitation program carried on in North Carolina. One year North Carolina was given the highest rating of any of the Atlantic Coast States in the shellfish sanitation rating of its oyster houses.

Due credit for this highly favorable condition should be given the North Carolina State Board of Health and its sanitation engineers, who work out of headquarters of the Division of Commercial Fisheries at Morehead City. These men have been very helpful in the shellfish industry by furnishing blueprints to fit their particular needs, interpreting of shellfish regulations, and periodic checking of fish houses.

Constant efforts are being made to enforce the commercial fishing rules and regulations without fear or favor.

KIND, QUANTITY AND VALUE OF FISH TAKEN IN WATERS OF NORTH CAROLINA For the period July 1, 1958 to June 30, 1960

Kinds of Fish	No. Pounds	Value to Fishermen
Bluefish	1,281,797	\$ 152,384
Butterfish	791,553	61,731
Cabio	23,039	1,383
Carp	661,890	19,857
Catfish	2,271,742	220,140
Croakers	6,297,858	465,827
Black Drum	41,394	2,483
Red Drum	11,782	1,078
Eels	169,791	6,784
Flounders	2,520,964	305,952
Grouper	14,641	1,046
Herring, Thread	4,371,000	50,704
Herring	· · ·	269,686
Hickory Shad	281,576	16,895
Jewfish	600	44
King Mackerel	94,390	17,521
King Whiting	1,377,156	128,259
Mackerel, Boston	3,100	620
•	5,031,639	365,181
Mullet		7,302
Pigfish	152,498	13
Pike or Pickerel	111	
Pompano	19,108	5,732
Sand Perch	119,372	3,582
Soup or Porgy	100,208	8,013
Sea Bass	86,813	8,681
Grey Trout	5,992,626	371,449
Spotted Trout	601,334	150,333
Shad	506,643	231,529
Sharks	15,062	753
Sheephead	10,657	834
Red Snapper	20,557	5,615
Spade Fish	6,664	478
Spanish Mackerel	332,240	49,836
Spot	4,611,334	287,832
Striped Bass	1,893,156	341,354
Sturgeon	40,964	6,145
Suckers	700	. 28
Swellfish	505,218	15,157
Tilefish	300	28
White Perch	797,464	55,172
Yellow Perch	58,434	4,047
· · · · · · · · · · · · · · · · · · ·		4,047
Total of Food Fin Fish	68,086,023	\$ 3,641,488
Menhaden (No. of Fish)	734,946,129	6,971,074
		10,612,562

Oysters	430,007	(Bu. tubs) 5 pk.	1,290,021
Clams	79,069	(bushels)	213,486
Soft Shell Crabs	30,626	(dozen)	45,939
Escallops '	32,650	(gallons)	114,275
Hard Crabs2	2,871,315	(pounds)	1,029,209
Shrimp	4,292,804	(Pounds, heads off)	2,146,402
	Total Value of	Shellfish	\$ 4,839,332
Value of Fin Fish			10,612,562
	Total Value of	Water Products	15,451,894

COMMUNITY PLANNING

The primary function of the Division of Community Planning is to provide towns, cities and counties with the technical assistance needed for the solution of their physical, social and economic problems through planning. Assistance is given in the development of plans for land use, streets, parking, central business districts, parks, recreation, schools and other community facilities; in drafting zoning and ordinances, subdivision regulations and other legal tools needed for the implementation of plans; in studies of population, fiscal conditions and economy; and, in the provision of continuing technical assistance needed by municipal and county officials as they attempt to carry out the recommendations of comprehensive community plans.

THE NEED FOR COMMUNITY PLANNING

The need for sound community planning is evident in our growing traffic congestion, the deterioration of residential areas by improperly located commercial or industrial activities, the cancerous growth of slum and blighted conditions, the decline of the central business districts, the rapidly increasing cost of municipal services, and the inadequate provision of land for parks, schools and other public uses. The great majority of North Carolina communities, like most American communities, have grown without the benefit of adequate plans to guide development. Fortunately, North Carolina is still a State of small communities and we can avoid the tragic and costly mistakes which have been made in the large metropolitan concentrations in other sections of the country.

Perhaps no other state contains so many small incorporated places or has more population living in communities of under 50,000 persons. These communities are one of North Carolina's great assets and they are becoming increasingly attractive to people, business and industry now located in overcrowded metropolitan centers. At the present time, there are 415 incorporated communities in North Carolina. According to the 1960 Census, 210 of these communities, or approximately one-half, had populations in excess of 1,000 persons; 59 communities had populations in excess of 50,000 persons, and only seven municipalities had populations in excess of 50,000 persons. While the typical North Carolina municipality is small, it is also experiencing a rapid rate of growth. Between 1950 and 1960, almost 90 percent of North Carolina's total population increase took place in the 210 communities having populations of these communities increased 29.8 percent while the population of the state increased only 1.3 percent.

DIVISION'S PRIMARY RESPONSIBILITY TO SMALL COMMUNITIES

The seven municipalities in North Carolina having populations of more than 50,000 persons have created planning departments staffed with professional planning personnel to assist in the increasing problems of urban growth. The smaller towns and cities do not have the financial resources to employ full time professional planning staffs although their planning needs are not less acute than those of their larger neighbors. Therefore, the Division maintains a trained staff which provides professional planning services to the smaller towns, cities and counties at a reasonable cost. Individual staff members of the Division may work with several communities, thus, reducing the overall planning costs for the individual community for below that which would be incurred if they employed their own full time planning staffs.

FEDERAL PLANNING GRANTS TO MUNICIPALITIES AND COUNTIES HAVING POPULATIONS OF LESS THAN 50,000 PERSONS

The Division of Community Planning has been authorized to act in behalf of towns, cities and counties in obtaining Federal planning grants covering up to 45 percent of the cost of certain eligible planning projects. These Federal planning grants are not made directly to the local governments but are made to an authorized state planning agency. The towns, cities or counties receiving aid from the planning grants also pay their share of the planning costs to the state planning agency.

This state planning agency, which in North Carolina is the Division of Community Planning, is then responsible for the expenditure of the Federal and local funds and for the provision of adequate planning services to participating local governments. These Federal planning grants, authorized under Section 701 of the Federal Act of 1954, as amended, are available to aid in the cost of: (1) making studies of population, economy, land use and traffic; (2) preparing long-range plans for future land use, thoroughfares, central business districts, schools, parks, recreation and other community facilities; (3) preparing related ordinances such a zoning and subdivision regulations; and (4) preparing public improvements programs establishing the priority of need for the various public improvements proposed in the long-range plans.

AREA PLANNING OFFICES

The individual small town or city cannot support the cost of maintaining its own professional planning staff but by pooling its resources with those of neighboring communities, a joint planning staff can be financially supported. In order to encourage the smaller towns and cities to initiate and support effective planning programs, the Division of Community Planning will establish Area Planning Offices staffed with professional planning personnel to provide assistance to any community or group of communities agreeing to pay for the cost incurred. These Area Planning staffs would act for the smaller communities in much the same manner as the planning departments in the larger municipalities. They would be available to provide continuing planning assistance to the smaller municipalities, not only to assist in the preparation of plans but also to provide technical assistance needed by municipal officials for the solution of day-to-day problems affecting the physical development of the community. The establishment of Area Planning Offices is the result of an increasing realization among municipal officials that planning should be a permanent function of local government. This is especially true in periods of rapid urban change and growth. The completion of a comprehensive plan provides the framework for decisions about the desirable development of the community, based upon the best available knowledge of population growth, economic potential, and land use trends within the community. But the plans have little value unless a continuing community planning program is maintained to insure that decisions affecting the physical development of the community are made within the frame-work of the plans and within the financial capacity of the community. Since many technical questions are involved, municipal officials need professional planning assistance available to them on a continuing basis. Such assistance will be available to those towns, cities, and counties who share in the financial support of the Area Planning Offices of the Division.

The Division's first Area Office was established in Salisbury in September, 1960, and is now adequately staffed to provide planning services to municipalities and counties in that section of the State. Negotations are now underway for the establishment of a second Area Office in Kinston to serve communities in that area. As more communities participate in the support of these Area Offices, additional staff members can be added thus providing a wider range of professional planning skills.

COMMUNITIES RECEIVING PLANNING ASSISTANCE

The Division's staff has assisted large numbers of communities and counties throughout the State by analyzing their planning needs, recommending suitable planning programs and making applications for Federal grant funds. The most important work of the Division, however, has been in making basic studies of communities, preparing long-range development plans, and preparing implementing measures such as zoning ordinances, subdivision regulations, public improvements programs, and related planning work. Municipalities and counties which have engaged the Division to perform such technical planning work include:

- 1. Canton
- 2. Carteret County
- 3. Cary
- 4. Chapel Hill
- 5. Conover
- Clinton 6.
- 7. Elizabeth City
- 8. Forest City
- 9. Franklin
- 10. Goldsboro
- Graham
 Havelock

- 13. Henderson
- 14. Highlands 15. Hickory
- 16. Jacksonville 17. Kinston

- 18. Laurinburg 19. Maxton 20. Mocksville 21. Mooresville 21. Mount Airy
- Mount Holly 23.
- 24. New Bern

- 25. Parkton
- 26. Raeford
- 27. Roanoke Rapids
- 28. Rockingham
- 29. Rocky Mount
- 30. Rowan County
- Selma
- 31. 32. Salisbury
- 33.
- Spencer Wilmington 34. Wilmin 35. Wilson

FUNDS RECEIVED FROM FEDERAL GRANTS AND FROM LOCAL GOVERNMENTS

The Division receives State appropriations to cover part of its administrative costs but the largest part of its budget is derived from payments made by communities and counties receiving planning assistance and from Federal grants. Since 1958, receipts from communities and counties total \$154,048, and receipts from Federal grants total \$158,090. Combined receipts from both sources amount to \$312,138.

The Forestry Division, often called the State Forest Service, is designated by State law to "have charge of the work of forest maintenance, forest fire prevention, reforestation, and the protection of lands and water supplies by the preservation of forests, etc." The State law also carries specific authorization "to arrange for and accept such aid and cooperation from the several United States Government Bureaus and other sources as may assist in carrying out the objectives of the Department." This forestry program covers the following broad activities:

1. Forest Fire Control—Administered by the Forestry Division in financial cooperation with the several counties and the U. S. Forest Service. The outstanding achievements in Forest Fire Control during the biennium were the effective use of the Statewide Forest Fire plan which entailed employment of cooperating agencies on large fires. Of particular note was the excellent assistance provided by the Marines, Prison Department and industry in supplying manpower and equipment.

The conversion of two surplus Navy planes for chemical or water dropping of fires will lend invaluable assistance particularly on fires in inaccessible areas.

With the addition of four counties in the cooperative forest fire system this brings the total to 92, the largest number since the initiation of the program. Currently 92 of the 100 counties are thus under cooperative fire protection by the State. The Division conducts the work in the counties through its salaried full-time County Ranger or County Forester, who reports directly to one of 13 District Foresters. The Division owns and operates 144 forest fire lookout towers, six airplanes, its own radio communication net, and a considerable amount of forest fire fighting equipment, consisting of tractors, fire plows, specially equipped trucks, etc.

2. Forest Management Advice and Service—The public demand for this in the field service is attested to be the fact that on June 30,1960, there were over 2,300 landowner requests on hand for forestry assistance. The Division has a currently authorized strength of 65 graduate Foresters. Some are assigned largely to the fire control program, some to the forest nurseries - reforestation and some to forest management service. But all foresters of the Division are available for the vital work of advice and service, under certain conditions, to forest owners and operators in the management of forest land. All Forest Rangers of the Division are likewise available as sources of information on both forest management and reforestation.

3. Forest Tree Nurseries and Reforestation—The Division operates four State forest tree nurseries, one in each of the following counties: Johnston, Henderson, and Burke.

The forest tree distribution for the biennium planting season was 181 million seedlings. These seedlings are sold at approximately the cost of production for forest and windbreak planting at varying prices, \$5.00 per thousand f.o.b. destination for the several species of pine.

4. Information and Education—There is available considerable literature on forestry, most of which is free upon request to the Information Officer of the Department. This literature is particularly valuable to teachers, pupils, etc.

5. Administration of State Forests—Thus far, the State owns and operates only one State Forest, the 35,000 acre Bladen Lakes State Forest in Bladen County. It is administered by the Division and is an excellent example of the management of low value land under good forestry practices. Since 1939 when the State obtained control of this sub-marginal agricultural area, the Division of Forestry has operated the property as a forest unit and increased its book value at least sevenfold.

6. Forest Tree Insect and Disease Control—Continuous efforts to control the oak wilt disease in western North Carolina have been undertaken and other epidemics of the pine sawfly, elm spanworm, and balsm wooly aphid are being studied and action planned. The southern pine beetle epidemic of 1957 in the mountain section of the State is now considered under control.

FOREST FIRE CONTROL

Material progress has been made in reducing the fire losses in North Carolina except for the so-called ground burning area which embraces approximately two

million acres in the Coastal Plain. Fires in this particular type are extremely difficult to extinguish under certain conditions due to the ground cover and inacessibility. This continues to be the number one forest fire problem in North Carolina.

This continues to be the number one forest fire protent in North Calorina. Four large fires occurred in this ground burning area, two in the April-May period of 1959 and two in the same period of 1960. The largest of these was the Ponzer-Pungo fire of 1959 burning about 24,700 acres, followed by the Phelps Lake fire of 1960 which burned about 14,000 acres. The Hales Lake fire of 1959 burned about 11,900 acres in the Dismal Swamp area north of Elizabeth City and the Piney Woods fire of 1960 burned about 12,500 acres in the area northwest of Lake Mattamuskeet.

All four of these major fires burned in highly inaccessible areas under explosive fire weather conditions. Water dropping planes from the Georgia Forestry Commission and the U. S. Forest Service were used on three of them, Marines from Camp Lejeune on two of them and considerable Prison labor on all of them. Cooperation from the Marine Corps, Coast Guard, Prison Department and Forest Products and other landowners was most excellent on these fires.

Progress is being made on basic and equipment development research in this ground burning area under cooperative arrangements with the U. S. Forest Service and industry. A large percentage of the area burned in the State is accounted for by a few large fires in this particular type.

The Fire Control organization placed two water dropping planes in operation in June of 1960. These planes were converted and equipped from Government surplus military planes, and represent a major addition to the Division's fire fighting equipment.

The Federal Government under the provisions of the Clarke-McNary Law continues its financial cooperation with the State. The amount of Federal funds made available to the State under this law depends primarily on the State Appropriation for Forest Fire Control and the State maintaining its relative position with other States in appropriation for Forest Fire Control. Reductions in Federal allotment to this State during the past two years have resulted from failure of this State to maintain its relative position with other States in Fire Control appropriation.

Present Organization

The State is organized into four Forestry Regions, these being the Lower Coastal, Upper Coastal, Piedmont and Mountains. All but the Mountain region has a Regional Forester in charge who supervises four District Forest field supervisory offices in the Lower and Upper Coastal Plain Regions and two in the Piedmont Region. The three Mountain Districts having no Regional Forester work directly under the Raleigh Office. Each of the 13 District Forest field supervisory offices is in charge of a District Forester who supervises the work in the area of from about 1 to 2 million acres of timberland involving from 4 to 10 counties depending on size. The District Foresters have 1-4 supervisory assistants. There were 91 counties cooperating with the Forestry Division as of June 30, 1960 and an additional one, making 92, initiated cooperation as of July 1, 1960.

State Plans

The State Forest Fire Plan for large project fires, involving cooperation with the Highway and Prison Departments, other State Departments, Marine Corps at Camp Lejeune, industrial and other forest landowners was used on 6 project fires with excellent cooperation and results. Additional assistance was secured from the Georgia Forestry Commission and the U. S. Forest Service in furnishing a water dropping plane on three of the largest fires through an invocation of the South-eastern States Forest Fire Compact Commission.

Training Schools in large fire organization and suppression have been held each year in the Lower Coastal Region in cooperation with forest industry and other landowners and the Marine Corps. A cooperative fire suppression agreement with the Marine Corps is a part of the above mentioned State Fire Plan. In addition, similar training schools in large fire operations have been held in the Upper Coastal Region and the Piedmont Region in cooperation with the Wildlife Commission and numerous Rural Fire Departments.

The 1960 annual training school for the Southeastern States Forest Fire Compact

Commission, involving 10 Southeastern States, was held at Fayetteville in August of 1960 with attendance from all but two of the 10 States.

A Rural Fire Defense Plan is currently under preparation in cooperation with State Civil Defense and the U. S. Forest Service to provide for the coordinated use of the manpower and equipment resources of Federal land protection agencies and the State Forestry Division in case of enemy attack or natural disasters. The State Forester is Chairman of the Rural Fire Defense Committee and will operate under the over-all direction of the Director of State Civil Defense under such conditions.

County Cooperation

Work has been continued in financial cooperation with the 91 counties under forest fire control, such work being based on the County as a unit. This form of cooperation has met widespread support from the various counties. The Department cooperates with the various counties on the basis of their ability to pay as indicated by each county's taxable wealth. The counties pay from 25 to 40% of the total cost of fire protection within the county.

As of June 30, 1960, there were 9 counties representing about 1,169,000 forest acres in the State still without any organized form of forest fire protection, although one additional County initiated Cooperation with the Department as of July 1, 1960.

Private Cooperation

Financial cooperation was continued with private forest owners who agree to pay an annual amount which is used to supplement other available funds to provide more intensified fire protection to their lands.

Detection System

The Forestry Division now operates 144 fire lookout towers and Federal land ownership agencies operates an additional 42 such towers in cooperation with the Forestry Division for reporting forest fires. The Division also operates 4 State-owned reconnaissance airplanes which supplement the tower network in periods of unfavorable visibility and these planes aid the ground crews by giving directions, fire progress and locations. Another valuable service is the parachuting of food, drinking water, coffee and small items of supplies to the crews.

Forestry Division Communications

Currently there are 145 fixed stations, 438 mobile and 67 portable two-way communications radios in operation by the Forestry Division along with a considerable milage of telephone line. Most of the fixed station radios are in lookout towers and District Offices and the mobile radios are on pick-up trucks, jeeps, larger trucks, station wagons and other fire suppression vehicles.

Permanent Improvements

New District Office buildings were constructed at Rocky Mount and Lenoir and new Towermen's residences were constructed at Edgecombe and Southern Pines' lookout towers. Tower cabins were constructed at Spruce Pine and Benns Knob Towers, the latter being on the Cleveland-Burke county line.

The 8 towers purchased in the last Biennial period were erected and placed in operation. These eight towers, plus an additional one purchased and erected, and one moved to a better location and increased in height, materially improved the tower detection coverage for reporting fires. One additional steel lookout tower was purchased and will be erected in the next 2-year period. The initiation of cooperative forestry programs with additional counties will require at least 1 lookout tower per county.

Forest Fire Statistics

The forest fire statistics for the past four years are shown in the statistical chart. In evaluating these statistics, the following factors must be kept in mind:

- 1. Climatic conditions are all important in the actual suppression of forest fires.
- 2. Funds available represented about one-half the amount needed for adequate protection.

Conclusion

The initiation of cooperative forestry programs in 4 additional counties during the Biennium represents steady progress toward the goal of State-wide forest fire protection. During the Biennium, major forest fires were controlled at considerably less acreage than in the previous Biennium reflecting the impact of more thorough organization, training and preparation for such fires. Cooperation from all State and Federal agencies, landowners and the general public are indicative of the real progress made in Forest Fire Prevention and Control.

FOREST FIRE STATISTICS FOR STATE PROTECTED AREAS BY CALENDAR YEARS

	1956	1957	1958	1959
Area under Protection—Acre Number of Fires Causes of Fires	15,651,852 3,007	16,810,200 2,273	16,810,200 2,467	17,209,600 3,047
1. Campers & Hunters 2. Debris Burning 3. Incendiary	293 1,011 433	178 674 424	440 785 324	208 1,185 396
4. Lightning 5. Lumbering 6. Railroads	78 97	50 59 67	20 37 87	43 59 70
7. Smoker 8. Miscellaneous	587 466	484 337	473 301	618 468
Total	3,007	2,273	2,467	3,047
Area Burned: Forest Land Open Land	82,111 4,650	148,810 1,773	46,921 5,822	78,837 6,367
Total	86,761	150,583	52,743	85,204
Damage: Forest Land Other Total	\$579,250 <u>30,737</u> \$609,987	\$931,438 14,500 \$945,938	\$287,427 26,454 \$313,881	\$577,232 46,838 \$ 624,070
Law Enforcement: No. Fires Resulting in Law Enforcement Action		8 311	141	326
Finances—Fiscal Years	1956-57	1957-58	1958-59	1959-60
Appropriation by Counties Appropriation by Private Owne Appropriation by State Rentals from Employees Appropriation, Federal Governm Presuppression Fire Lines Bladen Lakes State Forest	rs 33,73 679,77 6,00 nent 349,95 3,97	4 33,332 0 780,863 3 6,402 5 323,943	\$ 333,927 33,145 825,114 6,400 310,500 4,700 8,844	\$ 341,698 31,998 987,916 8,548 311,600 4,700 8,844
Total	\$1,345,29	4 \$1,471,221	\$1,522,630	\$1,695,304
Available Funds: Per Acre Protected	8.6 cen	ts 8.75 cents	9.06 cents	9.85 cents

FOREST MANAGEMENT

North Carolina is one of the Nation's leading timber-producing states and for over 300 years the forests of the State have been a major source of income and employment for its citizens. Wood using industries are established in every county in the State and provide steady employment for the citizens of the Coastal Plain and Mountain Counties as well as those in the Industrial Piedmont. Investments in timber using plants are second only to the textile industry in the State's economy.

More than 45% of North Carolina's manufacturing establishments are wood using industries.

Direct and indirect benefits are derived from the State's forests and include watershed protection, soil conservation, prevention of stream pollution, flood

damage, food and cover for wildlife, tourist attractions and many others. Hunters and anglers annually pay nearly one and one-half million dollars into government treasuries for the privilege of hunting and fishing in the lakes, streams and forests. The beauties of the forested slopes and valleys of the Smokey Mountain National Park attract more tourists than any other National Park.

Park attract more tourists than any other National Park. In relation to its forest area, North Carolina now provides more than its share of both timber growth and cut. With 4% of the Nation's commercial forest area, it supplies 5% of the annual cut and produces 6% of the annual growth. As the virgin timber stands of the western softwoods are cut out, the eastern states, especially North Carolina and the other southern states with their high growth capacity, will have to assume an increasing share of the cut.

Growing increased quantities of timber without regard to species, or quality, will not necessarily meet the timber needs of the Nation or North Carolina's forest industries. The State has enough forest land with productive capacity to easily meet prospective demands. The big problem is to grow more of the right kind, and size of trees.

Yellow pine sawtimber, and pulpwood is by far the preferred source of raw material among the forest industries in and adjacent to North Carolina.

The use of hardwood pulpwood by the pulp and paper mills is increasing and there is a current shortage of high quality hardwood suitable for face veneer, for the quality hardwood furniture for which the State is famous, and for other exacting uses.

Growth, at present, exceeds the cut for all important species groups and in all size classes. So much of the present inventory, however, consists of timber the forest industries cannot use that North Carolina faces the possibility that eventually the less desirable timber will occupy so much of the available forest land there will not be enough space left to grow the softwood and high quality hardwoods needed. There has been a marked increase in recent years in the amount of growing space taken over by undesirable or low quality hardwood and unmerchantable trees. It is estimated that cull trees of all species occupy about one-fifth of the available growing space.

Sixty-two per cent, or 19,341,000 acres, of the State's total land area is presently available for timber production. The National Forests, the State Forests, the land owned by the Pulp and Paper Companies and other wood using industries are, for the most part, already being managed for maximum timber production. Improvements in forest management practices are expected to continue on these areas.

The 222,000 Farm Woodland owners with forest holdings averaging 60 acres are the key to future supplies of wood. These farmers own more than twice as much forest land as do all others together, and their woodlands, because of exploitation and neglect, are among the least productive. These lands offer the greatest need and opportunity for improving the timber supply.

It is to the owners of these potentially highly productive but presently understocked and unmanaged farm forests that the Division of Forestry offers professional forestry services. The outstanding feature of this activity is that the private landowner is given in-the-woods advice and assistance on how best to manage and market his timber.

When advice or assistance is requested, the forester makes a thorough reconnaissance of the farm forest to evaluate the present condition of the forest area and to determine the capability of the soil to produce specific forest products. The forester informs the landowner of these conditions and recommends a plan of action that will maintain or increase the forest growth, and at the same time meet the needs or limitations of the landowner.

Additional services include: Selecting, marking, and estimating the volumes in trees ready for harvest; assistance in finding markets for and selling forest products; elimination of cull trees, undesirable or unmerchantable species and restocking with desirable species; assistance in preparing open fields, cut over or otherwise understocked areas for natural regeneration or reforestation by planting; advice and assistance in obtaining and planting forest tree seedlings.

Twelve Service Foresters are presently employed who devote all of their efforts to giving forest management advice, tree marking service, and forest planting advice and assistance to landowners. Other foresters devote part of their time to this forest management advice and assistance to landowners.

During the last fiscal year nearly 18 million board feet of sawtimber and over 9 thousand cords of pulpwood were selectively marked by foresters of the Division. In addition, private consulting foresters and industrial foresters marked some 2 million board feet of sawtimber and 4 thousand cords of pulpwood in accordance with the marking recommendations made by foresters of the Division. The demand for forest management and reforestation advice and assistance continues to increase.

A nominal charge is made for the marking service. Landowners are charged at the rate of 50ϕ per thousand board feet of sawtimber marked, 15ϕ per cord of pulpwood marked and 15ϕ per seed tree selected. No charge is made for the first 20,000 board feet or 10 cords marked.

Gross returns to forest landowners receiving assistance from the Division in marketing forest products from their land exceeded \$640,000. Through cooperative agreements with the U. S. Forest Service, the Division hired two Watershed Foresters to provide the technical assistance and to supervise. the forest management and reforestation phases of the Small Watershed Program (P. L. 566). One forester is presently assigned to the Deep Creek and Town Fork Creek Watersheds in Yadkin, Stokes and Forsyth counties, and the other to the Mud and Muddy Creek Watersheds in Henderson, McDowell and Burke Counties. Additional foresters will be hired as new watershed projects are approved and funds appropriated by Congress.

PROGRESS IN FOREST MANAGEMENT SERVICE TO LANDOWNERS

	Period 1948-1958	During Biennium 1958-1960	Total To Date
No. of Examinations Made	12,035	3,284	15,319
Total Woodland Acres Examined	1,948,323	190,912	2,139,235 5,442
No. of Tracts Marked	4,622	820	
Acreage Marked	112,931	14,985	127,916
Board Feet Marked	269,347,000	32,361,000	301,708,000
Cords Marked	110,774	16,850	127,624
Acres Given Planting Assistance	37,513	87,162	124,675
Applications Not Acted Upon		2,314	2,314

Over 2,300 requests from landowners had not been serviced at the close of the Fiscal year. A large per cent of these were for the technical forestry services the Division agrees to provide the County Agriculture Conservation Program and the Conservation Reserve in Reforestation and Timber Stand Improvement. The effect of the Conservation Reserve and the forestry phases of the A. C. P. is reflected in the 87,162 acres for which planting advice and assistance was given. This is more than twice the number of acres of the preceding 10 years.

INDUSTRIAL FORESTRY

There has been a considerable reduction in the number of sawmills in the State over the past several years. This reduction in numbers has not reduced the lumber cut to any appreciable extent because the mills which are staying are the larger ones and almost without exception they have undergone extensive modernization and added automation which does make a much more efficient operation and a greatly increased production per man day. There are still some of the old type of cut out and get out" operations but they are for the most part gone. This type operator has either been replaced or educated in the modern methods and the operations are a permanent type installation drawing raw material from a comparatively small area.

Since they are in business to stay and at a given location, most of these operators are receptive to the idea of a selective or partial cut so that they can assure themselves a continuous supply of raw material through forest management and

themselves a continuous supply of raw material through forest management and wise use of available raw material. Probably the best example of wise use of raw material is the debarking of logs so that the waste (slabs, etc.,) can be used for pulp chips. This is also another reason for the stabilizing of the middle sized mills in the capacity of 12 to 25 thousand board feet daily production. This waste utilization equipment is expensive but most of the more moderately priced equipment is ideally suited for mill within this size range or possibly somewhat smaller. The primary reasons behind this size predominating are several but the two major ones are: 1- Raw material, 2- Cost

of equipment. A modern sawmill in the 15 to 25 MBF class with the waste utilization equipment can be built for about 25 to 30% of the cost of a mill of 35 to 50 MBF capacity. A mill of this smaller class can be supplied with raw material from a comparatively small area compared to the larger ones with resulting savings in transportation costs for raw material.

This modern, automatic machinery does an excellent job of manufacturing a high quality, regular, and accurately sized product if it is in adjustment and properly aligned but it does not lend itself to often and repeated moves. It must have a good foundation and available power to operate properly. The small mills which formerly cut most of the lumber sawn could be moved easily and often but the standards of manufacture were low and much waste developed from miscut lumber. The present day market will not stand this waste either in the lumber or the inability to utilize the normal waste from a milling operation. The industrial forestry program is aimed at assistance to operators in bringing

The industrial forestry program is aimed at assistance to operators in bringing their mills up to acceptable standards, location of suitable types of waste utilization, equipment for the particular needs of the individual operation, marketing assistance to some extent, and the publication of a listing so that landowners with available timber will have the opportunity of offering it to more buyers which will give the landowners a better price and in effect make timber available to more operators. Educational work is going on continuously for wider acceptance of forest management on the part of the operators which will increase the timber supply and generally improve the economic situation of everyone in North Carolina. On the other side, educational work is also being done to acquaint foresters and timber owners with some of the problems of the operators. These two programs will in time allow a more businesslike arrangement between buyer and seller thereby everyone will profit and not one at the expense of the other. One of the major projects along this line is the exploratory work which is now going on concerning the adjustment of the International log rule to take care of some southern pine sawing practices which were not considered when the rule was originally devised. When these adjustments have been made, we hope that they will lead to widespread acceptance of this rule and detract from the popularity of the grossly unfair Doyle rules.

The increase in the use of waste to make pulp chips are borne out by the following figures and years.

1954—	126,000	Cords	for	entire	South
1955	374,000	Cords	for	entire	South
1956—	80,127	Cords	for	North	Carolina
1957	102,783	Cords	for	North	Carolina
1958	190,107	Cords	for	North	Carolina
1959	311,700	Cords	for	North	Carolina

The 311.7 thousand cords of chips from North Carolina wood wasts represents 779,250 tons, this is between 35% and 40% of the total solid wood mill waste in the State. The value of rough lumber (before any finishing or remanufacture) manufactured in North Carolina, based on an estimated cut of 1,900,000,000 board feet annually and valued at approximately \$60 per 1000 board feet, is \$114,000,000. The additional returns to mills in North Carolina, in 1959, from the sale of wood waste as pulp chips amounted to about 4.5% of their returns from the primary product or over \$5,000,000. This return is less than one-half of the potential if 100% could be utilized since the value of the waste wood is more than 10% on the average and in some cases as high as 15 to 20% of the value of the rough lumber cut.

The sum total of this type of progress tends to help stabilize the operations and therefore the economy of the area in addition to much more complete utilization of waste takes some of the strain off the forests, since this wood must come from some source, therefore, a better management job can be done with production of the best and highest value products from the stands.

NURSERIES

The North Carolina Division of Forestry now operates four forest tree nurseries. These installations are located in Johnston, Wayne, Buke and Henderson counties. They have a combined capacity of approximately 100 million seedlings annually. Tree seedlings are sold at approximate cost of production for windbreaks, erosion control and reforestation at varying prices, with \$4.50 per thousand f.o.b. nursery for several species of pines.

The following tabulation shows the distribution breakdown by species and cooperators. The considerable increases in the last tree planting seasons tabulated were due to the Soil Bank program which encouraged farmers to retire crop land by planting trees. Much of the forest tree planting in the future will be the conversion of low grade stands to more valuable species.

Species	1956-57	1957-58	1958-59	1959-60
Atlantic White Cedar	-0-	-0-	348,000	15,575
Balsam Fir	-0-	-0-	282,500	424,375
Black Locust	20,000	3,900	-0-	-0-
Black Walnut	3,600	-0-	-0-	-0-
Cypress	-0	-0-	1,950,487	191,150
Loblolly Pine	36,635,449	63,894,948	72,891,971	47,649,935
Longleaf Pine	708,700	1,228,400	1,720,935	1,084,486
Maritime Pine	-0-	-0-	-0-	-0-
Norway Spruce	-0-	-0-	42,500	13,000
Pond Pine	-0-	-0-	285,500	56,100
Red Cedar	320,100	1,297,375	350,891	484,850
Shortleaf Pine	793,910	881,000	1,090,150	593,200
Slash Pine	14,436,272	7,450,500	10,988,000	24,087,250
Virginia Pine	-0-	-0-	86,400	90,900
White Pine	2,391,825	5,464,060	6,881,422	7,777,600
Yellow Poplar	259,400	107,950	1,071,750	581,000
Miscellaneous	1,901,355	3,432,450	7,050	7,600
Totals	57,470,611	83,760,583	97,997,556	83,057,921

DISTRIBUTION OF FOREST TREE SEEDLINGS BY SPECIES

DISTRIBUTION OF FOREST TREE SEEDLINGS BY CLASS OF COOPERATORS

	No. of Cooperators	No. of Trees	No. of Cooperators	No. of Trees
Class of Cooperators	Biennium	1958-1960	Cumulative Grand Total	
Farmers Industries Schools State Club & Organizations Municipalities Federal Agencies Others	. 115 . 73 . 18 . 107 . 25 . 16	135,108,450 37,781,000 263,650 1,207,500 2,93,200 2,420,050 3,066,350 914,800	49,602 646 779 231 2,815 118 123 943	276,338,854 155,149,649 3,021,109 6,373,286 1,595,114 10,655,124 15,913,117 10,295,177
Totals	. 13,400	181,055,000	55,257	479,336,430

PUBLICATIONS

The ninth edition of "Common Forest Trees of North Carolina" was reprinted in 1959. To date 75,000 copies of this publication have been distributed to school teachers and pupils. One copy is given free to the teachers and pupils and others are charged 15ϕ per copy.

The Division of Forestry in cooperation with the Tennessee Valley Authority published a booklet entitled "Sawmills and Lumber Production For Twenty-Six Counties in Western North Carolina". This publication contains the results of a comprehensive survey of sawmill activity in lumber production in 26 counties in western North Carolina for the calendar year 1958.

A brochure on the Bladen Lakes State Forest is available to show progress and developments on this area. In cooperation with the Tennessee Valley Authority a "Guide For Watershed Management - The Second Decade" was published for the Town of Waynesville and others interested.

A pamphlet designed to assist forest landowners in marketing various products entitled "Buyers of Forest Products in North Carolina" is available with distribution limited to specific requests.

The primary objective of this 35,000 acre State Forest is to build up a growing stock of timber on the previously over-cut and badly burned area; to utilize all resources including game; to demonstrate that such an area can more than pay its own way under sound forestry operations. The area comprising the State Forest was originally leased from the Federal Government in 1939. In October 1954, the area was deeded to the State with the

exception of certain mineral rights.

A variety of activities are carried on, as noted from the table of receipts acquired during this biennium. The area has been self-supporting since its management by the Division of Forestry. The Forest now pays taxes to Bladen county. These taxes are based on a total valuation of the forested land at \$1,301,570. Taxable value is 35% of this valuation, and the taxes amounted to \$7,142,48 in 1959.

RECEIPTS

BLADEN LAKES STATE FOREST

Fiscal Years 1958-59 and 1959-60

585,593 6,239.75	Board Feet Rough Green Lumber	\$ 247,543.01 13,965.37 70,241.20 160.27 410.50 23,088.45 91.90 3,205.69 1,541.84 1,027.86 428.00 11.50 189.17 4,023.75 450.00 912.99
	Total	\$ 367 291 50

BELOW ARE OUTLINED THE YEARLY GROSS RECEIPTS

SINCE THE YEAR 1939

rear			Amount
1939-40		\$	169.24
1940-41			1,092.57
1941-42			8,786.37
1942-43			16,761,72
1943-44			31,794.00
1944-45			41,848.13
1945-46			26,793.95
1946-47			32,038.56
1947-48 1948-49			31,045.46
1948-49			52,597.53
1949-50			61,189.83
1951-52			93,013.21
1952-53			95,008.23
1953-54			85,735.81
1954-55			85,592.77 95,388.02
1955-56			103.415.33
1956-57			106,850.65
1957-58			23,529.40
1958-59			173,024.78
1959-60			94.266.72
	Total	\$1,4	459,942.28

FOREST INSECT & DISEASE CONTROL

The forest pest situation has been highlighted during the biennium by the oak wilt disease, the white pine blister rust disease and the balsam wooly aphid. Cooperative pest control projects, under the Federal Forest Pest Act, have been continued in combating the oak wilt and white pine blister rust disease. Also, a project has been set up and control work has been started to protect some of the high-value fir stands in Mt. Mitchell State Park from being killed by the balsam wooly aphid.

OAK WILT

This disease is still confined to a five-county area (Buncombe, Haywood, Madison, Swain and Jackson) in western North Carolina. When using the number of new infections found each year (per 100 square miles) as a basis for evaluating the status of this disease, it appears that control against oak wilt is holding this disease in check. This is not the case in eastern Tennessee where no control is being applied.

Year			New	Infections		New Infectio Per 100 Sq.	
1954 ((Control Began)			9		1.1	
1958				12		1.5	
1959				4		.5	
1960 (0	Control work still	in progress but	trend indicates	that results	will be	favorable.)	

WHITE PINE BLISTER RUST

All white pine plantations being established in blister rust areas are being checked to determine the hazard for each individual plantation. Where the hazard is very severe and control costs unreasonable, the landowner is advised to change planting sites or make other adjustments. When control is practical, the necessary work is carried out.

In natural white pine stands, surveys are being carried out to keep up with this disease. Also, control work is being done in some instances as a follow-up to the work that was done through the public work programs during the 1930's.

BALSAM WOOLY APHID

The control project against this insect was underway at the end of the biennium. Approximately 100 acres of the fir type on Mt. Mitchell was being sprayed. Procedures and specifications developed in a pilot test in 1959 are being followed in the spraying.

OTHER PESTS

Other serious pest outbreaks have occurred in several areas of the State. The elm spanworm is defoligating hardwood trees in Cherokee and Clay counties. The Virginia pine sawfly has continued active in the northcentral counties. The southern pine beetle is present in epidemic proportions in Dare and Tyrrell counties. Even though those and some other pests are causing serious damage, both economic and/or technical limitations do not allow all-out direct control at this time.

MINERAL RESOURCES

The Division of Mineral Resources, which corresponds to the geological survey of many states, is the official representative of the Department of Conservation and Development in the fields of geology, mineral resources, mining, and treatment of minerals. As designated by State law, "It shall make such examination, survey and mapping of the geology, mineralogy and topography of the State, including their industrial and economic utilization, as it may consider necessary." Its objective is to improve the general welfare of North Carolina through a better understanding and a wiser use of its geology, topography and mineral resources. The programs of work and the services of the Division may be summarized as follows:-

1. The Division, through its own personnel and in cooperation with the United States Geological Survey and other agencies, carries out systematic surveys on the geology and mineral resources of specific areas which may be treated as units. Such work includes detailed topographic and geologic mappings, systematic sampling, petrographic study, and a general appraisal of the geology and mineral resources of each area surveyed.

2. The Division carries out, in cooperation with various state and federal agencies and industrial concerns, a wide range of mineral investigations restricted to the study of a specific mineral or mineral resource. Individual deposits and prospects are studied, mapped and sampled. Mineralogical and petrographic studies are carried out and a general appraisal is made of each deposit and the resource as a whole.

3. The Division cooperates with landowners, prospectors, small miners and citizens of the State by identifying and reporting on specimens of rocks and minerals sent in for identification. Also, upon requests, mineral deposits are examined and information furnished as to their value and uses when it appears that the furnishing of such information will advance the general welfare of the State.

4. The office of the Division of Mineral Resources serves as a clearing house for this information through the publication of bulletins, economic papers, information circulars, and reports of investigation. These publications which have considerable educational value are sold at nominal prices intended to cover the costs of printing.

GENERAL

Due to the business recession during the biennium 1956-1958, the mineral production of North Carolina in 1957 was the lowest since 1954. Marked improvements began about the middle of 1958 and by the end of that year production was back to normal. As a result, the biennium 1958-1960 was one of the best in the history of the State. The mineral production of 1959 approximated the alltime high of 1954 and 1960 promises to set a new record.

The principal minerals produced in the State in 1959 in the order of value were (1) stone, (2) sand and gravel, (3) mica, (4) feldspar, (5) talc and pyrophyllite, (6) copper, (7) spodument (lithium), and (8) clays. The value of stone increased in 1958 and again in 1959. The value of sand and gravel increased approximately 21 percent in 1959 over 1958. The value of mica increased slightly in 1958 as compared with 1957 but was up 7 percent in 1959 over 1958. Crude feldspar decreased in value in 1958 as compared with 1957 but was up 16 percent in 1959 over 1958. The value of talc and pyrophyllite sold in 1958 was lower than in 1957 but increased 8 percent in 1959 over 1958. The value of copper increased 10 percent in 1958 over 1957 and 33 percent in 1959 over 1958. Collection of production figures on spodumene (lithium) in 1958, for the first time since 1953, showed North Carolina to be the principal domestic producer of lithium miner the Atomic Energy Commission. Production figures, and are not included in the State total. If these figures could be included, the cord would show an all-time high in the value of the mineral production of North Carolina for the years 1958 and 1959. The value of clays and shales used in the manufacture of brick and tile and lightweight aggregate declined 16 percent in value in 1958 as compared with 1957 but increased 23 percent in 1959 over 1958.

Figure 1, shows graphically the value of the mineral production in North Carolina during the decade 1950-1959 as compared with that of the decade 1940-1949.

DEVELOPMENTS IN THE MINERAL INDUSTRY

A number of important developments took place in the mineral industry of North Carolina during the biennium 1958-1960. Appalachian Sulphides, Inc., enlarged its mill at the newly developed Ore Knob Copper mine in Ashe County to a capacity of 800 tons of ore per day and began full-scale production in 1958. This enlarged mine and mill capacity, and the rise in the price of copper, account for the increased value of the copper production in North Carolina. By-product gold and silver in the amount of approximately \$60,000 per year are being recovered from this mine.

Examination and exploration for copper and other minerals were carried out by mining interests at a number of old mines and prospects in the Piedmont and Mountain areas of the State. Geochemical methods were widely used. According to Mining World (April 1960) the deepest exploratory hole, approximately 1400 feet deep, was drilled near the old Phoenix mine in Cabarrus County.

Tungsten Mining Corporation, which closed its mine and mill in Vance County on June 28, 1958, became a Division of Howe-Sound Company in 1959. The mine and mill of Tungsten Mining Corporation in Vance County were reactivated as of April 1, 1960 with approximately 200 employees. In 1959, Cranberry Magnetite Corporation obtained a long term lease on the Old Cranberry Magnetite mine in Avey County and began plans to open the mine and construct a concentrating plant and reduction furnace to process the ore. A small amount of ore was produced from the mine during 1959. This was the first commercial production of iron ore in North Carolina since 1936. Tennessee Copper Company, after a drilling program that indicated the presence of mineable reserves of lead and zinc ore, took over the old Silver Hill mine in Davidson County, in 1959, and began development work. The old shaft has been reconditioned and deepened several hundred feet and plans made for a mill to concentrate the ore. This was probably the mining highlight in the southeast for the year 1959. Due to the failure of the metal titanium to prove suitable for use in industry as had been expected, interest in the ilmenite sands (titanium ore) of Eastern North Carolina, declined and two leases that had been granted by the Department of Conservation and Development to explore for ilmenite in the sounds of the State were allowed to expire by the holders after limited investigations. After extensive exploratory work at the Star mine in Montgomery County, Union Refining and Mining Company of High Point, in 1959, began developing a mine and constructing a modern refinery to mine and process gold ore. Work was progressing satisfactorily at the end of the biennium.

Major developments took place in the lithium industry of the State during the year 1959. Texas Gulf Sulphur Company took a five year option on the holdings of Basic Atomics, Inc., near Lincolnton and planned exploratory work and pilot plant studies. Foote Mineral Company carried out extensive drilling on its Kings Mountain property that proved its spodumene (lithium ore) reserves to be 30 percent higher than previous estimates. Lithium Corporation of America moved its laboratory and producing facilities from Minnesota to Bessemer City where it has had a large plant in operation for several years for the processing of foreign uses. The firm also announced that it would reopen its North Carolina mines in 1960.

There was renewed interest in olivine and the State College Mineral Research Laboratory in Asheville carried out beneficiation studies. Construction of a mill to

process olivine from the Wray mine in Yancey County was started. The oil, gas and sulphur mining lease granted to J. E. Fitz-Patrick of Fort Worth, Texas, in 1957, was transferred to Coastal Plains Oil Company in 1958. In the spring of 1959, Coastal Plains Oil Company drilled 7 wells around Lake Mattamuskeet in Hyde County that varied in depth from 1635 to 2005 feet and contained a total footage of 13,345 feet. No oil, gas or sulphur were found but

plans are being made to do further drilling. Bryant P. Seay of Houston, Texas, drilled two wells in the Hoffman Forest of Jones and Onslow Counties, both of which were dry. Both wells bottomed in basement rock, one at a depth of 1430 feet and the other at a depth of 1335 feet. In September 1959, American Mining and Development Company of New York City drilled one well in Bladen County and one well in Pender County for oil and salt. Neither oil nor salt was found. Both wells bottomed in basement rocks at depth of 700 feet. In June 1960, Peter Henderson Oil Company of New York City drilled three wells in the Hoffman Forest of Jones and Onslow Counties, all of which were dry. Plans have been announced for further drilling.

The production of clays and shales used in the manufacture of brick, sewer pipe, tile and lightweight aggregate, and these products, showed a healthy growth during the biennium 1958-1960. Triangle Brick Company announced a new plant near the Research Triangle in Wake County. Borden Brick and Tile Company completely renovated its plant in Durham. Southern Lightweight Aggregate Corporations enlarged its plant at Aquadale in Stanly County and opened a new clay pit near Leaksville in Rockingham County to supply a nearby plant in Virginia. Tuff-Lite Corporation, remodeled its plant at Salisbury and constructed a new plant near Gold Hill. In 1958, the last year for which figures are available, North Carolina produced one of each three brick manufactured in the Southeastern States and one of each eleven brick manufactured in the United States. In that year it was fourth in the nation with Ohio first, Pennsylvania second, and Texas third.

Consolidations and mergers were the highlight of the stone industry in 1959. Superior Stone Company acquired Bryan Rock and Sand Company and in turn became a division of American Marietta Company. Vulcan Materials Company; purchased the Piedmont Quarry Company, Pioneer Quarry Company, Greystone Granite Quarries, and W. E. Graham and Sons, all of which will operate as the W. E. Graham and Sons Division. Approximately 33 quarries and pits were involved in the transactions. There was continued interest in limestone for cement manufacture and exploration work was carried out by two companies in the Piedmont region and one or two companies in the Coastal Plain. Volunteer Portland Cement Company continued exploration of limestone deposits near Maple Hill, Pender County, until the fall of 1959 when it was taken over by Ideal Cement Company. Early in 1960, Ideal Cement Company announced plans to build a modern portland cement plant at Wilmington.

North Carolina continued to be the leading State in the production of feldspar and mica. The new feldspar plant of Lawson United Feldspar and Mining Company which ws completed at Penland, Mitchell County, near the end of the 1956-1958 biennium was placed in operation, and the Spruce Pine Mica Depot of the General Services Administration of the Federal Government continued to purchase strategic quality mica. Carolina Pyrophyllite Company began mining pyrophyllite on Bowling's Mountain in Granville County and trucking it to a mill at Staley in Randolph County.

WORK OF DIVISION

In keeping with a grogram of Mineral studies recommended by the Mineral Resources Committee and approved by the Board of Conservation and Development at the April 1958 meeting, the systematic work of the Division of Mineral Resources is divided into two major categories: (1) commodity studies and (2) geologic studies. Commodity studies cover specific minerals or mineral deposits such as asbestos, clays and shales, ilmenite, limestones, etc. Geologic studies include detailed geologic mapping and examination of mineral deposits in a specific area.

In the category of commodity studies, four programs were started as follows: (1) limestone studies, (2) ilmenite studies, (3) a geophysical survey of the Deep River Coal Field and (4) asbestos studies. In June 1958, a study of the limestones of the Piedmont and Mountain areas of the State was started in response to the many requests for information on the quantity and quality of limestone in those areas. In the course of the study, a re-examination was made of all the deposits previously known and described in reports now out of print. In addition, deposits of some importance not previously known were located and studied. The deposits were evaluated as to the amount and

availability of rock present and representative samples were collected and analyzed to show the quality of the rock. This information was assembled in a formal report and published in the spring of 1960 as Bulletin 74, "Crystalline Limestones of the Piedmont and Mountain Regions of North Carolina". In June 1958 in response to the many requests being received and at the direction of the Division of Mineral Resources of the Board of Conservation and Development, a study of the ilmenite deposits in the sounds and estuaries of the Coastal Plain was started. This is a longrange program that will require three or four years to complete. Considerable progress was made on the project in the fall of 1958, but with the decline in the interest in titanium, which is obtained chiefly from ilmenite, work on the project was suspended in a favor of more important programs. One of the most important undeveloped mineral resources of North Carolina is the Deep River Coal Field of Chatham, Lee and Moore Counties, which according to Professional Paper 246 of the United States Geological Survey contains more than 100-million tons of coal. A major difficulty in mining this coal is a number of minor faults which interrupt the beds. In July 1959, a geophysical survey of this field, by the use of electro-resistivity equipment, was undertaken. The United States Geological Survey cooperated informally on the project by furnishing the equipment and advising on the work. During the course of two weeks work, it was found that the differences in resistivity of the fault planes and that of the surrounding rocks was not great enough to measure and the project was abandoned. It appears that this difficulty was caused by traces of salt in the formations. A study of the asbestos deposits of the western part of the State was started in the spring of 1959. North Carolina has been a small but steady producer of anthophyllite asbestos for years. While less valuable than chrysotile asbestos, anthophyllite asbestos has a number of important uses and many requests have been received for information on the North Carolina deposits. Most of the deposits are small but they are more numerous than had been expected and indications are that the reserves of asbestos in the State are considerable. Satisfactory progress had been made by the end of June and the field work should be completed by the end of 1960.

In the category of geologic studies, three projects were undertaken as follows: (1) geologic mapping of the Albemarle quadrangle in Stanly County, (2) geologic mapping of parts of Davidson County and (3) geologic mapping of Moore County. The geologic mapping of the Albemarle 15-minute guadrangle has been completed and a geologic map and report on the guadrangle are about ready for publication. The Albemarle guadrangle is an important area from the standpoint of geology and mineral deposits and the report will present valuable information on both. Geologic mapping was continued on a cooperative basis with the United States Geological Survey in Davidson County. Work was first started in the Lexington and Hargrove $7\frac{1}{2}$ -minute quadrangles but has been expanded to include the Denton 15-minute quadrangle. Work in the Denton 15-minute quadrangle is progressing satisfactorily and should be completed in 1961. The Denton 15-minute quadrangle joins the Albemarle 15-minute quadrangle on the north and work in the two quadrangles is being closely coordinated. The objectives of the work in both quadrangles are to map the geology of the area and determine the structural, lithological, mineralogical, geochemical and age relations of the rocks and the bearing these factors have on the mineral resources of the area. Geologic mapping of Moore County was started in the fall of 1959 and the field work was about 75 percent completed at the end of June 1960. Moore County, which is considered one of the best balanced counties in the State, economically, contains rocks of both the Piedmont and Coastal Plain types as well as important mineral resources. When completed, the report on Moore County should make an important contribution to that part of the State. Geologic mapping carried out in cooperation with the United States Geological Survey prior to the 1958-1960 biennium include the Spruce Pine district of Avery, Mitchell and Yancey Counties and the Hamme Tungsten District of Vance County. A report, "Geology of the Spruce Pine District, Avery, Mitchell and Yancey Counties," was approved in January 1960 for publication as a U.S. Geological Survey Bulletin. A report, "The Geologic Setting of the Hamme, Tungsten District, North Carolina," was completed and submitted for publication as a U. S. Geological Survey Bulletin. Copies of both of these reports are on file in the office of the Division of Mineral Resources.

Formal cooperation with the United States Geological Survey on geologic mapping and mineral studies in North Carolina which was started several years ago on a

small scale is beginning to pay dividends. In a letter dated March 22, 1960, the Chief Geologist of the United States Geological Survey listed 10 major non-cooperative projects being carried out on the geological survey instead to major non-coopera-tive projects being carried out on the geology and mineral resources of North Carolina by the Geologic Division of the U. S. Geological Survey. Four of these projects are of special interest. They are: (1) Western North Carolina Pegmatites, Avery, Mitchell and Yancey Counties. This is a special study to collect data on distribution, quality and type of mica in shoots of different pegmatite zones; relation of type of mica to composition of pegmatite minerals and wall rocks; and distribution of mica peqmatites with respect to regional structure, (2) Massive Sulfides of the or mice pegmattres with respect to regional structure, (2) Massive Suffices of the Southeastern States. This includes detailed reconnaissance mapping in the Boone-Jefferson area which is underway, (3) Central Piedmont which consists of detailed geologic mapping in several quadrangles near Concord in Cabarrus and Mecklenburg Counties and (4) Grandfather Mountain area which includes geologic mapping of several quadrangles in the area. Mapping has been completed in the Linville and Table Rock quadrangles and is underway in the Lenoir and Blowing Rock auadranales.

GROUND WATER STUDIES

Ground-water studies were conducted in cooperation with the United States Geological Survey through June 30, 1959. The 1959 session of the General Assembly of North Carolina established a Department of Water Resources which took over all work on groundwater as of July 1, 1959. The following projects were completed as of June 30, 1959: (1) a report, "Geology and Ground-Water of the Greenville Area," was completed and published as Bulletin 73; (2) field work and a report on the geology and ground-water resources of the Wilmington-New Bern area; (3) field work and a report on the geology and ground-water resources of the Fayetteville area; (4) field work and a report on the geology and ground-water resources of the Clinton-Goldsboro area, and (5) field work and a report on a water supply for the Dare Beaches sanitary district on the Outer Banks of Dare County,

COOPERATIVE SERVICES

In addition to the work outlined above, the Division of Mineral Resources serves as a clearing house for information on the geology and mineral resources of North Carolina. During the first half of the biennium a number of well sites were located for towns, schools, state institutions and industries. The Division cooperated with landowners, prospectors, small miners, and people interested in the geology and mineral resources of the State by rendering services not otherwise available. Information and assistance were furnished on asbestos, clays, mica, prophyllite, spodumene, stone, sand and gravel, oil and gas possibilities of the State, radioactive and other minerals. A number of talks were made to civic and mineral clubs, and schools on the geology and mineral resources of North Carolina. The Division cooperated with the Southeastern Section of the Geological Society of America which met in Chapel Hill on April 16-18, 1959 and with the Carolina Geological Society which met at Albemarle on October 24-25, 1959, by preparing guidebooks for field trips. This was considered a valuable service as a number of outstanding geologists from several states attended these meetings. Approximately 1500 rock and mineral specimens were examined for citizens of the State and information furnished as to their identity and value. This type of work is considered important and prospectors and collectors are encouraged to send in specimens for examination. Through the examination of such specimens some of our most important mineral deposits have come into production. The Division serves as a clearing house for the distribution of technical reports on the geology and mineral resources of the State. During the biennium, more copies of maps, bulletins, economic papers and information circulars were sold than during any like period in the history of the Department.

The following publications were issued during the biennium:

Bulletin No. 73, "Geology and Ground-Water Resources of the Greenville Area, North Carolina," by Philip M. Brown. Bulletin No. 74, "Crystalline Limestones of the Piedmont and Mountain Regions of North Carolina," by Stephen G. Conrad.

STATE PARKS

FOR THE PERIOD JULY 1, 1958 - JUNE 30, 1960.

PURPOSES OF STATE PARKS

The Division of State Parks has but one purpose: TO SERVE THE PEOPLE OF NORTH CAROLINA AND THEIR VISITORS BY:

1. Preserving and protecting natural areas of unique or exceptional scenic value not only for the inspiration and benefit of the present generation, but, also, for generations to come. This is the most basic function of state parks and must always be given first priorty.

2. Establishing and operating state parks that provide recreational use of natural resources and outdoor recreation in natural surroundings.

3. Portraying and interpreting plant and animal life, geology, and all other natural features and processes included in the various state parks.

4. Preserving, protecting and portraying scientific sites of statewide importance.

THE GOAL

The ultimate goal toward which the Department of Conservation and Development, through its Division of State Parks, is working is the establishment, development and operation of a system of state parks which will preserve and protect permanently the most important scenic and scientific sites in the state; provide for the people of North Carolina adequate opportunities for outdoor recreation in natural surroundings; and portray and explain the natural and scientific features of the state parks.

In these times, an enormous amount of interest is being focused on outdoor recreation. No other phase of natural resource use is receiving more attention than the recreational use of natural resources. Many agencies - public and private, nation-wide and local - are devoting a great deal of study and thought to what has been called "The Crisis in Outdoor Recreation". No matter who makes it, each study reveals the same basic fact: there are not now nearly enough outdoor recreation areas to meet current demand and the shortage will become increasingly acute unless the acreage devoted to state parks and other outdoor recreation areas is greatly increased.

What causes this overwhelming demand for outdoor recreation resources? Four things: More people. More income. More leisure. More mobility.

All of these factors are at work in North Carolina. Our population has increased and will continue to increase. Our per capita income has increased and will continue to increase. Our leisure time has increased and will increase further. Our mobility, the ability to travel, has increased and will continue to increase, thanks to the automobile and our modern highways:

It will take much more state park acreage than now exists to meet the demands for outdoor recreation created by more people, more income, more leisure and more mobility.

Many authorities in the field of outdoor recreation resources conclude that to meet **present** demands, each state should have three acres of state parks per 100 persons of state population, and that within 30 years, more or less, eight acres of state parks will be required per 100 persons.

North Carolina's state park acreage falls far short of these standards! Three acres per 100 persons to meet present demands means 150,000 state park acres. We now have **less than one quarter** of this state park acreage. Eight acres per 100 persons to meet future demands means from 450,000 to 600,000 state park acres, depending on the amount the state's population increases. The State park program has a long way to go just to catch up with current demand and a great deal further to go to meet future demands.

REPORT OF PROGRESS

The opportunities the North Carolina State Parks give our citizens for enrichment of their personal lives, for enjoyment of outstanding natural scenery, for wholesome recreation and for pyhsical, mental and spiritual renewal and refreshment make the state park system a very important factor in the State's efforts to help its citizens achieve fuller, richer and more meaningful standards of living. During the past two years, state park activities have been concentrated on improving the quality of and expanding these opportunities.

The work the Division of State Parks does to carry out its purposes and functions, and to achieve its goal is complex and varied. To assure its accomplishment in an orderly, efficient and economical manner, this work is organized into nine major divisions as follows:

- 1. Operation for Public Use
- 2. Maintenance
- 3. Interpretive and Public Use Progarms
- 4. Protection and Law Enforcement
- 5. Business Management
- 6. Information and Education
- 7. Personnel Administration
- 8. Planning, Development and Construction
- 9. Cooperation with and Services to Other Agencies

There has been steady progress in each of these divisions of work during this biennium and many accomplishments in each. A summary of progress and accomplishment follows:

1. OPERATION FOR PUBLIC USE

The most vivid proof of the public's need and demand for state parks is the volume of pulic use.

Public use of the North Carolina State Parks continued to increase. State park attendance during this biennium reached an all time high of 3,096,184 - this despite numerous wet weather weekends during the summer of 1958. It exceeded attendance for the biennium ending June 30,1958 by 2.6 percent; attendance for the biennium ending June 30,1956 by 1.8 percent; attendance for the biennium ending June 30,1954 by 14.5 percent; attendance for the biennium ending June 30, 1952 by 26.9 percent; and attendance for the biennium ending June 30, 1950 by 88.8 percent. In ten years, state park attendance has almost doubled.

Even more startling, and actually far more important, are these increase in active use of the state parks:

Public Usa Biennium June 30	Ending	Percentage of Increase Over Biennium Ending June 30, 1958	Percentage of Increase Over Biennium Ending June 30, 1950
Total Attendan	ice3,096,184	2.6	88.8
Camper Days	74,699	45.3	820.0
Picnickers	879,640	3.4	225.0
Swimmers	395,627	26.8	383.0

These figures graphically illustrate the fact that each year more and more of those who come to the state parks are park **users** instead of merely park **visitors** and that each year the state parks mean more and more to those who use them. These figures also make it obvious that to meet the mushrooming demand for state park services that State must finance the acquisition, development, operation and maintenance of many more state parks than it now has.

2. MAINTENANCE

Careful maintenance to protect the public's investment in the state park system is a very important part of state park work. Maintenance is a continuous problem. Day in and day out, maintenance work must be done to keep the state parks and the facilities in them in good condition and to protect the health and safety of state park users.

The maintenance program for each state park is carefully planned in advance to make sure proper priority is given to maintenance projects and to get the most work possible accomplished with available funds and personnel. All maintenance programs are so planned that most major maintenance jobs are done during the late fall, winter and early spring months. This accomplishes two purposes: it permits park personnel to concentrate on operation for public use during the summer months heavy use season and it makes maximum utilization of the time and efforts of field personnel.

During this biennium, a wide variety of maintenance projects ranging from minor repairs to major renovations were completed. The completion of these projects further reduced the backlog of maintenance work and brought the entire state park system closer to being in a first-class state of maintenance. However, many of the structures and utilities in the state park system were built twenty to twenty-five years ago and will require major repairs and renovations to put and keep them in good condition. Funds for doing so have been requested in the budgets for the 1961-63 biennium.

3. INTERPRETIVE AND PUBLIC USE PROGRAMS

Special emphasis continued to be placed on helping park users gain better knowledge and understanding of the **natural** features of each state parks that they can better enjoy and make fuller recreational use of the state parks. Nature study and similar interpretive programs are the main means of doing this and each year personnel of the Division strive to make these programs more interesting and meaningful to the park user. The work of the Chief Park Naturalist in assisting the park superintendents in selecting, training and coordinating the activities of seasonal naturalists, the preparation of exhibits for park museums, guided walks, campfire and other programs, and establishment of marked nature trails are among the things done to make the interpretive programs more interesting and meaningful. Enjoyment and recreational use of natural features are the most inspiring and lasting benefits state parks offer, and interpretive programs are among the truly distinctive services rendered by state parks.

During this biennium, summer naturalists were employed at six state parks (Cliffs of the Neuse, Hanging Rock, Morrow Mountain, Mount Mitchell, Reedy Creek, and William B. Umstead) and these men carried out planned interpretive programs continuously during the summer months. At two state parks, Morrow Mountain and William B. Umstead, these programs were extended to the spring and fall months on weekends.

The park superintendents and park rangers aided many groups large and small, to plan and enjoy their use of the state parks, and assisted other groups with special programs. As in past years, swimming and lifesaving classes were taught at several state parks in cooperation with the American Red Cross.

4. PROTECTION AND LAW ENFORCEMENT

State Parks

Although done without fanfare, and very much taken for granted, protection and law enforcement is a vital part of the state park program. It is the three-part job of protecting the state parks from fire, vandalism, trespass and some of the assaults of nature; protecting the wildlife in the state parks from hunting, trapping and other forms of molestation (all state parks are wildlife sanctuaries); and preserving law and order in the state parks. Neglect or relaxation of protection and law enforcement activities could easily result in severe damage to the state parks and drastic change in the clean, wholesome environment they provide for family recreation.

Continual vigilance, alert patrol and constant attention to fire prevention measures by the park superintendents and park rangers prevented the occurrence of any serious forest fires in the state parks. Two of these - both intentionally set - were at Hanging Rock State Park and burned only one-third of an acre. The person setting these fires was apprehended and brought to trial. The third fire was at Morrow Mountain State Park and burned six square feet. Swift action by field personnel kept these fires from reaching serious proportions.

The installation of radio communication systems in several of the state parks, the continued hearty cooperation of the Division of Forestry in the preparation of fire control plans and other protective measures, the purchase of additional patrol vehicles, making and maintaining friendly relations with park neighbors and keeping state park boundaries clearly marked and posted all helped to make protection more effective.

Due also to the excellent protection and law enforcement work of field personnel, vandalism and littering was less of a problem than it once was and an ideal atmosphere for family use was maintained at all state parks. A number of factors contributed to this, perhaps the most important of which were constant efforts to educate the public in good park manners, and a never-ceasing effort to keep the state parks clean and neat.

Only one building fire occurred during this report period. One of the ranger residences at Cliffs of the Neuse State Park was destroyed by fire on January 1,1959. This loss was partially covered by a payment of \$9,000 from the State Insurance Fund.

The forces of nature did the worst damage to the state parks during this two year period. Trees and other vegetation in several state parks suffered considerable damage from the snow and ice storms of the late winter and early spring of 1960, the infestation of balsam wooly aphid at Mount Mitchell State Park reached serious proportions, and beach erosion at Fort Macon State Park continued to be a major problem.

The balsam wooly aphid infestation at Mount Mitchell State Park was, and is, a matter of grave concern. Unless the infestation is controlled, every balsam tree in the park is threatened with destruction. Both the Division of Forestry and the United States Forest Service have worked intensively to find effective control measures. In 1958, the Southeastern Forest Experiment Station, in cooperation with the Divisions of Forestry and State Parks, made a detailed intensive study of the infestation. Based on the findings of this study, a pilot control project, financed jointly by Federal and State agencies, was carried out in the spring and summer of 1959 to determine what sprays and spraying methods would most effectively control the balsam wooly aphid. Two species of predators, imported from European and Near East countries, were also released on an experimental basis. The results of the pilot control project were carefully evaluated by experts and, in accordance with their advice and recommendations, contracts were let for spraying approximately 106 acres of forest land within Mount Mitchell State Park. This work was commenced in June 1960, and will be carried on to completion.

With a \$50,000 allotment granted from the Contingency and Emergency Fund by Governor Hodges and the Council of State, existing groins at Fort Macon State Park were rebuilt and strengthened and a considerable amount of beach nourishment was done. This work, completed in November 1958, has been effective in maintaining the usefulness of the present erosion control structures and in delaying further damage to dunes and shoreline. However, most of the beach nourishment has been washed away by storms and a great deal more work must be done to completely stop beach erosion.

The State Parks Regulations were revised in January 1959 and copies were sent to the Clerk of Court in each of the 100 counties and posted as required by law.

State Lakes

The Division of State Parks is charged with the responsibility of administering seven State-owned lakes for pulic use. This is primarily a protection and law enforcement job. Three of these State lakes - Jones, Salters and Singletary in Bladen County - are within the boundaries of State parks and are administered under state park rules, regulations and policies. No unusual difficulties are involved in administering these three lakes.

The problems at the other four lakes are entirely different. Only part of the shoreline of Lake Phelps in Washington and Tyrrell Counties is bordered by state park land so this lake is administered primarily under the State Lakes Regulations. Because it does not receive heavy concentrated use, its administration does not involve serious difficulties.

The Department owns no land around White and Black Lakes in Bladen County nor around Lake Waccamaw in Columbus County. Because of its inaccessibility, little use is made of Black Lake. White Lake and Lake Waccamaw receive heavy concentrated use and, because of the entire lack of State-owned land around them, the administration of these two lakes is beset with many problems and difficulties. Administration of these two lakes is the most difficult law enforcement job the Division of State Parks has. Despite this, and the fact that White Lake is badly overused, administration of the State Lakes continued to be effectively and efficiently done. The State Lakes Regulations were revised in January 1959 and copies were sent to the Clerk of Court in each of the 100 counties and posted as required by law.

5. BUSINESS MANAGEMENT

Business management is a very important part of the varied and complex state park program. Accounting for expenditures and receipts; specifying and requisitioning a wide variety of supplies, materials and equipment; property inventorying and accounting; preparing payrolls; and keeping fiscal, equipment, operation and cost records are only a part of business management of the state parks. Upon the prompt and efficient execution of business management activities depends much of the success of the state park program. Among the activities carried on in this phase of state park wark during this biennium were periodic physical inventories of nonexpendable property at each state park, frequent merchandise inventories, and revision of parts of the Forms and Reports Manual.

Earned receipts from the operation of state park facilities during this biennium reached an all time high of \$282,208.20 - an increase of 12.3 percent over the previous biennium. These earned receipts amounted to 35.4 percent of the total administration, operating and maintenance expenditures.

6. INFORMATION AND EDUCATION

The state parks continued to receive excellent publicity in the press, in periodicals and on radio and television. An outstanding example of this publicity was the series of nine articles on state parks featured in the September 1958 through May 1959 issues of NORTH CAROLINA EDUCATION, the official publication of the North Carolina Education Association.

The third, and best, edition of the state park brochure was published in March 1959. This edition has a color cover and contains complete information on the state parks. The brochure was so well received and so much in demand that a second printing was necessary. Copies of the brochure were sent to libraries, Chambers of Commerce, physicians, personnel directors and other selected mailing lists. A fourth edition of the brochure is now in preparation. New publications prepared and issued included: A Guide to the Vegetation of

New publications prepared and issued included: A Guide to the Vegetation of Mount Mitchell State Park and Check List of Plants in Mount Mitchell State Park and on Major Hiking Trails Leading from the Park.

Another measure of the ever growing interest in state parks is the number of requests for information on the state parks. Many more such requests were received during this biennium than during any similar period. On some days, over 100 inquiries were received. Thanks to the brochure and a systematic method of handling them, all inquiries were answered promptly.

New photographs and color slides were taken, classified, indexed and added to the photograph and color slide collections. The color slides have been much used to illustrate the talks given by both field and Raleigh Office personnel. Many such talks were made to a large variety of groups and organizations. In all these talks, indeed in all publicity whatever the media, stress was laid not on getting more people to the state parks but on the opportunities state parks offer for recreation, enjoyment of natural beauty, and personal enrichment and refreshment.

More and more use is being made of the state parks for educational and research purposes. During this report period, many field trips were made to the state parks by school and college classes in connection with the study of the natural sciences and other subjects, and a number of scientists used the state parks in connection with research projects. Each year, school camps were conducted in one of the state parks by city school systems.

7. PERSONNEL ADMINISTRATION

The successful achievement of the mission of the Division of State Parks and the quality and quantity of the benefits and services the people of North Carolina receive from the state park system depend to a large degree upon state park employees. Much time and effort has, therefore been devoted to all phases of personnel administration from selecton of employees to systematic job performance evaluation. Constant review of the basic purpose and objective of the North Carolina State Park

system, annual park superintendents meetings, training sessions in specific phases of state park work, on-the-job training, review and revision of organization charts, preparation of detailed written job and operating routines for state park operation, and many other activities were carried on - all with the objective of helping each employee to do a first-class job of discharging his duties and responsibilities. These activities, together with modest salary increases, improvement and expansion of housing and working facilities and more adequate staffing of each state park have resulted in a continued increase in the know-how, efficiency, production and morale of all state park employees.

As shown by the following tabulation, there was some turnover of personnel. As far as possible, vacancies were filled by promotion of employees.

		Date Vacancy		Date of
State Park	Position	Occurred	Replaced by	Replacement
Fort Macon	¹ Park Ranger II	5/31/59	Promotion of Park Ranger I from Hanging Rock	7/1/59
	¹ Park Ranger I	5/31/60	Not yet filled	
Hanging Rock	² Park Ranger 1	7/1/59	New employee	10/1/59
Jones, Singletary, and State Lakes	¹ Park Supt. 1	5/23/58	New employee	7/1/58
Morrow Mountain	¹ Park Ranger II	11/15/58	Promotion of Park Ranger I at Morrow Mountain	12/1/58
	² Park Ranger I	12/1/58	New employee	12/1/58
Mount Mitchell	¹ Park Ranger II	5/31/60	New employee	6/1/60
Reedy Creek	² Park Supt. 1	1/2/59	Promotion of Park Ranger I at Reedy Creek	2/1/59
	² Park Ranger I	2/1/59	New employee	6/1/59
	⁸ Park Supt. 1	6/10/59	New employee	8/17/59
William B. Umstead	¹ Park Ranger I	3/31/60	⁴ Park Ranger II at William B. Umstead	5/1/60
Raleigh Office	¹ Chief Park Naturalist	9/16/59	New employee	2/1/60
	¹ Landscape Architect 1	1/15/60	Not yet filled	

¹ Vacancy caused by resignation of employee.
 ² Vacancy caused by promotion of employee.
 ³ Vacancy caused by termination of employee.
 ⁴ This employee had been filling position of an employee on military leave who returned to his job.

Careful attention was, as usual, given to interviewing, selecting and employing the 84 full time summer employees. Much of the success of state park operation depends on these summer employees.

Four additional permanent employees (Park Ranger I at Fort Macon and Mount Mitchell State Parks, Park Attendant at Pettigrew State Park and Stenographer II in the Raleigh Office) and nine additional seasonal employees were authorized in the 1959-61 budget. The addition of these employees made it possible to further improve standards of operation and maintenance.

To comply with the letter and spirit of the State Minimum Wage Law, adjustments were made in the salaries of summer personnel to assure a minimum wage rate of 75¢ an hour.

8. PLANNING, DEVELOPMENT AND CONSTRUCTION

Planning

Thought and study were given to how many additional state parks will be required to meet current and future demands for state park facilities and to where new state parks should be located. Factors considered included probable size, composition and distribution of the state's population; probable increases in per capita income; probable increases in leisure time; probable changes in mobility; responsibilities for outdoor recreation areas and facilities that should be assumed by counties. cities and towns; and the part private enterprise might play in providing outdoor recreation facilities. In addition to making its own studies and doing its own advance planning, the Division of State Parks has participated in surveys and studies concerning outdoor recreation resources being conducted by a number of agencies including the National Park Service, the Outdoor Recreation Resources Review Commission, and the American Forestry Association.

During this biennium, personnel of the Division designed, prepared working drawings, wrote specifications and supervised the construction of most of the projects included in the 1957 Capital Improvements Program as well as for some of the 1959 Capital Improvements Projects. In addition, Division personnel worked on preparation of museum exhibits and a variety of other jobs.

At the request of the Committee on State Parks, a detailed study was made to assess the quality of all phases of the state park program. This report, entitled Evaluation of the Quality of the North Carolina State Park Program and Comparison with the Quality of State Park Programs in Other States, was made with the assistance of persons of long and wide experience in state park work. After careful study of this report, the Committee recommended that the North Carolina State Park Program continue to be carried out in accordance with present policies and standards.

Land Acquisition

New Areas

Clearing title to Bear Island, which the Hammocks Beach Corporation is giving to the State, has been delayed by a number of circumstances beyond the control of the Department. Most of the difficulties have now been overcome, and the way cleared for proceeding with the friendly condemnation proceedings necessary to clear title to the island.

Additions to Existing Areas

One very important phase of the program to bring each existing state park to the highest possible standards - land acquisition - is well underway. Many interior holdings, and adjacent holdings having the effect of interior holdings, have been purchased and efforts are being made to acquire all remaining such holdings. Tracts purchased during this biennium are:

State Park	Purchased From	Date Purchased	Acreage
Cliffs of the Neuse	A. T. Garris	Dec. 22, 1958	0.11
Reedy Creek	J. W. Booth Estate Mrs. Mabel Booth Young L. C. Daniel Mrs. Eleanor Gore Claude H. McGhee	July 31, 1959 Aug. 4, 1959 July 30, 1959 July, 1959 July, 1959 June 28, 1960	10.1 34.0 40.0 5.0 2.61
William B. Umstead	²⁷ Fietta Blake Estate Mr. and Mrs. T. E. Slater Mr. and Mrs. J. W. King Lola Slater Kina and	Jan. 28, 1960 Jan. 28, 1960 Jan. 28, 1960	21.35 2.05 2.34
	Berbia Blake ³ Cities of Raleigh and Durham) Counties of Wake and Durham)	Jan. 28, 1960 July 18, 1958	1.31 84.09
White Lake	* Bladen Insurance and Realty Company	Aug. 22, 1958	.06

¹ Acquired by exchange of equal acreage of State-owned land. ² One-half interest acquired by purchase. Remaining one-half interest to be acquired by condemnation.

³ Acquired by exchange of 60.94 acres of State-owned land.
⁴ To be used for administrative purposes only.

Other tracts at Mount Mitchell, Reedy Creek and William B. Umstead State Parks are now in the process of being acquired.

Investigation of Proposed Areas

A number of areas were proposed for addition to the state park system and all were carefully investigated. One, an area of four acres containing what is claimed to be the oldest holly tree in the state, was not approved for inclusion in the state park system because it did not meet established standards. Another, Chimney Rock,

was not approved because the sum required to purchase it, \$500,000, was not available and also because other areas proposed for state parks have higher priority. The Wilkes Reservoir was re-examined but no change was made in the decision not to approve its inclusion in the state park system. An area in Pender County, known as the Burgaw Prairie, was examined. Once a unique natural garden, the area has been so changed by agricultural development as to be unsuitable for state park use. Several sites in Henderson County proposed for state parks were investigated but none were found to meet established standards.

Preliminary investigation was made of two public utility reservoir areas - Duke Power Company's Cowans Ford Reservoir lying in Mecklenburg, Iredell, Lincoln and Catawba Counties and Virginia Electric Power Company's Gaston Reservoir in Halifax, Northampton and Warren Counties. Both reservoirs are under constuction and detailed investigations and surveys will be made of each to determine whether or not they are suitable for inclusion in the state park system.

DEVELOPMENT AND CONSTRUCTION

Most of the 36 projects included in the 1957 Capital Improvements Appropriation have been completed or are in the last stages of construction. These projects have added a variety of much needed public use facilities and other improvements to the state park system. The current status of each project is given in Table 3.

The 1959 Capital Improvements Appropriation of \$480,000 included three major and two minor projects. The three major projects are \$150,000 for land acquisition at Mount Mitchell and other state parks, \$150,000 for beach erosion control at Fort Macon State Park, and \$172,000 for preliminary development of Hammocks Beach Bear Island) State Park. Surveys have been completed, appraisal made of, and negotiations are now underway with the owners for the purchase of land for addition to Mount Mitchell State Park. Bids were twice received on the erosion control work at Fort Macon State Park and twice rejected as too high. It is now planned to await completion and publication of the Corps of Engineers-Beach Erosion Control Board Study of beach erosion in the Fort Macon-Atlantic Beach Area before re-advertising for bids. Work on the Hammocks Beach State Park Projects must await successful conclusion of the friendly condemnation proceeding and delivery of acceptable title to the State. Of the two smaller projects, the \$1,500 project for repairs at Morrow Mountain is almost complete, and the \$7,000 project for repairs at Pettigrew State Park is underway.

In addition to capital improvements projects, a parking area at Mount Jefferson State Park was built by the State Highway Commission with an allotment made by Governor Hodges from his Highway Surplus Fund and a boardwalk was completed at Lake Waccamaw.

9. COOPERATION WITH AND SERVICES TO OTHER AGENCIES

The Division of State Parks cooperated in a variety of projects with other agencies and rendered a number of consultatory and other services to various public and private agencies during the biennium. Among the agencies with which the Division cooperated in various ways were the North Carolina Cape Hatteras Seashore Commission, Keep North Carolina Beautiful, the Armed Services, National Park Service, and a number of State agencies.

The Division has been most fortunate in receiving hearty cooperation and assistance from a number of State and Federal agencies. Appreciation is particularly dueto the other Divisions of the Department of Conservation and Development, the State Highway Commission, the United States Forest Service, the National Park Service, and the Property Control and Construction Division of the Department of Administration.

RECOMMENDATIONS FOR FURTHER PROGRESS

An enormous amount of work remains to be done to improve and expand the state park system to the point of adequately meeting the demands made upon it. To do this, the following must be done:

CHRO

A. PROVIDE THE INCREASES IN THE STATE PARK MAINTENANCE BUDGET REQUIRED TO ADEQUATELY MAINTAIN AND OPERATE THE EXISTING STATE PARKS FOR PUBLIC USE.

State park budgets and state park personnel are still insufficient to adequately maintain and operate the state parks for the volume of public use they receive. Much more should be done to carry out programs that provide for public use of the natural features of the state parks.

B. PROVIDE THE ADDITIONAL TECHNICAL PERSONNEL REQUIRED FOR SOUND PLANNING AND ECONOMICAL DEVELOPMENT OF THE STATE PARK SYSTEM.

An adequate staff of competent technical personnel is absolutely essential for sound planning and economical development of the state park system. The addition of two technical employees would make possible the careful advance planning necessary for economical and efficient development of the state park system.

C. PROVIDE THE CAPITAL IMPROVEMENTS APPROPRIATIONS REQUIRED TO COMPLETE LAND ACQUISITION AND DEVELOPMENT AT EXISTING STATE PARKS.

One of the most urgent jobs still to be done is the completion of land acquisition programs at the present state parks. Failure to acquire necessary lands has left most of the state parks with either interior holdings or irregular boundaries, or both. This is severely handicapping protection and development for public use. In some cases, protection of state property from fire, vandalism and other damage is made extremely difficult if not virtually impossible.

D. PROVIDE A LAND PURCHASE FUND FOR ACQUISITION OF NEW STATE PARKS.

The present number of areas in the state park system are too few to render reasonable service to the people of North Carolina. Additional areas are needed if the basic purposes and objectives of the state park program are to be achieved. These areas are necessary for three reasons: (1) to bring state park services to all sections of North Carolina; (2) to preserve certain areas for their greatest public benefit; and (3) to prevent the over-use and consequent deterioration of existing state parks. There are many gaps in the state park system that must be filled.

E. PROVIDE FUNDS FOR BUILDING PUBLIC USE FACILITIES ON NEW STATE PARKS.

Once they are acquired, roads, parking areas, sanitary facilities and a number of public use facilities will be needed in new state parks.

All of these recommendations should be carried out in strict accordance with Principles Governing the Establishment, Extension and Development of the State Park System of the State of North Carolina and Park, Parkway and Recreational Area Study of North Carolina. TABLE 1 STATE PARKS PUBLIC USE RECORD CAMPER DAYS

NAME OF AREA	ATTEN	TOTAL	PICNICKERS	KERS	TENT & TRAILER	LER LER	ORGAI	ORGANIZED	SWIN	SWIMMERS	НК	HIKERS	CABINS	NS	FISH	FISHING
	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FΥ 1960
STATE PARKS:																
Cliffs of the Neuse 145,482	145,482	115,152	40,899	32,929	3,856	3,921			30,154	22,407	13,634	10,700			106	285
Fort Macon	1435,573	2427,722	50,432	45,891					103,164	86,189	7,442	7,089			50,500	49,835
Hanging Rock	172,828	179,339	64,246	52,840	13,822	15,557			47,211	40,364	31,831	25, 244	3,131	3,283	135	
Jones Lake	68,164	64,460	53,914	51,259	723	648			13,068	10,882					264	347
Morrow Mountain	231,841	225,723	116,179	115,051	8,671	10,052			21,369	20,819	21,395	22,908	1,557	1,907	6,073	5,438
³ Mount Jefferson	4,875	8,130	1,722	2,728												
Mount Mitchell	312,007	242,642	54,815	50,608	3,670	3,790					2,964	3,092				
Pettigrew	20,062	21,538	4,235	4,014	545	991									3,166	3,232
Reedy Creek	27,163	32,789	22,530	24,014			4,050	3,325							ţ	92
Singletary Lake	9,843	11,048			18		5,710	5,856							380	315
William B. Umstead	170,932	158,871	46,440	44,894	3,932	4,503	14,711	11,300			21,741	18,443			263	142
TOTALS 1,598,770 1,497,414 455,412	1,598,770	1,497,414	455,412	424,228	35,237	39,462	24,471	20,481	214,966 180,661	180,661	99,007	88,674	4,688	5,190	60,891	59,686
¹ Includes 289,595 visitors to Fort		Macon.						•								

² Includes 233,683 visitors to Fort Macon. ³ Operated only July 1—September 15, 1958—June 1-30, 1959 Operated only July 1—September 15, 1959—June 1-30, 1960

The Geodetic Survey Division is in the process of being activated pursuant to Chapter 102, General Statutes, as amended by action of the 1959 Session of the General Assembly. A study of applications for the position of Director of this new Division has been made and interviews held with a number of technically qualified. men. A selection of the man and the prompt activation of the survey will take place immediately after the end of the fiscal year 1959-60.

An outline of the functions of this Division is furnished under Table of Organization. Basically the duties of the Division are "To make or cause to be made from time to time such surveys and computations as are necessary to further or complete the North Carolina Coordinate System. The agency shall endeavor to carry to completion as soon as practicable the field monumentation and office computations of the Coordinate System. - - - -"(1939,c.163,s.9) and under the law of 1959 (102-12) "shall prepare for publication and cause to be published before July 1, 1962, a map or maps setting forth the location for both horizontal and vertical control, together with such other pertinent data as the agency may direct for implementation of the North Carolina Coordinate System.- - -""

A geodetic survey is a survey which covers so large an area, such as a city, county or state, that the size and shape of the earth must be considered in the computation of the results. In order to save the local surveyor the task of computing his surveys with rather complex equations, a mathematical system, called the State Coordinate System, was developed whereon the usual methods of east-west and north-south coordinates were used. The tangeable, concrete survey monuments, which this Division is directed to establish, will be of inestimable value to all engineers and surveyors in their field of work. The field surveys, office computations and publication of the data for the public will be the major fields of endeavor for this new group. It will require many years of constant application, but each years added production will have a snow-ball effect on the wide spread use of the system.

DEPARTMENT PERSONNEL

Administration

Wm. P. Saunders	Director
J. Edgar Kirk	Assistant Director
Wade H. Lucas	
Sidney C. Holden	Auditor
	A accounting Claub
Eula M. Lincoln	
Mrs. John C. Bagley	
Victor Barfield	
Latona P. Crabtree	Accounting Clerk
Letha P. Burgess	Stock Clerk
Stewart B. Tucker, Jr.	Duplicating Machine Operator
Harold N. McClain	Duplicating Machine Operator
Gladys J. Gooch	Stenographer
Betsy S. Brown	Stenographer Clerk
Betty J. Spence	Clerk
Peggy Bennett	Bookkeeping Machine Operator
Vernette Dean	Typict Clock
	Typist Clerk
Herman Hinton	Janitor-Messenger

DIVISION OF STATE ADVERTISING

Charles J. Parker	State Advertising Director
Miriam G. Rabb	Public Information Officer
Charles E. Kelly	Photographer
James R. Denning	Photographer
A. Evelyn Covington	Administrative Assistant
Alva J. Hudson	Stenographer Clerk
Sylvia A. Bolton	Stenographer Clerk
Connie C. Clark	Stenographer Clerk
Mildred F. Strickland	Typist Clerk
Mildred B. Turner	Typist Clerk
Florence B. McLaurin	Typist Clerk

DIVISION OF COMMERCE AND INDUSTRY

Wm. R. Henderson	Industrial	Development	Administrator
Paul KellyIndustria	Developm	nent Assistant	Administrator
Thomas B. Broughton	Industrial	Development	Representative
Cecil E. Bell			
William C. Guthrie			
Allison D. Allison			
Lewis F. Dunn			
Robert E. Leak			
James B. Hauser			
James D. Little, Jr.			
Richard P. Mauney			
Mashall L. Shepard			
Marshall T. Wills			
Hunter A. Poole			
W. H. Riley			
Robert W. Whitfield			
Eugene Harris			
Renno J. Hawkins			
Robert C. Emanuel			
Patricia T. Allen			
Gladys B. Merritt			
Alice E. Alderman			
Peggy B. Milhan			
Doris M. Boseman			
Elizabeth Cummings		Sten	ographer Clerk

Enid H. Kass	Stenographer	Clerk
Patricia F. Hairr	Stenographer	Clerk
Frances M. Falvey		
Virginia Satterfield	Typist	Clerk

DIVISION OF COMMERCIAL FISHERIES

ADMINISTRATION:

C. G. Holland	
Leon K. ThomasAssistant Fisheria	s Commissioner
OFFICE STAFF:	
Norman R. WebbA	
Ruth R. Walker	
Ruth H. Thompson	
Bertie E. Haislip	
Cecil W. PhelpsBui	Iding Custodian

LAW ENFORCEMENT SUPERVISORS:

Frank	Ε.	Hopkins	Law	Enforcement	Supervisor
Willis	С.	Mobley	Low	Enforcement	Supervisor

INSPECTORS:

R. Clifton Wilson	Inspector
Frank Taylor	Inspector
Ralph L. Jones	Inspector
Joseph Simmons	Inspector
Thomas L. Evans	
Glen L. Harris	Inspector
Alton Alonza McLawhorn	
Silas Vann Sneeden	Inspector
John D. Whiford	Inspector
Marvin E. Haislip	Inspector
Charles T. Kellum	Inspector
Gerold D. Perry	Inspector
Enoch W. McGahey	Inspector
Roger L. Spencer, Jr.	Inspector
Leland Wise	Inspector

OPERATION PATROL BOATS:

Arthur E. Rose	Airplane Pilot
Thomas A. Basnight	Captain
Charlie W. Ange	Captain
Tilton Davis	
Claude L. Sawyer	Captain
Roma G. Salter	
Charles Clifton Edwards	Captain
Samuel H. Gerock	
Lem H. Hardy, Jr.	
Daniel E. Sadler	Engineer
Kenneth M. Gaskill	
Arnold L. Daniels	
James H. Spencer	Crewman
Jack N. Mason	Crewman

SHELLFISH DIVISION

Charles S. Goodwin	.Patrol	Boat Captain
Reginald F. Lewis	.Patrol	Boat Captain
William R. Willis		
Wilbur S. Godwin		
Liston T. Yopp		Inspector

DIVISION OF FORESTRY

RALEIGH OFFICE

F. H.	Claridge	State	Forester
-------	----------	-------	----------

Harvey C. Barron
M. M. Carstarphen
W. J. ClarkAssistant Forester
S. A. DowdellIndustrial Forester
H. J. Green
P. A. GriffithsAssistant State Forester (Mgt.)
B. S. Hays
L. E. Hicks
J. B. Hubbard
A. H. MaxwellPest Control Project Forester
B. E. Sanford
H. L. Terry
P. W. TillmanAssistant State Forester (F.C.)
Cage Webb
R. C. Winkworth
Ann Coley
Roxanna D. DudleyStenographer Clerk Elizabeth J. HouseStenographer Clerk
Reba R. Johnson
Elizabeth Peterson
Grace Prevost
Betsy Shearin
Jean R. Tew
Carrie Lee Walters
Mabel D. Young
Maber D. Toung
Region I (Districts 4, 7, 8, 13)
R. C. Winkworth
Charles B. Aycock Brown, Jr

DISTRICT PERSONNEL

District No. 1-Asheville

B. H. Corpening	District Forester
R. F. Penland	Assistant District Forester
M. N. Shaw, Jr.	Service Forester
W. L. Reeves	District Ranger
G. E. Bethea	Watershed Forester
T. L. Byrd	
Ruth M. Holt	

F. H. Ledbetter District For Hamilton Erwin, IIIAssistant District For A. D. WilliamsDistrict Ra E. P. SimmonsDistrict Ra Nancy Dula (Temp)Stenographer Clerk (To	ester nger nger
District No. 3—Rockingham	
J. A. Pippin	ester ester nger ank)
District No. 4—New Bern	
D. R. Varner District For Hugh A. Tate District For Charles A. Fox Service For E. C. Ferebee District Ra L. W. Davis District Ra J. W. Raines District Mech Stewart T. Howard Equipment Ope Carolina H. Davis Stenographer Ope	ester ester inger inger inger inger inger inger
District No. 5—Rocky Mount	
E. F. Corn	ester ester ester inger nanic rator
District No. 6—Fayetteville	
Henry S. Plotkin District For H. G. Harris Assistant District For R. M. McElwee Service For Walter H. Gaddy District Ra J. T. Wright Radio Engineer (Re R. B. Hendrix Mechan H. E. Campbell Forestry Pilot (Re Anna Campbell Stenographer C	ester ester inger g. II) nic I eg.II)
District No.7—Elizabeth City	
Ernest W. Looney District For David E. Bobbs Service For T. F. Lowry District Ra W. R. Gregory District Ra Hersey Smithson District Mech J. R. Williams Equipment Ope Elizabeth Harrell Stenographer C	ester inger inger ianic rator
District No. 8—Whiteville	
T. S. Rhyne, Jr	ester ester inger inger inger

George C. Blake
District No. 9—Sylva
Charles C. Pettit, Jr. District Forester Francis L. Thorne Service Forester Dover J. Dean District Ranger Waymon W. Webb District Mechanic Ellen N. Corbin Stenographer Clerk
District 10—Lexington
J. S. Hinshaw District Forester Robert G. Carney Assistant District Forester Mr. Lois V. Tysinger Stenographer Clerk
District 11—Chapel Hill
W. R. KiserDistrict Forester M. T. TilghmanAssistant District Forester John E. A. NicholsonAssistant District Forester V. G. WatkinsService Forester John R. ThomasDistrict Mechanic Graham H. MoselyRadio Engineer (Reg. II) Nettie B. WilburnStenographer Clerk
District 12—Belmont
F. N. CravenDistrict Forester Hilda B. HopeStenographer Clerk
District 13—Fairfield
John M. Deyton
Clayton Warehouse
W. L. JohnsonCarpenter-Foreman
Bladen Lakes State Forest
G. V. Chamblee Forest Supervisor Gilmer G. Green Assistant Forest Supervisor Nash Tatum Logging Supervisor Robert E. Flynn Logging Supervisor I Peggy Gillespie Stenographer Clerk
Clayton State Forest Nursery
Moody Clemmons
Holmes State Forest Nursery
Homer OrrLabor Foreman
Little River State Forest Nursery
W. A. BlandNursery Superintendent R. L. WatkinsNursery Foreman
Edwards State Forest Nursery
D. L. Brenneman

FIELD PERSONNEL

District No. 1

Ralph W. Soles Ray A. Hipps Clyde W. Curtis James E. Rhodes James M. Chondler Monroe U. Marlowe J. Bruce Street Joseph B. Ritchie Corvos E. Parton John C. English

District No. 2

William G. Lackley Andy Mock Royoll Joseph F. Clayton Julius R. Ollis Robert C. Perkins John Ray Hoover R. E. Cromer Ray E. Norman Crayte P. Teogue Edwin H. McGee

District No. 3

Earl E. Robertson A. B. Clark J. B. McLeod A. C. Farrell Carl Wood Travis A. Wicker V. E. McCrimmon W. G. McCrimmon Rober F. Freeman D. R. Lockhort A. R. McMillan

District No. 4

Henry S. Woolard Thurman W. Bonner Marvin D. Ormond Edmund M. Foremon Jomes A. Powell W. Clavin Morris Laster T. Boker Kelly Morton Eugene C. Wells Odell Roynor Alfred D. Andrews B. E. McDoniel John L. Ives Clifton Heath Robert H. Kinsey George C. Davis Vernon J. Doniels J. L. Hardison W. T. Lowrimore

COUNTY

Buncombe
Buncombe
Buncombe
Henderson
Madison
McDowell
Mitchell
Polk
Rutherford
Yancey
- uncey

Alexander Alleghany Ashe Avery Burke Coldwell Stokes Surry Watauga Wikes

Anson Chatham Hoke Lee Montgomery Moore Moore Richmond Richmond Scotland

Beoufort

Beoufort Beoufort Carteret Corteret Croven Craven Croven Duplin Duplin Duplin Jones Lenoir Jones & Lenoir Onslow Onslow Pamlico Sandy Run Assoc. State College Assoc. Forest Ronger Forest Ronger Forest Towermon Forest Ronger Forest Ronger Forest Ranger Forest Ranger Forest Ranger Forest Ranger Forest Ranger

> Forest Ranger Forest Ronger Forest Ranger Forest Ranger Forest Ranger Forest Ranger Forest Ranger Forest Ranger Forest Ranger

Forest Ranger Forest Ranger Forest Ranger Forest Ronger Forestry Aide Forest Ranger Forest Towerman Forest Fire Equip. Opr. Forest Fire Equip. Opr. Forest Fire Equip. Opr. Forest Ranger

Forest Ranger Forest Ranger Forest Fire Equip. Opr. **Forest Ranger** Forest Fire Equip. Opr. **Forest Ranger** Forest Ronger Forest Ranger **Forest Ranger** Forest Ronger Forest Fire Equip. Opr. **Forest Ronger Forest Ronger** Forest Fire Equip. Opr. **Forest Ronger** Forest Fire Equip. Opr. Forest Ronger Forest Ranger **Forest Ranger**

District Na. 5

Herbert E. Hathaway, Jr. Joseph A. Pearce Zell C. Smith Jardan W. Jahnsan T. E. House W. L. Lawrence, Jr. Jodie Burgess Leroy W. Wheeler N. S. Tyson James P. Dickersan W. F. Davis R. E. Dentan

District Na. 6

Peter P. Smith R. Bruce Culbreth William J. Easom J. Ellis Byrd Herman J. Whitley Wade P. Cracker William E. Herring Henry B. Osborne Milford E. Pennigton

District No. 7

Miles J. White James M. Castelloe Mantelle B. Williams Roger C. Spivey Harry L. Langston, Jr. Charles M. Edwards Mills J. Williams M. H. Leggett Graham C. Harris Lewis Stallings

District Na. 8

Frank B. Sholar Curtis W. Sessoms Kenneth D. Jahnson Lester L. Edwards J. B. McDowell B. Frank Batten Charles T. Butler M. J. Lanier James V. Casteen Braddie N. Pait David E. Carter Joseph A. Strickland S. J. McKoy G. T. Reid John P. Millican Beamon Strickland A. Ray Dyson Alva O. Squires James A. Davis Edgecambe Franklin Greene Halifax Halifax Nash Nash Nash Narthamptan Pitt Pitt Warren Wilsan

Cumberland Cumberland Harnett Johnstan Johnston Sampson Sampson Wayne

Bertie Bertie Camden Chowan Gates Hertford Hertford Martin Pasquotank Perquimans

Bladen Bladen Bruswick Bruswick Brunswick Columbus Calumbus Pender Pender Robeson Rabeson Robesan Holly Shelter Assoc. Ortan Assoc. Riegel Assoc. Riegel Assoc. Sou. Bruns. Assoc. Waccamaw Assoc. Waccamaw Assoc.

Forest Ranger Forest Ranger Forest Ranger Forest Ranger Forest Fire Equip. Opr. Forest Ranger Forest Ranger Forest Ranger Forest Ranger Farest Fire Equip. Opr. Farest Ranger Farest Ranger

Forest Ranger Forest Ranger Farest Fire Equip. Opr. Forest Ranger Farest Ranger Forest Fire Equip. Opr. Forest Ranger Farest Fire Equip. Opr. Forest Ranger

Forest Ranger Forest Fire Equip. Opr. Forest Ranger Forest Ranger Forest Ranger Forest Ranger Forest Fire Equip. Opr. Farest Ranger Forest Ranger Forest Ranger

Forest Ranger Farest Fire Equip. Opr. Forest Ranger Forest Ranger Forest Fire Equip. Opr. Forest Ranger Forest Fire Equip. Opr. **Farest Ranger** Forest Fire Equip. Opr. Farest Ranger Farest Ranger Forest Fire Equip. Opr. **Farest Ranger** Forest Ranger Farest Ranger Farest Fire Equip. Opr. Forest Ranger Forest Ranger Forest Fire Equip. Opr.

District No. 9 Harold E. Hatchett Cherokee Forest Ranger Jack H. Parker Clay Forest Ranger John A. McKeldrey R. E. Caldwell Graham **Forest Ranger** Haywood Forest Ranger Charles Evans Robert J. Bryson Wade A. Sutton Clark Grissom Forest Ranger Forest Ranger Jackson Macon Swain Forest Ranger Transylvania Forest Ranger District No. 10 Brvant Braswell, Jr. Davidson Forestry Aide Forester John F. Spivey, Jr. Guilford Ronald A. Brown Iredell Forester John C. Davis Jack M. Farmer Randolph Forester Yadkin Forestry Aide District No. 11 Robert B. Jones Durham Forestry Aide Forestry Aid (Soil Bank) William D. Colville Granville D. C. Critcher Alamance Forest Ranger John D. Harris Forestry Aide Orange R. C. Daniel C. W. Stoffregen, Jr. Vance Forest Ranger Wake Forestry Aide George E. Tilley Wake Forest Ranger Hermon P. Tillerson Caswell Forestry Aide District No. 12 Edward N. Seltzer Carbarrus Forester Stanley R. Swanson Catawba Forester Cleveland Paul Davis Forester John U. Perry John S. Hawk Forester Gaston Lincoln Forester John W. Stokes Stanly Forester District No. 13 Dane Roten Dare Forester Hyde Forest Ranger

B. C. Simons Macon O. Howard J. Edward Swain Marvin Voliva W. E. Spear Richard L. Davenport

Forest Ranger Forest Fire Equip. Opr. Forest Ranger Forest Fire Equip. Opr. Forest Ranger Forest Fire Epuip. Opr.

DIVISION OF GEODIC SURVEY

Washington

Washington

Hyde

Tyrrell

Tyrrell

Philip C. Doran	Directo	r
Helen B. Brother	rsStenographer Cler	k

DIVISION OF MINERAL RESOURCES

Dr. J. L. Stuckey	State Geologist
Stephen G. ConradAsis	
James F. Conley	
Oscar B. Eckhoff	
William F. Wilson	
Penny R. Stamatelos	

DIVISION OF STATE PARKS

Administration

Thomas W. Morse Superintendent State Parks Thomas C. Ellis Assistant Superintendent State Parks Wilbur C. Fuller Civil Engineer John R. Kibler Landscape Architect Conley L. Moffett Chief Park Naturalist George E. Wiles Accountant Walter K. DeBerry Building Maintenance Supervisor Mary E. Sanders Stenographer Clerk Lorraine C. Harrold Stenographer Clerk Cornell W. Chappell Accounting Clerk
Cliffs of the Neuse, Wayne County
Bruce Price
Fort Macon, Carteret County
Ray S. Pardue
Hanging Rock, Stokes County
George H. SuttonPark Superintendent Carl R. FlinchumPark Ranger Charles H. MiltonPark Ranger James R. SpeerPark Ranger
Bear Island State Park, Onslow County
Jones and Singletary Lake Camp, Bladen County
Myers G. Braxton
Manage Manage in Strate Count
Morrow Mountain, Stanly County
Cedric P. Squires
Cedric P. Squires
Cedric P. Squires Park Superintendent James C. Gulledge Park Ranger Clyde H. Miller Park Ranger Charlie J. Mills Park Ranger Mount Jefferson Area, Ashe County
Cedric P. Squires Park Superintendent James C. Gulledge Park Ranger Clyde H. Miller Park Ranger Charlie J. Mills Park Ranger
Cedric P. Squires Park Superintendent James C. Gulledge Park Ranger Clyde H. Miller Park Ranger Charlie J. Mills Park Ranger Mount Jefferson Area, Ashe County Mount Mitchell, Yancey County Smith Ray Park Superintendent
Cedric P. Squires Park Superintendent James C. Gulledge Park Ranger Clyde H. Miller Park Ranger Charlie J. Mills Park Ranger Mount Jefferson Area, Ashe County Mount Mitchell, Yancey County Smith Ray Park Superintendent Clyde Hopson Park Ranger
Cedric P. Squires Park Superintendent James C. Gulledge Park Ranger Clyde H. Miller Park Ranger Charlie J. Mills Park Ranger Mount Jefferson Area, Ashe County Park Ranger Mount Mitchell, Yancey County Smith Ray Smith Ray Park Superintendent Clyde Hopson Park Ranger Pettigrew, Washington and Tyrrell Counties Thomas H. Hampton
Cedric P. Squires Park Superintendent James C. Gulledge Park Ranger Clyde H. Miller Park Ranger Charlie J. Mills Park Ranger Mount Jefferson Area, Ashe County Park Ranger Mount Mitchell, Yancey County Smith Ray Smith Ray Park Superintendent Clyde Hopson Park Ranger Pettigrew, Washington and Tyrrell Counties Park Ranger Thomas H. Hampton Park Ranger Park Attendant Park Attendant
Cedric P. Squires Park Superintendent James C. Gulledge Park Ranger Clyde H. Miller Park Ranger Charlie J. Mills Park Ranger Mount Jefferson Area, Ashe County Park Ranger Mount Mitchell, Yancey County Smith Ray Smith Ray Park Superintendent Clyde Hopson Park Ranger Pettigrew, Washington and Tyrrell Counties Park Ranger Thomas H. Hampton Park Attendant Reedy Creek, Wake County Park Superintendent James C. Johnson Park Superintendent

William B. Umstead, Wake County

Haywood L. Dillard	Park	Ranger
John D. Barnett	Park	Ranger
Howard W. Sorrell	Park	Ranger

KERR RESERVIOR DEVELOPMENT COMMISSION

N. Warren Weldon	Chairman
Paul M. Anderson	Park Superintendent
Lemuel P. Eastwood	
Wm. L. Twisdale	
Jesse J. Stem, Jr.	

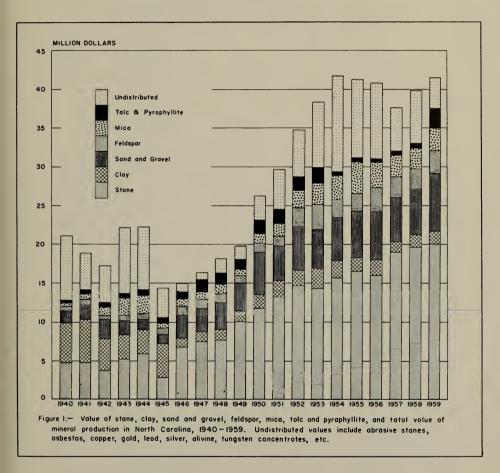
DIVISION OF STATE PLANNING

Robert D. Barbour	
	Stenographer Clerk
	Accounting Clerk

DIVISION OF COMMUNITY PLANNING

Lindsey W. Cox, Jr.	Planner
Durwood S. Curling	
Paul A. Hofmann	
Philip W. Dondero	Planner
Jerry M. Turner	
John G. Scott	
Evelyn F. Brantley	Draftsman
Wendell L. Denton, Jr.	
Frances Poole	
Julie P. Hardee	

CONSERVATION AND DEVELOPMENT BUDGETS



THE BUDGETS

CONDENSED FINANCIAL STATEMENTS

For the Biennium Beginning July 1, 1958 and Ending June 30, 1960

S. C. Holden, Auditor

MAINTENANCE FUNDS

DEPARTMENT OF CONSERVATION AND DEVELOPMENT STATEMENT OF RECEIPTS AND DISBURSEMENTS

	Fi	scal Year 1958-59		al Year 59-60
	Disbursements\$3 Less: Receipts			,818,864 ,51 8,37 4
	General Fund Appropriation\$2	,303,036	\$2	,300,490
SUMM	ARY BY PURPOSE			
ι.				
	DisbursementsAppropriation\$	98,182	\$	93,712
	Less: Receipts			175
	Appropriation\$	98,182	\$	93,537
н.	COMMERCE AND INDUSTRY:			
	DisbursementsAppropriation\$	208,152	\$	267,802
ш.	ADVERTISING:			
	Disbursements—Appropriation\$ Less: Receipts	494,430	\$	533,205 28
	Appropriation	494,430	\$	533,177
IV.	WATER RESOURCES, INLETS AND COASTAL WATERWAYS:			
	Disbursement\$ Less: Receipts	122,870 7,926		Separate partment
	Appropriation	114,944	Es	tablished
٧.	MINERAL RESOURCES:			
	Disbursements—Appropriation\$ Less: Receipts	68,105 2,445	\$	61,047 1,617
	Appropriation	65,660	\$	59,430
VI.	FORESTRY:			
	Fire Control			
	Disbursement\$1 Less: Receipts	,526,973 692,980	\$1	,698,841 730,188
	Appropriation\$	833,993	\$	959,653
	General Forestry			
	Disbursement Less: Receipts	54,141 7,211		53,762 6,963
	Appropriation\$	46,930	\$	46,799
	Forest Management			
	Disbursement\$ Less: Receipts	122,552 51,250	\$	133,559 55,866
	Appropriation\$	71,302	\$	77,693
	Nurseries (4)			
	Disbursement\$ Less: Receipts	445,824 400,921	\$	381,772 356,962
	Appropriation\$	44,903	\$	24,810

	Bladen Lakes State Forest		
	Disbursement\$ Less: Receipts	158,909 164,417	\$ 179,726 182,235
	Appropriation\$		\$2,509
VII.	PARKS:		
	Disbursements\$ Less: Receipts	380,653 137,384	\$ 415,438 154,168
	Appropriation	243,269	\$ 261,270
VIII.	DRAINAGE OF LAKE PHELPS: Disbursements—Appropriation\$	6,967	
iX.	FORT MACON EROSION CONTROL: Disbursements—Appropriation\$	58,640	
х.	DEFERRED OBLIGATIONS:		
^ .	Disbursements—Appropriation Transferred to Succeeding Year	21,172	
XI.	LESS: RECEIPTS Funds transferred from Preceding Year		\$ 21,172
		2 7/7 570	
	TOTAL DISBURSEMENTS \$ LESS: TOTAL RECEIPTS \$ TOTAL DISBURSEMENTS	3,767,570	\$3,818,864 \$1,518,374
	TOTAL DISBURSEMENTS FROM APPROPRIATION\$	2.303.036	\$2,300,490
	SUMMARY OF DISBURSEMENTS-BY OBJECTS:	-,,	+_,,
		2.100.415	\$2,201,223
	Salaries and Wages	2,100,413 171,110 70,206 91,031 50,986 204,382 14,707 105,639	157 014
	Travel Expense	70,206 91.031	76,573 98,716 78,194 204,367 16,669 86,559
	Printing and Binding Motor Vehicle Operation	50,986	78,194
	Lights, Power, and Water	204,382	204,367
	Lights, Power, and Water Repairs and Alterations General Expense	105,639	86,559
	General Expense Direct Advertising	105,639 105,505 375,600	132,635 384,999
	Federal Cooperation—		
	U. S. Geological Survey Industrial Development and Research Deep River Cool Survey	107,199 20,515	5,500 32,351 2,699
	Deep River Coal Survey Fort Macon Frosion Control	58,640	30
	Infestation Control Drainage of Lake Phelps Ocracoke Island Ground Water Insurance and Bonding	6,967	
	Insurance and Bonding	3,913	3,500 19,240
	Equipment\$ Additions and Betterments	194,771 29,346	\$ 275,514 57
	Stores for Resale—Parks	35,466	42,224
	Geologic Map Project Transferred to Succeeding Year		
	Deferred Obligations	21,172	
	Totals\$	3,767,570	\$3,818,864
	SUMMARY OF RECEIPTS		
	Social Security Refund	E 105	\$ 31
	Sale of Equipment	5,125	388
	Sale of Equipment Sale of Publications—Water Resources Sale of Publications—Mineral Resources	51	
	Cooperation—Board of Health	2,445	1,617
	Water Investigation	2,750	489
	Sale of Publications—Forestry Federal Cooperation—Forestry County Cooperation—Forestry	382,810	407,503 341,698
		320,719	341,698
	Sale of Tree Seedlings-Forestry	48,424 374,642	331,611
	Sale of Tree Seedlings—Forestry Receipts Bladen Lakes State Forest Sale of Forest Products	173,025 2,202 1,347 14,200	341,676 50,494 331,611 190,243 2,852 3,494 14,952 124,831
	Machine Rental	1,347	3,494
	Permits, Parks State Lakes Park Concession	14,200 118,075	14,952 124,831
	State Sales Tax	49	295
	Rentals From Employees Insurance Fire Loss	15,784 2,886	17,704
	Sale of Forest Products Machine Rental Permits, Parks State Lakes Park Concession State Sales Tax Rentals From Employees Insurance Fire Loss Funds Transferred From Preceding Year	2,000	21,172
	Totals\$	1,464,534	\$1,518,374
			43

DIVISION OF COMMERCIAL FISHERIES

Statement of Receipts and Disbursements

OPERATING FUND

Biennium 1958-60

Disbursements	1958-59 225.836	 244,441
Less: Receipts	110,720	114,405
General Fund Appropriation	115,116	\$ 130,036
SUMMARY BY PURPOSE		
I. ADMINISTRATION AND INSPECTION \$ II. OPERATION PATROL BOATS \$ III. SHELLFISH SANITATION \$ IV. SECTION BASE \$	127,528 97,644 664	\$ 139,263 103,525 1,653
TOTAL DISBURSEMENTS	225,836	\$ 244,441
SUMMARY OF DISBURSEMENTS-BY OBJECTS:		
Salaries and Wages \$ Supplies and Materials Postage, Telephone, and Telegraph Travel Expense Printing and Binding Motor Vehicle Operation Lights, Water, and Heat Repairs and Alterations General Expense Insurance and Bonding Equipment Totals \$	137,770 13,047 1,877 19,280 1,189 14,392 1,322 19,581 2,298 1,308 13,772 225,836	\$ 152,620 14,012 1,661 22,220 935 13,174 1,537 19,330 3,478 1,276 14,198 244,441
SUMMARY OF RECEIPTS:		
Food Fish Licenses and Taxes	4,467 16,293 2,388 9,675 25,058 48,159 915 3,765	\$ 7,060 19,376 3,065 9,005 21,378 49,610 780 4,131
Totals\$	110,720	\$ 114,405

DIVISION OF COMMERCIAL FISHERIES

Statement of Receipts and Disbursements

SHELLFISH FUND

Biennium 1958-60

DEVENUE.	1958-59	1959-60
REVENUE: Appropriation\$ Less: Total Disbursements	115,995 88,942	\$ 107,520 101,782
Balance	27,053	\$ 5,738
SUMMARY OF DISBURSEMENTS-BY OBJECTS		
Salaries and Wages\$ Supplies and Materials Travel Expense	17,605 622 2,725	\$ 19,955 837 2,892
Gas and Oil Repairs and Alterations	354 1,504	401 6,375
Contract Oyster and Shell Planting Equipment	65,431 386	70,337
Insurance	315	577
Totals\$	88,942	\$ 101,782

STATE PLANNING PROGRAM

Statement of Receipts and Disbursements

Biennium 1958-60

DEVENUE

KEVENUE.	1050 50	1050 (0
	1958-59	1959-60
General Fund Appropriation\$	27,851	\$ 34,705
SUMMARY OF DISBURSEMENTS-BY OBJECTS		
Salaries and Wages\$	21,347 [.]	\$ 16,700
Supplies and Materials	781	\$ 16,700 1,690 522
	606	1,070
Postage, Telephone and Telegraph		522
Travel Expense	2,307	1,288 96
Printing and Binding	125	96
Repairs and Alterations	94	481
General Expense	95	8.942
Equipment	2,496	481 8,942 4,986
Totals\$	27,851	\$ 34,705

KERR RESERVOIR DEVELOPMENT COMMISSION

Statement of Receipts and Disbursements

Biennium 1958-60

REVENUE:	1958-59	19	59-60
General Fund Appropriation	24,599	\$	26,077
SUMMARY OF DISBURSEMENTS-BY OBJECTS			
Salaries and Wages Supplies and Materials Postage, Telephone, Telegraph	12,852 860 250	\$	20,147 699 466
Travel Expense—Commissioners Printing and Binding	246 53		188 99
Motor Vehicle Operation Lights, Power, Water	1,392 320 398		1,600 448 670
Repairs and Alterations Equipment Additions and Betterments	398 326 7,848		1,700
Insurance	54		60
Totals\$	24,599	\$	26,077

RESEARCH TRIANGLE

Biennium 1958-60

Statement of Receipts and Disbursements

REVENUE:	1958-59	1959-60
General Fund Appropriation		\$ 100,000
SUMMARY OF EXPENDITURES BY PURPOSE:		
Grant-in-Aid		\$ 100,000

COMMERCIAL FISHERIES ADVISORY BOARD

Statement of Receipts and Disbursements

Biennium 1958-60

REVENUE:	1958-59	195	9-60
Appropriation—Contingency and Emergency Fund\$ Less: Total Disbursements	3,375 3,375	\$	2,000 1,127
Balance Reverted to General Fund	NONE	\$	873
SUMMARY OF DISBURSEMENTS-BY OBJECTS			
Travel Expenses—Commissioners\$ Postage, Telephone, and Telegraph	30	\$	1,127
General Expense	50		
Totals\$	3,375	\$	1,127

ATLANTIC STATES MARINE FISHERIES COMMISSION

Statement of Receipts and Disbursements

Biennium 1958-60

REVENUE:	1958-59	195	9-60
Appropriation—Contingency and Emergency Fund\$	1,000	\$	1,500
SUMMARY OF DISBURSEMENTS-BY OBJECTS			
Payment to Commission on Expenses\$	1,000	\$	1,500

COMMISSION TO STUDY THE OPERATION OF MOTOR BOATS

Statement of Receipts and Disbursements

Biennium 1958-60

REVENUE:	1958-59	1959-60
Transferred From Preceding Year\$ Less: Total Disbursements	300 260	NONE NONE
Balance Reverted to General Fund	40	NONE
SUMMARY OF DISBURSEMENTS-BY OBJECTS		
Travel Expense—Commissioners\$	260	NONE

STATE ADVISORY COMMITTEE ON AVIATION

Statement of Receipts and Disbursements

Biennium 1958-60

REVENUE:	1958-59	195	59-60
Appropriation Less: Total Disbursements		\$	1,000 95
Balance Reverted to General Fund		\$	905
SUMMARY OF DISBURSEMENTS—BY OBJECTS: Travel Expense of Committee		\$	95

KERR RESERVOIR DEVELOPMENT COMMISSION

Biennium 1958-60

SPECIAL FUND

Statement of Receipts and Disbursements

	1958-59	195	59-60
REVENUE:			
Rentals from Property\$ Sale of Lumber	3,537	\$	1,733 125
Funds Transferred From Preceding Year	501		500
Totals\$	4.038	\$	2.358
Less: Total Disbursements\$	4,038 3,538	\$	2,358 1,087
Balance Transferred to Succeeding Year	500	\$	1,271
SUMMARY OF DISBURSEMENTS-BY OBJECTS			
Supplies\$		\$	299
Equipment Permanent Buildings and Improvements	680 2,858		788
Totals\$	3,538	\$	1,087

SOIL BANK PROGRAM

Biennium 1958-60

SPECIAL FUND

Statement of Receipts and Disbursements

REVENUE:	1958-59	19	59-60
Appropriation—Federal Trust Fund	72,711 1,387	\$	56,320 34,769
Total		\$	91,089 32,801
Balance Transferred to Succeeding Year	34,769	\$	58,288
SUMMARY OF DISBURSEMENTS-BY OBJECTS		*	
Salaries and Wages	30,057 503 110 2,389 4,226 1,794 250	\$	24,026 537 102 2,198 4,418 1,516 4
Total\$	39,329	\$	32,801

STATE PLANNING PROGRAM-COMMUNITY PLANNING

Biennium 1958-60

SPECIAL FUND

Statement of Receipts and Disbursements

	1958-59	195	9-60
REVENUE:			
Federal Planning Grant\$	21,211	\$	53,361
State Cost	20.022		4,031
Communities Cost	30,823		34,981
Funds Transferred From Preceding Year			30,151
			50,151
Total\$	52,034	\$ 1	22,539 96,990
Less: Disbursements\$	21,883	\$	96,990
		-	
Balance Transferred to Succeeding Year\$	30,151	\$	25,549
SUMMARY OF DISBURSEMENTS BY OBJECTS:			
Salaries and Wages\$	13,203	\$	44,201
Supplies and Materials	364		800
Postage, Telephone and Telegraph	31		215
Travel Expense	1,802		3,432
Printing and Binding	470		1,847
General Expense	663		2,485
Contractual Services	5,350		44,010
Totals\$	21,883	\$	96,990

WATERSHED PROJECT

Biennium 1958-60

SPECIAL FUND

Statement of Receipts and Disbursements

REVENUE:	1958-59	1959-60
Appropriation-Federal Trust Fund	11,138	\$ 13,814 3,702
Total\$ Less: Disbursements\$	11,138 7,436	\$ 17,516 \$ 14,445
Balance Transferred\$	3,702	\$ 3,071

SUMMARY OF DISBURSEMENTS BY PROJECTS:		
I. DEEP AND ABBOTT	7,436	\$ 7,287 6,977 181
\$	7,436	\$ 14,445
SUMMARY OF DISBURSEMENTS BY OBJECTS:		
Salaries and Wages	4,388 702 67 123 198 1,740	\$ 8,795 604 89 382 1,233 2,634
General Expense	218	708
Totals\$	7,436	\$ 14,445

CAPE HATTERAS SEASHORE COMMISSION

Statement of Receipts and Disbursements

Permanent Improvement Fund of 1951

REVENUE:

TO DATE

DATE

Cape Hattered Flom: Cape Hatteras Seashore Commission, (Code 612)	768,233 10,000 40,000
Unexpended Balance	5,487 812,746

TRYON PALACE COMMISSION

Statement of Receipts and Disbursements

Permanent Improvement Fund of 1949

REVENUE:

REVENUE:	TO DATE
Proceeds First Latham Trust\$ 118,386	
Proceeds Second Latham Trust	
Proceeds Residue Latham Estate Funds	
Rentals	
Total Revenue	\$2,780,233
LESS: DISBURSEMENTS	
Architect's Fees and Furnishings\$ 703,600	
Documentary Research	
Physical Research 182,718	
New Construction 1,422,228	
Land Acquisition	
Total	2,772,444
Unexpended Funds	\$ 7,789

PERMANENT IMPROVEMENT FUNDS

STATE PARKS

Statement of Receipts and Disbursements Permanent Improvement Fund of 1947

REVENUE:	TO DATE
Appropriation, Chapter 622, Public Laws of 1947150,000Purchase of Tryon Palace Land\$ 150,000Conservation and Development (Code 3171)55,0001949 Permanent Improvement Fund (Code 1649)10,000Tryon Palace Project, Special Fund (Code 21)12,449	\$ 500,000
Total Funds for Purchase of Tryon Palace Land	227,449
Total Revenue Less: Disbursements	727449 709,892
Unexpended Appropriation	\$ 17,557

PROJ	ECTS:	APPROPRIATION	EXPENDITURES	UNEXPENDED
1.	CLIFFS OF THE NEUSE	\$ 57,000	\$ 56,888	\$ 112
П.	CRABTREE CREEK	94,000	93,577	423
111.	FORT MACON		29,994	6
IV.	HANGING ROCK		87,489	5,511
V.	JONES LAKE	30,000	25,500	5,511 4,500 393
VI.	MORROW MOUNTAIN	93,000	92,607	393
VII.	MOUNT MITCHELL	56,000	49,456	6,544
VIII.	PETTIGREW	30,000	29,966	34
IX.		17,000	16,967	33
Х.	TRYON PALACE LAND	227,449	227,448	1
	Totals	727,449	\$ 709,892	\$ 17,557

DIVISION OF COMMERCIAL FISHERIES

Statement of Receipts and Disbursements

Permanent Improvement Fund of 1949

REVENUE:	O DATE
Appropriation, Chapter 1249, Public Laws of 1949\$ Sale of Boats and Equipment	50,000 36,244
Total Revenue	86,244 85,524
Unexpended Balance\$	720

STATE PARKS

Statement of Receipts and Disbursements

Permanent Improvement Fund of 1949

REVENUE: Appropriation, Chapter 1248, Public Laws Funds Transferred From 1952-53 Code 317	of 1949	\$ 26,500		DATE 74,144
Cooperation State Highway and Public Works Commission—Umstead Park Paving		45,000		71,500
Total Revenue Less: Disbursements		······		45,644 90,567
Unexpended Appropriation			\$	55,077
PROJECTS:	APPROPRIATION	EXPENDITURES	UNEXP	ENDED
I. CLIFFS OF THE NEUSE II. CRABTREE CREEK III. FORT MACON IV. HANGING ROCK V. HIAWASSEE LAKE (Transferred to Permanent Improvement Fund	243,485 95,208	\$ 124,139 250,552 95,010 122,897	\$	22 2,933 198 6,388
of 1947) VI. JONES LAKE VII. MORROW MOUNTAIN VIII. MOUNT MITCHELL IX. PETTIGREW X. TOWN CREEK INDIAN MOUND XI. CAPE HATTERAS	38,016 80,779 208,700 31,360 25,260	10,000 38,008 78,154 188,421 26,968 25,252 50,000		2,625 20,279 4,392 8
XII. RENDEVOUS MOUNTAIN AREA XIII. MOUNT JEFFERSON AREA XIV. BEAR ISLAND AREA XV. REEDY CREEK	1,929 2,115 3,000	1,833 1,888 3,000 74,445		96 227 17,901
TOTALS	\$1,145,644	\$1,090,567	\$	55,077

FORESTRY AND STATE PARKS

Statement of Receipts and Disbursements

CAPITAL IMPROVEMENT FUND OF 1957

REVENUE: Appropriation Chapter 1341, Public Laws of 19 Sale of Timber Plans and Specification Forfeitures Department of Motor Vehicles		\$ 4,910 200	TO DATE \$ 688,000
Total Receipts			6,599
Total Revenue Less: Disbursements			\$ 694,599 547,652
Unexpended Appropriation:	•••••••		\$ 146,947
PROJECTS: A I. CLIFFS OF THE NEUSE \$ II. FORT MACON	PPROPRIATION 89,100 11,323 65,963 19,792 17,298 152,183 14,552 87,383 85,013 72,000 8,000	EXPENDITURES 78,367 4,519 53,708 19,779 55,176 17,137 106,875 14,422 52,125 65,724 72,000 7,820	UNEXPENDED \$ 10,733
Totals\$	694,399	\$ 547,652	\$ 146,947

KERR RESERVOIR DEVELOPMENT COMMISSION

Statement of Receipts and Disbursements

CAPITAL IMPROVEMENT FUND OF 1957

REVENUE:	TO DATE
Appropriation, Chapter 1341, Pub Less: Disbursements	lic Laws of 1957\$ 22,000 21,957
Unexpended Appropriation	\$ 43
PROJECTS:	APPROPRIATION EXPENDITURES UNEXPENDED
Buildings and Other Improvements	\$ 22,000 \$ 21,957 \$ 43

FORESTRY AND STATE PARKS

Statement of Receipts and Disbursements

CAPITAL IMPROVEMENT FUND OF 1959

REVENUE:	TO DATE
Appropriation, Chapter 1039, Public Laws of 1959	\$1,173,500
Less: Transferred to Department of Water Resources	600,000
Appropriation—Forestry and Parks	\$ 573,500
Less: Disbursements	41,606
Unexpended Balance	\$ 531,894

PROJ	ECTS:	PPROPRIATION	EXPENDITURES	UNEXPENDED
1. 11.	BEAR ISLAND\$ FORT MACON	172,000	\$	\$ 172,000 150,000
- III.	MORROW MOUNTAIN	1,500	1,470	30
IV. V.	PETTIGREW	7,000 150,000		7,000 150,000
vi.	FORESTRY			
VII.	(Seed Extractory Building)	25,000		25,000
	(Irrigation-Clayton)	9,200	9,188	12
VIII.	FORESTRY (Irrigation—Goldsboro)	20,000		20,000
IX.	FORESTRY	20,000		20,000
Х.	(Tower Residence—Edgecombe) FORESTRY	7,000	6,507	493
^ .	(Tower Residence—Southern Pines)	7,000	6,383	617
XI.	FORESTRY	1.000	044	124
XII.	(Tower Road—Mitchell) FORESTRY	1,000	866	134
	(Tower Cabin—Mitchell)	3,000	2,999	1
XIII.	FORESTRY (Tower Cabin—Cleveland)	2,000	398	1,602
XIV.	FORESTRY			
XV.	(Tower—Caswell) FORESTRY	8,800	6,050	2,750
	(Tower—New Hanover)	10,000	7,745	2,255
	Totals\$	573,500	\$ 41,606	\$ 531,894

KERR RESERVOIR DEVELOPMENT COMMISSION

Statement of Receipts and Disbursements CAPITAL IMPROVEMENT FUND OF 1959 Biennium 1958-60

REVENUE:

REVENUE: Appropriation, Chapter 1039 of Public Laws Less: Disbursements	of 1959		TO DAT \$ 40,00 	
Unexpended Balance			\$ 14,93	6
PROJECTS:	PPROPRIATION	EXPENDITURES	UNEXPENDE	D
I. BULLOCKSVILLE PARK	6,950 21,087 6,384 1,779 3,800	\$ 3,734 17,379 450 854 2,647	\$ 3,21 3,70 5,93 92 1,15	6 8 4 5 5 3
Totals	40,000	\$ 25,064	\$ 14,96	53



WHO Said That

NORTH CAROLINA

160,000 Industrial Workers Available Now in North Carolina?

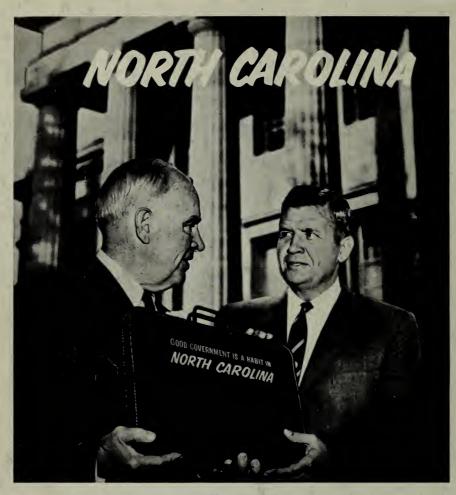
Yes, while the State's industrial growth continues at a record rate, a recent survey shows there are still 160,000 men and women now available for industrial jobs. To these able, easy-to-train and eager-to-work thousands will be added other thousands of youth coming to job age next year, plus the steadily larger proportion of workers released by mechanized and electrified farms.

This farm population — largest in the South — offers industry its biggest labor asset. Through many new Industrial Education Centers, North Carolina worked with scores of industries last year to train new workers or to upgrade trained workers to new skills. This industrial training program is made 100 percent accessible by means of fully equipped mobile classrooms for on-the-job training. Such an unusual program is merely the newest step in North Carolina's long and consistent record for helping industry grow.

When your industry expands into North Carolina you are not taking a chance with the unknown. The many facets of opportunity this state offers have been tested by thousands of other industries now thriving in a growth climate that prevails from community group to governor.

For information about plant location you can communicate in confidence with Governor Luther H. Hodges, Chairman of the Board of Conservation and Development, Raleigh, North Carolina.

NCDPR - PARTF Section - 0084



Retiring Governor LUTHER H. HODGES (left) and New Governor TERRY SANFORD here symbolize the orderly transition of leadership which is traditional in a state where good government is a habit. Able leadership by the Governor is always a major reason why North Carolina continues to lead the Southeast in business and industrial growth.

Governor Terry Sanford, businessman, attorney, former State Senator and dynamic young leader knows North Carolina and her people. His background and attitude toward business qualify him to continue North Carolina's climate of growth for expanding industry and business. In North Carolina opportunity continues unlimited.

You are invited to communicate in confidence with Governor Terry Sanford, Chairman of the Board of Conservation and Development, Raleigh, North Carolina.