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UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
5200
NREAD

From: Commanding General, Marine Corps Base, Camp Lejeune
To: Commandant of the Marine Corps (Code LFL)

Subj: SUMMARY OF ENVIRONMENTAL/NATURAL RESOURCES MANAGEMENT REPORT SYMBOL (MC-11015-06)

Ref: (a) MCO P11000.8B

Encl: (1) Camp Lejeune Environmental/Natural Resources Management Summary for FY-1984 5

1985

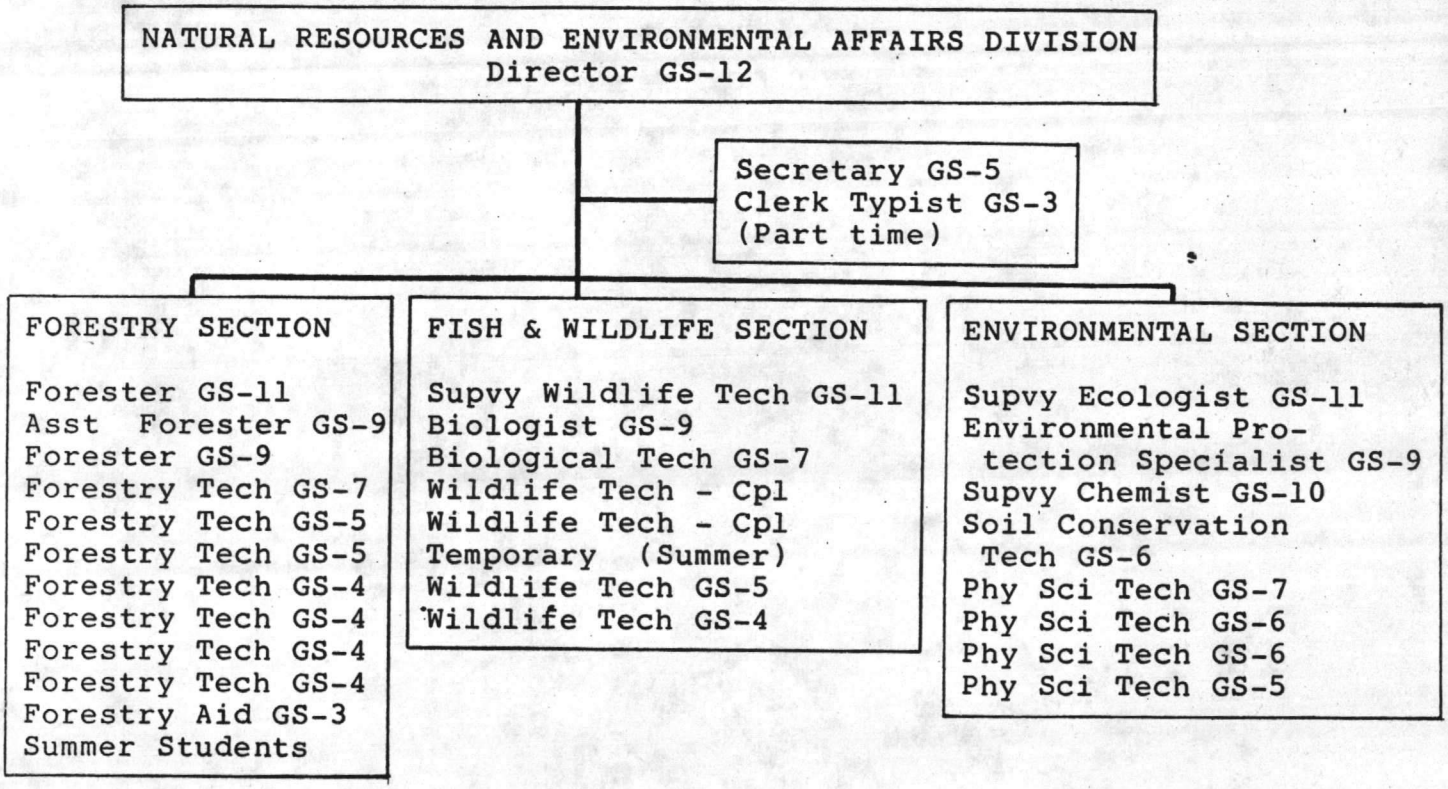
1. The enclosure is submitted in accordance with the reference. If additional information is desired, please contact Mr. Julian I. Wooten, Natural Resources and Environmental Affairs Division, (AUTOVON) 484-5003.

R. A. TIEBOUT
By direction

CAMP LEJEUNE ENVIRONMENTAL/NATURAL RESOURCES
MANAGEMENT SUMMARY FOR FY-1984

GENERAL MANAGEMENT

1. Program Administration - The Assistant Chief of Staff, Facilities has overall base natural resources and environmental program management responsibilities. The following personnel perform forestry, fish and wildlife and environmental program requirements.



2. Education and Public Relations

a. Training, Conferences, Meetings, Workshops

Nov 1984 Director, Natural Resources and Environmental Affairs Division (NREAD), Ecologist, Forester and Supvy Wildlife Technician attended LUMS training at the University of Nevada at Las Vegas.

Nov 1984 Director, NREAD and Supvy Wildlife Technician attended the DOD/Southeastern Fish and Wildlife Conference in New Orleans, Louisiana.

Nov 1984 Supvy Wildlife Technician attended the Sea Turtle Workshop in New Bern, North Carolina.

Dec 1984	Physical Science Technician attended North Carolina's Division of Health Services, Bacteriological Methods in the Analysis of Drinking Water course in Raleigh, North Carolina.
Jan 1985	Supvy Chemist attended the Hazardous Waste Manager's Seminar given by NEESA at Marine Corps Air Station, Beaufort, South Carolina.
Feb 1985	Director, NREAD and Supvy Wildlife Technician attended the Southeastern White-Tailed Deer Study Group Meeting in Wilmington, North Carolina.
Feb 1985	Asst Base Forester and Chief Forestry Technician attended the North Carolina Forest Service's Cooperators School relative to forest fire suppression.
Mar 1985	Base Forester attended an Environmental Coordinator's Workshop at the Army Logistics Management Center, Fort Lee, Virginia.
Mar 1985	Marine Corps Base hosted the Navy Land Use Compatibility Seminar which was attended by Department of Defense personnel engaged in land use management at various levels throughout the nation. Director, NREAD gave a presentation on Red-Cockaded Woodpecker management at Camp Lejeune.
Mar 1985	All forestry personnel and several representatives of Base Maintenance Division's Heavy Equipment Section and the Base Fire Department were briefed by North Carolina Forest Service on forest fire fatalities and how they could have been avoided.
Apr 1985	Environmental Engineer attended LUMS training at the Earth Resources Observation Systems of the USGS, Sioux Falls, South Dakota.
Apr 1985	Four Physical Science Technicians and the Supvy Chemist received Basic Gas Chromatography training given by Perkin-Elmer Company held at Marine Corps Base, Camp Lejeune, North Carolina.
May 1985	Supvy Wildlife Technician attended Colonial Waterbird Workshop in Wilmington, North Carolina.
Jun 1985	Supvy Wildlife Technician attended the National Wild Turkey Symposium in Des Moines, Iowa.
Jul-Aug 1985	Two Physical Science Technicians and the Environmental Protection Specialist attended the Hazardous Waste Facility Operator's Course given by NEESA at Marine Corps Base, Camp Lejeune, North Carolina.

Jul-Aug 1985	Director, NREAD and Asst Base Forester attended the Society of American Foresters Convention in Fort Collins, Colorado. They also attended and presented programs at the Navy Forestry Conference and the DOD Forestry Conference held in conjunction with the Society of American Foresters Convention.
Sep 1985	Three Physical Science Technicians, Soil Conservation Technician, Environmental Protection Specialist and Supvy Chemist attended the Respiratory Protection Training given by Preventive Medicine Unit, Naval Hospital at Camp Lejeune, North Carolina.

b. Training Given

Jan 1985	Director, NREAD, Forester, Environmental Protection Specialist and Supvy Chemist gave a class on Natural Resources to Onslow County School Teachers as part of a State Teachers Recertification Program.
Mar 1985	Supvy Chemist gave a class on water pollution to 25 Berkeley Manor Junior High Students.
Apr 1985	Asst Forester presented a slide presentation to aprpoximately 30 students of the Lejeune High School Ecology Class.
Jul 1985	Hazardous material disposal and related pollution abatement training is routinely being provided to civilian and military personnel. Approximately 60 key personnel received formal training in July provided by a NEESA contractor. Base environmental personnel are routinely providing training as requested by individual organizations. Training is focused towards key supervisors, foreman and NCO's. Hazardous Material Disposal Coordinators appointed in each command are assisting with this training.
Sep 1985	Director, NREAD gave a slide presentation to approximately 50 Stone Street Elementary School students at Camp Lejeune, North Carolina.

c. Tours

Mar 1985	Supvy Wildlife Technician conducted a field trip for 18 forestry and wildlife students from North Carolina State University, Raleigh, North Carolina.
Apr 1985	Supvy Chemist conducted a tour of the Water Quality Control Laboratory to a Lejeune High School Ecology Class.

3. Special Incidents

a. NREAD and Preventive Medicine personnel coordinated a research study with the Department of Entomology, North Carolina State University, Raleigh, North Carolina. The research involved the study of the tick population relative to investigation into tick transmitted Lyme Disease and the impact of controlled winter burning on the tick populations.

b. NREAD personnel coordinated a Savanna Research Study with the North Carolina Division of Coastal Management. Purpose of the research is to analyze trees, shrubs, herbs and soils within four selected study areas. The research continued along the staggered blooming times of savanna flowers until early October 1985. A report is forthcoming.

c. During the Spring 1985, in cooperation with the North Carolina Wildlife Resources Commission, 40 wild turkeys were live-trapped at Camp Lejeune and relocated to three unoccupied habitat areas in Eastern North Carolina. The trapping operation and release of the turkeys were video taped by base personnel.

d. In April 1985, part of a prehistoric Gomphothere Tooth was found on Onslow Beach. The tooth was forwarded to the Smithsonian Institution, Washington, DC and is cataloged in the Department of Paleobiology under number 374281.

e. A longleaf pine natural area and a Wallace Creek wetlands area were entered in the State Natural Heritage Program on 18 July 1985.

f. Headquarters Marine Corps funded Red-Cockaded Woodpecker Research Project began 6 Sep 1985 by North Carolina State University, Raleigh, North Carolina, as arranged by LANTDIV through the Department of the Interior.

ENVIRONMENTAL MANAGEMENT

1. Air Quality

a. Repairs to the air pollution controls at the main steam plant were designed and stack testing for permit renewal were scheduled.

b. A FY-88 pollution abatement project for the main steam plant was submitted for fly ash handling and recycling facilities.

2. Water Management

a. Ten drinking water wells were found containing Volatile Organic Chemicals (VOCs). Eight of the ten are in the Hadnot Point Water Treatment System and their major contaminant is Trichloroethylene. The other two wells are in the Tarawa Terrace Water Treatment System and their major contaminant is Tetrachloroethylene.

(1) All ten contaminated wells were shut off.

(2) Base history did not show any potential source of the Tarawa Terrace contamination. The North Carolina Division of Environmental Management is studying possible off-base sources.

(3) Routine monitoring of the Hadnot Point and Tarawa Terrace treated water for VOCs has been initiated.

(4) All drinking water wells were tested for VOCs.

b. Marine Corps Air Station, New River Water Treatment Systems' Trihalomethane (THM) content, exceeded acceptable levels, which was found to be directly related to the chlorides in the raw water wells. On 17 July 1985, all wells at Marine Corps Air Station, New River with chloride concentrations in excess 100 mg/l were turned off. Subsequent THM monitoring on 24 July produced THM level of 67.6 ppb (parts per billion) which was less than half of what it was on 17 July. The high chloride wells remain off at Marine Corps Air Station, New River.

c. The scope of work for the Navy Assessment and Control of Installation Pollutants (NACIP) study was defined in cooperation with LANTDIV. The scope includes the confirmation study for 22 sites, the characterization of groundwater contamination affecting two water supply systems and the Feasibility Report of remedial options for all sites and water supply issues.

d. Construction project to expand the Holcomb Boulevard Water Treatment Plant began. One of the first phases which ran a water line from Holcomb Boulevard's raw water line to the Tarawa Terrace raw water line was completed in June 1985. This was done first to relieve a water shortage at Tarawa Terrace as a result of its two contaminated wells being shut down.

e. The Water Quality Control Laboratory, NREAD, provided support to the Resident Officer in Charge of Construction by running 850 coliform tests of water coming through the new water laterals installed in the Midway Park Housing Area.

f. With the closure of the Base Ice Plant, the base has been buying ice machines for the various units that need ice. Preventive Medicine Unit (PMU) started monitoring all ice machines aboard Camp Lejeune. The Water Quality Control Laboratory, NREAD, provided analysis support for the 892 ice samples PMU took in FY-1985.

g. The Water Quality Control Laboratory, NREAD, performed the following analysis during FY-85:

Coliform Tests of Potable Water and Swimming Pools combined:	2400	(approximately)
Coliform Tests of Sewage Effluent:	2800	"
Coliform Tests of Surface Water:	1900	"
Biochemical Oxygen Demand; 5-Day:	3200	"
Suspended Solids of Outfalls:	2500	"
Oil and Grease:	270	"

h. A Gas Chromatograph located in the Quality Control Laboratory, NREAD, became operational and will allow local testing of drinking water for contaminants on a limited basis.

i. Application was submitted to the State of North Carolina for renewal of the NPDES permit for seven wastewater plants and related sources.

j. A Coastal Management Study of Onslow Beach was initiated in cooperation with the Sea Grant College Program of North Carolina State University. The study will evaluate impacts on the barrier island due to natural and main-induced factors.

k. Stormwater Management Study of the rapidly urbanizing Cogdell's Creek watershed was initiated with assistance from LANTDIV. Flood plain protection, erosion control and stormwater runoff controls will be identified for inclusion in the 20-plus MILCON projects planned for the future.

l. The availability of groundwater supplied to support future development was determined to be a key issue during FY-85. Camp Lejeune requested CMC funding for a four-year Aquifer Study by the U. S. Geological Survey.

m. A FY-88 MILCON Pollution Abatement Project was submitted to control vehicle washing and eliminate untreated discharge from self-propelled artillery maintenance facility.

3. Noise Control. Managing or controlling noise associated with gunfire, rockets, explosives, etc. is a continuing consideration during training. A locally developed system referred to as "Blast Forecast" was developed to eliminate and reduce disturbance of excess shock waves and noise from these weapons and explosives. The forecast is computed by Marine Corps Air Station, New River, based on local weather, existing and predicted. The method predicts the atmosphere refraction conditions and explosive limit (in pounds) which should not exceed the annoyance level of the surrounding community. The information is provided to Base Range Control for use in advising air/ground units of the maximum size projectiles or bombs (or combination thereof) allowable for that period. Use of this system, while not perfect, is a positive effort to reduce an adverse impact of military training on the community.

4. Hazardous Material Management

a. Approximately 44 samples of unknown substances were taken during FY-85 for analysis under the Waste Analysis Plan per RCRA, Part B permit.

b. Approximately 104 transformers were sampled and analyzed for Polychlorinated Biphenyls (PCB) content.

c. Approximately 34 samples of used oil were taken during FY-85. Twenty-one of these samples were taken within the different generation sites to determine quality and variability of used oil.

d. A $160K contract was awarded to Environmental Safety and Designs, Incorporated for a basewide Hazardous Materials/Used Oil Study. The study will develop the justification for upgraded hazardous material storage facilities. The study will include hazardous material spill prevention, control and countermeasure (SPCC) plan, used oil handling and recovery options (to include energy recovery) and the Oil SPCC Plan. An automated hazardous material information system will produce the hazardous material inventory for all items aboard Camp Lejeune which will significantly improve the potential for waste minimization and recovery.

5. Resource Recovery and Recycling

a. Waste oil collection and sales through the Defense Reutilization and Marketing Office (DRMO) continues.

b. The on base recycling center for cardboard operated by the Onslow County Sheltered Workshop Program was closed. Cardboard is currently being transported to their Jacksonville, North Carolina recycling center.

6. Solid Waste Disposal

a. Landfill continues operation in compliance with state permits.

b. Landfill is being inspected quarterly by North Carolina Division of Health Services. All reports are satisfactory to date.

c. Family housing garbage/refuse pick up is being done by private contractor.

7. Environmental Documentation. Environmental impacts were reviewed for approximately 25 construction projects, including MILCON projects, and for military training exercises such as Solid Shield-85, which proposed transfer of fuel ship-to-shore. Other actions reviewed included repairs to Camp Lejeune Railroad, clearing of artillery impact areas, exercise bold strike and numerous range improvement projects.

NATURAL RESOURCES MANAGEMENT

1. Fish and Game Management.

a. Work activities were directed for planning, administering and coordinating the conservation of wildlife populations through the development, maintenance and management of natural habitat. Habitat development projects included the maintenance and development of 500 acres of clearings which are well dispersed throughout the base; maintenance of a quail management area; establishment of autumn olive and bicolor lespedeza seedlings for game species; the maintenance of waterfowl impoundments for migratory game birds and maintenance/management of 11 freshwater ponds per recreational fishing.

b. Biological sampling of the base deer herd was conducted through reproductive study, age/sex ratio analysis and annual parasite counts.

c. The base is participating in a cooperative study with the North Carolina Wildlife Resources Commission and the National Wild Turkey Federation Commission to determine techniques for studying the genetic variability of wild turkey populations.

d. Permit Sales by Type

Type	Fee	No	Funds Collected
Hunting/Fishing Military	$ 7.00	1,730	$12,110
Hunting/Fishing Civ Employee	7.00	173	1,211
Hunting/Fishing Civ Guest Seasonal	7.00	401	2,807
Hunting/Fishing Civ Guest Daily	3.00	6	18
Fishing Military Civ Employee	3.00	746	2,238
Hunting Dependent Minor	No Charge		
Trapping Military Civ Employee	10.00	26	260
		3,082	$18,644

e. Game Harvested by Species

Type	Numbers
Deer	765 (52 additional kills by motor vehicle)
Bear	2
Squirrel	150
Wild Turkey	17
Quail	22
Dove	26
Rabbit	4
Duck	2
Raccoon	73
Oppossum	6

2. Nongame/Protected Species Management

a. Formal consultation has been conducted on all threatened and endangered species relative to ongoing activities. Biological opinions have been rendered by the US Fish and Wildlife Service and National Marine Fisheries Service. The species involved in the consultations include the Red-Cockaded Woodpecker, American Alligator, Eastern Brown Pelican, Atlantic Loggerhead, Green Ridley, Leatherback and Hawksbill Sea Turtles, the Fin, Humpback, Right and Sei Whales.

b. Thirty-five sea turtle nests were monitored by the wildlife biologist and two temporary technicians during the 1985 nesting season. A Green Sea Turtle which previously nested four times in 1980 returned to nest five times during the 1985 nesting season. Verification was made by a tag which was placed on her front flipper in 1980. These are the first nestings recorded of the Green Turtle north of the Georgia coastline.

c. The nesting and foraging habitat of the endangered Red-Cockaded Woodpecker was prescribe burned under the biological opinion guidelines rendered for the species. Annual surveys were conducted involving Red-Cockaded Woodpecker and American Alligator populations.

d. Thirty nesting boxes for Eastern Bluebirds were erected along trails in pine timberlands by Boy Scouts from the base participation in a conservation project. These nesting boxes along with the 350 previously erected boxes by management personnel were maintained and monitored during the year. 64% of the boxes were used for nesting by bluebirds during the year.

3. Forest Management. Forest management is presently being carried out on 76,466 acres. Forest management generally consist of timber management activities associated with the harvesting of timber and wildlife habitat management and forest protection. The forested land is managed on a sustained yield, multiple-use management system on a 10-year cutting cycle and a 100-year rotation.

a. Budget

Funds authorized	$405,000
Funds obligated	~~370,538~~ 398,890

b. Receipts - Sales of forest products

Product	Volumes
Pine Sawtimber	4,401 MBF
Pine Pulpwood	5,687 Cords
Hardwood Pulpwood	97 Cords

Total Proceeds $637,989

c. Timber Marked - All marking was done by in-house personnel in compartments 2, 3, 8, 11, 31, 49, 51 and 60. These marked areas totaled 906 acres with a volume of 2,400 MBF pine sawtimber and 2,200 cords of pine pulpwood.

d. Reforestation

(1) Acres planted	117
(2) Acres KG'ed	121
(3) Acres windrowed by root rake	121
(4) Acres bedded	110
(5) Acres chopped for seed bed preparation	45

e. Timber Stand Improvement

(1) Acres drum chopped	375
(2) Acres treated by hand	115

f. Unpaved Forest Access Roads

(1) Graded and repaired an estimated 7 3/4 miles.

(2) Hauled and spread 3,600 tons of stone.

(3) Purchased seed and fertilizer for erosion control and wildlife habitat improvement on 15 miles of unpaved roads.

g. Fire Protection and Suppression

(1) Prescribed Burning

(a) Flagged and secured approximately 80 miles of fireline.

(b) Prescribed burned approximately 5,839 acres in seven compartments.

(c) Controlled burned approximately 11,000 acres of range and impact areas.

(2) Manned fire towers approximately 100 man-days for forest fire detection.

(3) Suppressed 75 wildfires that burned 1,870 acres.

h. Insect and Disease Control

(1) Four southern Pine Beetle detection flights.

(2) 48 suspected Southern Pine Beetle infestation spots were ground checked.

(3) Control measures taken on three Southern Pine Beetle infestations.

(4) In cooperation with the US Forest Service, NREAD, personnel monitored 21 Gypsy Moth traps with two moths trapped.

4. Soil Conservation/Erosion Control. A system of diversions, sediment basins, outlet stabilization, silt fences and critical area plantings were used to control erosion at the base Ammo Dump. Approximately 120 acres were treated.

5. Agricultural Use/Range Maintenance. Marine Corps Base responded to CMC request for proposed projects under the agricultural and grazing outlease program for funding during FY-86. The project submitted was for forest access roads. Funding for the project submitted has been approved and will be accomplished during FY-86.

6. Landscaping and Horticulture. During fiscal year 1984, 20 buildings including headquarters and barracks were landscaped with shrubbery and trees. The Marine Corps Air Station, New River, Camp Geiger, Courthouse Bay entrance area as well as Sneads Ferry Gate were relandscaped with shrubbery. A total of 4,300 plants were used in FY-84. General maintenance, such as spraying, fertilization, weeding, pruning and removal of dead trees and shrubery was accomplished.

7. Outdoor Recreation

Type	Trips	Hours
Hunting	13,412	69,182
Fishing	150,000	620,000 (estimate)
Trapping	460	1,840 "

HISTORICAL/ARCHAEOLOGICAL RESOURCE MANAGEMENT

1. Approximately 10-12 skeletal remains were removed from an Indian Ossuary at Jarretts Point. $10,000 was transferred to the US Park Service to facilitate the removal, study and curation. The US Park Service coordinated a contract with the Department of Anthropology, University of North Carolina at Wilmington, Wilmington, North Carolina.

2. The development of a Cultural Resources Management Plan was initiated with assistance from the National Park Service. The plan will confirm the significance of archaeological and historical sites and develop protective measures for significant site management.

CAMP LEJEUNE ENVIRONMENTAL/NATURAL RESOURCES
MANAGEMENT SUMMARY FOR FY-1985

FY-86

GENERAL MANAGEMENT

1. Program Administration - The Assistant Chief of Staff, Facilities has overall base natural resources and environmental program management responsibilities. The following personnel perform forestry, fish and wildlife and environmental program requirements.

1986

NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS DIVISION
Director GS-12

Secretary GS-5
Clerk Typist GS-3
Recycling Coordinator GS-7

FORESTRY SECTION

Forester GS-11
Asst Forester GS-9
Forester GS-5/9
Forestry Tech GS-7
Forestry Tech GS-5
Forestry Tech GS-5
Forestry Tech GS-4
Forestry Tech GS-4
Forestry Tech GS-4
Forestry Tech GS-4

FISH & WILDLIFE SECTION

Supvy Wildlife Tech GS-11
Biologist GS-9
Biological Tech GS-8
Wildlife Tech - Cpl
Wildlife Tech - Cpl

ENVIRONMENTAL SECTION

Supvy Ecologist GS-11
Supvy Chemist GS-10
Bio Science Tech GS-9
Env Control Spec GS-9
Soil Con Tech GS-6
Phy Sci Tech GS-7
Phy Sci Tech GS-6
Phy Sci Tech GS-6

2. Education and Public Relations

a. Training, Conferences, Meetings, Workshops

Oct 1985 Supervisory Wildlife Technician attended DOD/Southeastern Wildlife Conference in Lexington, Kentucky on 27-30 October 1985.

Nov 1985 The Advanced Forest Fire Equipment Operator's School in Kinston, NC given by NC Forest Service was attended by the Base Forester and four Forestry Technicians.

Dec 1985 Environmental Control Specialist attended the Hazardous Spill Response Course at Texas A&M University.

Jan 1986 The National Interagency Incident Management System (NIIMS) was held in Kinston, North Carolina relative to forest fire suppression was attended by the Base Forester, Forestry Technicians, Base Fire Department members.

ENCLOSURE (1)

Mar 1986 Director, NREAD and Supervisory Wildlife Technician attended the National Military Fish and Wildlife Association and the North American Wildlife Conference on 22-28 March 1986 in Reno, Nevada.

May 1986 Soil Conservation Technician attended Inland Oil Spill Course, Texas A&M University, 19-23 May 1986.

Jun 1986 Supervisory Chemist and Environmental Control Specialist attended a PCB Seminar given by General Electric in Wilmington, NC.

Oct 1986 Director, NREAD, and Base Forester attended the Society of American Foresters Convention in Birmingham, ALA. They also attended the Navy Forestry Conference and the DOD Forestry Conference held in conjunction with the Society of American Foresters Convention.

b. Training Given

May 1986 Supervisory Wildlife Technician presented a training program to Beach Detachment personnel for support and coordination of the Sea Turtle Management Program at Onslow Beach on 30 May 1986.

Routine hazardous waste management training was provided to base personnel involved in hazardous waste management.

c. Tours

May 1986 Supervisory Wildlife Technician conducted a field trip for 25 biology students and two of their professors for Coastal Carolina Community College,

May 1986 A field trip was conducted by the Supervisory Wildlife Technician for 15 wildlife students and one of their professors from Wayne Community College, Goldsboro, NC on 12 May 1986.

July 1986 Supervisory Wildlife Technicians conducted a field trip for 22 students and two of there teachers from the Summer Enrichment Program, Camp Lejeune Dependent Schools of 10 July 1986.

July 1986 Supervisory Wildlife Technician conducted a field trip for four staff members from the Mariners Museum, Morehead City, NC on 14 July 1986.

Aug 1986 Supervisory Chemist conducted a tour of the Water Quality Control Laboratory to a Coastal Carolina Community College Laboratory Technology Class.

3. Special Incidents

a. NREAD coordinated the removal of an antique sawmill steam engine with the NC Forest Service in the fall of 1985. The antique steam engine was donated to the NC Forest and will be eventually displayed at a State Forest Service Museum located located at Bladen Lakes State Forest, Elizabethtown, NC. The engine was abandoned by its owner near Freeman Creek prior to the establishment of Marine Corps Base, Camp Lejeune.

b. A wild Flamingo (Phoenicopterus ruber) was observed at Onslow Beach near New River Inlet on 5 February 1986. Frequent observations of the bird were made at New River Inlet from the initial observation through late March of 1986.

c. During the late winter 1985, in cooperation with the North Carolina Wildlife Resources Commission, 23 wild turkeys were live-trapped at Camp Lejeune and relocated to four restoration areas in Eastern North Carolina.

d. A two-year Red Cockaded Woodpecker research study was initiated the Fall of FY-86 is continuing on schedule as originally planned. NC State University is conducting the research.

e. On 27 February 1986, Dr. William Davis, Director, Division of Parks and Recreation, and Ms. Julie Moore, NC Natural Heritage Program, participated in dedication ceremonies at Building 1 for the Long Leaf pine and Wallace Creek Natural AReas. The two sites were entered into the NC Registry of Natural Heritage Areas by MAJGEN L. H. Buehl, III.

f. The Base rendered assistance to the NC Forest Service in combating a 73,000-acre forest fire in Pender and Onslow Counties. Equipment, civilians and military personnel assisted under a cooperative agreement between the Commanding General, Marine Corps Base, Camp Lejeune and the NC Forest Service 6-20 May 1986.

NATURAL RESOURCES MANAGEMENT

1. Fish and Game Management.

a. Work activities were directed for planning, administering and coordinating the conservation of wildlife populations through the development, maintenance and management of natural habitat. Habitat development projects included the maintenance and development of 500 acres of clearings which are well dispersed throughout the base; maintenance of a quail management area; establishment of autumn olive and bicolor lespedeza seedlings for game species; the maintenance of waterfowl impoundments for migratory game birds and maintenance/management of 11 freshwater ponds per recreational fishing. Henderson and Hickory ponds were reclaimed in 1986. The work included the replacement of water controls/drain pipes replaced, shorelines dredged and the ponds will be restocked with largemouth bass/bluegill/redear sunfish combinations.

b. Biological sampling of the base deer herd was conducted through reproductive study, age/sex ratio analysis and annual parasite counts.

c. The base is participating in a cooperative study with the North Carolina Wildlife Resources Commission and the National Wild Turkey Federation Commission to determine techniques for studying the genetic variability of wild turkey populations.

d. Permit Sales by Type

	Fee	Number Collected	Funds Collected
Hunting/Fishing Military	$ 7.00	1,732	$12,124
Hunting/Fishing Civ Employee	7.00	131	1,127
Hunting/Fishing Civ Guest Seasonal	7.00	381	2,667
Hunting/Fishing Civ Guest Daily	3.00	2	6
Fishing Military Civ Employee	3.00	446	1,338
Hunting Minor Dependent	No Charge	107	-----
Trapping Military Civ Employee	10.00	17	170
		2,816	17,432

e. Game Harvested by Species

Type	Numbers
Deer	742 (32 additional kills by motor vehicles)
Bear	6 (6 additional bear killed by motor vehicles)
Squirrel	164
Wild Turkey	24
Quail	41
Dove	238
Rabbit	7
Duck	3
Raccoon	113
Otter	2

2. Nongame/Protected Species Management

a. Formal consultation has been conducted on all threatened and endangered species relative to ongoing activities. Biological opinions have been rendered by the US Fish and Wildlife Service and National Marine Fisheries Service. The species involved in the consultations include the Red-Cockaded Woodpecker, American Alligator, Eastern Brown Pelican (which was recently delisted), Atlantic Loggerhead, Green Ridley, Leatherback and Hawksbill Sea Turtles, the Fin, Humpback, Right and Sei Whales.

b. During the Red-Cockaded Woodpecker Research Study, 36 colony sites have been located on base of which 36 colony sites have been located on base of which 32 were occupied by at least one Red-Cockaded Woodpecker. More than 260 cavity trees have been located, mapped and descriptive data collected from around them. To date, 96 adults and 49 nestlings have been color banded. Only 46 of the nestlings banded are known to have fledged. There are eight birds known to have not been banded. Both adults and fledgings are being studied relative to home range.

c. The nesting and foraging habitat of the Red-Cockaded Woodpecker was prescribed burned under the biological opinion guidelines rendered by the US Fish and Wildlife Service for the species.

d. Thirty-nine sea turtle nests were monitored by Natural Resources personnel during the 1986 nesting season at Onslow Beach. The work involved protecting each nest from predation, beach erosion, military training, tagging adult turtles and determining the number of hatchlings.

e. Three hundred and eighty nesting boxes for Eastern Bluebirds were maintained and monitored during the three major nesting intervals during the nesting season. 67% of the boxes were used by bluebirds while 12% were used by other species including flying squirrels and the Carolina Chickadees.

3. Forest Management. Forest management is presently being carried out on 76,400 acres. Forest management generally consists of timber management activities associated with the harvesting of timber, wildlife habitat management and forest protection. The commercial forestland is managed on a sustained yield, multiple-use management system on a ten-year cutting cycle with an 80-year rotation for loblolly pine, a 100-year rotation for longleaf and pond pine, and a 120-year rotation for hardwood species.

a. Budget

Funds authorized	$419,000.00
Funds obligated	363,023.15

b. Receipts - Sales of Forest Products

Product	Volumes
Pine Sawtimber	3,041 MBF
Pine Pulpwood	6,075 Cords
Hardwood Pulpwood	109 Cords
TOTAL PROCEEDS:	$528,815.23

c. Timber Marked - All marked timber was accomplished by in-house personnel in Compartments 2, 8, 14, 24, 31, 38, 40 and 53. These marked areas totaled 1,715 acres with a volume of 2,606 MBF pine sawtimber, 2,466 cords pine pulpwood, 6 MBF hardwood sawtimber, and 40 cords of hardwood pulpwood.

d. Reforestation

(1) Acres planted	301
(2) Acres KG'd	136 Natural
	35 Artificial
(3) Acres Windrowed	35
(4) Acres Bedded	181
(5) Acres Chopped for Seedbed Preparation	222
(6) Acres chopped for artificial Regeneration	30

509

e. Unpaved Forest Access Roads - Graded and repaired and estimated three miles

f. Fire Protection and Suppression

(1) Prescribed Burning

(a) Flagged and secured 90 miles of fireline

(b) Prescribed burned 11,228 acres in 12 compartments

(c) Controlled burned 11,588 acres of range and impact area

22,816

(d) Assisted the NC Forest Service as required by the Cooperative Agreement

g. Insect and Disease Control

(1) Flew Southern Pine Beetle detection flights

(2) 130 suspected Southern Pine Beetle infestations were ground checked

(3) Control measures taken on 38 Southern Pine Beetle infestations

(4) In cooperation with the US Forest Service, Forestry personnel monitored 21 Gypsy Moth Traps with one moth being trapped.

4. Oil Conservation/Erosion Control. Technicial guides for erosion control were developed and will be incorporated into revision of Long Range Natural Resource Management Plan. The Soil Conservation Service, USDA assisted in the project.

5. Agricultural Use/Range Maintenance. Marine Corps Base responded to CMC request for proposed projects under the agricultural and grazing outlease program for funding during FY-86. The project was accomplished for planting approximately 20 miles of forest access during FY-86.

6. Outdoor Recreation

Type	Trips	Hours
Hunting	15,760	54,666
Fishing	150,000	620,000 (estimate)
Trapping	410	1,640 "

ENVIRONMENTAL MANAGEMENT

1. Air Quality. Asbestos removal continued throughout the installation by both base and contractor personnel. Local disposal at the approved site at the base sanitary landfill is utilized.

2. Water Management

a. The Water Quality Control Laboratory, Natural Resources and Environmental Affairs Division, performd the following analysis during FY-86:

(1)	Coliform Tests of Potable Water and Swimming Pools Combined	2,600 (approximately)
(2)	Coliform Tests of Ice Machines	2,300 "
(3)	Coliform Tests of Sewage Effluent	6,200
(4)	Coliform Tests of Surface Water	900
(5)	Biochemical Oxygen Demand; 5-day	3,200
(6)	Suspended Solids	2,500
(7)	Oil & Grease	450
(8)	Ammonia of Sewage Effluent	450

b. Draft NPDES (National Pollutants Discharge Eliminations System) permits were received from the State of North Carolina for the seven wastewater plants.

3. Noise Control. Managing or controlling noise associated with gunfire, rockets, explosives, etc. is a continuing consideration during training. A locally developed system referred to as "Blast Forecast" was developed to eliminate and reduce disturbance of excess shock waves and noise from these weapons and explosives. The forecast is computed by Marine Corps Air Station, New River, based on local weather, existing and predicted. The method predicts the atmosphere refraction conditions and explosive limit (in pounds) which should not exceed the annoyance level of the surrounding community. The information is provided to Base Range Control for use in advising air/ground units of the maximum size projectiles or bombs (or combination thereof) allowable for that period. Use of this system, while not perfect, is a positive effort to reduce an adverse impact of military training on the community.

4. Hazardous Material Management

a. Approximately 15 samples of unknown substances were taken during FY-86 for analysis under the Waste Analysis Plan per RCRA (Resource Conservation Recovery Act), Part B, Permit.

b. Approximately 176 transformers were sampled and analyzed for Polychlorinated Biphenyls (PCB) content.

c. Approximately 13 samples of used oil were taken during FY-85.

d. A comprehensive Hazardous Waste Management Plan and Hazardous Material Spill Prevention Contingency Plan were prepared in draft form by ENSAFE, Incorporated, Memphis, Tennessee and submitted to Navy/Base for review.

5. Resource Recovery and Recycling

a. Waste oil collection and sales through the Defense Reutilization and Marketing Office (DRMO) continues.

b. The on base recycling center for cardboard operated by the Onslow County Sheltered Workshop Program was closed. Cardboard is currently being transported to their Jacksonville, North Carolina recycling center. A Base Recycling Coordinator position was established and recruitment is anticipated shortly.

6. Solid Waste Disposal

a. Base Sanitary Landfill continues operation in compliance with state permits.

b. Base Sanitary Landfill is being inspected by North Carolina Division of Health Services. All reports are satisfactory to date.

c. Family housing garbage/refuse pick-up is being done by private contractor.

1-86 Summary Report

3. Forest Management. Forest management is presently being carried out on acres. Forest management generally consists of timber management activities associated with the harvesting of timber, wildlife habitat management and forest protection. The commercial forestland is managed on a sustained yield, multiple-use management system on a 10 year cutting cycle with an 80 year rotation for loblolly pine, a 100 year rotation for longleaf and pond pine, and a 120 year rotation for hardwood species.

a. Budget

Funds authorized	$419,000.00
Funds obligated	$363,023.15

b. Receipts - Sales of forest products

Product	Volumes
Pine Sawtimber	3,041 MBF
Pine Pulpwood	6,075 Cords
Hardwood Pulpwood	109 Cords
TOTAL PROCEEDS:	$528,815.23

c. Timber Marked - All marked timber was accomplished by in-house personnel in Compartments 2, 8, 14, 24, 31, 38, 40 and 53. These areas marked totaled 1715 acres with a volume of 2,606 MBF pine sawtimber, 2,466 cords pine pulpwood, 6 MBF hardwood sawtimber, and 40 cords of hardwood pulpwood.

d. Reforestation

(1) Acres planted	301
(2) Acres KG'ed	136 Natural 35 Artificial
(3) Acres Windrowed	35
(4) Acres Bedded	181
(5) Acres chopped for seedbed preparation	222
(6) Acres chopped for artificial regeneration	30

e. Unpaved Forest Acess Roads

(1) Graded and repaired an estimated 3 miles

f. Fire Protection and Suppression

(1) Prescribed Burning

(a) Flagged and secured 90 miles of fireline

(b) Prescribed burned 11,228 acres in 12 Compartments

(c) Controlled burned 11,588 acres of range and impact area

(d) Assisted the N. C. Forest Service as required by the Cooperative Agreement

g. Insect and Disease Control

(1) Flew 5 S.P.B. detection flights

(2) 130 suspected S.P.B. infestations were ground checked

(3) Control measures taken on 38 S.P.B. infestations

(4) In cooperation with the U. S. Forest Service, Forestry personnel monitored 21 Gypsy Moth Traps with one moth being trapped.

Peter

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
NREAD/JIW/th
11000/1

DEC 12 1983

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Summary of Environmental/Natural Resources Management Report Symbol (MC-11015-06)

1983

Ref: (a) MCO P11000.8A
(b) CG MCB ltr MAIN/JIW/th 11010 of 12 Oct 1983

Encl: (1) Camp Lejeune Environmental/Natural Resources Management Summary for FY-1983

1. The enclosure is submitted in accordance with reference (a). The Forestry Section was submitted by reference (b).

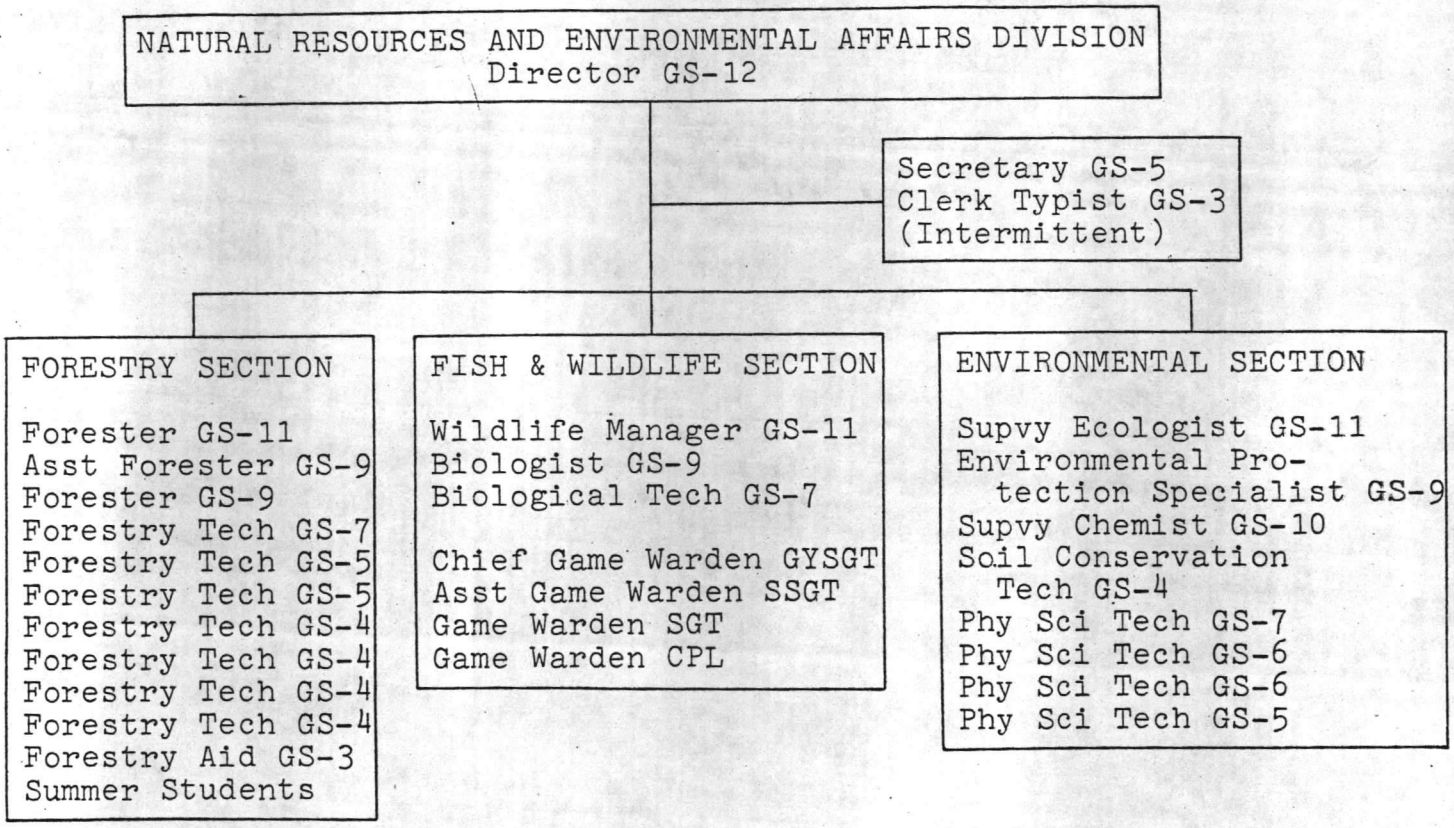
2. If additional information is desired, please contact Mr. Julian Wooten, Natural Resources and Environmental Affairs Division, (AUTOVON) 484-5003.

M. G. LILLEY
By direction

CAMP LEJEUNE ENVIRONMENTAL/NATURAL RESOURCES MANAGEMENT SUMMARY
FOR FY-1983

I. General Management

A. Program Administration - The Assistant Chief of Staff, Facilities has overall base Natural Resources and Environmental Program management responsibilities. The following personnel carry out Forestry, Fish and Wildlife and Environmental Program requirements.



B. Education and Public Relations

1. Natural Resources and Environmental Affairs Division personnel have attended the following training sessions:

a. Hardwood Management Workshop	1 each
b. Western Fish and Wildlife Conference	2 "
c. Society of American Foresters Conference	2 "
d. Southeastern Fish and Wildlife Conference	2 "

e. Formation and Control of Trihalomethanes 1 each

f. Bacteriological Methods in the Analysis of Drinking Water 1 "

g. Hazardous Material Control Course 1 "

h. Oil Spill Control Course 1 "

i. North Carolina Service Corporator School 1 "

j. Technical Sessions National Wild Turkey Federation 1 "

2. Natural Resources and Environmental Affairs Division personnel have conducted tours related to the Base Natural Resources programs as follows:

a. Paul Smith College of New York Forestry Students

b. North Carolina State University Wildlife Students

c. North Carolina Wild Turkey Federation, State Officers and Directors

3. Natural Resources and Environmental Affairs Division personnel have presented several slide/lecture programs to local civic organizations, schools, etc. Several articles related to the Base Natural Resources and Environmental Program have appeared in the base and local newspaper.

C. Special Incidents

1. A multi-resource inventory was contracted to inventory the natural resources on Marine Corps Base in preparation for updating the Natural Resource Management Plan in FY-84. The inventory was contracted by the US Forest Service, Asheville, North Carolina. A soils survey was also conducted and completed by the US Soil Conservation Service.

2. Environmental engineering survey was conducted by Atlantic Division, Naval Facilities Engineering Command and report prepared.

II. Environmental Management

A. Air Quality

1. NAPSIS Inventory of Air Pollution Sources was revised by Atlantic Division, Naval Facilities Engineering Command with Marine Corps O&M funding. Project is proceeding with process of obtaining remaining outstanding permits.

2. Asbestos disposal area developed at Base Sanitary Landfill in accordance with applicable regulations.

B. Water Use Management

1. Triholomethane analysis of all eight water treatment plants completed. Hadnot Point and Marine Corps Air Station (H), New River, are being monitored quarterly in accordance with state implementing regulations for Safe Drinking Water Act.

2. An exigent minor construction project P-817 began construction of improvements to Courthouse Bay sewage treatment plant. Improvements will provide a flow-equalization holding pond.

3. Four monitoring wells were installed at the Base sanitary landfill satisfying state sanitary landfill operation permit requirements.

4. A written SOP was developed between Occupational and Preventive Medicine Service, Naval Hospital and Natural Resources and Environmental Affairs Division relative to mutual responsibilities for in-house water quality monitoring.

5. The Water Quality Control Laboratory, Natural Resources and Environmental Affairs Division, performed the following analyses during FY-83. (Not a complete listing):

a.	Coliform tests of Potable water and ice supplies	2600(approx)
b.	Coliform test of sewage effluent	1900(approx)
c.	Coliform samples of surface water	1600(approx)
d.	Biochemical oxygen demand; 5-day	3100(approx)
e.	Suspended solids of outfalls	2500(approx)
f.	Oil and Grease	230(approx)

C. Noise Control

- Action initiated by Environmental Engineer, AC/S Facilities, to utilize Army Construction Engineering Research Laboratory Computer model for analysis of artillery related noise pollution at Camp Lejeune.

D. Hazardous Material Management

1. The Subpart B Permit Application for long term hazardous waste storage facility was submitted to the North Carolina

Division of Health Services. Required by the Resource Conservation and Recovery Act, the permit application was signed by base as owner and the local Defense Property Disposal Officer (DPDO) as operator.

2. The GS-9 Ecologist billet (reported during previous reporting period) was reclassified as a GS-9 Environmental Protection Specialist. The incumbent continues to provide operational monitoring of hazardous material and industrial waste disposal and serves as on-scene coordinator for routine spills of petroleum oils and lubricants and hazardous materials response/cleanup.

3. 125 transformers were analyzed for PCB content prior to turn-in to the DPDO.

4. Base Maintenance Electrical Shop personnel continue to perform routine inspections of PCB transformers in service or in custody awaiting disposal.

5. The initial assessment study, ie., NACIP, Phase I, was completed by a private Engineering firm under the supervision of Navy Energy and Environmental Support Activity, Port Huenume, California. Phase II, confirmation study is underway.

E. Resource Recovery and Recycling

1. Waste oil collection and sales through the DPDO continues.

2. The on-base recycling center for cardboard operated by the Onslow County Sheltered Workshop program, was closed. Cardboard is currently being transported to their Jacksonville recycling center.

F. Solid Waste Disposal

1. Landfill continues to be operated in compliance with state permits.

2. Landfill being inspected quarterly by North Carolina Division of Health Services. All reports satisfactory to date.

3. Family Housing garbage/refuse pick up is being done by private contractor.

G. Environmental Documentation. The following actions were assessed during FY-1983:

1. AVELEX 1-83, TLZ Bluebird Operations (PEA)

2. AVELEX 1-83, MCOLF Oak Grove Operations (PEA)

3. Power Supply to TWSEAS (PEA)

4. Proposed Substation and Feeder Line to Tarawa Terrace (PEA)

5. Marine Bulk Fuel System, Solid Shield '83 (PEA)

III. Natural Resources Management

A. Fish and Wildlife Management. Work activities were directed to plan, administer and coordinate the conservation of wildlife populations through the development, maintenance and management of natural habitat. Habitat improvement projects included the maintenance and development of 500 acres of clearings which are well dispersed throughout the base, management of a 2,350 acre quail management area, establishment of ornamental autumn olive and bicolor lespedeza seedlings for game species; the maintenance of waterfoul impoundments and fresh water ponds for fishing; procurement of serialized hunting, fishing and trapping permits; operation of hunter check stations; the issuance of hunting, fishing, trapping and firewood permits and enforcement of Base, State and Federal regulations governing the taking of wildlife resources.

1. Permit Sales by Type

TYPE	FEE	NUMBER	FUNDS COLLECTED
Hunting/Fishing Military	$7.00	2,634	$18,438
Hunting/Fishing Civilian Employee	7.00	236	1,652
Hunting/Fishing Civilian Guest Seasonal	7.00	658	4,606
Hunting/Fishing Civilian Guest Daily	3.00	36	108
Fishing Military, Civilian Employee	2.00	479	958
Hunting Dependent Minor	No Charge	50	0
Trapping Military, Civilian Employee	10.00	35	350
			$27,549

2. Game Harvest by Species

TYPE	NUMBER
Deer	847 (76 additional kills by motor vehicle)
Squirrel	816
Wild Turkey	24
Quail	178
Dove	193
Rabbit	62
Woodcock	33
Raccoon	109

B. Nongame/Protected Species Management. Formal consultation has been conducted on all threatened and endangered species and biological opinions have been rendered by the US Fish and Wildlife Services and National Marine Fisheries Services. The species involved in the consultations include the Red-Cockaded Woodpecker, American Alligator, Eastern Brown Pelican, Atlantic Loggerhead, Gree, Ridley, Leatherback and Hawksbill Sea Turtles; the Fin, Humpback, Right and Sea Whales. Thirty-eight turtles nests were protected and monitored by the wildlife biologist and two temporary technicians during the 1983 nesting season. The nesting and foraging habitat of the endangered Red-Cockaded Woodpecker was prescribed burned under the guidelines of the biological opinion rendered for the species. Annual surveys were conducted involving Red-Cockaded Woodpecker and Alligator populations. Three hundred and seventy nesting boxes for Eastern Bluebirds were erected along primary roadways throughout the Base. Management personnel monitored the boxes during the nesting and determined that 54% of the boxes were used for nesting by the bluebirds.

C. The Forest Management portion of the Environmental Summary was submitted by separate correspondence as requested for discussion at the Department of Defense Session of the Society of American Foresters Conference.

D. Soil Conservation/Erosion Control.

1. Maintenance and Repair Project #LE-202M began construction. This project will upgrade approximately 25 major stream crossings to improve the utility and to abate erosion/sedimentation pollution.

2. An agreement (contract) was entered with USDA Soil Conservation Service to publish revised Camp Lejeune Soil Survey. Updated soils mapping was generated at no cost to Base by the Onslow County Cooperative Soil Survey.

3. A sediment basin was constructed by Base Maintenance Division personnel at the Base Sanitary Landfill as required by the erosion control plan contained in State Landfill Permit and Operational Plan.

E. Agricultural Use/Range Management. Not applicable.

F. Landscaping and Horticulture.

1. During the Spring of 1983, the first area of the Division was landscaped with shrubbery. 4000 plants were placed around barracks, mess halls and Headquarters buildings. Landscaping was also completed at the Main Gate area, Building #33, and along Highway 24 near Midway Park. Twelve hundred plants were used on this project. General Maintenance of shrubbery beds and shrubbery, including flower beds was performed during this year, such as prunning, trimming, fertilizing and cleaning weeds and grass from shrubbery and flowers. Town areas in the Central Area and Division were regraded and seeded where no grass existed. Areas along Holcomb Boulevard, Seth Williams, Brewster Street and Main Service Roads were overseeded with Rye grass this fall.

G. Outdoor Recreation

TYPE	TRIPS	HOURS
Hunting	15,362	67,149
Fishing	25,000 (estimate)	100,000 (estimate)
Trapping	475	3,800

IV. Historical/Archaeological Resource Managment

A. The final draft of the Archaeological and Historic Reconnaissance for the base has been accepted and implemented. Copies of the survey have been forwarded to the Base Central Library and Staff Judge Advocate for research purposes. A copy of the survey has also been forwarded to the Coastal Carolina Community College Library for educational research purposes.

B. Sites listed as eligible for being recommended for inclusion in the National Registry have been submittal to the Staff Judge Advocate for legal advice relative to listing. All known historical and archaeological sites identified in the survey are being protected.

CAMP LEJEUNE FY-83 FORESTRY PROGRAM SUMMARY REPORT

1. Budget: Finance and Accounting Reports as of 7 September 1983

a.	Funds Authorized	$364,500
b.	Funds Obligated	320,336
c.	Estimated Funds Committed	43,600
d.	Expected Surplus	564

2. Receipts: Sales of Forest Products

	Product	Volumes		
		~~2,383,280~~ FY84		
a.	Pine Sawtimber	~~3,744.153~~	MBF	
b.	Pine Pulpwood	8,730.6	Cds	
c.	Hardwood Sawtimber	17.290	MBF	
d.	Hardwood Pulpwood	73.8	Cds	
	Total Proceeds			$607,583.38

OK

FY83 PROCEEDS

3. Timber Marked: All marking done by in-house personnel in compartments 1, 4, 19, 28, 36, 53, 54, 56, 58 and 61. These marked areas totaled 985 acres with a volume of 2,166 MBF Pine Sawtimber and 2,623 cords of Pine Pulpwood.

4. Reforestation:

a.	Acres Planted	111
b.	Acres KG'd	216
c.	Acres Bedded	262
d.	Acres Chopped for Planting	46
e.	Acres of Seedbed Preparation	0

5. 'Timber Stand Improvement: Timber stand improvement was accomplished on 46 acres by drum chopper in FY-83.

6. Unpaved Forest Access Roads:

a. Graded and repaired an estimated 21 miles

b. Hauled and spread 10,072 tons of stone

ENCLOSURE (1

c. Purchased seed and fertilizer for erosion control and wildlife habitat improvement on 18 miles of unpaved roads

d. Approximate expenditures: $116,383.00

7. Fire Protection and Suppression:

a. Prescribed Burning

(1) Flagged and secured 172 miles of fireline

(2) Prescribed burned 9,506 acres in 15½ compartments

(3) Controlled burned 6,500 acreas of range and impact areas

b. Manned fire towers approximately 75 man-days for forest fire detection

c. Suppressed 58 wildfires that burned a total of 299 acres

8. Insect and Disease Control:

a. Aerial Detection Flights: 3

b. Ground checked 66 spots for suspected Southern Pine Beetle infestations

c. Control Measures taken on 3 Southern Pine Beetle infestations

d. Trapped 1 male Gypsy Moth

MAIN/JIW/th
11010

SEP 1 5 1982

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Forestry Program Summary

Ref: (a) CMC ltr LFF-2:MGA:yum of 27 Aug 1982

Encl: (1) Forestry Program Summary FY-82

1982

1. In accordance with the reference, the enclosure is hereby submitted. If additional information is desired, please contact Mr. Julian Wooten, Natural Resources and Environmental Affairs Branch, Base Maintenance Division (AUTOVON) 484-5003.

B. W. ELSTON
By direction

MARLO called 1530 on 12-6-82
AV-224-1425

FORESTRY PROGRAM SUMMARY FY-82

1. Budget: Finance and Accounting Report as of 15 September 1982

a. Funds authorized	$383,200
b. Funds expended	240,326
c. Funds committed (estimated)	142,874
Total expended and obligated	$383,200

2. Receipts: Sale of Forest Products

a. Pine Sawtimber	3,068,170 MBF	$443,979
b. Hardwood Sawtimber	0	0
c. Pine Pulpwood	4,297 Cds	28,492
d. Hardwood Pulpwood	336 Cds	5,103
e. Other Proceeds (Penalty Payments, etc.)		3,894
f. Deletions (Bullet Damage, etc.)		-11,992
Total Proceeds		$469,476

3. Timber Marked: All marking was done by in-house personnel in compartments 23, 25, 52 and 46. The areas marked totaled 1,266 acres with a volume of 3,844,000 MBF pine sawtimber and 4,413 cords of pine pulpwood.

4. Reforestation:

a. Acres Planted	86
b. Acres KG'd	161
c. Acres Bedded	269
d. Acres Seedbed Prepared	29

5. Timber Stand Improvement - Precommercial thinning on 947 acres (drum chopping)

6. Unpaved Forest Access Roads

a. Graded and Repaired 18 miles

b. Hauled and Spread 6,478 tons of stone on unpaved forest access roads

c. Purchased seed and fertilizer for erosion control and wildlife habitat improvement

d. Approximate expenditures $85,000

7. Fire Protection and Suppression:

a. Prescribe Burn

(1) Flag and Plow 72 miles of fireline

(2) Control Burn 10,784 acres in 15 1/2 compartments

(3) Control Burn 6,500 acres in Range and Impact Areas

b. Manned Fire Towers an Estimated 100 days for Forest Fire Detection

c. Suppression of 79 wildfires that burned an estimated 552 acres

d. Assisted the North Carolina Forest Service on ground fires suppression off base

8. Insect and Disease Control:

a. Aerial Detection Flights: 3

b. Ground Check all Suspect Spots

c. Salvage or cut and leave all Infested Spots

MAIN/JIW/th
11010

SEP 2 2 1981

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Forestry Program Summary

Ref: (a) CMC ltr LFF-2:NGA:ymm of 30 Jun 1981

Encl: (1) Forestry Program Summary FY-81

1. In accordance with reference (a), enclosure (1) is hereby submitted. If additional information is desired, please contact Mr. Julian Wooten, Natural Resources and Environmental Affairs Branch, Base Maintenance Division, (AUTOVOM) 484-5003.

F. H. MOUNT
By direction

1981

REPLACES ANNUAL STATISTICAL REPORT

REPLACES ANNUAL STATISTICAL REPORT

FORESTRY PROGRAM SUMMARY FY-81

1. Expenditures: Finance and Accounting Report as of 14 September 1981

a. Funds authorized	$379,000
b. Funds expended	309,445
c. Funds obligated (estimated)	68,905
Total expended and obligated	$378,350

2. Receipts: Sale of Forest Products

a. Pine Sawtimber	5,412.700	MBF	$817,244.90
b. Hardwood Sawtimber	75.910	MBF	4,797.27
c. Pine Pulpwood	5,361.5	Cds	72,878.29
d. Hardwood Pulpwood	298.97	Cds	1,446.61
e. Mixed Pine Hardwood	87,750	Cu Ft	9,651.00*
f. Penalty Payment			373.60
Total Proceeds			$906,391.67

*Stacked timber on construction sites

3. Timber Marked:

a. By contract - Three compartments - Estimated volumes - Pine Sawtimber 2,125.040 MBF, Pine Pulpwood 3,921.75 Cds

b. By in-house personnel - Two and one-half compartments - Estimated volumes - Pine Sawtimber 3,137.910 MBF, Pine Pulpwood 3,004.3 Cds and Hardwood Pulpwood 14.7 Cds

c. Total Marked - Sawtimber 5,262.950 MBF and Pulpwood 6,926.05 Cds

4. Reforestation:

a. Acres Planted - 94 acres

b. Acres KG'd - 48 acres

c. Acres Chopped - 60 acres

5. Timber Stand Improvement - Precommercial thinning on 57 acres.

6. Timber Access Roads:

a. Water holes drained and filled on 15 miles of road with D-4 Tractor

b. Graded 15 miles of timber access roads

c. Planted 20 miles of forest access roads for erosion control and wildlife

ENCLOSURE (

d. Repair unpaved roads, Verona Area; Grade relief ditches, stone, etc.

7. Fire Protection and Suppression:

a. Prescribe Burn

(1) Flag and Plow 67 miles of fireline

(2) Control Burn 7,087 acres in 12 compartments

(3) Control Burn 6,500 acres in range and impact areas

b. Manned fire towers an estimated 90 days for forest fire detection

c. Suppression of 160 wildfires that burned an estimated 1,141 acres

d. Assisted the North Carolina Forest Service on fires threatening base property

8. Insect and Disease Control:

a. Aerial Detection Flights - Four

b. Ground check all suspect spots

c. Salvage or cut and leave all infested spots

d. Impact assessment, evaluation, control plan, etc. in conjunction with the U. S. Forest Service, Insect and Disease Control Personnel. Funding of $7,183 provided by U. S. Forest Service.

9. Personnel Additions:

a. Timber Management Forester - GS-5/7/9

b. Forestry Technician (Timber Marking Crew Leader) GS-5

c. Two Forestry Technicians (Timber Markers) GS-4

10. Equipment Purchased or Obligated:

a. Three Crew Cabs 4x4 - Replacements

b. Two Pickups 4x4 - New

c. Fire Plow - New

d. Slip/on Pumper 100 gallons - New

FY 1980 NATURAL RESOURCES STATISTICAL REPORT FOR
Marine Corps Base, Camp Lejeune, N. C.

PART I - SOIL AND WATER CONSERVATION

1. Natural Resources Management Plan

   a. Date prepared 18 April 1975

   b. Is plan current (yes)

1980

2. Soil Survey Report

   a. Acres completed 86,695

   b. Date prepared 18 April 1975

   (Note: Currently being revised to separate soil grouping used previously into individual soil series. Work is being done by Soil Conservation Service, USDA, as part of Onslow County Cooperative Soil Survey.)

3. Cooperative Agreement

   a. Agency Onslow Soil and Water Conservation District

   b. Date prepared 1 August 1974

   c. Is agreement current (yes)

4. Land Utilization (Acres)

a. Improved grounds	8,362	
b. Semi-improved grounds	5,014	
c. Unimproved grounds	73,319	(Total (1)-(7))
(1) Woodland	60,093	
(2) Agric. outlease	0	
(3) Impact areas	5,447 ✓ 6698 6658	
(4) Roadside zones and streams	2,523	
(5) Wildlife Foodplots	285	
(6) Coastal Beach	1,645	
(7) Tidal Marsh	3,326	

5. Land Use Conversion - None

6. Agricultural Outlease - None

7. Special Conservation Problems Corrected

a. Amphibious landing ramps

(1) Sites No. 52 and 166

(2) Planned Amphibious ramp at S-52 relocated upstream to Wiel Point Road by a project developed by Public Works Officer which included S-166.

(3) Project has been advertised for bids at an estimated cost of $98,000

8. Other Activities Completed

a. Project #1

(1) Cleanup after oil spills

(2) Fund source - O&M

(3) Pollution abatement - pumping oil out of drainage ditches, spill cleanup, and restoration of damaged area.

(4) Cost - $9563.05

b. Project #2

(1) Erosion and sedimentation related to tank trail stream crossings.

(2) Base wide survey completed of all significant crossings.

(3) $750,000 erosion abatement project developed and submitted in cooperation with Public Works Officer to correct major deficiencies.

c. Shoreline stabilization along New River south and adjacent to Mouth of Duck Creek.

(1) 404 permits and related State permits obtained

(2) Approximately $9800.00 in O&M Funds used to prepare site.

(3) Approximagely 750 feet of shoreline stablized to date with masonry rubble generated during demolition aboard Base.

PART II - FOREST RESOURCE MANAGEMENT REPORT FY 80

1. Total Acres of Managed Woodland 62,382

2. Professional Forester Time Used 24 (man months)

3. Long Range Forest Management Plan

a. Date prepared 18 April 1975

b. Date last revised April 1980

c. Date scheduled for next revision April 1981

d. Has annual work plan or increment been prepared for next fiscal year? (yes)

4. Timber Harvests

a. Acres harvested 1,793

b. Sawtimber 4,728.616 MBF Pine

c. Pulpwood 4,043* Cds Pine

d. Poles and piling 0

e. Other 1.450 MBF Hdwd

58 Cds Hdwd

f. 310,884 FT^3 Pine/Hdwd

g. Gross expenses $ 53,019

h. Gross proceeds $ 897,510

*Includes 1,809 cords southern pine beetle salvage.

5. Timber Stand Improvement

a. Acres 103

b. Gross expenditure $ 3,099

6. Reforestation

a. By tree planting 422 acres. By regeneration 80 acres. By site preparation 42 acres KG'd and 42 acres bedded.

b. Windbreaks and shelterbelts 0 acres.

c. Gross expenditures $ 55,929

7. Fire Protection

a. Acres protected 69,140

b. Forest fire lanes: Miles constructed 66 Miles maintained 5

c. Acres controlled burned 8,050 (+6,500 acs. - Ranges & Impact Areas)

d. Gross expenditures $59,289

8. Timber Access Roads

a. Miles constructed 0

b. Miles maintained 14

c. Gross expenditures $ 5,047

9. Natural Beauty

a. Approximately 66 miles of fire line were plowed to prevent prescribed fire from burning in hardwood areas. This will increase the size and aesthetic value of these hardwood areas.

b. Backslopes of heavily traveled main roads were excluded from prescribed burning.

c. Key areas of hardwood are being set aside in KG'd areas to break up these areas and make them more aesthetically pleasing.

10. Administrative Management Costs $ 75,530
(Includes all program costs not included in items 5 through 9 preceding)

11. Total Program Expenditures $ 251,913*
$ 280,361**

12. Estimated value of lumber products harvested and used on Installation
$ 5,000

* $33,486 expended from prior years obligations

** $28,448 expensed from U. S. F. S., Southern Pine Beetle Funds

Note: $283,855 obligated for heavy equipment purchase

TOTAL: $564,216 expensed and obligated FY 80.

PART III - FISH AND WILDLIFE MANAGEMENT

1. Activity

Marine Corps Base, Camp Lejeune, North Carolina

2. Cooperative Management Plan

Date completed 18 April 1975

3. Extent of Land and Water Areas in the Fish and Wildlife Program

Land acreage	71,303	
Water acreage	26,000	
Miles of stream	80	
Miles of shoreline	21	(Marine)
	122	(Stream & Bay)

4. Degree of Public Access. Use the following legend; and place the appropriate letters in the blanks for hunting, fishing and other:

A - Generally open with controlled public access within manageable quotas.
B - Installation personnel and guests.
C - Installation personnel only.
D - Closed (Specify whether for hunting, fishing, or other)

For hunting A
For fishing A
For other outdoor recreation B (Includes other outdoor recreation; i.e., camping, picnicking, winter sports, etc.; not swimming pools; ball parks, golf courses, etc.)

5. Estimated Number of Visitors Granted Access for:

Hunting	4,182
Fishing	25,000
Other outdoor recreation	0
Total	29,182

6. Problems and Potential Problems: The first nesting of Green Sea Turtles was documented during FY 80. Formal consultation was initiated with the U. S. Fish and Wildlife Service under section 7 of Public Law 93-205.

7. Explanation (if public access is denied for hunting, fishing, or other outdoor recreation). Beach facilities, camping, and picnic grounds are denied public access because they are controlled and operated by Base Special Services.

8. Itemized Expenditure of funds derived from fees collected

Project	Expenditures
a. Plant winter rye for wildlife	$1,908.00
b. Clear stumps and other debris from newly established small game strips	842.00
c. Disc leave strips for improving quail nesting cover and plant small game strips	3,395.00
d. Apply agricultural limestone to small game strips	877.00
e. Establish small game strips at HOLF (Oak Grove)	1,576.00
f. Apply agricultural limestone to wildlife clearings	3,002.00
g. Miscellaneous supplies	297.43
GRAND TOTAL	$11,897.43

NOTE: Materials budgeted for nongame and endangered species management was expended from other funds.

9. Special Services Fund

a. Wildlife food plantings (materials, seed and fertilizer) Total $2,318.59

10. Sikes Act Expenditures

a. Establish wildlife clearing for Wild Turkey and Bobwhite Quail $12,050.00

b. Plant winter grain for nongame and game species $11,750.00

c. Purchase wheel-type offset disc harrow $6,200.00

GRAND TOTAL $30,000.00

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
MAIN/JIW/th
11000
7 Dec 79

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Natural Resources Statistical Report

Ref: (a) MCO P11000.8A

Encl: (1) FY 1979 Natural Resources Statistical Report

1979

1. In compliance with reference (a), enclosure (1) is forwarded.

T. R. BAISLEY
By direction

FY 1979 NATURAL RESOURCES STATISTICAL REPORT FOR
Marine Corps Base, Camp Lejeune, N. C.

PART I - SOIL AND WATER CONSERVATION

1. Natural Resources Management Plan

   a. Date prepared 18 April 1975

   b. Is plan current (yes)

2. Soil Survey Report

   a. Acres completed 86,695

   b. Date prepared 18 April 1975

3. Cooperative Agreement

   a. Agency Onslow Soil and Water Conservation District

   b. Date prepared 1 August 1974

   c. Is agreement current (yes)

4. Land Utilization (Acres)

a. Improved grounds	8,362	
b. Semi-improved grounds	5,014	
c. Unimproved grounds	73,319	(Total (1)-(7))
(1) Woodland	60,093	
(2) Agric. outlease	0	
(3) Impact areas	5,447	
(4) Roadside zones and streams	2,523	
(5) Wildlife Foodplots	285	
(6) Coastal Beach	1,645	
(7) Tidal Marsh	3,326	

5. Land Use Conversion - None

6. Agricultural Outlease - None

ENCLOSURE (1)

7. Special Conservation Problems Corrected - (Identified in Natural Resources Management Plan)

a. Borrow Area - Marines Road

(1) Site Nos. 81 & 82

(2) Work incomplete (Significant reduction in erosion)

b. Holover Creek

(1) Site No. 84

(2) Work incomplete

c. Concrete Ramp - Rhodes Point Road

(1) Site No. 166

(2) In Public Works for Design

d. Town Point

(1) Site Nos. 174 & 175

(2) Cost - $12,000

(3) Fund Source - O&M

e. Inland Waterway

(1) Site Nos. 49 & 52

(2) Work not needed

f. Inland Waterway

(1) Site No. 86

(2) Cost - $700

(3) Fund Source - M&I

g. Verona Loop Road

(1) Site No. 190

(2) Work incomplete

h. Courthouse Bay

(1) Site No. 65

(2) Work incomplete

i. Race Course Area

(1) Site No. 198

(2) Work incomplete

j. Inland Waterway

(1) Site Nos. 64 & 90

(2) Work incomplete

k. TLZ Lark, TLZ Albatross, TLZ Lark Road

(1) Site Nos. 85, 104 & 105

(2) Work incomplete

l. F-3 Range

(1) Site No. 118

(2) Cost - $900

(3) Fund Source - M&I

m. Spring Branch

(1) Site No. 99

(2) Work incomplete

8. Other Activities Completed (Projects)

a. Project #1

(1) Cleanup after contingency oil spills

(2) Fund Source - O&M

(3) Pollution Abatement - Pumping oil out of drainage ditches, covering oil with sand, replacement of contaminated soil, grading and seeding areas.

(4) Cost - $5,978

PART II - FOREST RESOURCE MANAGEMENT REPORT FY 80

1. Total Acres of Managed Woodland 62,382

2. Professional Forester Time Used 24 (man months)

3. Long Range Forest Management Plan

a. Date prepared 18 April 1975

b. Date last revised April 1979

c. Date scheduled for next revision April 1980

d. Has annual work plan or increment been prepared for next fiscal year? (yes)

4. Timber Harvests

a. Acres harvested 2,474

b. Sawtimber 4,529.799 MBF Pine

c. Pulpwood 4,576 Cds Pine

d. Poles and piling 0

e. Other 50.080 MBF Hdwd

241 Cds Hdwd

f. Gross expenses $ 123,839

g. Gross proceeds $ 716,099*

5. Timber Stand Improvement

a. Acres 0

b. Gross expenditure $ 0

6. Reforestation

a. By tree planting 114 acres. By direct seeding 38 acres. By regeneration 110 acres. By site preparation 82 acres KG'd and 52 acres bedded.

b. Windbreaks and shelterbelts 0 acres.

c. Gross expenditures $14,437

*Represents money received during budget period and not total sales that occurred during this period.

7. Fire Protection

a. Acres protected 69,140

b. Forest fire lanes: Miles constructed 88 Miles maintained 5

c. Acres controlled burned 8,101 (+ 6.500 acs. - Ranges & Impact Areas)

d. Gross expenditures $ 45,388

8. Timber Access Roads

a. Miles constructed 0

b. Miles maintained 20

c. Gross expenditures $ 4,040

9. Natural Beauty

a. Approximately 88 miles of fire line were plowed to prevent prescribed fire from burning in hardwood areas. This will increase the size and aesthetic value of these hardwood areas.

b. Backslopes of heavily traveled main roads were excluded from prescribed burning.

c. Key areas of hardwood are being set aside in KG'd areas to break up these areas and make them more aesthetically pleasing.

10. Administrative Management Costs $ 67,759
(Includes all program costs not included in items 5 through 9 proceeding)

11. Total Program Expenditures $ 255,463

12. Estimated Value of Lumber Products Harvested and Used on Installation $5,000.

PART III - FISH AND WILDLIFE MANAGEMENT

1. Activity

Marine Corps Base, Camp Lejeune, North Carolina

2. Cooperative Management Plan

Date completed 18 April 1975

3. Extent of Land and Water Areas in the Fish and Wildlife Program

Land acreage	71,303	
Water acreage	26,000	
Miles of stream	80	
Miles of shoreline	21	(Marine)
	122	(Stream & Bay)

4. Degree of Public Access. Use the following legend; and place the appropriate letters in the blanks for hunting, fishing and other:

A - Generally open with controlled public access within manageable quotas.
B - Installation personnel and guests.
C - Installation personnel only.
D - Closed (Specify whether for hunting, fishing, or other)

For hunting	A	
For fishing	A	
For other outdoor recreation	B	(Includes other outdoor recreation; i.e., camping, picnicking, winter sports, etc.; not swimming pools; ball parks, golf courses, etc.)

5. Estimated Number of Visitors Granted Access for:

Hunting	4,307
Fishing	25,000
Other outdoor recreation	0
Total	29,307

6. Problems and Potential Problems: Formal consultation for the endangered Red-Cockaded Woodpeckers and threatened Atlantic Loggerhead Sea Turtle was conducted as required by Section 7 of Public Law 93-205. The US Fish and Wildlife Service issued a biological opinion with recommendations for protecting the habitat of both species. Marine Corps Base implemented a base order setting forth regulations for protecting the woodpecker and loggerhead turtle. Weekly inspections of woodpecker habitat are being conducted to monitor compliance with existing regulations.

7. Explanation (if public access is denied for hunting, fishing, or other outdoor recreation). Beach facilities, camping, and picnic grounds are denied public access because they are controlled and operated by Base Special Services.

8. Itemized Expenditure of Funds Derived from Fees Collected

Project	Expenditure	
a. Plant 30 2-acre plots in winter rye for wildlife		
Labor	$ 419	
Equipment	389	
Total		$ 808
b. Clear stumps and other debris from newly established small game strips		
Labor	307	
Equipment	211	
Total		518
c. Disc leave strips for improving quail nesting cover		
Labor	535	
Equipment	251	
Materials	92	
Total		878
d. Apply lime to bicolor strips in quail management area		
Labor	486	
Equipment	243	
Materials	98	
Total		827
e. Plant 80 acres chufas and lespedeza for wild turkey		
Labor	2,613	
Equipment	441	
Materials	41	
Total		3,095
f. Plant 30 2-acre plots to winter rye		
Labor	2,748	
Equipment	318	
Total		3,066
Grand Total		$9,192

Note: Materials budgeted from nongame and endangered species management were expended from other funds.

a. Wildlife Food Plantings (Special Services Fund) (Materials, seed and fertilizer)

Total	$ 3,988

b. Sikes Act Expenditures

(1) Mark red-cockaded woodpecker habitat	$ 33,258
(2) Establish new small game strips	4,037
(3) Increase shoreline depths of fish ponds	6,874
(4) Plow firelanes around woodpecker habitat	1,711
(5) Erect 200 nesting boxes for wood ducks	3,420
Total	$49,300

10-17-79

Julian:

Here is our part of the annual statistical report.

Ken

P.S. we made $460,636 from timber sales over expenditures last F.Y.

PART II FOREST RESOURCES MANAGEMENT REPORT
FY - 79

1. TOTAL ACRES MANAGED WOODLANDS 62,382
2. PROFESSIONAL FORESTER TIME USED 24 [MAN MONTHS]
3. LONG-RANGE FOREST MANAGEMENT PLAN
   a. DATE PREPARED 18 APRIL 1975
   b. DATE LAST REVISED April 1979
   c. DATE SCHEDULED FOR NEXT REVISION April 1980
   d. HAS ANNUAL WORK PLAN OR INCREMENT BEEN PREPARED FOR NEXT FISCAL YEAR? (YES)
4. TIMBER HARVESTS
   a. ACRES HARVESTED 2474 ACRES
   b. SAWTIMBER 4,529,799 MBF PINE
   c. PULPWOOD 4,576 CORDS PINE
   d. POLES + PILINGS NONE
   e. OTHER 50.080 MBF HARDWOOD
      241 CORDS HARDWOOD
   f. GROSS EXPENSES 123,839
   g. GROSS PROCEEDS $716,099
5. TIMBER STAND IMPROVEMENT
   a. ACRES 0
   b. GROSS EXPENDITURES 0
6. REFORESTATION
   a. BY TREE PLANTING 114 ACRES. BY DIRECT SEEDING 38 ACRES. BY REGENERATION 110 ACRES. BY SITE PREPARATION 82 ACRES KG'ED AND 52 ACRES BEDDED.
   b. WINDBREAKS + Shelterbelts 0 ACRES
   c. GROSS EXPENDITURES. 14,437.

7. FIRE PROTECTION

a. ACRES PROTECTED 69,140

b. FOREST FIRE LANES; MILES CONSTRUCTED 88, MILES MAINTAINED 5

c. ACRES CONTROLLED BURNED 8,101 (+6,500 ACS. OF RANGES AND IMPACT AREAS)

d. GROSS EXPENDITURES 45,388

8 TIMBER ACCESS ROADS

a. MILES CONSTRUCTED 0

b. MILES MAINTAINED 20

c. GROSS EXPENDITURES 4,040

9. NATURAL BEAUTY

a. APPROXIMATELY 88 MILES OF FIRE LINE WERE PLOWED TO PREVENT PRESCRIBED FIRE FROM BURNING IN HARDWOOD AREAS. THIS WILL INCREASE THE SIZE AND ASTHETIC VALUE OF THESE HARDWOOD AREAS.

b. BACKSLOPES OF HEAVILY TRAVELED MAIN ROADS WERE EXCLUDED FROM PRESCRIBED BURNING.

c. KEY AREAS OF HARDWOODS ARE BEING SET ASIDE IN KG'd AREAS TO BREAK UP THESE AREAS AND MAKE THEM MORE ASTHETICALLY PLEASING

10 ADMINISTRATIVE MANAGEMENT COSTS 67,759

(INCLUDES ALL PROGRAM COSTS NOT INCLUDED IN ITEMS 5 THROUGH 9.)

11. TOTAL PROGRAM EXPENDITURES $255,463

12. ESTIMATED VALUE OF LUMBER PRODUCTS HARVESTED AND USED ON INSTALLATION.

$5,000

STATISTICAL REPORT FY-79

#4 TIMBER HARVEST

PROCEEDS

1. Comp't. 12 - PENALTY	$519.63
2. Comp't. 35	16,759.14
3. Comp't. 50 + 15	429,090.26
PENALTY	567.28
4. SEEDTREE '78 - PENALTY	2,353.91
5. Comp't. 6 - PAYMENT UNIT #1	3,156.65
PENALTY	483.25
6. SEEDTREE '79	32,383.68
7. Comp't. 37	77,474.94
ADDITION	17,128.31
8. BERKELEY MANOR	700.00
9. HIGH SCHOOL	126.00
10. TOWN POINT	501.00
11. RADAR SITE	8,011.21
12. CLCP RAILROAD	14,021.48
13. Comp't. 11 - PAYMENT UNIT #2	109,417.06
14. GUM + DUNCAN ST.	3,405.55
TOTAL PROCEEDS	716,099.35

VOLUMES

	PINE		HARDWOOD	
	SAWTIMBER	PULPWOOD	SAWTIMBER	PULPWOOD
Comp't. 12 →	PENALTY			
Comp't. 35	121.734	280.7		
Comp't. 50+15	2,677.990	1,272.8	2.682	79.7
SEEDTREE 78 →	PENALTY			
Comp't 6 →	PENALTY	311.0		
SEEDTREE 79	199.098	52.8		
Comp't. 37	493.118	1780.7		
BERK. MANOR	10.000			
HIGH SCHOOL		21.6		
TOWN PT.		75.0		
RADAR SITE	149.883	75.9	26.780	79.6
CLCP RAILROAD	168.193	187.6		
Comp't. 11	672.460	391.5		
GUM + DUNCAN	37.323	126.2	20.618	82.1
	4,529.799	4575.8	50.080	241.4

4,529.799 MBF PINE
4,576 CORDS PINE
50.080 MBF HARDWOOD
241 CORDS HARDWOOD
} VOLUMES

ACRES HARVESTED

		TOTAL ACRES
1.	Comp't. 12 → PENALTY	
2.	Comp't. 35	232
3.	Comp't. 50 & 15	652
4.	SEEDTREE '78 → PENALTY	
5.	Comp't. 6	246
6.	SEEDTREE '79	156
7.	Comp't. 37	843
8.	BERKELEY MANOR	2
9.	HIGH SCHOOL	2
10.	TOWN POINT	7
11.	RADAR SITE	25
12.	CLCP RAILROAD	75
13.	Comp't. 11 - PAYMENT UNIT #2	224
14.	GUM & DUNCAN ST.	10
		2474

2474 TOTAL ACRES

#5 TIMBER STAND IMPROVEMENT

NONE

#6 REFORESTATION

Comp't.	STD.	ACRES	
18	5A	39	~~96 AC. SEEDED~~
45		21	
37	G5A	36	
11	OLD NURSERY	18	
		114 AC. PLANTED	
34	2 5	23 15	
		38 AC. DIRECT SEEDED	

#6 REFORESTATION (CONT)

KG'd

Comp't.	STD	ACRES
33	4	20
12	8	62
		82 AC. KG'd.

BEDDED

Comp't	STD.	ACRES
33	4	20
36	10A	32
		52 AC. BEDDED

NATURAL REGENERATION

Comp't.	STD	ACRES
50	1	110

#7 FIRE PROTECTION

88 MILES PLOWED - 5M. MAINTAINED G.10 AROUND

Comp't.	AC. BURNED
3	NOT BURNED
14	673
27	823
38	919
51	1,007
53	745
59	674
45	642
60	NOT BURNED
29	712
5	881
31	520
34	505
	8,101

KEM

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
MAIN/KCH/th
11000

OCT 31 1978

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Natural Resources Statistical Report

Ref: (a) MCO P11000.8A

Encl: (1) FY 1978 Natural Resources Statistical Report

1978

1. In compliance with reference (a), enclosure (1) is forwarded.

J. KOVACH
By direction

FY 1978 NATURAL RESOURCES STATISTICAL REPORT FOR
Marine Corps Base, Camp Lejeune, N. C.

PART I - SOIL AND WATER CONSERVATION

1. Natural Resources Management Plan

   a. Date prepared 18 April 1975

   b. Is plan current (yes)

2. Soil Survey Report

   a. Acres completed 86,695

   b. Date prepared 18 April 1975

3. Cooperative Agreement

   a. Agency Onslow Soil and Water Conservation District

   b. Date prepared 1 August 1974

   c. Is agreement current (yes)

4. Land Utilization (Acres)

a. Improved grounds	8,362	
b. Semi-improved grounds	5,014	
c. Unimproved grounds	73,319	(Total (1)-(7))
(1) Woodland	60,093	
(2) Agric. outlease	0	
(3) Impact areas	5,447	
(4) Roadside zones and streams	2,523	
(5) Wildlife Foodplots	285	
(6) Coastal Beach	1,645	
(7) Tidal Marsh	3,326	

5. Land Use Conversion - None

6. Agricultural Outlease - None

7. Special Conservation Problems Corrected - (Identified in Natural Resource Management Plan)

a. Borrow Area - Marines Road

(1) Site Nos. 81 & 82

(2) Work incomplete

b. Holover Creek

(1) Site No. 84

(2) Work incomplete

c. Inland Waterway

(1) Site Nos. 49, 52, 64, 86, 166, 175

(2) Public Works Department Designing

d. Tarawa Terrace

(1) Site Number 16

(2) Work incomplete

e. Brewster Boulevard

(1) Site Nos. 17 & 18

(2) Cost - $34,000

(3) Fund Source - O&M

f. Courthouse Bay

(1) Site No. 65

(2) Work incomplete

g. Inland Waterway

(1) Site Nos. 77 & 78

(2) Public Works Department Designing

h. Town Point Road

(1) Site No. 179

(2) Cost - $1,000

(3) Fund Source - O&M

i. Verona Loop

(1) Site No. 190

(2) Work incomplete

j. Race Course Area

(1) Site No. 198

(2) Work incomplete

k. Marine Corps Helicopter Outlying Landing Field

(1) Site No. 232

(2) Work incomplete

l. Inland Waterway

(1) Site No. 90

(2) Public Works Department Designing

m. Triangle Outpost

(1) Site No. 101

(2) No work required

n. TLZ Lark Road

(1) Site No. 104

(2) Work incomplete

o. TLZ Lark Road

(1) Site No. 105

(2) Work incomplete

p. G-10 Impact Area

(1) Site No. 106

(2) No work required

q. TLZ Goose

(1) Site Nos. 107, 108, 109, 110

(2) Cost - $5,014

(3) Fund Source - O&M

r. Sneads Ferry Road

(1) Site No. 112

(2) No work required

s. F-3 Range

(1) Site No. 117

(2) No work required

t. F-3 Range

(1) Site No. 118

(2) Work incomplete

u. Town Point

(1) Site Nos. 174, 175

(2) Cost - $12,000

(3) Fund Source - O&M

8. Activity Projects Completed

a. Project #1

(1) Drainage and erosion control basewide - roads, streets, ditches, etc.

(2) Fund Source - O&M

(3) Flood and control

(4) Cost - $96,300

b. Project #2

(1) Drainage and erosion control in Base Housing Area

(2) Fund Source - HA

(3) Flood and erosion control

(4) Cost - $29,500

c. Project #3

(1) Basewide special areas for weed control

(2) Fund Source - O&M

(3) Completion required for undesirable vegetation control around

transformer stations, fences, etc.

(4) Cost - $32,000

d. Project #4

(1) Cleanup after contingency oil spills

(2) Fund Source - O&M

(3) Pollution abatement - Pumping oil out of drainage ditches, covering oil with sand, replacement of contaminated soil, grading and seeding areas.

(4) Cost - $6,347

e. Project #5

(1) Landscaping and shrubbery maintenance

(2) Fund Source - O&M

(3) Planting trees shrubs and flowers

(4) Cost - $13,800

f. Project #6

(1) Tree pruning

(2) Fund Source - HA

(3) Remove dead trees around building, prune shrubbery, trim trees and landscape

(4) Cost - $46,500

g. Project #7

(1) Tree pruning

(2) Fund Source - O&M

(3) Remove dead trees around building, prune shrubbery, trim trees, and landscape

(4) Cost - $15,500

PART II - FOREST RESOURCE MANAGEMENT REPORT FY 78

1. Total Acres of Managed Woodland 62,382

2. Professional Forester Time Used 24 (man-months)

3. Long-Range Forest Management Plan

a. Date prepared 18 April 1975

b. Date last revised April 1978

c. Date scheduled for next revision April 1979

d. Has annual work plan or increment been prepared for next fiscal year? (yes)

4. Timber Harvests

a. Acres harvested 2,006

b. Sawtimber 5,458,853 bd. ft.

c. Pulpwood 5,332.9 cords

d. Poles and piling

e. Other 27,864 bd. ft.

81.4 cords

f. Gross expenses $ 81,622

g. Gross proceeds $ 686,157*

5. Timber Stand Improvement

a. Acres 74

b. Gross expenditure $ 3,107

6. Reforestation

a. By tree planting 374 acres. By direct seeding 0 acres. By regeneration 62 acres. By site preparation 86 acres KG'd and 122 acres bedded.

b. Windbreaks and shelterbelts 0 acres.

c. Gross expenditures $39,667

*Represents money received during budget period and not total sales that occurred during this period.

7. Fire Protection

a. Acres protected 69,140

b. Forest fire lanes: Miles constructed 76 Miles maintained 20

c. Acres controlled burned 9,242 (+ 6,500 acs. - Ranges & Impact Areas)

d. Gross expenditures $ 47,998 ($2,237 - O & M)

8. Timber Access Roads

a. Miles constructed 0

b. Miles maintained 18

c. Gross expenditures $ 5,124

9. Natural Beauty

a. Approximately 76 miles of fire line were plowed to prevent prescribed fire from burning in hardwood areas. This will increase the size and aesthetic value of these hardwood areas.

b. Backslopes of heavily traveled main roads were excluded from prescribed burning.

c. Key areas of hardwood are being set aside in KG'd areas to break up these areas and make them more aesthetically pleasing.

10. Administrative Management Costs $ 59,058
(Includes all program costs not included in items 5 through 9 proceeding)

11. Total Program Expenditures $ 236,576

12. Estimated Value of Lumber Products Harvested and Used on Installation $5,000.

PART III - FISH AND WILDLIFE MANAGEMENT

1. Activity

Marine Corps Base, Camp Lejeune, North Carolina

2. Cooperative Management Plan

Date completed 18 April 1975

3. Extent of Land and Water Areas in the Fish and Wildlife Program

Land acreage	71,303	
Water acreage	26,000	
Miles of stream	80	
Miles of shoreline	21	(Marine)
	122	(Stream and Bay)

4. Degree of Public Access. Use the following legend; and place the appropriate letters in the blanks for hunting, fishing and other:

A - Generally open with controlled public access within manageable quotas.
B - Installation personnel and guests.
C - Installation personnel only.
D - Closed. (Specify whether for hunting, fishing, or other.)

For hunting	A	
For fishing	A	
For other outdoor recreation	B	(Includes other outdoor recreation; i.e., camping, picnicking, winter sports, etc.; not swimming pools; ball parks, golf courses, etc.)

5. Estimated Number of Visitors Granted Access for:

Hunting	4,196
Fishing	25,000
Other outdoor recreation	0
Total	29,196

6. Problems and Potential Problem Areas. Some conflict has occurred between military use of the Tank/Mechanized Infantry Training Area and habitat of the red-cockaded woodpecker. Modifications for use of the area are in progress for concurrently insuring protection of the habitat and fulfilling the training commitments. Formal consultation has been requested with the U. S. Fish and Wildlife Service involving habitat protection programs for the red-cockaded woodpecker and the Atlantic loggerhead sea turtle.

7. Explanation (if public access is denied for hunting, fishing, or other outdoor recreation). Beach facilities, camping, and picnic grounds are denied public access because they are controlled and operated by Base Special Services.

8. Itemized Expenditure of Funds Derived from Fees Collected.

Project	Expenditure	
a. Plant 38 2-acre plots in winter grains fro game species		
Labor	$1,567	
Equipment	398	
Total		$1,965
b. Plant 50 1/2-acre strips in annual mixtures for small game		
Labor	446	
Equipment	300	
Total		968
c. Plant 60 1/2-acre plots to chufas for wild turkey		
Labor	1,249	
Equipment	436	
Total		1,709
d. Plant 50 2-acre plots in winter rye and wheat for game species		
Labor	4,076	
Equipment	1,121	
Total		5,197
		$9,839

Note: Materials budgeted for nongame and endangered species management were expended from other funds.

9. Itemized Expenditures, Other Than Fees, for Fish and Wildlife Enhancement Efforts

a. Wildlife Food Plantings (Materials, seed and fertilizer)	$4,980
b. Nongame and Endangered Species Management (Materials)	172
	$5,152

#4

TIMBER SALES

C-60 N62470-77-C-2530

	MBF	CORDS	TOTAL PROCEEDS
PU #1	202.192	293.4	18,072.58
PU #3	952.079	637.2	79,517.21
CHANGE 0001		67.8	508.25
	1,154.271	998.4	$98,098.04

C-45 N62470-77-C-2537

	MBF	CORDS	TOTAL PROCEEDS
PU #1	190.207	453.2	22,644.66
PU #3	193.587	196.8	20,799.20
	383.794	650.0	$43,443.86

C-34 N62470-78-B-3035

	MBF	CORDS	TOTAL PROCEEDS
PU #1,2,3,4,+5	413.079	2167.4	$84,241.48

SEEDTREE N62470-78-B-3014

	MBF	CORDS	TOTAL PROCEEDS
PU #1,2,3,+4	539,279	92.3	$70,167.62

C-6 N62470-78-B-3045

	MBF	CORDS	TOTAL PROCEEDS
PU #2	368.589	537.0	$47,580.27

DITCH AT B.M. N62470-78-M-3094

MBF	CORDS	TOTAL PROCEEDS
10.000	—	$700.00

1011
D-6
HARRELL

PADRICK
3428 - 3230
2101

2195
2083
5023

C-12 N62470-78-B-3045

	MBF	CORDS	TOTAL PROCEEDS
PU #1,2,+3	2589.841	887.8	$341,926.00
	MBF HDW	CORDS HDW.	
	27.864	81.4	

TOTAL MBF PINE 5,458.853

TOTAL CORDS PINE 5,332.9

TOTAL MBF HDW. 27.864

TOTAL CORDS HDW 81.4

TOTAL PROCEEDS $686,157.27

ACRES

1. C-60	PU #1	73
	PU #3	227
	CHANGE 0001	10
2. C-45	PU #1	241
	PU #3	30
3. C-34	PU #1,2,3,4,+5	446
4. C-6	PU #2 15 12 11 16 5	106
5. SEEDTREE 78		358
6. DITCH AT B.M		5
7. C-12	PU #1,2,+3	510
		2006 TOTAL

5. TIMBER STD. IMPROVEMENT

[redacted] ACRES 36 AC [redacted] C-37 (ABANDONED G-5A)

FROM FY-79 PLANTING

38 AC → C-33

DIRECT SEEDED FY-79

THIS 1 AC. MONEY SHOULD BE IN REFORESTATION BUT IT WAS PAID OUT OF TSI.

6. REFORESTATION

PLANTING - 374 ACRES

Comp't.	Acres
15	9
29	62
46	52
58	27
15	63
18	57
30	9
37	17
41	17
43	60

374 AC. PLANTED

62 [redacted] AC. REGENERATED IN C-[redacted] 12 FOR SEEDTREE

86 AC. OF SITE prep IN C-18 AND 45.

122 AC. BEDDED IN C-18-45-37 (G5A ABANDONED.

38
39 } PORTIONS
40

7 FIRE PROTECTION 9242 AC.

COMP'T	13'	473 AC.	
	18'	584	39 INCLUDED ALTHOUGH
	19'	956	IT IS NOT REGULAR
	28'	919	BURNING.
	30'	662	554 AC.
	31	FY-79	
	33'	1013	
	36'	817	
	41'	557	
	43'	751	
	46'	1039	
	54'	917	

76 MILES OF LINE FROM JOB ORDER
20 MILES AROUND G-10 - THIS IS STANDARD

Pete: file

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
MAIN/WAN/th
11000
14 Oct 77

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Natural Resources Statistical Report

Ref: (a) MCO P11000.8A

Encl: (1) FY 1977 Natural Resources Statistical Report

1977

1. In compliance with reference (a), enclosure (1) is forwarded.

C. D. WOOD
By direction

FY 1977 NATURAL RESOURCES STATISTICAL REPORT FOR
Marine Corps Base, Camp Lejeune, N. C.

PART I - SOIL AND WATER CONSERVATION

1. Natural Resources Management Plan

   a. Date prepared 18 April 1975

   b. Is plan current (yes)

2. Soil Survey Report

   a. Acres completed 86,695

   b. Date prepared 18 April 1975

3. Cooperative Agreement

   a. Agency Onslow Soil and Water Conservation District

   b. Date prepared 1 August 1974

   c. Is agreement current (yes)

4. Land Utilization (Acres)

a. Improved grounds	8,362
b. Semi-improved grounds	5,014
c. Unimproved grounds	73,319 (Total of (1)-(7))
(1) Woodland	60,093
(2) Agric. outlease	0
(3) Impact areas	5,447
(4) Roadside zones and streams	2,523
(5) Wildlife Foodplots	285
(6) Coastal Beach	1,645
(7) Tidal Marsh	3,326

5. Land Use Conversion - None

6. Agricultural Outlease - None

7. Special Conservation Problems Corrected - (Identified in Natural Resource Management Plan)

a. Camp Johnson Area

(1) Site No. 3

(2) Cost - $2,187

(3) Fund Source - O & M

b. Heavy Equipment Area

(1) Site No. 17a & 17b

(2) No work required

c. Berkeley Manor

(1) Site No. 27

(2) Cost - $1,389

(3) Fund Source - HA

d. French Creek Area

(1) Site No. 35

(2) Cost - $6,344

(3) Fund Source - O & M

e. Piney Green Road

(1) Site No. 40

(2) Cost - $562

(3) Fund Source - O & M

f. Training Road

(1) Site No. 45 & 47

(2) Cost - $2,858

(3) Fund Source - O & M

g. Magazine Area

(1) Site No. 46

(2) Active Borrow Area

h. Mouth of French Creek

(1) Site No. 49

(2) Public Works Department Designing

i. New River Shoreline

(1) Site No. 52

(2) Public Works Department Designing

j. Sneads Ferry Gate

(1) Site No. 57

(2) No work required

k. Sneads Creek

(1) Site No. 59 & 60

(2) Cost - $2,066

(3) Fund Source - O & M

l. Courthouse Bay

(1) Site No. 62

(2) No work required

m. Courthouse Bay Area

(1) Site No. 64

(2) Public Works Department Designing

n. Courthouse Bay Area

(1) Site No. 67

(2) Cost - $1,470

(3) Fund Source - O & M

o. Courthouse Bay Area

(1) Site No. 68

(2) Cost - $4,645

(3) Fund Source - O & M

p. Highway 172

(1) Site No. 75

(2) Work incomplete

q. Highway 172

(1) Site No. 76

(2) Active Borrow Site

r. TLZ Albatross

(1) Site No. 80

(2) Cost - $2,000

(3) Fund Source - O & M

s. Borrow Area - Marines Road

(1) Site No. 81 & 82

(2) Work incomplete

t. Holover Creek

(1) Site No. 84

(2) Work incomplete

u. Inland Waterway

(1) Site No. 86

(2) Public Works Department Designing

v. Onslow Beach

(1) Site No. 89

(2) Cost - $24,600

(3) Fund Source - O & M

w. Highway 172

(1) Site No. 99

(2) No work required

x. Triangle Outpost

(1) Site No. 100

(2) No work required

y. Rhodes Point Road and Town Point Road

(1) Site No. 166 & 175

(2) Public Works Department Designing

z. Rhodes Point Road and Town Point Road Areas

(1) Site Nos. 169, 174, 176

(2) Accomplished by Troop Training Project

8. Activity Projects Completed

a. Project #1

(1) Drainage & erosion control basewide - roads, streets, ditches, etc.

(2) Fund Source - O & M

(3) Flood & Control

(4) Cost - $71,311

b. Project #2

(1) Drainage & erosion control in Base Housing Areas

(2) Fund Source - HA

(3) Flood & Erosion Control

(4) Cost - $17,469

c. Project #3

(1) Basewide special areas for weed control

(2) Fund Source - O & M

(3) Completion required for undesirable vegetation control around transformer stations, fences, etc.

(4) Cost - $36,500

d. Project #4

(1) Cleanup after contingency oil spills

(2) Fund Source - O & M

(3) Pollution Abatement - Pumping oil out of drainage ditches, covering oil with sand, replacement of contaminated soil, grading and seeding areas

(4) Cost - $6,455

e. Project #5

(1) Landscaping shrubbery maintenance

(2) Fund Source - HA

(3) Planting trees, shrubs and flowers

(4) Cost - $81,118

f. Project #6

(1) Tree pruning

(2) Fund Source - O & M

(3) Remove dead trees around buildings, prune shrubbery, trim trees, and landscape

(4) Cost - $42,317

g. Project #7

(1) Landscaping Base Special Services Buildings at Onslow Beach

(2) Fund Source - R2 (Non-appropriated Fund)

(3) Planting local shrubbery bordering Camp Site #1

(4) Cost - $2,100

PART II - FOREST RESOURCE MANAGEMENT REPORT FY 77

1. Total Acres of Managed Woodland 62,382

2. Professional Forester Time Used 24 (man-months)

3. Long-Range Forest Management Plan

   a. Date prepared 18 April 1975

   b. Date last revised April 1977

   c. Date scheduled for next revision April 1978

   d. Has annual work plan or increment been prepared for next fiscal year? (yes)

4. Timber Harvests

   a. Acres harvested 1,432

   b. Sawtimber 2,710,240 bd. ft.

   c. Pulpwood 2,017 cords

   d. Poles and piling - - -

   e. Other 31,362 bd. ft.

   285 cords

   f. Gross expenses $ 50,873

   g. Gross proceeds $ 252,635*

5. Timber Stand Improvement

   a. Acres 212

   b. Gross expenditure $ 5,670

6. Reforestation

   a. By tree planting 388 acres. By direct seeding 0 acres. By regeneration 152 acres. By site preparation 83 acres.

   b. Windbreaks and shelterbelts 0 acres.

   c. Gross expenditures $35,443

*Represents money received during budget period and not total sales that occurred during this period.

7. Fire Protection

a. Acres protected 69,140

b. Forest fire lanes: Miles constructed 85 Miles maintained 20

c. Acres controlled burned 11,300 6,463 (+ 6,500 acs. - Ranges and Impact Areas)

d. Gross expenditures $ 52,646 ($3,931 - O & M)

8. Timber Access Roads

a. Miles constructed 10

b. Miles maintained 16

c. Gross expenditures $ 2,732

9. Natural Beauty

a. Approximately 85 miles of fire line were plowed to prevent prescribed fire from burning in hardwood areas. This will increase the size and aesthetic value of these hardwood areas.

b. Approximately 108 acres were deleted from proposed timber sales to increase the aesthetic value along heavily traveled roads and housing areas.

c. Backslopes of heavily traveled main roads were excluded from prescribed fire.

d. Key areas of hardwood are being set aside in KG'ed areas to break up these areas and make them more aesthetically pleasing.

10. Administrative Management Costs $ 86,008
(Includes all program costs not included in items 5 through 9 proceeding)

11. Total Program Expenditures $ 233,372

12. Estimated Value of Lumber Products Harvested and Used on Installation $5,000.

PART III - FISH AND WILDLIFE MANAGEMENT

1. Activity

Marine Corps Base, Camp Lejeune, North Carolina

2. Cooperative Management Plan

Date completed 18 April 1975

3. Extent of Land and Water Areas in the Fish and Wildlife Program

Land acreage	71,303	
Water acreage	26,000	
Miles of stream	80	
Miles of shoreline	21	(Marine)
	122	(Stream and Bay)

4. Degree of Public Access. Use the following legend; and place the appropriate letters in the blanks for hunting, fishing and other:

A - Generally open with controlled public access within manageable quotas.
B - Installation personnel and guests.
C - Installation personnel only.
D - Closed. (Specify whether for hunting, fishing, or other.)

For hunting	A	
For fishing	A	
For other outdoor recreation	B	(Includes other outdoor recreation; i.e., camping, picnicking, winter sports, etc.; not swimming pools, ball parks, golf courses, etc.)

5. Estimated Number of Visitors Granted Access for:

Hunting	5,044
Fishing	25,000
Other outdoor recreation	0
Total	30,044

6. Problems and Potential Problem Areas. Some conflict has occurred between military use of the Tank/Mechanized Infantry Training Area and habitat of the red-cockaded woodpecker. Modifications for use of the area are in progress for concurrently insuring protection of the habitat and fulfilling the training commitments.

7. Explanation (if public access is denied for hunting, fishing, or other outdoor recreation). Beach facilities, camping, and picnic grounds are denied public access because they are controlled and operated by Base Special Services.

8. Itemized Expenditure of Funds Derived from Fees Collected.

Project		Expenditure
a. Plant 38 2-acre plots in winter grains for game species		
Labor	$1,012	
Equipment	240	
Total		$1,252
b. Plant 40 1/2-acre strips in annual mixtures for small game		
Labor	827	
Equipment	362	
Total		1,189
c. Plant 60 1/2-acre plots to chufas for wild turkey		
Labor	827	
Equipment	362	
Total		1,189
d. Plant 30 2-acre plots in winter rye and wheat for game species		
Labor	2,425	
Equipment	1,276	
Total		3,701
TOTALS		$7,331

Note: Materials budgeted for nongame and endangered species management were expended from other funds.

9. Itemized Expenditures, Other Than Fees, for Fish and Wildlife Enhancement Efforts

a. Wildlife Food Plantings (Materials, seed and fertilizer)	$4,388
b. Nongame and Endangered Species Management (Materials)	607
	$4,995

F.Y. - 77
STATISTICAL REPORT

4.

TIMBER SALES. 1,432 AC.

✓A. ACRES. HARVESTED

N62470-77-C-2503 (Compt. 31+33) 335 AC.

C-31 STD'S. 2 → 89

3 → 94

5 → 27

6 → 67

7 → 68

C-33 STDS 7 → 30

12 → 31

406 - 71 AC. ROADSIDE ZONE

✓ N62470-77-C-2530 (HIGH SCHOOL) 20 AC.

N62470-76-C-0720 (SEEDTREE) — 667 AC.

N62470-76-C-0755 (LANDFILL) — 15 AC.

N62470-76-C-0754 (GUM + DUNCAN) — 6 AC.

N62470-76-C-0759 (C-18) — 389 AC.

359 AC + 30 AC. NEXT TO F-12

5.

TIMBER STAND IMPROVEMENT

A. ACRES. 166 8x8

AREAS ROLL-CHOPPED. 46 100% chop.

29-7	12 AC.
36-10	70
41-9	13
50-9	55
50-10	16

166 ACRES CHOPPED LEAVING 8 FT. UNCHOPPED STRIPS

ABANDONED G-5A 46 ACRES WHICH WAS SOLID CHOPPED.

6. REFORESTATION

A. BY TREE PLANTING 388 ACRES. → PLANTED FY-77

BY DIRECT SEEDING --- ACRES.

BY REGENERATION 152 ACRES.

SEEDTREES STD'S 3 AND 6 IN C-31.

STD. 6 67-9 (ROADSIDE ZONE)

STD. 3 94

152

BY SITE PREPARATION 83 ACRES.

COMP'T. 18 STD. 5 (NORTHERN MIDST SECTION) 41 AC.

45 STD 5 (LARGE SECTION) 42 AC.

83 AC.

7. FIRE PROPECTION

A. ACRES PROTECTED 69,140

B. FOREST FIRE LANES

FROM LONG RANGE PLAN

MILES CONSTRUCTED 85 MILES

FROM FY-76 STATISTICAL REPORT

MILES MAINTAINED 20 (G-10 IMPACT)

MILES CONSTRUCTED → FY-77 PRESCRIBED BURNING PROGRAM IN COMP'T'S. 1, 4, 8, 9, 10, 25, 32, 52, 55, 56, 58, 62 → 85M.

C. ACRES CONTROLLED BURNED 7,074 - 584 = 6463 → C-18

D. GROSS EXPENDITURES _____

8. TIMBER ACCESS ROADS

a. MILES CONSTRUCTED 0

b. MILES MAINTAINED 16 → PLANTED this much. Pete SAID they

c. GROSS EXPENDITURES _____.

Forestry

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
MAIN/WAN/th
11000
6 August 1976

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Natural Resources Statistical Report

Ref: (a) MCO P11000.8A

Encl: (1) FY 1976 Natural Resources Statistical Report

1976

1. In compliance with reference (a), enclosure (1) is forwarded

C. D. WOOD
By direction

FY 1976 NATURAL RESOURCES STATISTICAL REPORT FOR
MARINE CORPS BASE, CAMP LEJEUNE, N. C.

PART I - SOIL AND WATER CONSERVATION

1. Natural Resources Management Plan

   a. Date prepared 18 April 1975

   b. Is plan current (yes)

2. Soil Survey Report

   a. Acres completed 86,695

   b. Date prepared 18 April 1975

3. Cooperative Agreement

   a. Agency Onslow Soil and Water Conservation District

   b. Date prepared 1 August 1974

   c. Is agreement current (yes)

4. Land Utilization (Acres)

a. Improved grounds	8,362	
b. Semi-improved grounds	5,014	
c. Unimproved grounds	73,319	(Total of (1)-(7))
(1) Woodland	60,093	
(2) Agric. outlease	0	
(3) Impact areas	5,447	
(4) Roadside zones and streams	2,523	
(5) Wildlife Foodplots	285	
(6) Coastal Beach	1,645	
(7) Tidal Marsh	3,326	

5. Land Use Conversion - None

6. Agricultural Outlease - None

7. Special Conservation Problems Corrected

a. Camp Johnson

(1) Site No. 8*

(2) Cost - $494

(3) Fund Source - O & M

b. Camp Johnson

(1) Site No. 7*

(2) Cost - $1,316

(3) Fund Source - O & M

c. Camp Johnson

(1) Site No. 9*

(2) Cost - $1,109

(3) Fund Source - O & M

d. Paradise Point

(1) Site No. 28*

(2) Cost - $3,471

(3) Fund Source - O & M

e. Marine Road

(1) Site No. 55* & 56*

(2) Cost - $663

(3) Fund Source - O & M

f. Bearhead Creek

(1) Site No. 23*

(2) Cost - $357

(3) Fund Source - O & M

*(See special treatment areas - Management Plan)

g. Hospital Point

(1) Site No. 29*

(2) Cost - $524

(3) Fund Source - O & M

h. Industrial Area

(1) Site No. 31*

(2) Cost - $751

(3) Fund Source - O & M

i. Frenchs Creek

(1) Site No. 37*

(2) Cost - $430

(3) Fund Source - O & M

j. Industrial Area

(1) Site No. 42*

(2) Cost - $1,442

(3) Fund Source - O & M

k. Sneads Ferry Road (OP-5)

(1) Site No. 44*

(2) Cost - $2,300

(3) Fund Source - O & M

l. Lyman Road (OP-2)

(1) Site No. 120*

(2) Cost - $763

(3) Fund Source - O & M

8. Activity Projects Completed

a. Project #1

(1) Erosion Control

(2) Fund Source - O & M

(3) Replace sand and sod

(4) Cost - $1,980

b. Project #2

(1) Drainage and erosion control in Base Housing Areas

(2) Fund Source - HA

(3) Flood and erosion control

(4) Cost - $93,350

c. Project #3

(1) Base-wide drainage and erosion control on tank trails, roads, streets, ditches, etc.

(2) Fund Source - O & M

(3) Flood and erosion control

(4) Cost - $57,885

d. Project #4

(1) Base-wide special areas for weed control

(2) Fund Source - O & M

(3) Completion required for undesirable vegetation control around transformer stations, fences, etc.

(4) Cost - $7,500

e. Project #5

(1) Clean-up after contingency oil spills

(2) Fund Source - O & M

(3) Pollution Abatement - Pumping oil out of drainage ditches, covering oil with sand, replacement of contaminated soil, regrading and seeding areas.

(4) Cost - $2,700

f. Project #6

(1) Landscaping shrubbery maintenance

(2) Fund Source - HA

(3) Planting trees, shrubs, and flowers

(4) Cost - $45,000

g. Project #7

(1) Tree Pruning

(2) Fund Source - O & M

(3) Remove dead trees around buildings, prune shrubbery, trim trees and landscaping

(4) Cost - $40,000

PART II - FOREST RESOURCE MANAGEMENT REPORT FY 76

FISCAL YEAR

1. Total Acres of Managed Woodland 62,382

2. Professional Forester Time Used 24 (man-months)

3. Long-Range Forest Management Plan

a. Date prepared 18 April 1975

b. Date last revised April 1976

c. Date scheduled for next revision April 1977

d. Has annual work plan or increment been prepared for next fiscal year? yes

4. Timber Harvests

a. Acres harvested 725

b. Sawtimber 5,554,476 pine bd. ft.

c. Pulpwood 15,133 pine cords

d. Poles and pilings - - - bd. ft.

e. Other 21,948 hwd. bd. ft.

122.7 hwd. cords

f. Gross expenses $ 48,315.27

g. Gross proceeds $ 319,303.31

5. Timber Stand Improvement

a. Acres 61

b. Gross expenditure $ 8,008.50

6. Reforestation

a. By tree planting 350 acres. By direct seeding — acres. By regeneration - - - acres. By site preparation 500 acres.

b. Windbreaks and shelterbelts — - acres

c. Gross expenditures $ 72,627.40

Enclosure (1)

7. Fire Protection

a. Acres protected 69,140

b. Forest fire lanes: Miles constructed 50 Miles maintained 20

c. Acres controlled burned 7,312 (and ranges)

d. Gross expenditures $ 32,617.05

8. Timber Access Roads

a. Miles constructed - - -

b. Miles maintained 10

c. Gross expenditures $ 5,858

9. Natural Beauty

a. Approximately two miles of river shore was not logged both to improve asthetic value and reduce the erosion possibilities.

b. Approximately fifty miles of fire lines were plowed to prevent prescribed fire from burning in hardwood areas which will increase the size and asthetic value of hardwood areas.

10. Administrative Management Costs $ 43,896.78 (includes all program costs not included in items 5 through 9, preceding)

11. Total Program Expenditures $ 211,323

12. Estimated Value of Lumber Products Harvested and Used on Installation $ 5,000

PART III - FISH AND WILDLIFE MANAGEMENT

1. Activity,

Marine Corps Base, Camp Lejeune, North Carolina.

2. Cooperative Management Plan

Date completed 18 April 1975.

3. Extent of Land and Water Areas in the Fish and Wildlife Program

Land acreage	71,303	
Water acreage	26,000	
Miles of stream	80	
Miles of shoreline	21	(Marine)
	122	(Stream and Bay)

4. Degree of Public Access. Use the following legend; and place the appropriate letters in the blanks for hunting, fishing, and other:

A. Generally open with controlled public access within manageable quotas.
B. Installation personnel and guests.
C. Installation personnel only.
D. Closed. (Specify whether for hunting, fishing, or other.)

For hunting	A	
For fishing	A	
For other outdoor recreation	B	(Includes other outdoor recreation; i.e., camping, picnicking, winter sports, etc.; not swimming pools, ball parks, golf courses, etc.)

5. Estimated Number of Visitors Granted Access for:

Hunting	4,159
Fishing	25,000
Other outdoor recreation	0
Total	29,150

6. Problems and Potential Problem Areas. Funds collected from permit sales at present rates are not sufficient to maintain ongoing wildlife projects. Labor and material costs have continued to increase since permit fees were last increased during FY-69. Slight modification was necessary near completion of FY-76 to provide necessary funds for next fiscal year prior to collection of fees for hunting.

7. Explanation (if public access is denied for hunting, fishing, or other outdoor recreation). Beach facilities, camping, and picnic grounds are denied public access because they are controlled and operated by Base Special Services.

8. Itemized Expenditure of Funds Derived from Fees Collected.

Project	Expenditure	
a. Planted 36 2-acre plots in rye for deer and wild turkey -		
Labor	$1,488	
Equipment	1,080	
Total		$2,568
b. Planted 30 2-acre plots in rye for deer and wild turkey -		
Labor	1,028	
Equipment	108	
Total		1,136
c. Planted 54 1-acre plots for small game -		
Labor	827	
Equipment	362	
Total		1,189
d. Planted 60 1-acre plots for wild turkey -		
Labor	827	
Equipment	362	
Total		1,189
Total		$6,082

Note: Materials budgeted for fish management and endangered species protection were expended from other funds.

9. Itemized Expenditures, Other Than Fees, for Fish and Wildlife Enhancement Efforts.

a. Wildlife Food Plantings (Materials, seed, and fertilizer)	$4,144
b. Endangered Species Management (Materials)	148
c. Fish Management (Materials, fertilizer, lime, fish food)	548
Total	$4,840

[redacted]

[redacted]

DEY
no type unless in Blank

REAL PROPERTY FACILITIES MANUAL

PART II - FOREST RESOURCES MANAGEMENT REPORT F.Y. 76

ANNUAL op. plan F.Y. 76

1. TOTAL ACRES IN MANAGED WOODLANDS 62,382

2. PROFESSIONAL FORESTER time USED 24 (MAN-MONTHS)

3. LONG-RANGE FOREST MANAGEMENT PLAN

N.R. STATISTICAL REPORT

A. DATE Prepared 18 April 1975

B. DATE LAST REVISED April 1976

C. DATE SCHEDULED FOR NEXT REVISION April 1977

D. HAS ANNUAL WORK plan OR increment been prepared for NEXT FISCAL YEAR? YES

4. Timber HARVESTS

900 S.P.B SALVAGE
60 F.T.
2 LOT 203
263 REGULAR
725

A. ACRES HARVESTED 725

B. Sawtimber 5,554,476 PINE b.f. (SAWTIMBER RECORD)

C. PULPWOOD 15,133 PINE CORDS

D. Poles AND pilings — b.f.
21,948 HARDWOOD b.f.

E. OTHER 122.7 HARDWOOD CORDS

F. Gross expenses $ ~~36,313.27~~ 34,682 (48,315.27)

G. Gross proceeds $ 319,303.31

5. Timber STAND Improvement
(SEED bed burn in C-40)

FOR. MAN. report

A. ACRES 61 AC.

B. Gross expenditure $ (8008.50)

533.00
+7475.50 chipper
$8008.50

hwd

PLANTING F.Y. 76

6. REFORESTATION

a. By TREE planting 350 ACRES.

By direct SEEDING — ACRES. By Regeneration — ACRES. By SITE preparation 500 ACRES (K.G CONTRACT)

b. WINDBREAKS and shelterbelts — ACRES.

c. Gross expenditures $ 71,627.40 ~~[illegible]~~ $72,627.40

7243 BODDER
5428.30 PLANTER

7. FIRE Protection

a. ACRES protected 69,140 (N.R. STATISTICAL Report)

b. FOREST FIRE LANES:

MILES Constructed 50

MILES MAINTAINED 20 (EST)

(prescribed burn plans)

8 → G-10
→ F-3
→ F-12
→ F-18

c. ACRES controlled burned 7,312 AND RANGES

d. Gross expenditures $ ~~27,405~~ 32,617.05

8. Timber ACCESS ROADS

a. MILES constructed —

b. MILES MAINTAINED 10

c. Gross expenditures $ 5,858

★ LAST SHEET

9. ~~Number AND type of FORESTRY operations contributing to Natural Beauty.~~

10. ADMINISTRATIVE Management Costs. $ 43,896.78

(including all program costs not included in item 1 through 9, proceeding.) ~~Approximately $12,000 was charged to this account when in Reality it should have been charged to Timber HARVEST, Item #4.~~

$211,323
~~211,323~~

11. Total Program Expenditures $ ~~143,907~~ ?.

12. Estimated Value of Lumber products Harvested and used on installation $5,000?.

★ 9. Natural Beauty

a. Approximately 2 miles of river shore was not logged both to improve asthetic value and reduce the erosion possibilities.

b. Approximate 50 miles of fire lines were plowed to prevent prescribed fire from burning in hardwood areas which will increase the size and asthetic value of hardwood areas.

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

Forestry file copy

IN REPLY REFER TO
MAIN/CFR/th
11000
11 Aug '75

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Natural Resources Statistical Report

Ref: (a) MCO P11000.8A

Encl: (1) FY 1975 Natural Resources Statistical Report

1975

1. In compliance with reference (a), enclosure (1) is forwarded.

E. A. VOM ORDE, JR.
By direction

FY 1975 NATURAL RESOURCES STATISTICAL REPORT FOR
MARINE CORPS BASE, CAMP LEJEUNE, N. C.
PART I - SOIL AND WATER CONSERVATION

1. Natural Resource Management Plan

   a. Date prepared: 18 April 1975

   b. Plan is current

2. Soil Survey Report

   a. Acres completed: 86,695

   b. Date prepared: 18 April 1975

3. Cooperative Agreement

   a. Agency: Soil Conservation Service

   b. Date prepared: 1 August 1974

   c. Agreement is current

4. Land Utilization (Acres*)

a. Improved grounds		8,362
b. Semi-improved grounds		5,014
c. Unimproved grounds		
(1) Woodland	60,093	
(2) Roadside Zones & Streams	2,523	
(3) Tidal Marsh	3,326	
(4) Coastal Beaches	1,645	
(5) Wildlife Food Plots	285	
(6) Impact Areas	5,447	
(7) Total		73,319
d. Total Land Area		86,695

*Acreages for Marine Corps Air Station, New River & Helicopter Outlying Landing Field, Oak Grove are included

5. Land Use Conversion

a. Area #1

(1) From S to U - 42 acres

(2) Annual monetary savings - None

(3) This acreage was a former dump and landfill area. Pine trees were planted to establish cover and prevent erosion.

b. Area #2

(1) From I to U - 11 acres

(2) Annual monetary savings - $392

(3) This area formerly was covered in grass that required mowing. Pine trees were planted to reduce maintenance cost, provide a screen and improve wildlife habitat.

c. Area #3

(1) From U to S - 86 acres

(2) Estimated monetary savings - Negative

(3) This area was formerly a natural woodland area. It consists of a 100 foot right-of-way for a 230 KV transmission line extending from Midway Park to Hadnot Point area. Income from clearing the timber amounted to $36,600.

6. Agricultural Outleases - None

7. Special Conservation Problems Corrected

a. Area #1

(1) Site No. 12 (See special treatment areas-Management Plan)

(2) Cost - $50

(3) Fund source - O & M

b. Area #2

(1) Site No. 21 (See special treatment areas-Management Plan)

(2) Cost - $1,600

(3) Fund source - 64002 (Wildlife Fund)

8. Activity Projects Completed

a. Project #1

(1) Constructed earth dike, installed drain line and valves at oil storage facilities near Bldg-362 at Camp Geiger

(2) Fund source - O & M

(3) Pollution abatement - for compliance with Spill Prevention, Containment and Countermeasure Plan

(4) Cost - $1,919

b. Project #2

(1) Correct erosion and drainage on various tank trails

(2) Fund source - O & M

(3) Flood and erosion control

(4) Cost - $3,314

c. Project #3

(1) Base-wide drainage and erosion control projects

(2) Fund source - O & M

(3) Completion required use of dragline for cleaning out ditches and waterways for proper drainage for mosquito control

(4) Cost - $ 22,219

d. Project #4

(1) Base-wide special areas for weed control

(2) Fund source - O & M

(3) Completion required for undesired vegetative control around transformer station, fences, etc.

(4) Cost - $11,834

e. Project #5

(1) Clean up after contingency oil spills

(2) Fund source - O & M

(3) Pollution abatement - pumping oil out of drainage ditches, covering oil with sand, replacement of contaminated soil, regrading and reseeding areas.

(4) Cost - $2,516

PART II - FOREST RESOURCE MANAGEMENT REPORT FY 75

1. Total Acres of Managed Woodland: 62,583

2. Professional Forester Time Used: 19 (man-months)

3. Long Range Forest Management Plan

a. Date prepared: 18 April 1975

b. Date last revised: None

c. Date scheduled for next revision: April 1976

d. Has annual work plan or increment been prepared for next fiscal year: Yes

4. Timber Harvests

a. Acres harvested: 1,650

b. Sawtimber: 9,295,558 bd. ft.

c. Pulpwood: 33,823 cds.

d. Poles and piling: 0 bd. ft.

e. Others: 0

f. Gross expenses: $46,100

g. Gross proceeds: $1,141,137.40

5. Timber Stand Improvement

a. Acres: 8,878 prescribe burned - This figure is included in item #7.

b. Gross expenditures: Cost of prescribed burning is included in item #7.

6. Reforestation

a. By tree planting 285 acres. By natural regeneration under seed trees after site preparation 275 acres. Acres receiving mechanical site preparation 1,058 acres.

b. Windbreaks and shelterbelts 0 acres

c. Gross expenditures: $67,300

7. Fire Protection

a. Acres protected: 69,140

b. Forest fire lanes: Miles constructed 30.5 Miles maintained 15.0

c. Acres controlled burned: 8,878 acres (Plus all Ranges) 11,300 Ranges

d. Gross expenditures: $19,100

8. Timber Access Roads

a. Miles constructed: 8 miles

b. Miles maintained: 10 miles

c. Gross expenditures: $2,210.00

9. Operations contributing to Natural Beauty

a. Two miles of roadside zones were left during timber harvest to enhance natural beauty.

b. Forty acres in clumps of hardwood, including dogwood, were left in site preparation areas after timber harvest.

10. Administrative Management Costs $42,800 (Includes all program cost not included in items 4 through 9, preceeding)

11. Total Program Expenditures $177,500

12. Estimated Value of Lumber Products Harvested and Used on Installation $2,000.00

PART III - FISH AND WILDLIFE MANAGEMENT

1. Activity: Marine Corps Base, Camp Lejeune, North Carolina

2. Cooperative Management Plan: Date Completed - 18 April 1975

3. Extent of Land and Water Areas in the Fish and Wildlife Program

Land Acreage	71,303
Water Acreage	26,000
Miles of Stream	80
Miles of Shoreline	21 Marine, 122 Stream & Bay

4. Degree of Public Access. Use the following legend; and place the appropriate letters in the blanks for hunting, fishing, and other:

A. Generally open with controlled public access within manageable quotas.
B. Installation personnel and guests.
C. Installation personnel only.
D. Closed (Specify whether for hunting, fishing, or other.)

For hunting	A	
For fishing	A	
For other outdoor recreation	B	(Includes other outdoor recreation; i.e., camping, picnicking, winter sports, etc.; not swimming pools, ball parks, golf courses, etc.)

5. Estimated Number of Visitors Granted Access for:

Hunting	3,498 (man-days)
Fishing	29,460 (man-days)
Other outdoor recreation	0
Total	32,958

6. Problems and Potential Problem Areas: None

7. Explanation (if public access is denied for hunting, fishing, or other outdoor recreation). Beach facilities, camping, and picnic grounds are denied public access because they are controlled and operated by Base Special Services.

8. Itemized Expenditure of Funds Derived from Fees Collected.

	Project	Expenditure	
A.	Planted 58 2-acre plots in rye for deer and turkey -		
	Labor	$3,143	
	Equipment	1,211	
	Total		$4,354
B.	Planted 59 1/4-acre food strips for small game -		
	Labor	$ 874	
	Equipment	336	
	Total		$1,210
C.	Planted 30 1-acre strips for wild turkey -		
	Labor	$ 794	
	Equipment	297	
	Total		$1,091
D.	Material for Endangered Species Management	$ 59	
	Total		$6,714

9. Itemized Expenditures, Other than Fees, for Fish and Wildlife Enhancement Efforts. (Special Services Funds)

A.	Seed and Fertilizer	$3,489
B.	Plant materials and nesting boxes for nongame species management	$ 169
C.	Material and equipment for protecting nesting habitat of endangered species	$ 399
D.	Wild turkey banding study	$ 47
E.	Fish pond management	$ 770
	Total	$4,874

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO

15G/CFR/th
11000
14 Aug 1974

From: Commanding General
To: Commandant of the Marine Corps (Code LFF-2)

Subj: Natural Resources Summary and Statistical Reports

Ref: (a) MCO P11000.8

Encl: (1) FY 1974 Natural Resources Summary Report
(2) FY 1974 Natural Resources Statistical Report

1974

1. In compliance with reference (a), enclosures (1) and (2) are forwarded.

E. A. VOM ORDE, JR.
By direction

FY 1974 NATURAL RESOURCES SUMMARY REPORT FOR
MARINE CORPS BASE, CAMP LEJEUNE, N. C.

1. Military Mission and Population. The mission of Marine Corps Base, Camp Lejeune is to:

a. Provide housing, training facilities, logistic support, and certain adminsitrative support for Fleet Marine Force Units and other units as assigned.

b. Conduct specialized schools and other training as directed.

c. Receive and process personnel as assigned and conduct individual combat training as directed.

Population: Military - approximately 27,000, military dependents on and off Base - 30,000 and civilian employees including non-appropriated funds - 4,500.

2. Highlights of the Program.

a. Eight 45 cubic yard containers with compactors were installed in April and May at strategic locations such as commissaries, exchanges, etc. for the collection of recyclable cardboard. The compacting unit reduces the volume on a four to one ratio. By recycling this cardboard, a large volume of waste was avoided at the sanitary landfill. Also, three incinerators for burning cardboard were eliminated.

b. 4,477,000 board feet of sawtimber and 8,410 cords of pulpwood were sold for a gross income of $732,760. The harvest of this stated amount of timber is incomplete due to an infestation of southern pine beetles. The contractor has been directing all his efforts toward salvaging beetle infested timber. All field and office work has been completed for updating the forest management plan. Reforestation was completed on 238 acres by planting loblolly and slash pine seedlings and 271 acres were site prepared for natural regeneration.

c. Eleven fresh water ponds totaling 33 acres were managed for fresh water fishing. Management consisted of stocking fingerlings, fertilization, liming, aquatic weed control, and shoreline maintenance. Productivity was evaluated through water chemistry checks, seine sample analysis, and creel census checks.

d. Fifty-six wildlife food plots were planted to rye and wheat in the fall to provide winter grazing. Chufas, millet and other annuals were planted in portions of these plots in the spring. Portions of each plot were left fallow to provide nesting and escape cover. These plantings totaled 132 acres. Fifty-four quarter-acre plots were planted to annuals and perennials in the 1,300 acre small game management area.

e. Ten miles of access roads were planted to lespedeza, fescue and bahia grass. These plantings provide food for wildlife, improve "edge" effects, help maintain roads and provide access for human use. Ten wetland sites were seeded to jungle rice for waterfowl as an experimental project in cooperation with the U. S. Soil Conservation Service.

f. Seventy-two wild turkeys were trapped in a cooperative project with the North Carolina Wildlife Resources Commission. Thirty of these birds were released on National Forest Service Game Lands at three locations in North Carolina. Thirty-two birds were banded and released on the Base in the initial phases of a banding study.

g. An osprey survey of coastal North and South Carolina was conducted during the Spring and Summer of 1974 by Research Biologist from the U. S. Fish and Wildlife Service, Migratory Bird and Habitat Research Laboratory, Laurel, Maryland. Natural Resources and Environmental Affairs personnel assisted with that part of the survey which involved Camp Lejeune. Air, land and water observations were made. It was determined that the osprey population at Camp Lejeune is doing quite well as 51 pairs were observed at nesting sites aboard Base.

h. A wild honeybee project was begun this year to help make more insects available for pollination of flowers. Five hollow trees containing honeybees have been located and marked so they will not be accidentally cut during logging operations. An additional seven colonies have been put in standard beehives and are being managed for pollination purposes.

3. The Natural Resources and Environmental Affairs Division continues to function under the Base Maintenance Officer. The Long Range Multiple Use Natural Resources Management Plan has been completed in the rough. By cooperative agreement the Soil Conservation Service will complete all cartography and print the completed plan for an agreed amount of $14,000. All work is to be completed by 31 December 1974. Objectives of the ensuing year are to put the plan into operation and carry out the program as submitted in the Annual Operational Plan.

4. Pollution from oil continues to be a potential problem as large quantities of petroleum products are delivered daily to the Base by truck or rail. The fuel is stored in underground tanks and in properly diked surface tanks and fuel bladders. Camp Lejeune has been fortunate in that no major oil spills have occurred in its offshore or inland waterways; however, a few minor accidental spills have occurred at storage facilities and refueling stations. Steps have been taken to eliminate the problem. Other minor oil spills have occurred around maintenance areas, motor pools, etc. In an effort to eliminate the problem, approximately 40 waste oil storage tanks have been modified and installed at different locations for utilization at the unit level. Time has been spent with each unit informing personnel of ways to reduce oil spillage in their respective areas.

Oil contaminated soil in various locations has been replaced with new soil, reseeded, and landscaped. Further work is planned in the future to improve appearance of the grounds around maintenance buildings, motor pools, etc.

In the past, most of the waste oil collected at Camp Lejeune was used for dust control on unpaved roads and parking lots. This practice has been approved by the Environmental Protection Agency. A 272,000-gallon tank is now available for storing excess waste oil that is not needed for dust abatement. Approximately 29,000 gallons have been stored in the tank. This excess oil is expected to be used for heating fuel or reclamation.

Camp Lejeune has a boat, oil skimmer, vacuum truck, sorbent mats, straw, and other equipment that can be used to contain and clean up oil spills. This equipment is located at Base Maintenance and, upon notification, can be transported to the site of an oil spill. Also, 600 feet of oil containment boom is on order.

Beginning in January 1974, the educational process is being used in an effort to promote the pollution abatement program. Classroom time was granted for a slide/lecture presentation on the environment to be routinely included as a part of the Motor Transport School Company, Montford Point, student training program. The Base Ecologist gives the presentations with special emphasis being placed on oil pollution. By making each student more aware of environmental problems, it is hoped more desirable habits and attitudes will be developed, resulting in better Marines and eventually better citizens. To date, approximately 600 students have attended the lecture.

5. Lawns at a maximum height of three inches were maintained on 1,868 acres and five acres of lawn were renovated. Herbicide was sprayed on 325 acres for weed and brush control. Approximately 2,100 flowering trees, shrubs and plants were planted in support of the Base beautification program.

6. Woodland management operations were carried out by the Forestry and Wildlife Branches in accordance with multiple use objectives. In conjunction with regular timber harvest program, to preserve the natural beauty of the Base, buffer strips varying in width from 100' to 200' were left around timber operations adjacent to main highways, recreation areas, built up areas and waterways. Clumps of hardwood, especially dogwood, are preserved in cut over areas to enhance natural beauty and maintain a habitat for wildlife.

Prescribed burning, an important facet of woodland management in this area, was very successful this year. Ideal burning weather prevailed through January and February. As a result, 16,100 acres were burned in a most satisfactory manner.

In addition to the regular wildlife food plot plantings, ten miles of forest access roads were planted to lespedeza, fescue and bahia grass. These plantings provide food for wildlife, improve "edge" effects and help stabilize the road bed.

7. The harvest of wildlife species is listed as follows:

SPECIES HARVESTED	NUMBER	
White-tailed Deer	568	(Including 183 either-sex)
Wild Turkey	11	
Squirrel	2,487	
Rabbit	11	
Quail	69	
Dove	51	
Raccoon	188	
Rail	87	
Waterfowl	700	(Estimated)

8. The Natural Resources and Environmental Affairs Division continued in its efforts of maintaining public support for its conservation program through an active educational program. Programs consisted of slide/lecture presentations on Camp Lejeune conservation practices which consisted of speaking to over 2,000 persons approximately forty hours. Audiences consisted of elementary and high school students, boy and girl scouts troops, civilians, officers and enlisted men aboard Base. A 25 minute presentation was also given over WNBE-TV concerning the Camp Lejeune Conservation Program.

9. Covered shelters, heads, fire grills, and picnic tables were installed at the new recreation area at the site of the old burn dump.

FY 1974 NATURAL RESOURCES STATISTICAL REPORT FOR
MARINE CORPS BASE, CAMP LEJEUNE, N. C.
PART I - SOIL AND WATER CONSERVATION

1. Natural Resources Management Plan

   a. Date prepared: Incomplete (Target date for completion - 31 December 1974)

   b. Is plan current: Yes (Upon completion)

2. Soil Survey Report

   a. Acres completed: 85,000 (Approximate) Includes New River Air Station and (HOLF) Oak Grove

   b. Date prepared: June 1974

3. Cooperative Agreement

   a. Agency: Soil Conservation Service

   b. Date prepared: 1 August 1974

   c. Is agreement current: Yes

4. Land Utilization (Acres)

a. Improved Grounds		6,730
b. Semi-improved Grounds		5,014
c. Unimproved Grounds		
(1) Woodland	58,029	
(2) Roadside Zones & Streams	2,523	
(3) Wetlands	48	
(4) Tidal Marsh	3,326	
(5) Coastal Beaches	1,645	
(6) Wildlife Food Plots	285	
(7) Impact Areas	5,447	
(8) Total		71,303
d. Total Land Area for Base		83,047

5. Land Use Conversion

a. (1) From U - 42 acres to I - 42 acres

(2) Negative

(3) No environmental benefit involved. This was a wooded area cleared for a construction project.

6. Agricultural Outline: None

7. Special Conservation Problems Completed: None

8. Activity Projects Completed

a. (1) Correction of soil erosion problem at Henderson Pond

(2) Fund Source - 64002 (Wildlife Fund)

(3) Completion required regrading, shaping the shoreline, mulching, and seeding.

(4) Cost - $1,600

b. (1) Landscaping of Curtis Road, New Water Treatment Plant and barracks at French Creek.

(2) Fund Source - O & M

(3) Completion required grading, seeding and planting of shrubbery.

(4) Cost - $12,549

c. (1) Correct drainage for mosquito control

(2) Fund Source - O & M

(3) Completion required use of dragline for cleaning out ditches and certain waterways for proper drainage.

(4) Cost - $19,418

d. (1) Clean up after contingency oil spills

(2) Fund Source - O & M

(3) Pollution Abatement - Pumping oil out of ditches, covering oil with sand, replacement of contamined soil, regrading and reseeding areas.

(4) Cost - $3,586

PART II - FOREST RESOURCE MANAGEMENT REPORT FY 73

1. Total Acres of Managed Woodland: 60,552

2. Professional Forester Time Used: 18 (Man-months)

3. Long-Range Forest Management Plan

a. Date prepared: March 1964

b. Date last revised: April 1974

c. Date scheduled for next revision: Long-Range Plan for FY 1975-1984 complete (except for printing) and will be revised at end of FY 75.

d. Has annual work plan or increment been prepared for next fiscal year: Yes

4. Timber Harvests

a. Acres harvested: 1,625
Harvest incomplete on two compartments

b. Sawtimber: 4,477,000 bd. ft.

c. Pulpwood: 8,410 cds.

d. Poles and Piling: 0

e. Other: 0

f. Gross Proceeds: $732,760

5. Timber Stand Improvement - (Includes site preparation for planting and natural regeneration under seed-trees)

a. Acres 689

b. Gross expenditures $41,149

6. Reforestation

a. By tree planting 238 acres. By natural regeneration 451 acres.

b. Windbreaks and shelterbelts 0 acres.

c. Gross expenditures $ 7,585

7. Fire Protection

a. Acres protected: 65,000

b. Forest fire lanes: Miles constructed: 20. Miles maintained: 15.

c. Acres control burned: 16,100

d. Gross expenditures: $24,955

8. Flood and Erosion Control to Protect Timber Areas None.

9. Timber Access Roads

a. Miles constructed: 0

b. Miles maintained: 10

c. Gross expenditures: $ 2,338

10. a. Three miles of roadside zones were left during timber harvest to enhance natural beauty.

b. Twenty-five acres in clumps of hardwood, including dogwood were left in site preparation areas after timber harvest.

11. Administrative Management Costs $59,247 (includes all program costs not included in items 5 through 9, preceding).

12. Total Program Expenditures: $135,274

13. Estimated value of lumber products harvested and used on installation $2,000.

PART III - FISH AND WILDLIFE MANAGEMENT

1. Activity: Marine Corps Base, Camp Lejeune, North Carolina

2. Cooperative Management Plan

   Date Completed: 27 November 1973

3. Extent of Land and Water Area in the Fish and Wildlife Program

Land Acreage	71,303
Water Acreage	26,000
Miles of Stream	80
Miles of Shoreline	21 Marine, 122 Stream and Bay

4. Degree of Public Access. Use the following legend; and place the appropriate letters in the blanks for hunting, fishing, and other:

   A. Generally open with controlled public access within manageable quotas.
   B. Installation personnel and guests.
   C. Installation personnel only.
   D. Closed. (Specify whether for hunting, fishing, or other.)

For hunting	A
For fishing	A
For other outdoor recreation	B (Includes other outdoor recreation; i.e., camping, picnicking, winter sports, etc.; not swimming pools, ball parks, golf courses, etc.)

5. Estimated Number of Vistors Granted Access for:

Hunting	3,016 (Man-days)
Fishing	27,075 (Man-days)
Other outdoor recreation	0
Total	30,091

6. Problems and Potential Problem Areas: None

7. Explanation (if public access is denied for hunting, fishing, or other outdoor recreation). Beach facilities, camping, and picnic grounds are denied public access because they are controlled and operated by Base Special Services.

NREA

UNITED STATES MARINE CO

MARINE CORPS BASE

CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO

15G/CFR/to
11000
15 Aug 1973

From: Commanding General
To: Commandant of the Marine Corps (Code COM)

Subj: Natural Resources Summary and Statistical Reports

Ref: (a) MCO P11000.8

Encl: (1) FY 1973 Natural Resources Summary Report
(2) FY 1973 Natural Resources Statistical Report

1973

1. In compliance with reference (a), enclosures (1) and (2) are forwarded.

E. A. VOM ORDE, JR.
By direction

FY 1973 NATURAL RESOURCES SUMMARY REPORT FOR
MARINE CORPS BASE, CAMP LEJEUNE, N. C.

1. Military Mission and Population. The mission of Marine Corps Base, Camp Lejeune is:

a. To provide training facilities, logistic support and certain administrative support for Fleet Marine Force Units and other units assigned.

b. To conduct specialized schools and other training as directed.

c. To receive and process personnel as assigned and conduct individual combat training as directed.

Population: Military - approximately 35,000, military dependents on and off Base - 30,000, and civilian employees - 3,000.

1,500

2. Highlights of the Program.

a. The Base burn dump site was converted into a recreation area. Soil was hauled in to cover the old burning site. The area was regraded, seeded to bermuda grass and landscaped with plantings of Azalea, Crepe Myrtle, Dogwood, and Crab Apple. A three- acre borrow pit was converted into a lake and stocked with bream and bass.

b. 1,700,000 board feet of sawtimber and 4,721 cords of pulpwood were harvested for a gross income of $154,500. Reforestation was completed on 221 acres by planting loblolly and slash pine seedlings and 100 acres were site prepared for Natural regeneration. 200 CFI Plots were remeasured and 202 trees were measured with a dendrometer. The data obtained will be the basis for up-dating the Forest Resources Management Plan.

c. A bear study project in cooperation with the North Carolina Wildlife Resources Commission was initiated in April of 1973. Six bears were live trapped, tranquilized, tagged, and pertinent data obtained such as weight, age, length, etc. A transmitter collar was installed on a female and her movements have been monitored by radio. This information will be used in the development of bear management programs.

108 acres of winter deer and turkey pasture were planted in October of 1972. Approximately 60 one-quarter acre strips were planted in May to summer grain for the enhancement of small game.

3. In October of 1972 the Natural Resources and Environmental Affairs Division of Base Maintenance was formed.

All Natural Resources and Environmental Programs are under the cognizance of this new division. Objectives of the ensuing fiscal year are to complete the Long Range Multiple Use Natural Resources Management Plan and to carry on the program as submitted previously in the annual operational plan.

4. Pollution Abatement Project completed.

a. Boiler fuel conversion - The boilers at the heating plant (Building 1700), Hadnot Point Area which had formerly burned coal as the principle fuel were modified to burn number six fuel oil fulltime.

b. Boiler smoke detectors - Smoke detectors were installed at six heating plants. These detectors automatically set off an alarm when smoke in the stack becomes a certain density. This enables the operator to quickly adjust air-fuel mixture thus keeping air pollution by smoke to a minimum.

c. A scrubber was installed on the incinerator at Bldg 1200. This equipment washes out particulate matter from the smoke stack as burning takes place. Thus air pollution from this source is nullified.

d. A Base Order, entitled "Spill Prevention, and Countermeasure Plan for Oil and Other Hazardous Substances" was published. Thirty tanks for the collection of used oil were installed at various motor vehicle maintenance areas. Pollution from oil spills and improper disposal of used oil was greatly reduced.

5. Lawns at a maximum height of three inches were maintained on 1,868 acres and 88 acres of lawn were renovated. 278 acres were sprayed with herbicide for brush and weed control. The underbrush on 15 acres adjacent to the Golf Course was cut and removed. This brush removal permitted a view of the river which in turn contributed to the natural beauty of the area. A total of 1,794 trees and pieces of shrubbery were planted throughout the Base for landscape maintenance and beautification.

6. Woodland management operations were carried out by the forestry and wildlife branches in accordance with multiple use objectives. Approximately 1,375 acres of timber land were harvested this past year yielding 1,700,000 board feet of sawtimber and 4,721 cords of pulpwood. To preserve the natural beauty of the Base, buffer strips varying in width from 100' to 200' were left around timber operations adjacent to main highways, recreation areas, built up areas, and waterways. Clumps of hardwoods, especially dogwood, are preserved in cut over area to enhance natural beauty and maintain the habitat for wildlife.

Another important tool in land management operations at Camp Lejeune is prescribe burning. More than 5000 acres of woodland were burned last winter with the resulting advantages: removal of accumulated litter on the forest floor, control of Brown Spot disease, stimulation of shrub sprouting opening of the understory for better wildlife utilization. All live-firing ranges were also burned to reduce the hazard of wildfire. Approximately 15 miles of timber access roads were also maintained providing forest access to logging contractors, sportsmen and other recreationists.

Wildlife practices included the planting of fifty-four plots totaling 108 acres. One-half of each plot was planted in the fall with rye and wheat to provide winter grazing. Millet and annuals were planted during the late spring. The other half of the food plots were left fallow for the invasion of native grasses and herbs.

In addition, the 1300-acre small game management area was planted with annual seed mixtures in fifty-four quarter-acre plots and perennials, such as serica lespedeza, were planted in six quarter-acre plots.

Three and one quarter miles of access road were planted to rye grass, fescue and bahia grass. These plantings provide "edge" effects and food for wildlife, and help maintain the roads.

Thirty-five 1/2 to 3/4 acre wildlife openings were maintained by trimming and removing encroaching woods and vegetation.

7. The harvest of wildlife species is listed in the following table:

SPECIES HARVESTED	NUMBER
White-tail deer	351
Wild Turkey	13
Squirrel	2100
Rabbit	7
Quail	122
Dove	120
Raccoon	30
Rail	120
Woodcock	18
Waterfowl	500 (Estimated)

8. In order for a Natural Resources Program to be effective, it must have the support of the public. This past year Camp Lejeune has carried out an active education effort which consisted of speaking to over 700 persons approximately 40 hours. Groups varied in nature and consisted of

students from the second grade through the community college level, Boy Scouts, Girl Scouts, and civilian supervisors on Base. Personnel also presented a twenty-minute program over WNBE television station depicting the Camp Lejeune Conservation Program. A series of news articles entitled "Outdoor Sportsman" were written for the Base Newspaper to keep the public informed on the progress of the hunting season and the need for proper management.

9. Several improvements for outdoor recreation development and facilities were made during FY-73. The old burn dump site was converted into a recreation area complete with three acre pond. Dedication ceremonies were held at Henderson Pond and it was opened for fishing. Both of the Special Services camp grounds were equipped with drinking water, electricity, fire grills, and covered shelters.

FY 1973 NATURAL RESOURCES STATISTICAL REPORT FOR
MARINE CORPS BASE, CAMP LEJEUNE, N. C.
PART I - SOIL AND WATER CONSERVATION

1. Natural Resources Management Plan

   a. Date prepared: Incomplete (in process of being prepared)

   b. Is plan current: No

2. Soil;Survey Report

   a. Acres completed: 65,473

   b. Date prepared: September, 1965

3. Cooperative Agreement

   a. Agency: Soil Conservation Service

   b. Date prepared: March, 1965

   c. Is agreement current: Yes

4. Land Utilization (Acres)

a. Improved grounds	6730	
b. Semi-improved grounds	5014	
c. Unimproved grounds	71303	
(1) Woodland	~~60552~~	58029
Road, roadside zones & Streams		2523
(2) Agric. outlease	~~None~~	
(3) Wetlands	48	
(4) Tidal marsh	3326	
(5) Coastal Beaches	1645	
(6) Wildlife food plots	285	
(7) Impact areas	5447	

Enclosure (2)

5. Land Use Conversion

a. (1) From U - 22 acres to I - 22 acres

(2) Negative

(3) This is an area that had been used as a burn dump for many years. The area was regraded, landscaped and the borrow pit was converted to a small lake (3 acres) and stocked with fish. It will now be used as a recreation a area.

b. (1) From I - 20 acres to U - 20 acres

(2) Estimated annual monetary savings $700

(3) This is a lawn area that was planted with loblolly pine seedlings.

6. Agricultural Outlease: None

7. Special Conservation Problems Corrected: None

8. Activity Projects Completed

a. (1) Conversion of Dump Site to Recreation Area

(2) Fund source-O&M and NA

(3) Completion of this project required regrading, seeding, and landscaping.

(4) Cost - $23,478

b. (1) Installation of Waste Oil Tanks

(2) Fund source-O&M

(3) Pollution Abatement

(4) Cost - $3215

c. (1) Clean up after Contingency Oil Spills

(2) Fund Source-O&M

(3) Pollution Abatement - Pumping oil out of ditchs, replacement of contaminated soil, regrading and reseeding areas.

(4) Cost - $8293

PART II - FOREST RESOURCE MANAGEMENT REPORT FY 73

1. Total Acres of Managed Woodland: 60,552

2. Professional Forester Time Used: 19 (man-months)

3. Long-Range Forest Management Plan

   a. Date prepared: March, 1964

   b. Date last revised: 1973

   c. Date scheduled for next revision: 1974

   d. Has annual work plan or increment been prepared for next fiscal year (yes)

4. Timber Harvests

   a. Acres harvested: 1,375

   b. Sawtimber: 1,700.53 M bd. ft.

   c. Pulpwood: 4,721 cords

   d. Poles and piling: 0 bd. ft.

   e. Other: 0

   f. Gross proceeds: $154,499.82

5. Timber Stand Improvement

   a. Acres 385

   b. Gross expenditures $18,000

6. Reforestation

   a. By tree planting 221 acres. By natural regeneration 100 acres.

   b. Windbreaks and shelterbelts 0 acres.

   c. Gross expenditures $6,760

Enclosure (2)

7. Fire Protection

a. Acres protected: 65,000

b. Forest fire lanes: Miles constructed: 1. Miles maintained: 4.

c. Acres control burned: 6,580

d. Gross expenditures: $3,690

8. Flood and Erosion Control to Protect Timber Areas None.

9. Timber Access Roads

a. Miles constructed: 0

b. Miles maintained: 15

c. Gross expenditures: $ 5,800

10. a. Three miles of roadside zones were left during Timber Harvest to enhance natural beauty.

b. Fifteen acres in clumps of hardwood, including dogwood were left in site preparation areas after Timber Harvest.

11. Administrative Management Costs $ 82,518 (includes all program costs not included in items 5 through 9, preceding).

12. Total Program Expenditures $ 116,758

13. Estimated Value of Lumber Products Harvested and Used on Installation $150.00

PART III - FISH AND WILDLIFE MANAGEMENT

1. Activity: Marine Corps Base, Camp Lejeune, North Carolina

2. Cooperative Management Plan

   Expected date of completion: 31 December 1973

3. Extent of Land and Water Area in the Fish and Wildlife Program

Land acreage	71,303
Water acreage	26,000
Miles of stream	80
Miles of shoreline	21 Marine, 122 Stream and Bay

4. Degree of Public Access. Use the following legend; and place the appropriate letters in the blanks for hunting, fishing, and other:

   A. Generally open with controlled public access within manageable quotas.
   B. Installation personnel and guests.
   C. Installation personnel only.
   D. Closed. (Specify whether for hunting, fishing, or other.)

For hunting	A
For fishing	A
For other outdoor recreation	B (Includes other outdoor recreation; i. e., camping, picnicking, winter sports, etc.; <u>not</u> swimming pools, ball parks, golf courses, etc.)

5. Estimated Number of Vistors Granted Access for:

Hunting	2,273 (man days)
Fishing	25,000 (man days)
Other outdoor recreation	0
Total	27,273

6. Problems and Potential Problem Areas. <u>None</u>

7. Explanation (if public access is denied for hunting, fishing, or other outdoor recreation). Beach facilities, camping, and picnic grounds are denied public access because they are controlled and operated by Base Special Services.