Photo E
SOR 74%
4175 U.A. Bn.

Photo E

SOR 74%

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Photo E

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Photo H

SOR 75%

marking trees for thinning

1) ~~Keep stand from~~ to keep the growth rate up

Keeps trees healthy - faster

makes frost may

reduces insect problems

Photo H

SOR 75%

marking trees for thinning

1) ~~keep stock from~~ to keep the growth rate up

keeps trees healthy - faster

makes frost easy

reduces insect problems

Photo H

SOR 75%

Photo D

SOR 85%

4175 U.A. Gov.

Photo D

log truck & loader

SOR 85%

pulp wood

ten year cutting cycle
examine every ten years for possible cutting

mostly saw timber

D


2335
MACK
AY-8020

Photo D

log truck & loader

SOR 85%

pulp wood

ten year cutting cycle
examined every ten years for possible cutting

mostly saw timber

D

Photo A

SOR 110%

4175 U.S. Gov.

Photo A

SOR 110%

A

Photo A

SOR 110%

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Photo M

SOR 135%

prescribed burning

m

Photo M

SOR 135%

prescribed burning

M

Photo M

SOR 135%

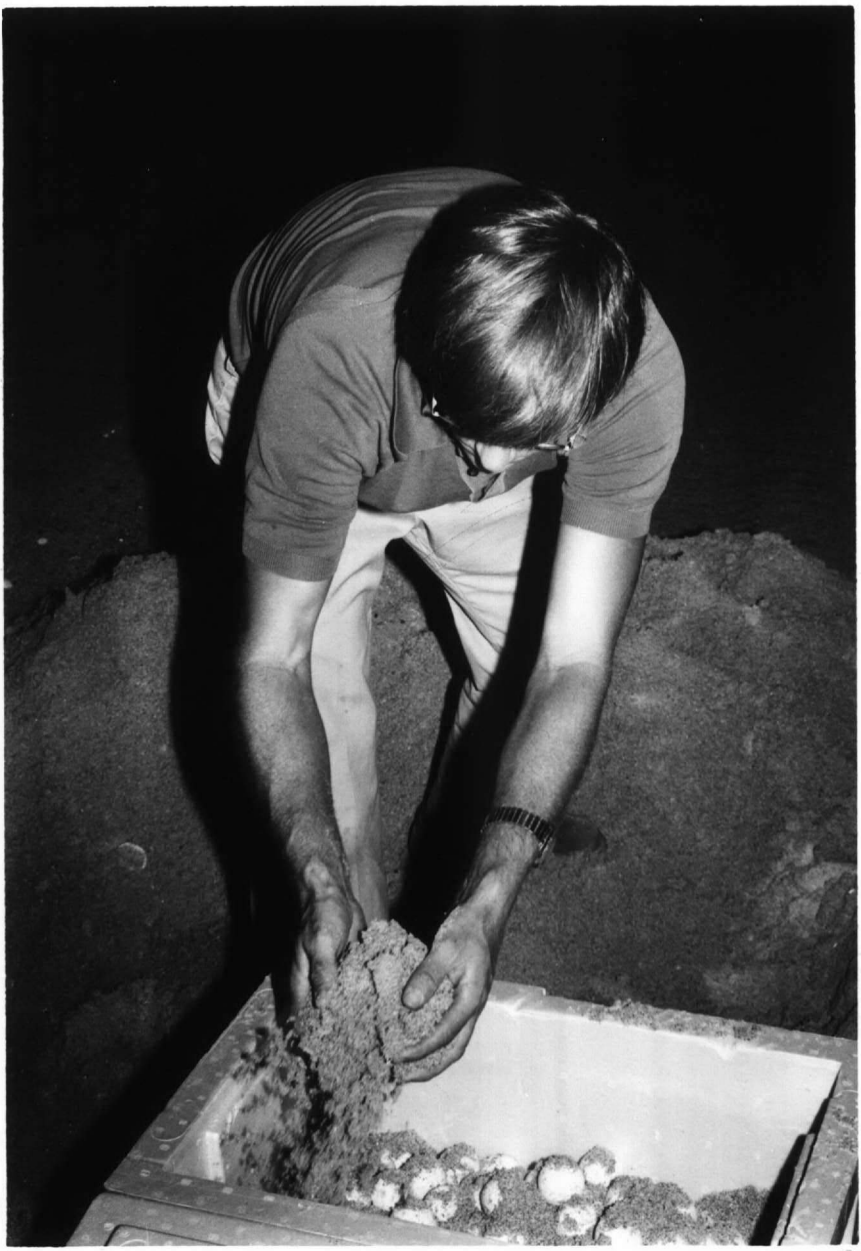

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Photo Q

SOR 50%

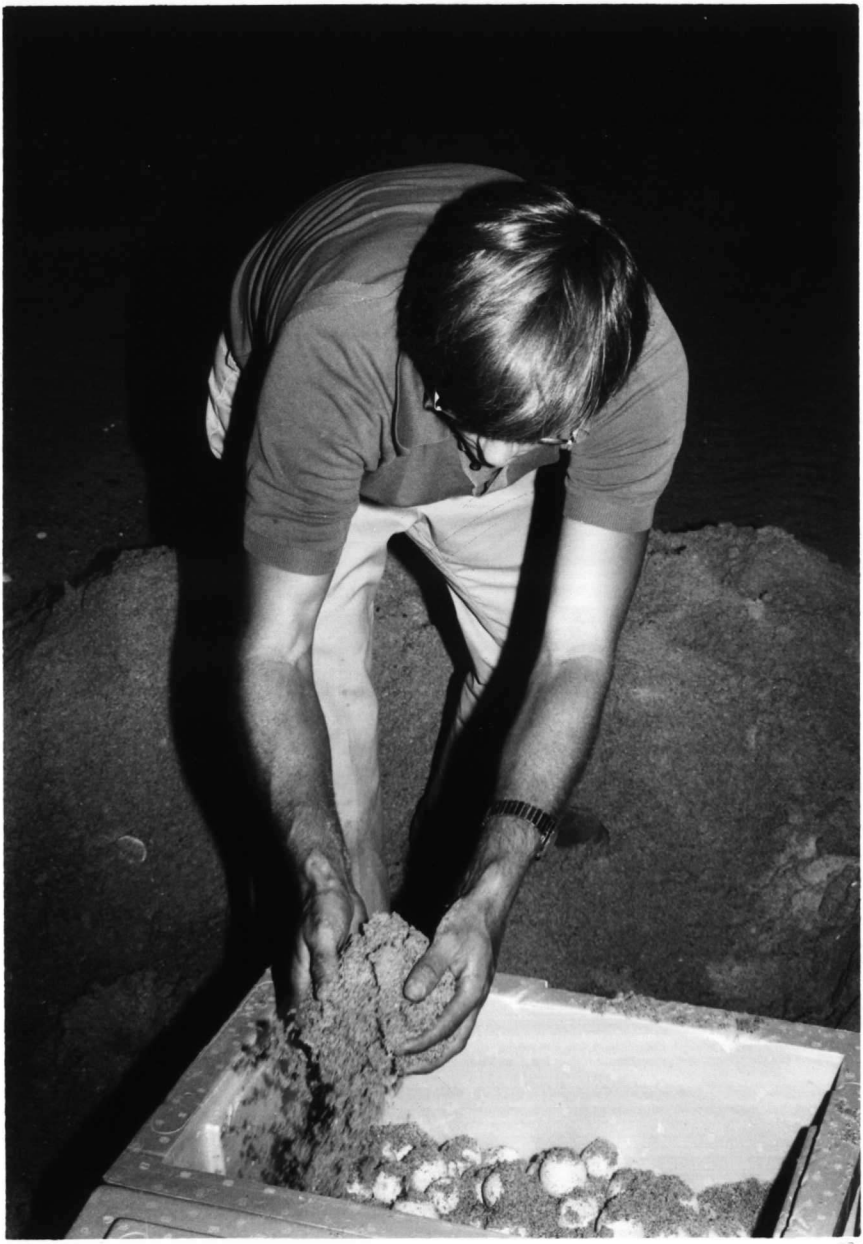
moving the eggs

Styrofoam cooler + wet sand to keep from drying out must be moved w/in 24hr of being laid. my detached embryo from egg shell

9

Photo Q

SOR 50%



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9

Photo 9

50R 50%

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Photo I

SOR 135%

Natural Regeneration - long leaf pine

preferred species insect & disease resistance - fire resistant

has proven more successful than planting methods

Photo I

I

SOR 135%

Natural Regeneration - long leave pine

preferred species insect & desease resistance - fire resistant

has proven more successful than planting methods

Photo I

I

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4175 N. A. Dr.

Photo O

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testify on protection measures for
Cocklebur woodpecker - habitat restrictions

Memo for 2nd Tenth Circuit

Photo 0

SOR ~~[illegible]~~ 135%

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briefing on protection measures for
Cockade woodpecker - habitat restrictions

Memo for 2nd Tank Battalion

Photo 0

SOR ~~[illegible]~~ 135%

4175 U. A. Grr.

Photo L

SOR 73%

timber sales inspection
twice a week at least
make sure contractor is keeping to contract specs.

$ about 1/2 pays for the CL French prog
UOM goes to school system

2

Photo L

SOR 73%

timber sales inspection
twice a week at least
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$ about ½ pays for the CL French prog
UOfO goes to school system

2

Photo L

SOR 73%

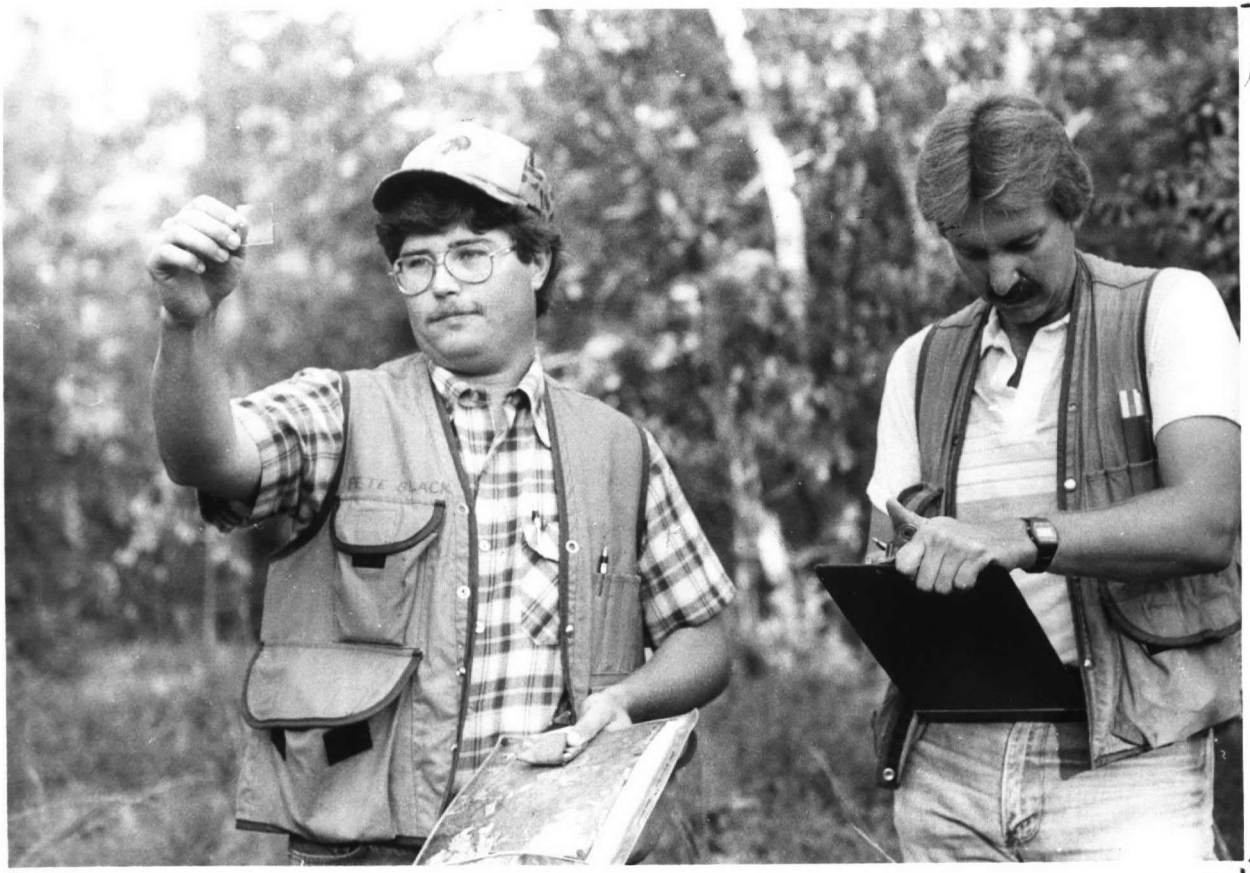

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Photo T

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T

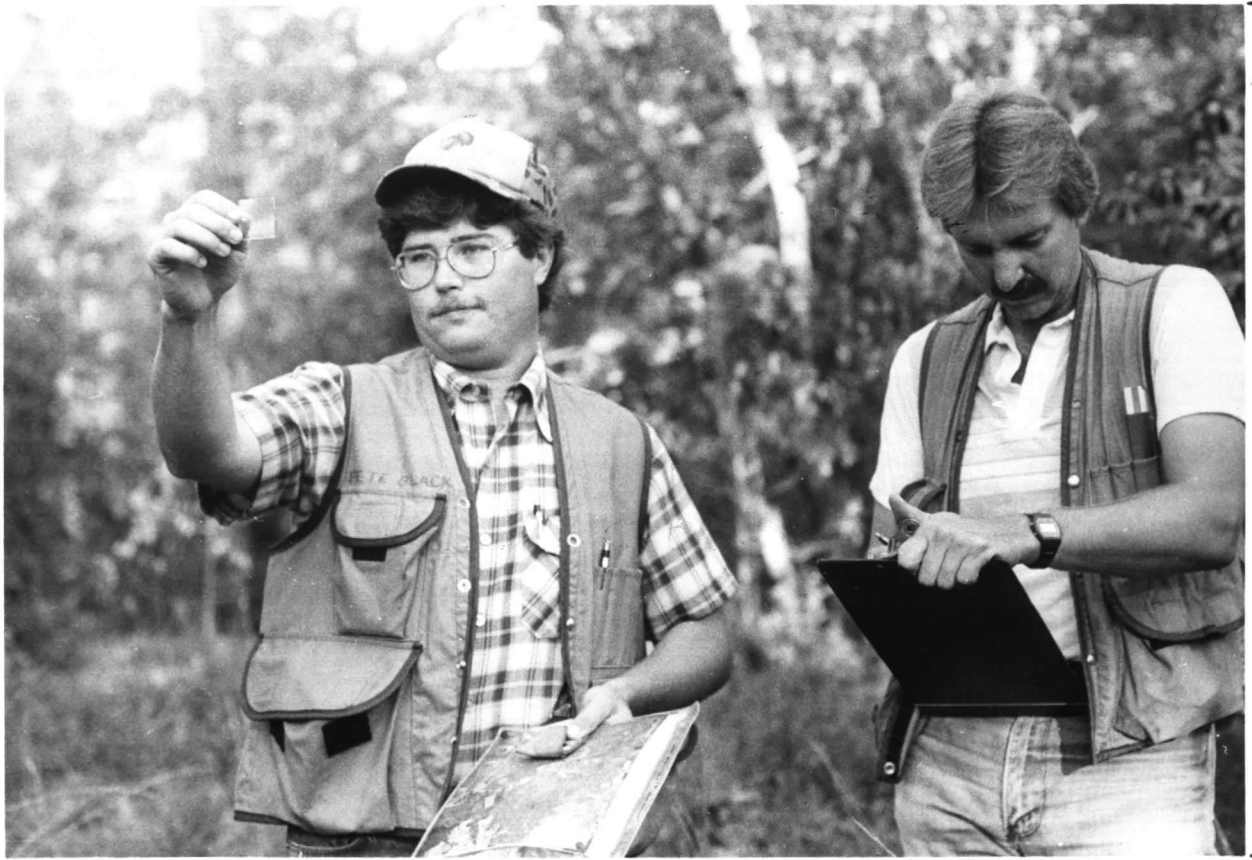
wildlife habitat + forestry coordination

making sure that the forestry management objectives are reached while incorporating as many wildlife management objectives as possible

hardwood [illegible]

Photo T

SOR 72%



T

wildlife habitat + forestry coordination

making sure that the forestry management objectives are reached while incorporating as many wildlife management objectives as possible

hardwood average increasing

Photo T

SOR 72%

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Photo R

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R

Dr scouts from base build + hang wood duck boxes

Photo R

SOR 66%

R

Dog scouts from base build + hay wood duck boxes

Photo R

SOR 66%

4175 U.S. Gov.

Photo G

SOR 62%

bottomland swamp

G

Photo G

SOR 62%

bottomland swamp

G

Photo G

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Photo C

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TRAINING AUDIOVISUAL SUPPORT CE R

MARINE CORPS B

CAMP LEJEUNE, NOR

OFFICIAL MARINE CORPS

C

BY:

DATE: 28 May 8

NEG: #013 158681

Photo C

SOR 54%

TRAINING AUDIOVISUAL SUPPORT CENTER

MARINE CORPS

CAMP LEJEUNE, NORT

OFFICIAL MARINE CORPS

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BY: _____

DATE: 28 May 8

NEG: #013 158681

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Photo N

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Photo N

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Photo N

SOR 52%

4175 N. A. Bar.

Photo J

SOR 50%

Photo J

J

SOR 50%

wildfires

Moore Rd. Plantation

Summer 83

d-83-J Sue lane

may as ~~200-300~~ a year

85' -

1952 acres burned - 121 fires

most 195 fires - 8'

Photo J

J

SOR 50%

wild Sues

Moore Rd. Plantation

Summer 83

d. 88-3 Sue lane

as many as ~~200-300~~ a year

85' -

1952 acres bound - 124 Sues

most 195 Sues - 8'

4175 N.A. Bmr.

Photo 5

SOR 50%

Roadwork
C-7

S

Forest Rd w/ backslope planted for
erosion protection

Photo S

SOR 50%

S

Roadwork C-7

Forest Rd w/ backslope planted for erosion protection

Photo S

SOR 50%

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Photo F

SOR 50%

PHOTOGRAPHIC FACILITY
Marine Corps Base
and
2d Marine Division (Rein), FMF
Camp Lejeune, North Carolina
28542
Commercial Phone
919 - 451 - 3733
451 - 1972
Autovon 484 - 3733
484 - 1972
- Credit -
"OFFICIAL MARINE CORPS PHOTO"

BY: Brooks

DATE: 8 JAN 81

NEG # 013-0562-81

Hankins SHP

New management plan assures management of hardwood clouds - old pines are cut - the far better wildlife diversity of terraces - wildlife pelus - owls

Photo 205 50% F

PHOTOGRAPHIC FACILITY
Marine Corps Base
and
2d Marine Division (Rein), FMF
Camp Lejeune, North Carolina
28542
Commercial Phone
919 - 451 - 3733
451 - 1972
Autovon 484 - 3733
484 - 1972
- Credit -
"OFFICIAL MARINE CORPS PHOTO"

BY: Brooks

DATE: 18 JAN 81

NEG # 013-0562-81

Harwood SLF

New management plan assures management of hardwood stands - old ones don't. For better wildlife diversity, seedlings, wildlife turkeys - woodpeckers - owls

Photo F

205

50%

4178 N. A. Arr.

Photo K

SOR 50%

Photo K
SOR 50%

TRAINING AUDIOVISUAL SUPPORT CENTER
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542
OFFICIAL MARINE CORPS PHOTO

BY: REQUESTOR

DATE: 22 SEPT 83

NEG: #013 -3647- 83

So. Pine beetle infestation
thousands salvage when possible
otherwise trees are felled + left in
place disrupts reproductive cycle of
beetles & kills larvae + eggs in trees

K

historically a big problem
thousands have removed the problem
considerably

Photo K
SOR 50%

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OFFICIAL MARINE CORPS PHOTO

BY: REQUESTOR

DATE: 22 SEPT 83

NEG: #013 -3647-83

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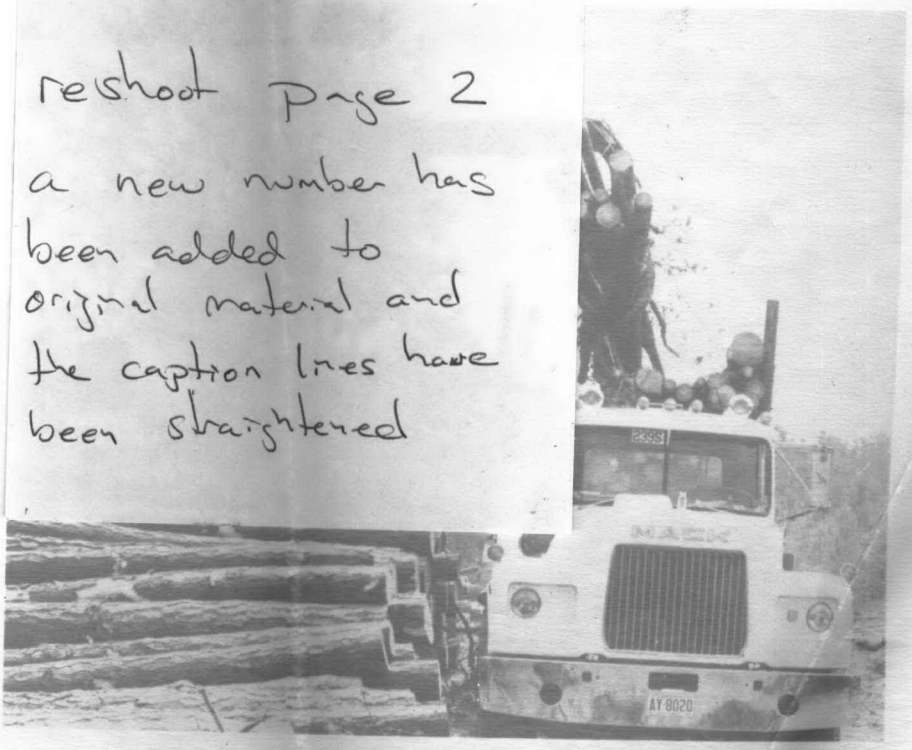
Executive Summary

Multiple-Use Natural Resources Management Plan

United States Marine Corps
Camp Lejeune

reshoot page 2
a new number has
been added to
original material and
the caption lines have
been straightened



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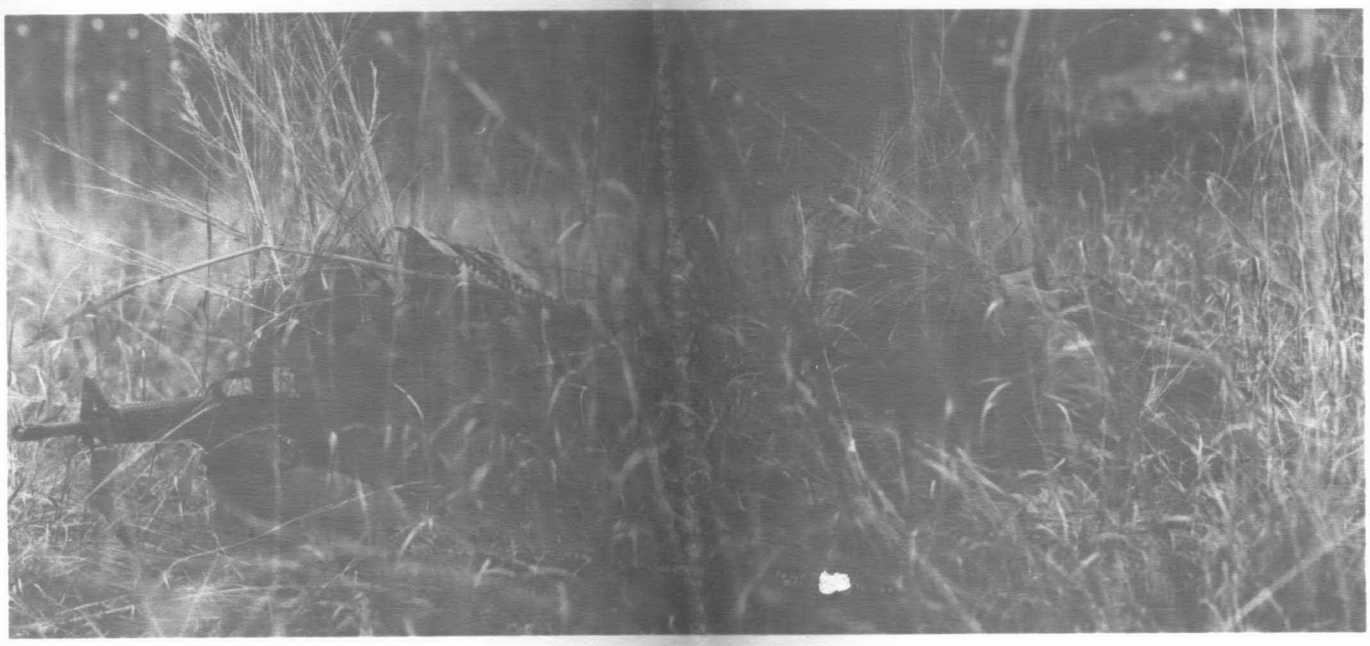

Executive Summary

Multiple-Use Natural Resources Management Plan

United States Marine Corps

Camp Lejeune

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Most of the land was privately owned. The woodlands had been denuded of quality timber. There was no fire protection and the wildlife habitat was generally poor.

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Resources

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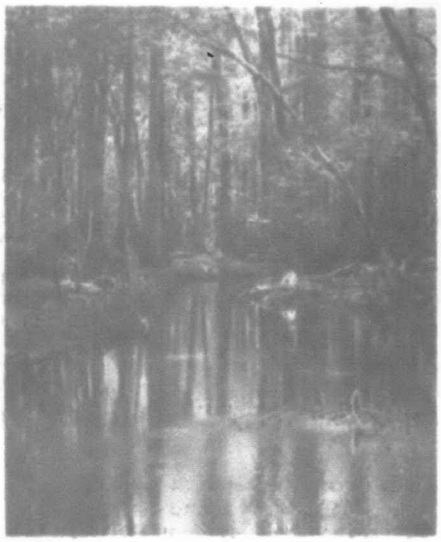
The principal watershed drainage areas are New River, Northeast Creek, Southwest Creek, Wallace Creek, French Creek, Bear Creek, Freeman Creek, and Duck Creek.

(Above) Camp Lejeune has many valuable natural resources including these hardwood stands.

(Top) Military exercises and resource management can be compatible as Camp Lejeune has proven for the past 40 years.



(Above) Wetlands provide excellent habitat for many species of wildlife. Their protection is closely regulated by both state and federal agencies.

(Top) Trees are marked for thinning. Crowded trees are easy prey for disease and insect damage. Thinning helps improve the growth rate and productivity of the forest.

There are 25 different soil series ranging from sandy loams to fine sand and muck. The dominant series is sandy loam. Some of the soils are low in organic matter and fertility, but most produce abundant crops of timber, forage and mast for wildlife.

Vegetation on the unimproved areas of the Base is typical of the Southeastern Coastal Plain. Pure pine stands, consisting of loblolly and longleaf pine, are found on the drier upland soils. Pure pond pine stands are found on the high organic wet soils. Pine-hardwood and pure hardwood stands are found in the streamside zone and on the more productive soils. Bottomland hardwood types are found on the floodplains of the major creeks.

The Base has an abundant population of native game and non-game wildlife species. There are also several endangered and threatened species. Wildlife serves as a natural barometer to the quality of the general environment of Camp Lejeune.

Forest Management

Camp Lejeune has 72,000 acres of forest land. It is the dominant land use and the Base's primary natural resource. Nearly 60,000 acres of the forest land are considered to have commercial value. Another 11,500 acres are included in impact areas and surface danger zones which prevent the timber from being harvested. The remaining acreage is considered to have no commercial value, or higher non-timber value, such as aesthetics, recreational or historical areas.

The Natural Resources and Environmental Affairs Officer has primary responsibility to the Commanding General for managing this land in accordance with public law, Department of Defense (DOD) directives, and Marine Corps directives. Camp Lejeune's forestry program meets these requirements through the principles of multiple use, sustained yield, and even-aged management. The objective is to provide an even flow of forest related benefits such as a quality training area, timber, wildlife habitat, outdoor recreation, and aesthetics.

More than 16,000 cords of pine wood and 6,000 cords of hardwood can be harvested under the Base Forestry Program. Proceeds from the sale of forest products are used to fund the annual operational expenses of the forest management program. As required by law, 40 percent of the net proceeds is annually returned to the Onslow County School System. Any remaining proceeds are used to fund forest management programs at other Marine Corps and Navy installations.

For record keeping purposes, the Base is divided into 55 compartments. Each compartment contains approximately 1,050 acres. These are further subdivided into contiguous stands of similar timber type and age. Silvicultural treatments are applied on a stand-by-stand basis. Five to six compartments are analyzed for needed silvicultural treatment annually.

In 1983, a multi-resource inventory was conducted in cooperation with the US Forest Service. It provides basic details for determining allowable annual harvest and general information concerning the condition of the forest resources.

Typical forest management projects carried out by the NREAD staff include:

Timber Sales
Timber sales are prepared to carry out

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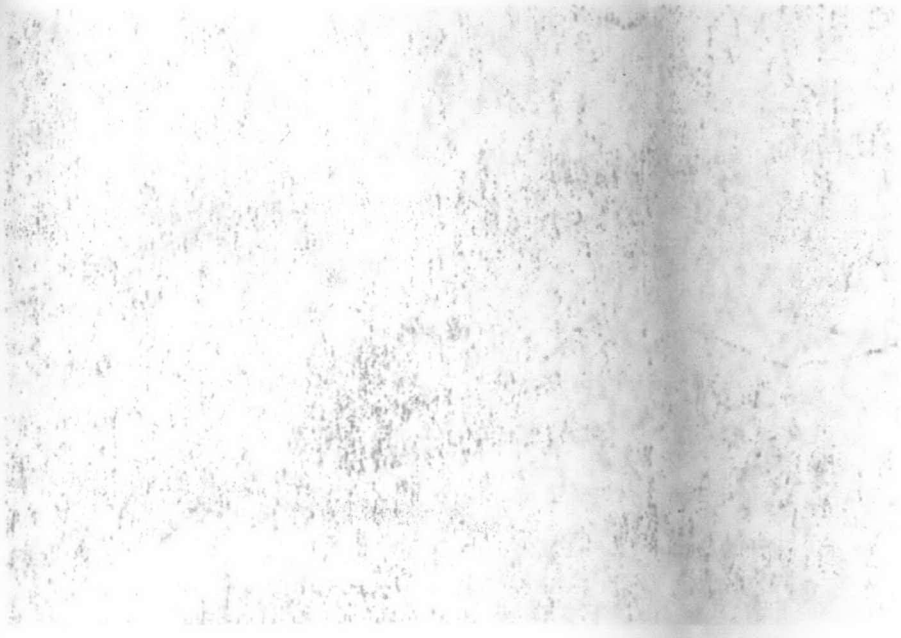
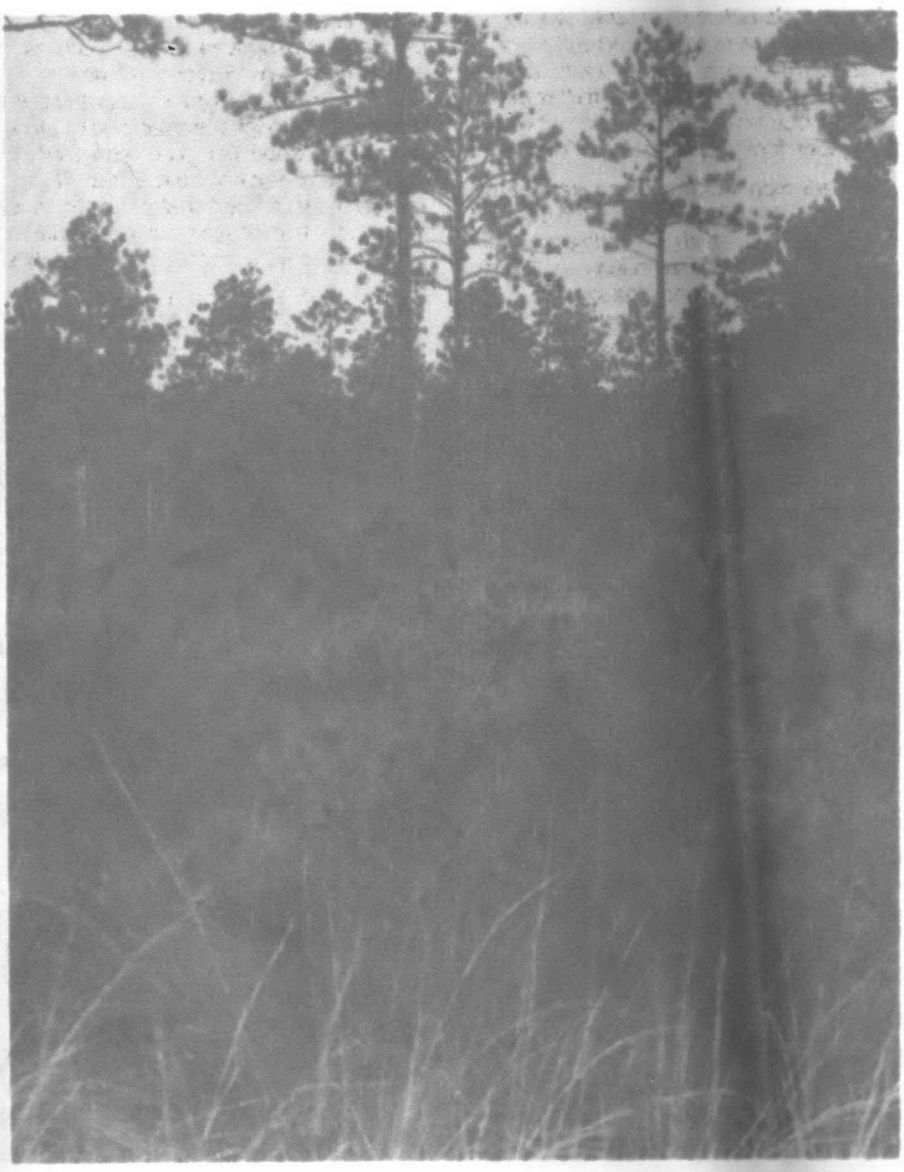
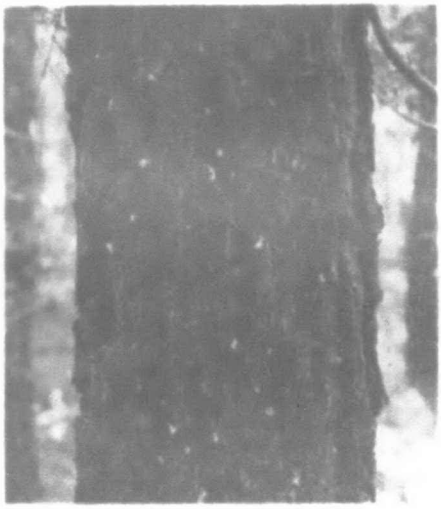




(Above) Wildfires are a common problem aboard Camp Lejeune. Specialized heavy equipment and properly trained personnel are essential for constructing fire lanes and conducting other fire suppression activities.

(Left) Long leaf pine is a preferred species because of its resistance to insects, disease, and fire. Long leaf is particularly suited to the less fertile soils.



(Above) Historically the Southern Pine beetle has done considerable damage to pine forests. Thinning has reduced the problem by promoting healthier timber stands.

(Top) Timber sales inspections are done as required to ensure the contractor's compliance with the contract specifications.

specific management objectives, and monitored to ensure contractual compliance.

Prescribed Burning
Prescribed burning helps reduce wildfire hazards, improve wildlife habitat, and control undesirable species. Camp Lejeune's forest land is normally burned on a five year cycle. Ranges, impact areas, and quail management areas are burned annually — while the Red-Cockaded Woodpecker habitat areas are burned on a two or three-year cycle.

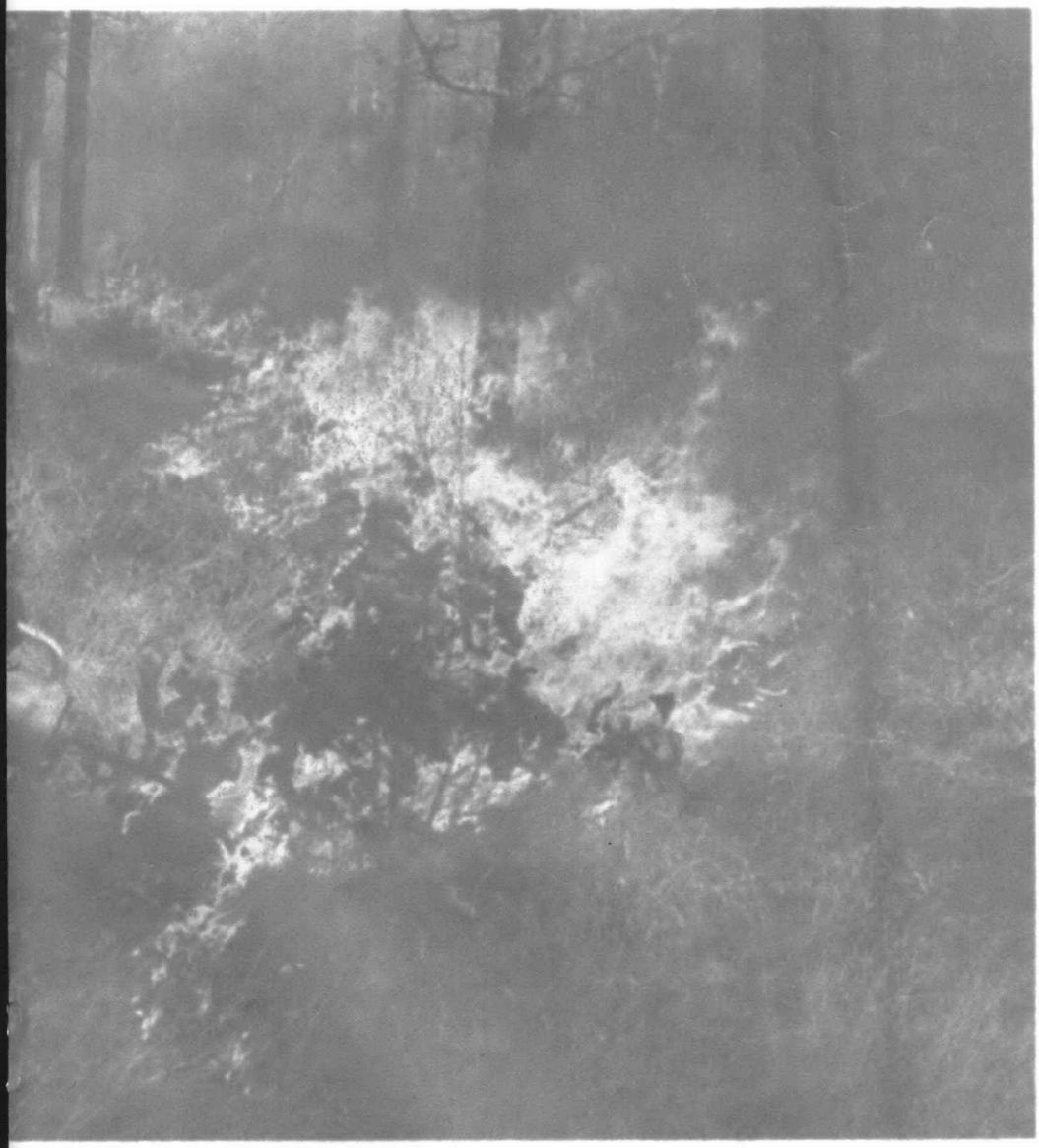
Insect and Disease Control
Insect and disease control requires constant monitoring because conditions can vary greatly from month to month. Early detection and a rapid response are essential for preventing losses and limiting the spread of the agent.

Timber Stand Improvement
Timber stand improvement maintains the health and productivity of the forest by removing overstocked and unmerchantable trees. This is normally accomplished by mechanical precommercial thinning.

Reforestation
Reforestation helps sustain the forest benefits by creating a balanced age distribution. About 400 acres of pine, and 160 acres of hardwood and mixed pine and hardwood should be regenerated annually.

Wildfire Control
The incidence of wildfire within Camp Lejeune depends on the severity of the weather and the intensity of military training. Monitoring weather conditions and manning fire towers during periods of high fire danger maintain the Base's ability to respond quickly when wildfires occur.

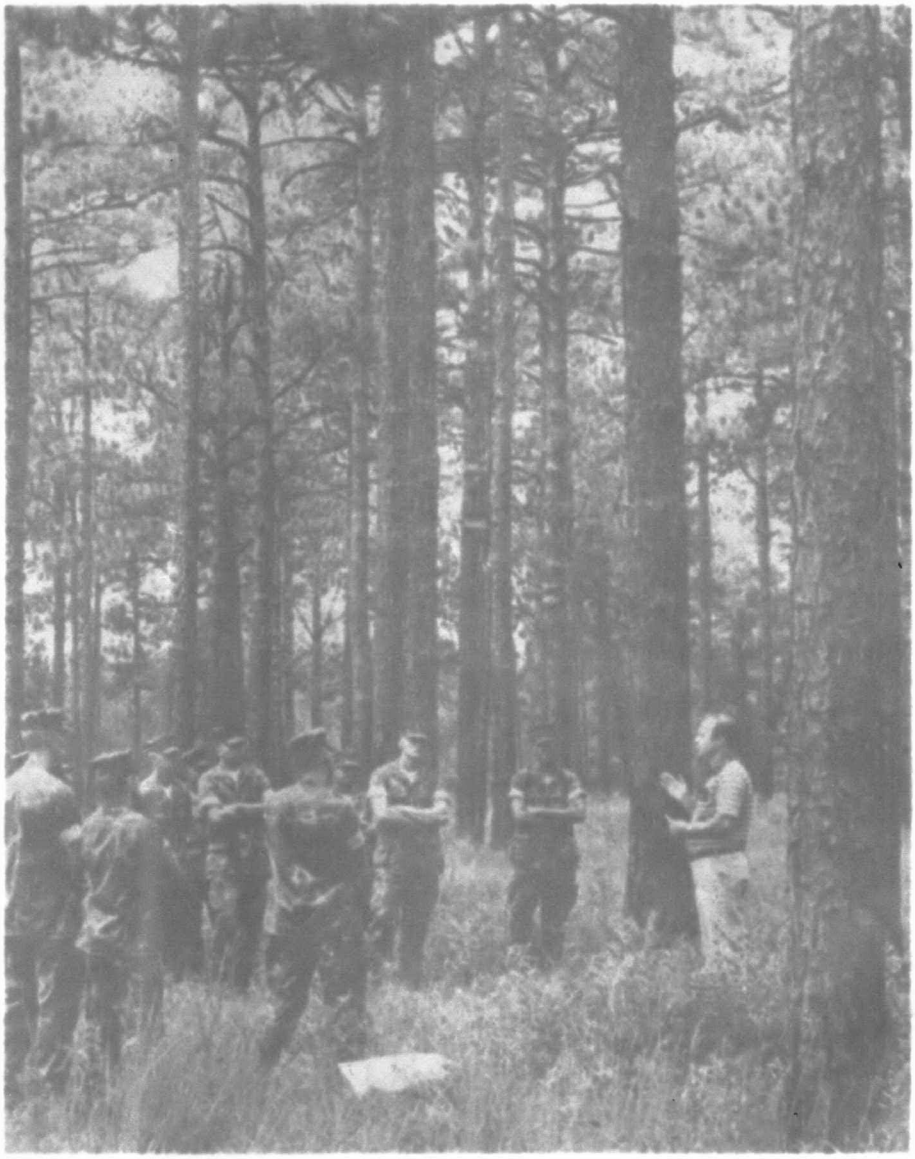
Forest Access Road Maintenance
Multiple-use management of the forest re-

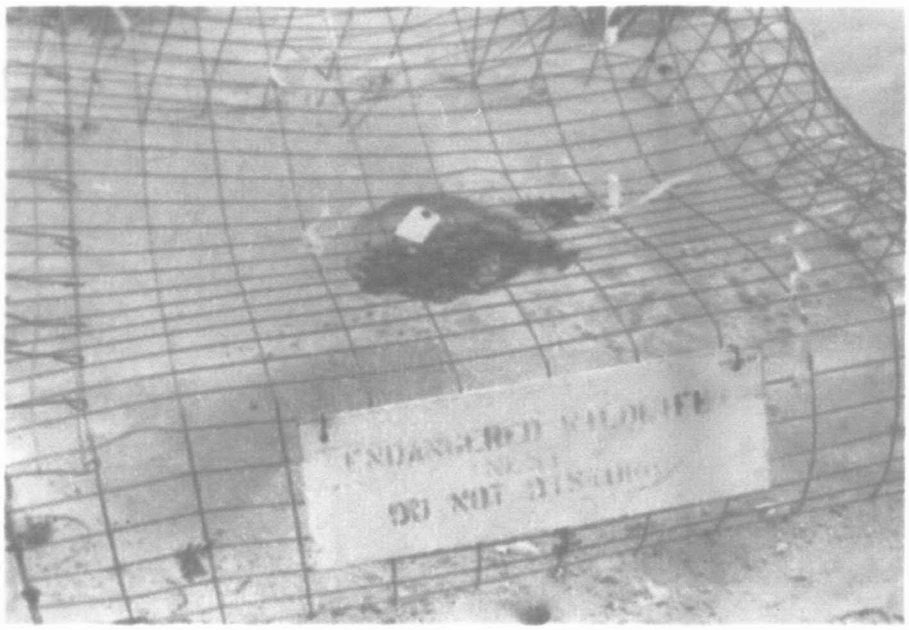


By consuming the understory, prescribed burning reduces the fuel available to wildfires. Wildlife food and cover are also improved through this practice.

(Above) The Base's wildlife management program has maintained a wide variety of game animals. Deer, wild turkey, bear, quail, dove, rabbit, and squirrel are all available to the sportsman.

(Right) Military personnel are briefed on the measures used at Camp Lejeune to protect the Base's natural resources.





source requires an adequately maintained access road system. The access roads are protected from erosion by planting perennial grasses. Once the grass is established the roads also provide wildlife food and cover.

Wildlife Management

Camp Lejeune's wildlife management program provides optimum environmental conditions for all present wildlife, including game, nongame, endangered, and threatened species. It is consistent with the Base's primary land use — military training. The program is also in compliance with all Base, state and federal regulations concerning wildlife management.

An aggressive game management program on the Base, provides quality hunting, fishing, and trapping opportunities for the sportsman. Approximately 850 white-tailed deer, 30 wild turkey, and three black bear are harvested annually. In addition, numerous small game species such as bobwhite quail, morning dove, rabbit and squirrel are hunted. Twelve fresh water ponds offer the angler excellent fishing for bass, bluegill, and channel catfish.

A well dispersed system of wildlife openings have been established at Camp Lejeune. These sites benefit both game and nongame species by enhancing cover and supplementing the natural food supply. Also, the openings provide excellent vantage points for observing wildlife in their natural surroundings.

Protection of endangered and threatened species on Camp Lejeune is done in accordance with the Environmental Policy Act of 1968 and the Endangered Species Act of 1973. Principal endangered and threatened species found here are the Red-Cockaded Woodpecker, American Alligator, Green Sea Turtle, and the Atlantic Loggerhead Sea Turtle. In addition, the Fin Whale, Humpback Whale, Right Whale, and Sei Whale use the waters off the coast in their yearly migration routes.

Soil and Water Management

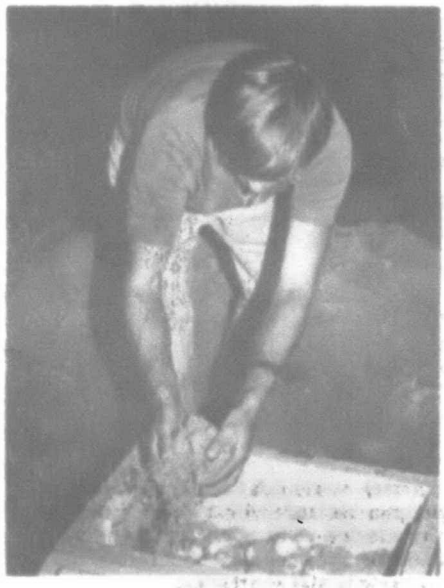
Whenever vegetation is damaged and soil disturbed, a potential for soil erosion and water management problems exists. The movement of troops and heavy equipment can easily create potential erosion. Many of the soil types found within the Base are highly erodible which complicates the situation further.

Controlling soil erosion, however, is not a difficult task if proper management techniques are followed. The NREAD has developed with the help of the USDA Soil Conservation Service a Technical Guide. In the Technical Guide are specific criteria for designing and maintaining erosion control practices.

(Top) The nests of the Loggerhead and Green Sea turtles are covered with a wire cage to prevent predation from raccoons and foxes.

(Above, Right) When sea turtle nests are located on a portion of beach designated for military training operations the eggs are moved to a safer location.

(Right) Boy Scouts from the Base participate in the non-game management program by building and hanging blue bird boxes in selected areas.



(Above) Areas left bare by the construction of roads are a major source of soil erosion on the Base. Forest access roads are seeded immediately after the construction is completed.

(Top) Forest compartment prescriptions and wildlife habitat appraisals, conducted by natural resources specialists, ensure program coordination and the accomplishments of the multiple-use natural resources management objectives.

For the soil and water conservation goals to be achieved it will take the cooperation of a number of officials involved in the development, use, and maintenance of real property. The control and prevention of water pollution and soil erosion is the single most demanding environmental requirement for the Command.

New Initiatives

The Multiple-use Natural Resources Management Plan represents no radical changes but, rather, a logical progression built on past success. There are two initiatives which will have beneficial effect on natural resources management at Camp Lejeune.

Land-Use Management System (LUMS)
LUMS is being developed to alleviate deficiencies in current land management and land use planning methodologies. The deployment of new mobile weapons systems has intensified the Base's land use activities. At the same time environmental protection legislation has also increased. These two events occurring simultaneously have greatly increased the need for closer resource management. LUMS will provide it.

Wildlife Habitat Appraisal Guidelines
This guide is a field evaluation procedure designed to measure the quality of the habitat for a particular species of wildlife. It is designed not only to rate the quality of the existing vegetative cover, but also accounts for the effects of forest management practices on the habitat. The guide identifies weak or missing elements as a basis for making improvements. By using this habitat appraisal system, NREAD can define habitat needs for the featured species and determine if it can be improved through forest and wildlife management techniques.

Conclusions

Camp Lejeune has long been a leader in Department of Defense natural resource management. In fact, this is the fifth Long Range Management Plan that has been written for Camp Lejeune, though the present addition is by far the most complex and comprehensive ever produced.

Camp Lejeune has been the recipient of the Secretary of Defense Conservation Award in 1968, 1973 and 1975. In 1972, 1974, 1975, 1978, and 1980 Camp Lejeune won the Secretary of the Navy Environmental Protection Award, and in 1980 won the Secretary of Defense Environmental Protection Award.

Camp Lejeune was among the first Department of Defense installations to seek formal consultation with the US Fish and Wildlife Service to establish guidelines for compliance with the Endangered Species Act. It was also the first installation to develop, in cooperation with the US Forest Service, a multiple-use inventory that is the basis for the Multiple-use Natural Resources Management Plan.

The highlights presented in this document are intended to help interested persons understand how the management of natural resources and other environmental management issues will be addressed at Camp Lejeune.

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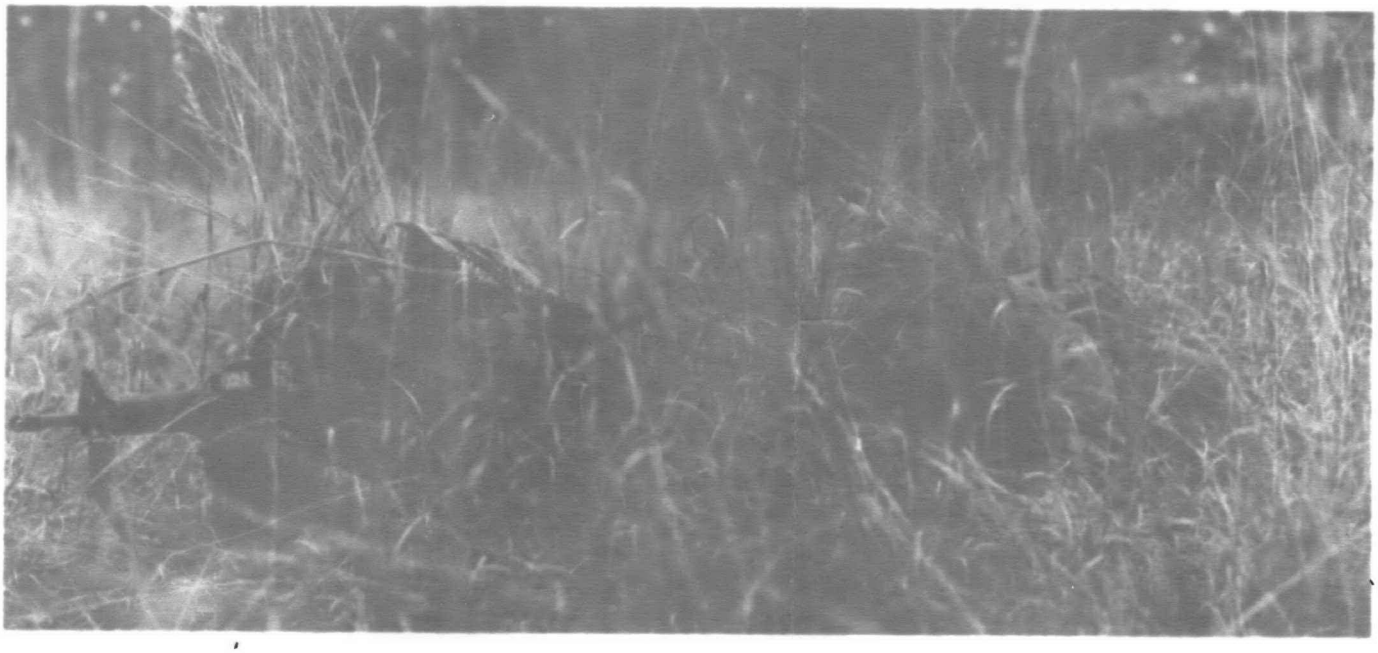

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Multiple-Use Natural Resources Management Plan

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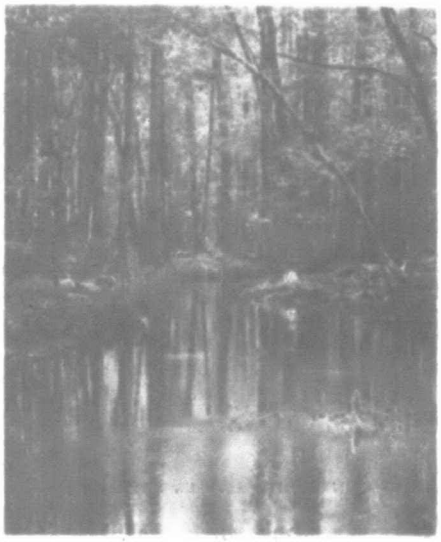

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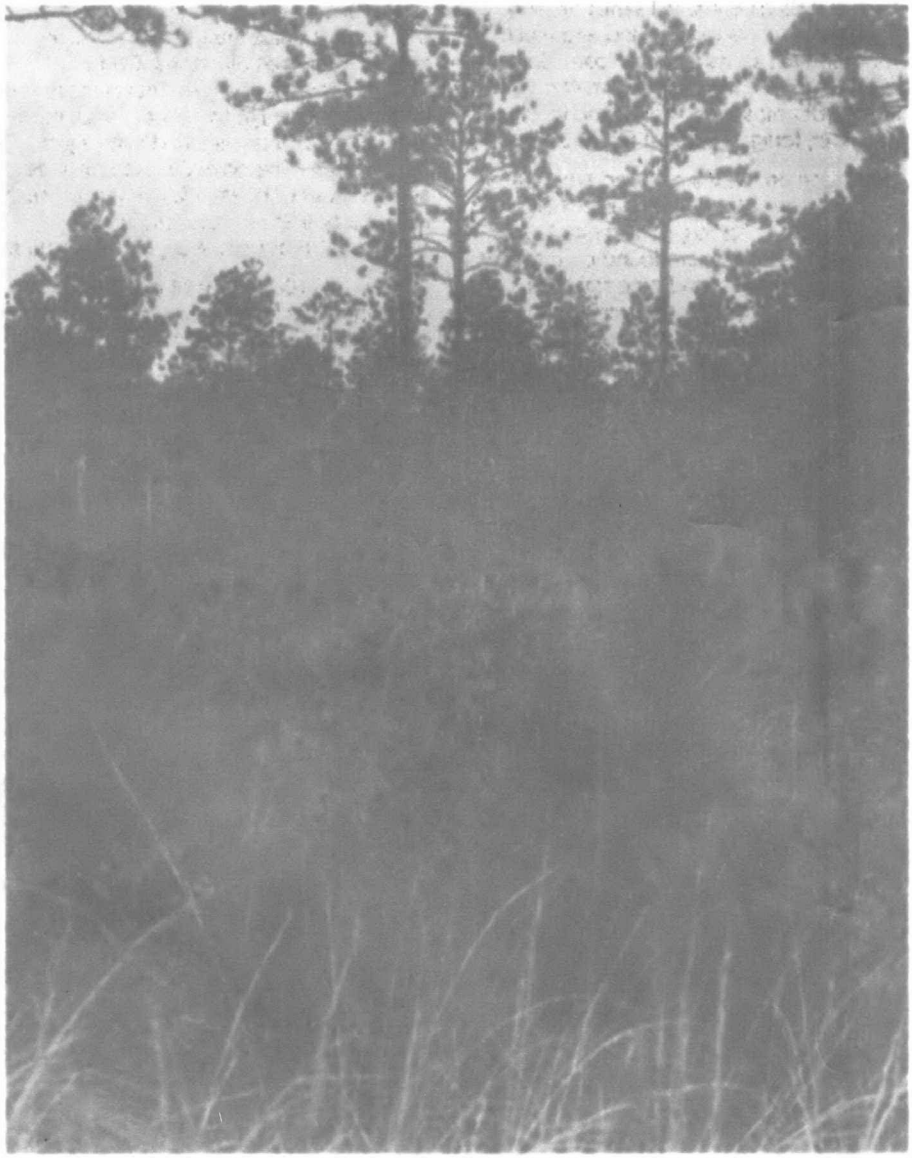

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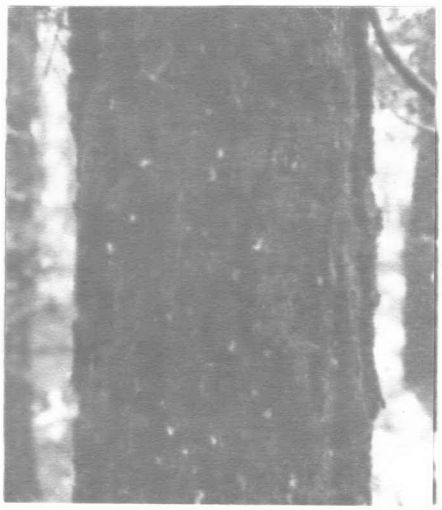

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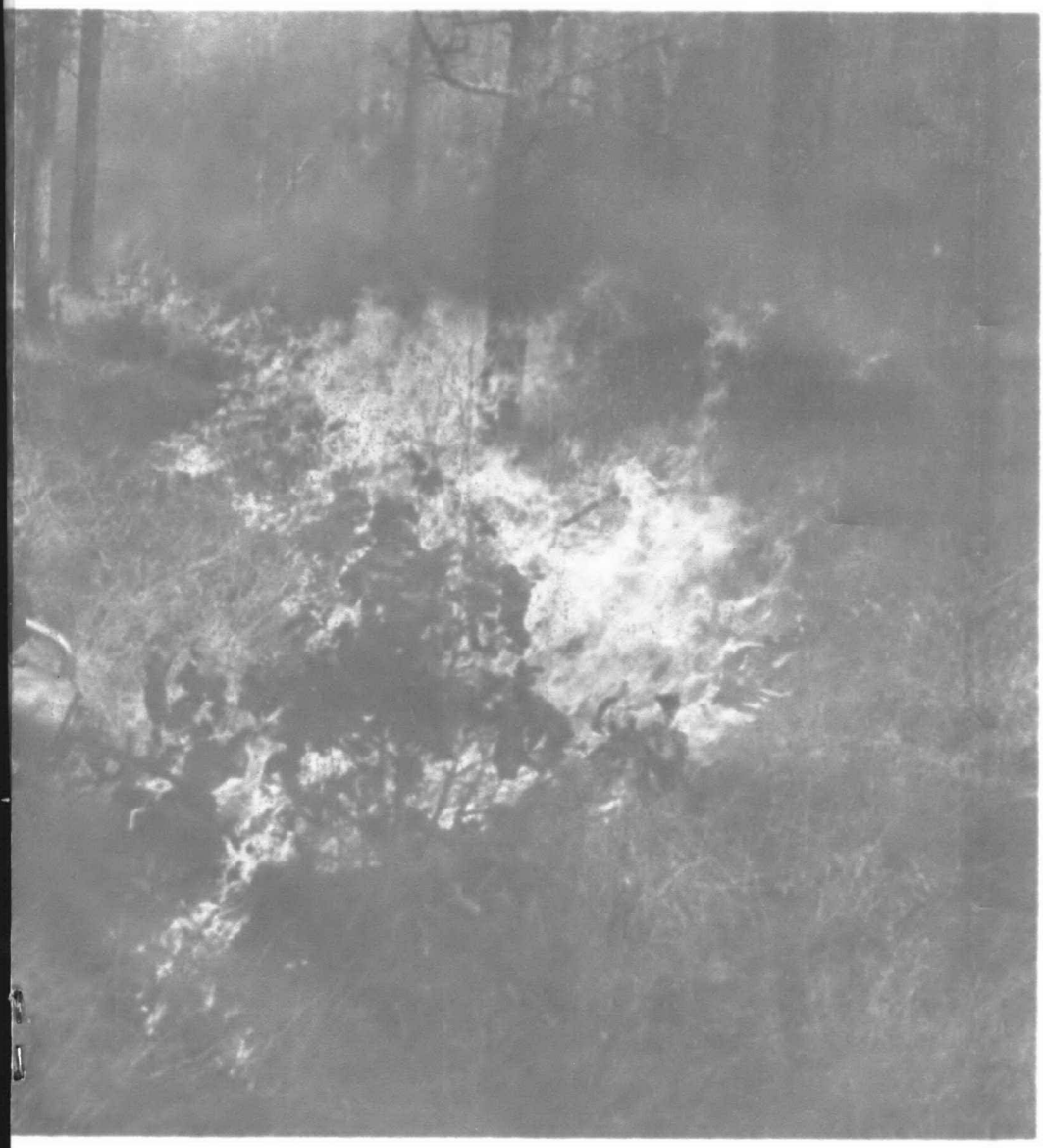

By consuming the understory, prescribed burning reduces the fuel available to wildfires. Wildlife food and cover are also improved through this practice.

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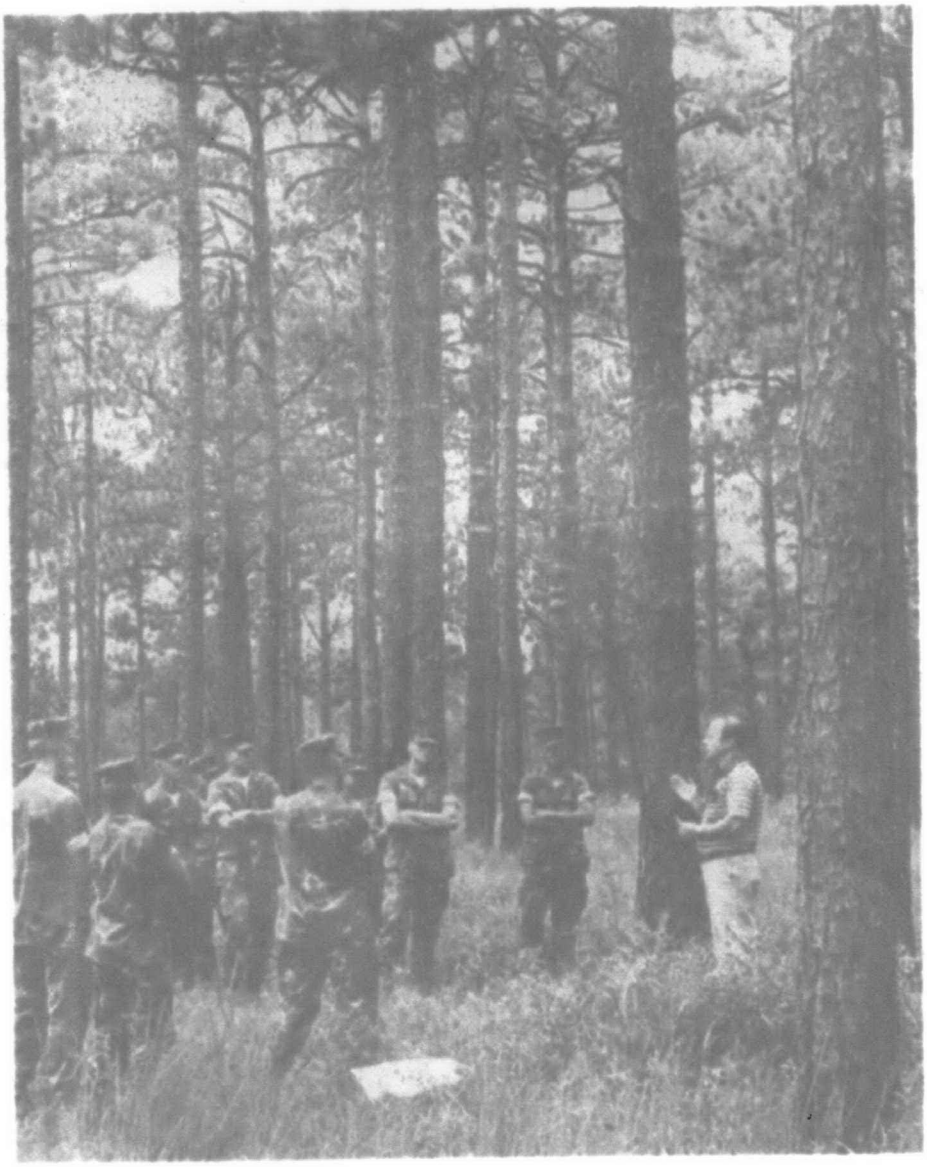

source requires an adequately maintained access road system. The access roads are protected from erosion by planting perennial grasses. Once the grass is established the roads also provide wildlife food and cover.

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Whenever vegetation is damaged and soil disturbed, a potential for soil erosion and water management problems exists. The movement of troops and heavy equipment can easily create potential erosion. Many of the soil types found within the Base are highly erodible which complicates the situation further.

Controlling soil erosion, however, is not a difficult task if proper management techniques are followed. The NREAD has developed with the help of the USDA Soil Conservation Service a Technical Guide. In the Technical Guide are specific criteria for designing and maintaining erosion control practices.

(Top) The nests of the Loggerhead and Green Sea turtles are covered with a wire cage to prevent predation from raccoons and foxes.

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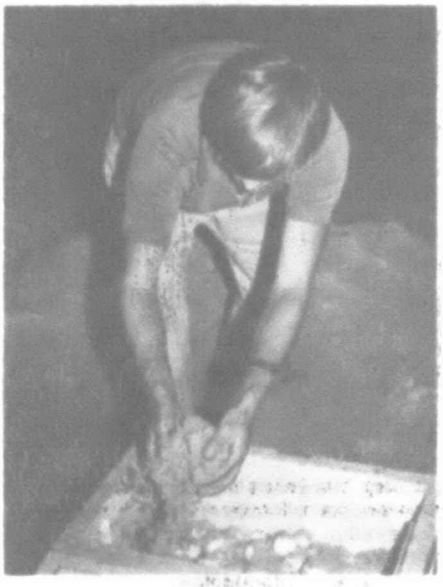

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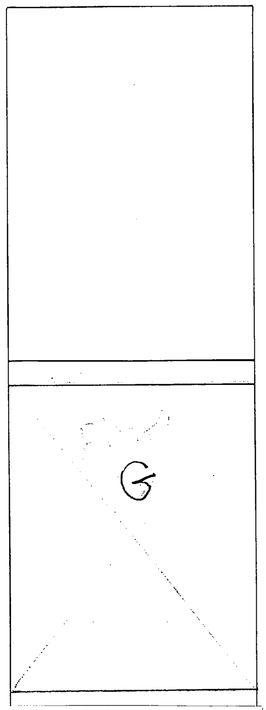

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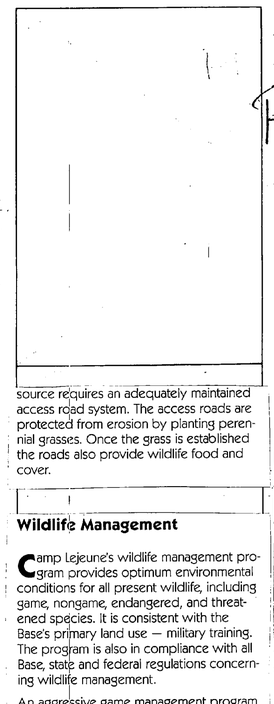

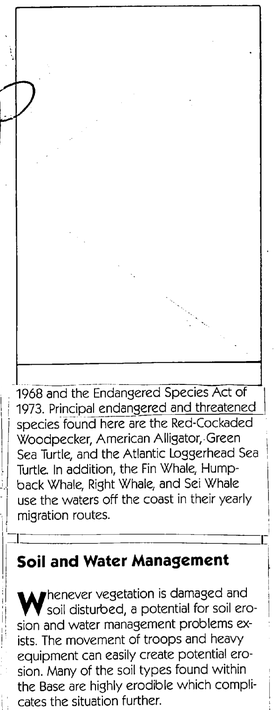

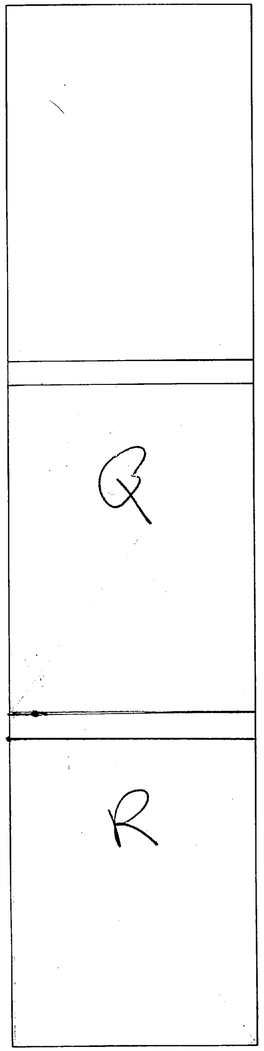

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Executive Summary

Multiple-Use Natural Resources Management Plan

United States Marine Corps
Camp Lejeune

COVER

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As World War II approached, the Marine Corps began to search for a suitable site on the East Coast to conduct amphibious warfare training. In 1939 land was bought in Onslow County, North Carolina, and in 1941 construction of the Base began.

Most of the land was privately owned. The woodlands had been denuded of quality timber. There was no fire protection and the wildlife habitat was generally poor.

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Since government ownership was finalized in 1941, the Base implemented a forestry program in 1946, a wildlife management program in 1966, an environmental program in 1972, and recently a multi-use natural resources management plan. Environmental conditions for flora, fauna and humans have improved steadily under the Corps' direction.

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The Natural Resources and Environmental Affairs Division (NREAD) has the primary responsibility for assisting the Base Commander in carrying out his natural resource management and protection responsibility.

Resources

Camp Lejeune consists of approximately 85,000 acres of land. About 84 percent of the area is covered by forests.

The Base is typical of the Southeastern Coastal Plain with an elevation of sea level to 70 feet above. The topography ranges from flat, savannah-like to gently rolling. Deep wooded forests characterize the better upland sites while most of the watercourses are headed by inaccessible swamps and pocosins.

The principal watershed drainage areas are New River, Northeast Creek, Southwest Creek, Wallace Creek, French Creek, Bear Creek, Freeman Creek, and Duck Creek.

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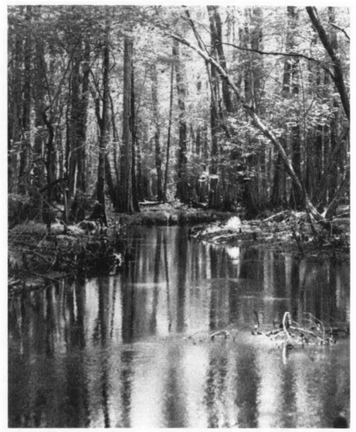

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Camp Lejeune has 72,000 acres of forest land. It is the dominant land use and the Base's primary natural resource. Nearly 60,000 acres of the forest land are considered to have commercial value. Another 11,500 acres are included in impact areas and surface danger zones which prevent the timber from being harvested. The remaining acreage is considered to have no commercial value, or higher non-timber value, such as aesthetics, recreational or historical areas.

The Natural Resources and Environmental Affairs Officer has primary responsibility to the Commanding General for managing this land in accordance with public law, Department of Defense (DOD) directives, and Marine Corps directives. Camp Lejeune's forestry program meets these requirements through the principles of multiple use, sustained yield, and even-aged management. The objective is to provide an even flow of forest related benefits such as a quality training area, timber, wildlife habitat, outdoor recreation, and aesthetics.

More than 16,000 cords of pine wood and 6,000 cords of hardwood can be harvested under the Base Forestry Program. Proceeds from the sale of forest products are used to fund the annual operational expenses of the forest management program. As required by law, 40 percent of the net proceeds is annually returned to the Onslow County School System. Any remaining proceeds are used to fund forest management programs at other Marine Corps and Navy installations.

For record keeping purposes, the Base is divided into 55 compartments. Each compartment contains approximately 1,050 acres. These are further subdivided into contiguous stands of similar timber type and age. Silvicultural treatments are applied on a stand-by-stand basis. Five to six compartments are analyzed for needed silvicultural treatment annually.

In 1983, a multi-resource inventory was conducted in cooperation with the US Forest Service. It provides basic details for determining allowable annual harvest and general information concerning the condition of the forest resources.

Typical forest management projects carried out by the NREAD staff include:

Timber Sales
Timber sales are prepared to carry out

(Above) Wildfires are a common problem aboard Camp Lejeune. Specialized heavy equipment and properly trained personnel are essential for constructing fire lanes and conducting other fire suppression activities.

(Left) Long leaf pine is a preferred species because of its resistance to insects, disease, and fire. Long leaf is particularly suited to the less fertile soils.

(Above) Historically the Southern Pine beetle has done considerable damage to pine forests. Thinning has reduced the problem by promoting healthier timber stands.

(Top) Timber sales inspections are done as required to ensure the contractor's compliance with the contract specifications.

specific management objectives, and monitored to ensure contractual compliance.

Prescribed Burning
Prescribed burning helps reduce wildfire hazards, improve wildlife habitat, and control undesirable species. Camp Lejeune's forest land is normally burned on a five year cycle. Ranges, impact areas, and quail management areas are burned annually — while the Red-Cockaded Woodpecker habitat areas are burned on a two or three-year cycle.

Insect and Disease Control
Insect and disease control requires constant monitoring because conditions can vary greatly from month to month. Early detection and a rapid response are essential for preventing losses and limiting the spread of the agent.

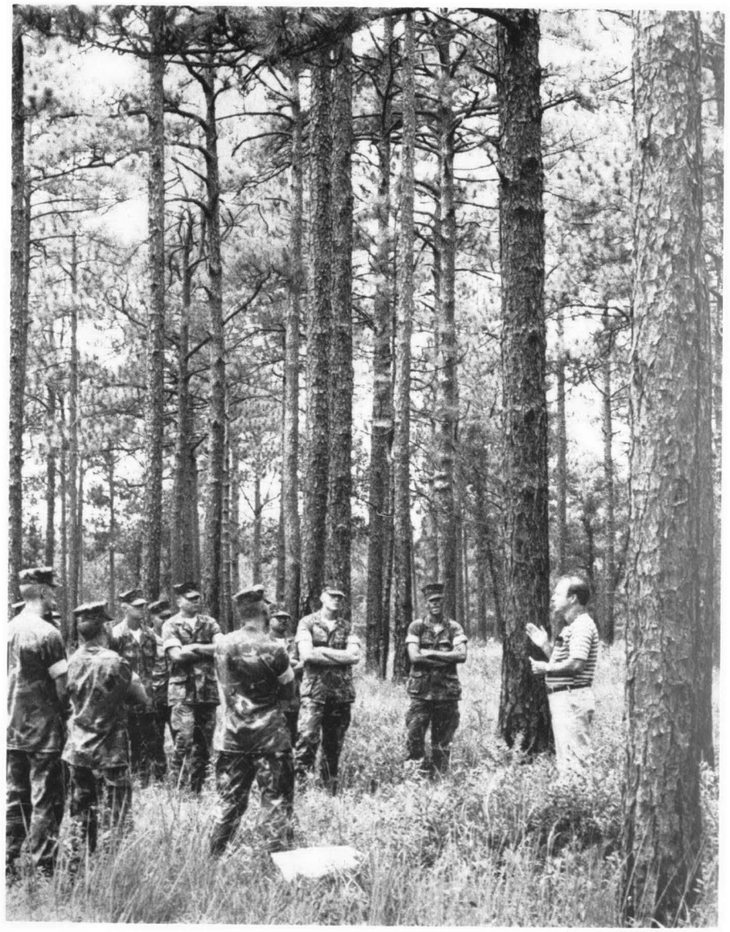
Timber Stand Improvement
Timber stand improvement maintains the health and productivity of the forest by removing overstocked and unmerchantable trees. This is normally accomplished by mechanical precommercial thinning.

Reforestation
Reforestation helps sustain the forest benefits by creating a balanced age distribution. About 400 acres of pine, and 160 acres of hardwood and mixed pine and hardwood should be regenerated annually.

Wildfire Control
The incidence of wildfire within Camp Lejeune depends on the severity of the weather and the intensity of military training. Monitoring weather conditions and manning fire towers during periods of high fire danger maintain the Base's ability to respond quickly when wildfires occur.

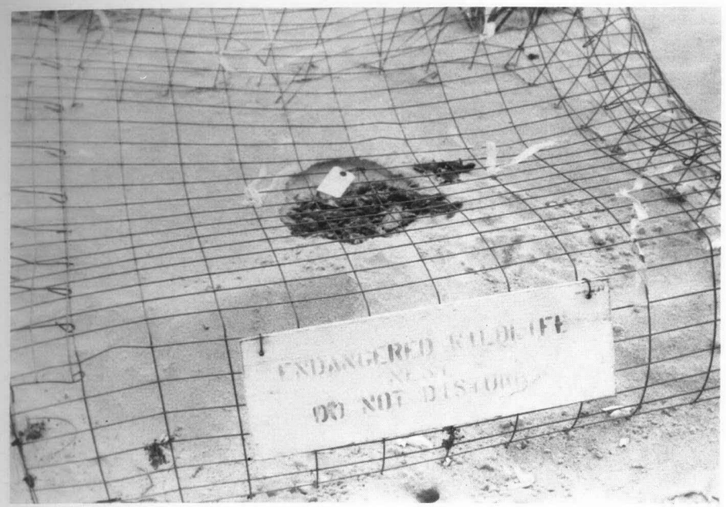
Forest Access Road Maintenance
Multiple-use management of the forest re-

By consuming the understory, prescribed burning reduces the fuel available to wildfires. Wildlife food and cover are also improved through this practice.



(Above) The Base's wildlife management program has maintained a wide variety of game animals. Deer, wild turkey, bear, quail, dove, rabbit, and squirrel are all available to the sportsman.

(Right) Military personnel are briefed on the measures used at Camp Lejeune to protect the Base's natural resources.



source requires an adequately maintained access road system. The access roads are protected from erosion by planting perennial grasses. Once the grass is established the roads also provide wildlife food and cover.

Wildlife Management

Camp Lejeune's wildlife management program provides optimum environmental conditions for all present wildlife, including game, nongame, endangered, and threatened species. It is consistent with the Base's primary land use — military training. The program is also in compliance with all Base, state and federal regulations concerning wildlife management.

An aggressive game management program on the Base, provides quality hunting, fishing, and trapping opportunities for the sportsman. Approximately 850 white-tailed deer, 30 wild turkey, and three black bear are harvested annually. In addition, numerous small game species such as bobwhite quail, morning dove, rabbit and squirrel are hunted. Twelve fresh water ponds offer the angler excellent fishing for bass, bluegill, and channel catfish.

A well dispersed system of wildlife openings have been established at Camp Lejeune. These sites benefit both game and nongame species by enhancing cover and supplementing the natural food supply. Also, the openings provide excellent vantage points for observing wildlife in their natural surroundings.

Protection of endangered and threatened species on Camp Lejeune is done in accordance with the Environmental Policy Act of 1968 and the Endangered Species Act of 1973. Principal endangered and threatened species found here are the Red-Cockaded Woodpecker, American Alligator, Green Sea Turtle, and the Atlantic Loggerhead Sea Turtle. In addition, the Fin Whale, Humpback Whale, Right Whale, and Sei Whale use the waters off the coast in their yearly migration routes.

Soil and Water Management

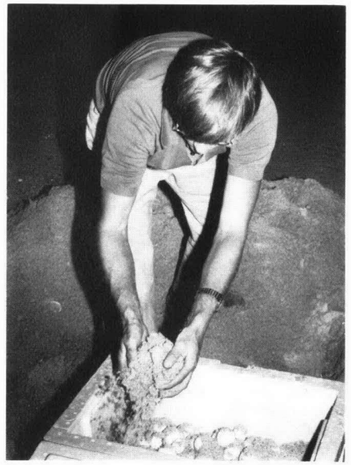
Whenever vegetation is damaged and soil disturbed, a potential for soil erosion and water management problems exists. The movement of troops and heavy equipment can easily create potential erosion. Many of the soil types found within the Base are highly erodible which complicates the situation further.

Controlling soil erosion, however, is not a difficult task if proper management techniques are followed. The NREAD has developed with the help of the USDA Soil Conservation Service a Technical Guide. In the Technical Guide are specific criteria for designing and maintaining erosion control practices.

(Top) The nests of the Loggerhead and Green Sea turtles are covered with a wire cage to prevent predation from raccoons and foxes.

(Above, Right) When sea turtle nests are located on a portion of beach designated for military training operations the eggs are moved to a safer location.

(Right) Boy Scouts from the Base participate in the non-game management program by building and hanging blue bird boxes in selected areas.



(Above) Areas left bare by the construction of roads are a major source of soil erosion on the Base. Forest access roads are seeded immediately after the construction is completed.

(Top) Forest compartment prescriptions and wildlife habitat appraisals, conducted by natural resources specialists, ensure program coordination and the accomplishments of the multiple-use natural resources management objectives.

For the soil and water conservation goals to be achieved it will take the cooperation of a number of officials involved in the development, use, and maintenance of real property. The control and prevention of water pollution and soil erosion is the single most demanding environmental requirement for the Command.

New Initiatives

The Multiple-use Natural Resources Management Plan represents no radical changes but, rather, a logical progression built on past success. There are two initiatives which will have beneficial effect on natural resources management at Camp Lejeune.

Land-Use Management System (LUMS)
LUMS is being developed to alleviate deficiencies in current land management and land use planning methodologies. The deployment of new mobile weapons systems has intensified the Base's land use activities. At the same time environmental protection legislation has also increased. These two events occurring simultaneously have greatly increased the need for closer resource management. LUMS will provide it.

Wildlife Habitat Appraisal Guidelines
This guide is a field evaluation procedure designed to measure the quality of the habitat for a particular species of wildlife. It is designed not only to rate the quality of the existing vegetative cover, but also accounts for the effects of forest management practices on the habitat. The guide identifies weak or missing elements as a basis for making improvements. By using this habitat appraisal system, NREAD can define habitat needs for the featured species and determine if it can be improved through forest and wildlife management techniques.

Conclusions

Camp Lejeune has long been a leader in Department of Defense natural resource management. In fact, this is the fifth Long Range Management Plan that has been written for Camp Lejeune, though the present addition is by far the most complex and comprehensive ever produced.

Camp Lejeune has been the recipient of the Secretary of Defense Conservation Award in 1968, 1973 and 1975. In 1972, 1974, 1975, 1978, and 1980 Camp Lejeune won the Secretary of the Navy Environmental Protection Award, and in 1980 won the Secretary of Defense Environmental Protection Award.

Camp Lejeune was among the first Department of Defense installations to seek formal consultation with the US Fish and Wildlife Service to establish guidelines for compliance with the Endangered Species Act. It was also the first installation to develop, in cooperation with the US Forest Service, a multiple-use inventory that is the basis for the Multiple-use Natural Resources Management Plan.

The highlights presented in this document are intended to help interested persons understand how the management of natural resources and other environmental management issues will be addressed at Camp Lejeune.

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