

HUNT PLAN

Pocosin Lakes National Wildlife Refuge
Creswell, North Carolina

SUBMITTED BY:

Jim Sweeney
Refuge Manager

DATE

12-18-91

REVIEWED BY:

Bill Hancher

DATE

12/18/91

Bill A. Galt

DATE

1/28/92

Kenneth W. Benson

DATE

1/28/92

APPROVED BY:

James Williams

DATE

1/28/92

HUNT PLAN

Pocosin Lakes National Wildlife Refuge Amendment 2.

The following sections of the Pocosin Lakes NWR Hunt Plan are modified as indicated below. These are technical corrections only. The state considers only the hogs in the mountain region of the state "wild boar" (and regulates hunting of these animals). Hogs in the coastal plain, where Pocosin Lakes NWR is located, are considered feral animals. These changes correct references to "wild boar" made in Amendment 1 in 2004.

IV. ASSESSMENT

A. Big Game

Change first paragraph to read:

White-tailed deer, black bear, and wild turkey are the only species occurring on Pocosin Lakes NWR that are classified as big game in North Carolina. Feral hogs also occur on the refuge.

Change the last paragraph (from Amendment 1) to read:


In 2003, only sporadic and unsubstantiated reports of feral hogs in the Frying Pan Unit were being received. Sightings began increasing in 2004 and in 2005, a small number of sightings were reported from the main refuge. Feral hogs are known to cause significant habitat damage where they occur and eliminating this exotic species from the refuge would be desirable.

V. DESCRIPTION OF HUNTING PROGRAM

Change the following in the list of species that can be hunted:

16. feral hog

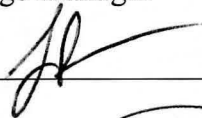
Submitted By:


Refuge Manager

Date:

1/18/06

Reviewed By:



Date:

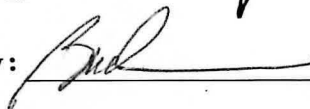
31 JAN 06



Date:

02-03-2006

Approved by:



Date:

2-13-06

UNITED STATES FISH AND WILDLIFE SERVICE

ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the action of **amending the Pocosin Lakes National Wildlife Refuge Hunting Plan to correct the status of feral hogs:**

Check One:

- XX is a categorical exclusion as provided by 516 DM 2, Appendix 1 and 516 DM 6, Appendix 1 section A. (1). No further NEPA documentation will therefore be made.
- _____ is found not to have significant environmental effects as determined by the attached environmental assessment and finding of no significant impact.
- _____ is found to have significant effects and, therefore, further consideration of this action will require a notice of intent to be published in the Federal Register announcing the decision to prepare an EIS.
- _____ is not approved because of unacceptable environmental damage, or violation of Fish and Wildlife Service mandates, policy, regulations, or procedures.
- _____ is an emergency action within the context of 40 CFR 1 506.1 1. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other supporting documents:

Sport Hunting Decision Document Package for Pocosin Lakes NWR
Pocosin Lakes National Wildlife Refuge Hunt Plan Amendment 1

Signature Approval:

 Originator/Refuge Manager	<u>1/18/06</u> Date	 Regional Compatibility Coordinator	<u>31 JAN 06</u> Date
 Regional NEPA Coordinator	<u>2/9/06</u> Date	 Refuge Supervisor	<u>2-3-06</u> Date
 Regional Chief	<u>2/13/06</u> Date		

HUNT PLAN

Pocosin Lakes National Wildlife Refuge Amendment 1.

The following sections of the Pocosin Lakes NWR Hunt Plan are modified as indicated below:

IV. ASSESSMENT

A. Big Game

Change first paragraph to read:

White-tailed deer, black bear, wild turkey, and possibly wild boar are the only species occurring on Pocosin Lakes NWR that are classified as big game in North Carolina.

Add the following paragraphs to the end of the section:

The North Carolina Wildlife Resources Commission (NCWRC) reintroduced wild turkeys to the area starting in the 1980s. Birds were released on Pocosin Lakes NWR in 2000 with the understanding that the refuge would open to spring turkey hunting when the state opened Tyrrell, Hyde, and Washington Counties. The turkey population in the area has since grown and the state opened these counties to turkey hunting in 2003.

Only sporadic and unsubstantiated reports of wild boar sightings are known and these mostly from remote areas of the refuge, primarily the Frying Pan Unit. Local individuals reportedly kill these animals whenever they are seen. Wild boar are known to cause significant habitat damage where they occur and keeping a population of this exotic species from becoming established on the refuge is desirable.

B. Small Game

Change the first sentence to read:

Small game species present on Pocosin Lakes NWR include squirrel, rabbit, quail, raccoon, opossum, beaver, and nutria.

Add the following paragraph prior to the last paragraph:

Beaver block culverts and create other nuisance problems on the refuge and some reduction in annual production is desirable. Because of their aquatic nature, we expect only a very small number of beaver to be harvested with firearms. Nutria is an exotic species that occurs in small numbers on the refuge. Nutria damage dikes and other refuge improvements and thus impact priority management work. Hunter interest in taking this species is expected to be extremely limited, but any reduction of this exotic species is desirable.

V. DESCRIPTION OF HUNTING PROGRAM

Add the following to the list of species that can be hunted:

15. wild turkey
16. wild boar
17. beaver
18. nutria

HUNT PLAN

Pocosin Lakes National Wildlife Refuge Amendment 1.

The following sections of the Pocosin Lakes NWR Hunt Plan are modified as indicated below:

IV. ASSESSMENT

A. Big Game

Change first paragraph to read:

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V. DESCRIPTION OF HUNTING PROGRAM

Add the following to the list of species that can be hunted:

15. wild turkey
16. wild boar
17. beaver
18. nutria

Submitted By: Harmon Phillips
Refuge Manager

Date: 2/12/04

Reviewed By: Garry Tucker

Date: 2/18/04

William C Hunter

Date: 2/20/04

Date: _____

Date: _____

Bill A. Grubbs
Acting Chief of Refugees JMA
3-31-04

Date: 2-20-04

Approved by: Jon Andrews
ACTING Regional Director

Date: 3-31-04

UNITED STATES FISH AND WILDLIFE SERVICE

ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the action of **amending the Pocosin Lakes National Wildlife Refuge Hunting Plan to include additional species of upland and big game:**

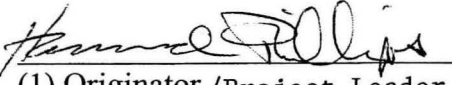

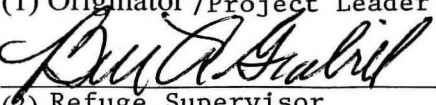
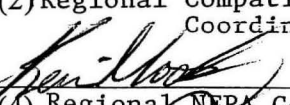
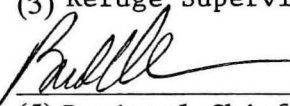
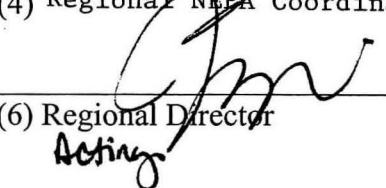
Check One:

- XX is a categorical exclusion as provided by 516 DM 2, Appendix 1 and 516 DM 6, Appendix 1 section A. (1). No further NEPA documentation will therefore be made.
- _____ is found not to have significant environmental effects as determined by the attached environmental assessment and finding of no significant impact.
- _____ is found to have significant effects and, therefore, further consideration of this action will require a notice of intent to be published in the Federal Register announcing the decision to prepare an EIS.
- _____ is not approved because of unacceptable environmental damage, or violation of Fish and Wildlife Service mandates, policy, regulations, or procedures.
- _____ is an emergency action within the context of 40 CFR 1 506.1 1. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other supporting documents:

Sport Hunting Decision Document Package for Pocosin Lakes NWR
Pocosin Lakes National Wildlife Refuge Hunt Plan Amendment 1

Signature Approval:

	2/2/04		5/3/04
(1) Originator/Project Leader	Date	(2) Regional Compatibility Coordinator	Date
	5.4.04		5/4/2004
(3) Refuge Supervisor	Date	(4) Regional NEPA Coordinator	Date
	5/6/04		5/6/04
(5) Regional Chief, NWRS	Date	(6) Regional Director Acting	Date

Sport Hunting
Decision Document Package
for
POCOSIN LAKES NWR



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7. Hunt Plan Amendment 1.

Sport Hunting
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for
POCOSIN LAKES NWR



Contents

1. Hunting Plan

I. INTRODUCTION

A. Establishment

In July, 1989, the Conservation Fund, in conjunction with the Richard King Mellon Foundation purchased 104,000+ acres of wetland in northeastern North Carolina. On June 26, 1990, The Conservation Fund donated 93,000+ acres of this land to the U.S. Fish and Wildlife Service. With this donation, the Pocosin Lakes National Wildlife Refuge was established and includes the donated land, 12,350 acres that was formerly Pungo National Wildlife Refuge and 6,000 acres of land adjacent to Frying Pan Lake that was a part of Alligator River National Wildlife Refuge. The refuge is located in northeastern North Carolina between Albemarle and Pamlico Sounds. The acreage is divided between three counties as follows: Washington 20,024; Tyrrell 55,841; and Hyde 35,609 (Figure 1).

The authority for acquisition and establishment of the refuge is the Fish and Wildlife Act of 1956 (16 U.S.C. 742a - 742j; 7- Stat. 1119, as amended). P.L. 84-1024 initially established the Fish and Wildlife Service under the Assistant Secretary for Fish and Wildlife and a Commissioner for Fish and Wildlife. The Act was amended by P.L. 93-271 to abolish the Office of Commissioner and establish the Fish and Wildlife Service under a Director. Under this Act, the Secretary is authorized to take such steps as may be required for the development, advancement, management, conservation, and protection of fish and wildlife resources including but not limited to research, development of existing facilities, and acquisition by purchase or exchange of land and water or interests therein. The Act also authorizes the Service to accept gifts of real or personal property for its benefit and use in performing its activities and services. Such gifts qualify under Federal income,

estate, or gift tax laws as a gift to the United States. That portion of the refuge that was formerly Pungo National Wildlife Refuge (Pungo Unit) established in 1963 was approved by the Migratory Bird Conservation Committee as authorized by the Migratory Bird Hunting Stamp Act of 1934 and the Wetlands Acquisition Act of 1961. Pungo was established as an inviolate sanctuary for migratory birds.

B. Habitat

1. Vegetation

The predominant vegetation type of the refuge is southeastern shrub bog, also known as pocosin. This type is characterized by a very dense growth of mostly broadleaf evergreen shrubs and scattered pond pine. Although most of this habitat has been subject to drainage of one degree or another, it still provides some of the best examples of pocosin in the southeast. The North Carolina Natural Heritage Program includes 3,000 acres of the Pungo Unit on its Registry of Natural Areas. In addition the North Carolina Department of Natural Resources has identified three areas of pocosin in Tyrrell and Hyde Counties as potential natural areas. These are as follows:

- a. Upper Alligator River Pocosin - 29,793 acres
(26,000± acres on refuge)
- b. Harvester Road Tall Pocosin - 7,989
(7,000± acres on refuge)

- c. New Lake Fork Pocosin - 9,300
(7,100± acres on refuge)

With respect to the Upper Alligator River Pocosin, the evaluation concluded that it was "the best of unmodified or only slightly modified pocosins on the Albemarle Pamlico Peninsula". One of the best examples of unmodified pocosin on the refuge is immediately adjacent to State Road 94 in Hyde County, 1/2 mile south of the Northwest Fork of the Alligator River. Large numbers of pitcher plants and a forest of dwarf pond pine occur here.

The refuge also includes 2,175 acres in eight separate tracts on or near the Scuppernong River or its tributaries. Most of this acreage consists of bottomland hardwood forest with a few stands of loblolly pine and several Atlantic white cedar stands. The dominant species of the bottomland hardwood forest are blackgum and Carolina ash with smaller components of red maple, water tupelo, loblolly pine, and bald cypress. Most of the acreage in the Scuppernong tracts is in one of the potential natural areas identified by the North Carolina Natural Heritage Program.

In addition to the bottomland hardwood forest along the Scuppernong, there is also significant acreage of bottomland hardwoods along the Northwest Fork of the Alligator River, the Alligator River itself, Frying Pan Lake, and the north side of Pungo Lake.

The refuge includes 400 acres of marsh along the Alligator River which is part of a 971 acre marsh dominated by cattail. This marsh has been

identified as an important natural area by the North Carolina Natural Heritage Program and is known as the Upper Alligator River Marsh.

Approximately 21,000 acres of the refuge were cleared for row crops or pasture during the past 40 years. Excluding the 1200 acres cultivated annually on the Pungo Unit, only a portion of the remaining acreage was actually used for those purposes for a significant length of time. During 1975-78, crops were planted by First Colony Farms on 1,150 acres of the refuge in Hyde County south of Coulbourn Road. From 1978-85, 600-1,150 acres were farmed by lessees in the same area. From 1985-88, 150 cattle were allowed to graze on 2,959 acres of improved pasture between Coulbourn Road and Lake Phelps. During 1978-81 the improved pasture remained available for grazing, but few cattle were put on the area.

During the period 1978-83, an experimental peat mining project was conducted on 150 acres of the previously cleared land. By 1986 this project had been discontinued.

Most of the land cleared is now in various stages of regrowth to southeastern shrub bog vegetation. However, in 1981 and 1985, this succession was interrupted by severe fires.

C. Soils

Organic soils, commonly called peat, occur on the majority of the refuge. These normally waterlogged soils exceed 4 feet in depth on most of the area. Large

acreages have depths in excess of 8 feet. A significant percentage of the soil volume consists of buried roots, stumps, and logs that persisted as the organic soil accumulated. These organic soils will burn when dry, thus increasing the fire hazard during droughts.

Mineral soils that underlay the peat were deposited as recent marine sediments and vary from sand to clay. The type of mineral soil can change drastically over a short distance, and its character has a strong influence on the physical and chemical properties of the entire soil profile.

The soils are very acidic (pH 3.5-4.0), often contain buried wood and usually have very poor internal drainage. These characteristics limit the number of plant species which can grow and thrive.

D. Water Resources

(1) Lake Phelps

The refuge includes 4.5 miles of shoreline along Lake Phelps, a 16,600 acre state owned lake located in Washington and Tyrrell Counties. This fresh-water lake has a maximum depth of 9 feet, but its average depth is about 5 feet. Only that part of the refuge between State Road 1183 and the lake shore drain into the lake. No canals or natural surface streams drain into the lake. Outflow from Lake Phelps is controlled by canal gates and is ultimately discharged into the Scuppernong River and Albemarle Sound.

(2) New Lake

The refuge includes 4,020+ acres of the 4,800-acre New Lake in Hyde County along with approximately half of its shoreline. The outflow of this shallow lake is discharged through a single water control structure to a canal that flows into that reach of the Intracoastal Waterway between the Pungo and Alligator Rivers.

(3) Pungo Lake

The 2,800 acre Pungo Lake is located on the Pungo Unit. Average depth of the lake is only 1-2 feet. The lake water has a pH of 4.9 and is darkly stained by tannic acid and suspended organic matter. There is very little light penetration and consequently there are very few aquatic plants in the lake. Water flow into the lake is controlled by a one-way flapgate located on Property Line drainage ditch. On the southeast side of the lake, there is a 60-inch culvert with a stopboard riser that allows water to be released out of the lake. Since the Property Line Ditch must be completely full before any water runs into the lake (which seldom occurs) the ditch is not a significant water source. Rainfall is essentially the only source of water to the lake.

(4) Alligator and Scuppernong Rivers

The Alligator River is located in Dare, Tyrrell, and Hyde Counties and drains into Albemarle Sound. The Scuppernong is located in Tyrrell and

Washington Counties and also drains into Albemarle Sound. The Alligator and its tributaries drain most of the western portion of the refuge. The Scuppernong and its tributaries drain the northeastern fringe of the refuge and most of the outlying tracts north of the main tract of the refuge. Although at times salinity values at the mouth of the Alligator River approach the brackish range, both rivers are essentially fresh.

(5) Canals and Ditches

Numerous canals were dug through the refuge as a result of previous agricultural and timbering activities. This system has altered the drainage patterns that prevailed before settlement. The directions of flow in this complex system are not fully understood at this time. On 22,890+ acres the canal system is supplemented by a system of field and collector ditches. The field ditches are 3-5 feet deep and 330 feet apart. They feed into the collector ditches which are 6-8 feet deep and 1/2 mile apart. The collector ditches in turn feed into the canals which are 10-15 feet deep.

(6) Roads

The refuge has over 112 miles of roads that are of a peat, sand and clay consistency. The roads are either muddy or dusty depending on the weather. These roads deteriorate rapidly and require extensive maintenance (grading) to keep them passable. The major cause of deterioration is vehicular traffic. There are also many smaller (secondary) roads that require mowing and

occasional grading to provide access to boundaries, canals, and into large tracts of land. The smaller roads also deteriorate rapidly with vehicular use. Since all refuge roads are essential to fire fighting efforts, either for access or as firebreaks, it is essential to keep them passable.

E. Wildlife

Wildlife populations present are those representative of the types of habitat discussed above and include swans, geese, ducks, deer, bear, raccoon, opossum, gray squirrel, rabbit, gray fox, red fox, muskrat, otter, assorted small mammals, reptiles, amphibians, perching birds, marsh and water birds and upland birds including quail and mourning doves.

Bald eagles and peregrine falcons are occasional and transitory visitors to the refuge. Several unconfirmed sightings of eastern cougars have been reported to state and federal wildlife officers. A red cockaded woodpecker was sighted near the refuge boundary prior to the 1985 wildfire; but, no sightings have been reported following that fire. A few alligators may be present in refuge waters since there are populations close by and they have occurred here previously.

II. CONFORMANCE WITH STATUTORY AUTHORITIES

Hunting on the Pungo Unit will not be changed, but continue with deer being the only species hunted and a shortened season. This is consistent with establishing legislation for Pungo designating it as an inviolate sanctuary for migratory birds.

In accordance with the Federal Consistency requirements of Section 307 of the Coastal Zone Management Act of 1972, as amended, the project is consistent with North Carolina Coastal management Program.

The Refuge Recreation Act of 1962 (16 U.S.C. 460K) authorizes the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use, when such uses do not interfere with the primary objectives for which the area was established. In addition, the Refuge Recreation Act requires (1) that any recreational use permitted will not interfere with the primary purpose for which the area was established; and (2) that funds are available for the development, operations, and maintenance of the permitted forms of recreation.

The recreational use authorized by the regulations will not interfere with the primary purposes for which Pocosin Lakes NWR was established. This determination is based upon consideration of the Service's Final Environmental Impact Statement of the operations of the National Wildlife Refuge System published November 1976, the Pocosin Lakes NWR hunting plan, environmental assessment and section 7 evaluation. The cost of the proposed hunting program is estimated to be \$20,000 annually. Sufficient funds will be available within the refuge budget to operate the hunting program as proposed. It is estimated that 54,000 hunter visits per year will occur.

III. OBJECTIVES

The overall goals of the National Refuge System and the authorizing legislation for the establishment of Pocosin Lakes Refuge led to the development of the following Refuge specific objectives:

1. to protect and enhance habitat for those species which are classified as endangered, threatened, or of special concern;

2. to protect and restore wetlands which will contribute to the Presidential Initiative of "No Net Loss of Wetlands;"
3. to protect the watershed of nearby lakes, rivers and estuaries which support recreational and commercial fisheries and which provide wintering habitat for Canada geese, snow geese, tundra swans, and a variety of ducks;
4. to protect organic soils and pocosin wetlands from wildfires;
5. to protect and enhance production habitat for wood ducks and songbirds; and wintering habitat for other waterfowl;
6. to provide opportunities for wildlife-oriented interpretation, outdoor recreation; and environmental education.

The overall purposes of the Pocosin Lakes NWR are to protect and enhance a unique type of wetlands and provide significant wintering habitat for waterfowl.

The proposed hunting program would be designed to contribute to or be compatible with refuge objectives. It would provide high quality, wildlife-oriented recreation to the general public and the opportunity to utilize a renewable resource.

IV. ASSESSMENT

The following assessment pertains to the new refuge lands and the Frying Pan Unit, not the Pungo Unit. The Pungo Unit was

established under different authorizing legislation and the seasons are not being changed.

A. Big Game

White-tailed deer and black bear are the only species occurring on Pocosin Lakes NWR which are classified as big game in North Carolina.

A large percentage of Pocosin Lakes lands are very similar to the Pungo Unit. Data collected from 21 years of hunting on the Pungo Unit shows the deer herd is in excellent condition and can support an annual harvest in excess of 300 animals on 9500 huntable acres. The lands of Pocosin Lakes have a history of hunting and high success ratios. Virtually all private landowners who have agricultural lands adjacent to refuge property experience depredation problems with deer. Contacts with state biologists and wildlife enforcement officers all feel their observations support the fact that refuge deer populations would not only support a hunt, but need to be hunted to maintain the deer herd within the carrying capacity of the lands. Estimates of deer densities are 50 - 60 deer per square mile.

There is currently no information available to estimate population size or density of black bear. There has been bear hunting on refuge lands and there are reports of bear depredation on adjoining croplands.

B. Small Game

Small game present on Pocosin Lakes NWR includes squirrel, rabbit, quail, raccoon and opossum. The refuge lands have a history of hunting. Information from North

Carolina wildlife professionals indicates that small game populations are normal for this type of habitat and capable of supporting annual hunting pressure and harvest without detriment to the population as a whole.

Raccoons destroy waterfowl, songbird, and gallinaceous bird nests. They compete with wood ducks for natural cavities. Harvest by hunters will exert some degree of population control. Raccoon harvests will be monitored. It is not anticipated that annual reductions by hunters will detrimentally impact other refuge species. Removals should reduce potential for the spread of disease such as distemper and rabies as well as enhance wood duck and other bird production.

Squirrels, like raccoons, but to a lesser degree, compete with the wood duck for natural cavities. Removal of some of the annual production should reduce competition with nesting waterfowl.

Potential rabbit and quail hunting, and other miscellaneous small game allowed by the state, will be allowed. Populations of quail and rabbits are cyclic. Hunting will remove some of the annual production, especially during high population cycles.

C. Migratory Birds

In addition to the Pungo Unit's 100,000 waterfowl, an additional 4,000 to 10,000 have been observed on other portions of the refuge. These are mostly tundra swans, wood ducks, mallards and black ducks. Woodcock, snipe and rail populations are present in huntable levels. Mourning doves use the refuge for nesting and roosting and on occasion are present in large concentrations,

especially near the private croplands.

V. DESCRIPTION OF HUNTING PROGRAM

Virtually all areas of the refuge support populations of deer and bear. Areas in early successional plant stages support quail and rabbit while the more wooded areas support raccoon, opossum and squirrels. Open water and marsh areas support waterfowl, rails and snipe. Woodcock are found in the woodland and thickest areas. Mourning doves are seen throughout the refuge but are concentrated in areas near adjacent agricultural lands and the early successional plant areas.

Hunting will be allowed on the majority of refuge lands with the following exceptions. Land between Shore Drive (Keep Road) and Lake Phelps will be closed to all hunting and New Lake (Alligator Lake) will be closed to waterfowl hunting (Figure 2).

Hunting for the following species will be allowed during the established state hunting seasons.

1. White-tailed Deer
2. Quail
3. Rabbit
4. Squirrel
5. Snow Geese
6. Tundra Swan
7. Ducks
8. Dove
9. Woodcock
10. Rails
11. Snipe
12. Raccoon

13. Opossum

14. Fox

Night hunting for raccoon and opossum will require a special use permit, but permits will not be required for other hunting. Check stations will only be utilized for the Pungo unit deer hunt.

Note: A permit system is not expected to be required but this could change if hunting demand exceeds safe limits and a limit on number of hunters per day is required.

VI. MEASURES TAKEN TO AVOID CONFLICTS WITH OTHER MANAGEMENT OBJECTIVES

A. Biological Conflicts

Section 7 consultations involving potential impacts of the hunts on endangered species has been completed. Scheduling, closed areas, education, law enforcement and terrain will limit conflicts to endangered species. Hunts will be scheduled and/or zoned to limit conflicts with waterfowl sanctuaries.

B. Public Use Conflicts

The demand for non-consumptive wildlife oriented public use is currently low and is not expected to increase greatly during the next few years. Limited demand for wildlife/nature observation, photography, and study is expected. Though conflicts are possible they are not expected. Should conflicts arise consideration will be given to zoning, time and/or space scheduling and prohibition of certain activities.

C. Administrative Conflicts

Limited access has the potential to cause conflict with adjoining landowners and hunters. Brochures and maps will delineate access points and hunt roads. Road maintenance on critical off refuge access points will be accomplished.

Hunting seasons and fire seasons will overlap and result in increased potential for wild fires. The refuge will be closed to all public use on high fire danger days. The refuge will also have fire personnel on station during fire danger periods. Hunters will be informed of fire danger potential and encouraged to exercise extreme caution while participating in refuge activities. Vehicular travel will be restricted to designated roads only.

VII. CONDUCT OF THE HUNT

A. Refuge Specific Hunt Regulations

1. Commercial guiding will be permitted by a refuge special use permit. A state commercial guide license will also be required.
2. Any person hunting deer with a firearm must wear 500 square inches of fluorescent orange material visible from all sides.
3. A special use permit is required for night hunting of raccoons and opossums.
4. Retriever type dogs (pointers, setters, beagles) will be allowed for small game hunting.

5. Hunters under the age of 16 must have completed a hunter education course.
6. Dogs will not be allowed to run deer, bear, or fox. All stands and blinds must be portable and removed after each hunt.
7. Shotguns and primitive weapons may be used. Squirrel hunting with 22 calibre rifles will be allowed. Pistols will not be allowed.
8. Open fires are prohibited.
9. Vehicular traffic will be restricted to designated roads only (Figure 1).
10. All hunting will be restricted to designated portions of refuge only.
11. There will be no bear hunting.

The roads that will be open to public travel by motorized vehicles are depicted on Figure 1. There will be three (3) main entrance roads. These are Boerma and De Hoog Roads near the south shore of Lake Phelps, Washington County; Northern Road off of State Road 94 in Tyrrell County; and Ponzer Outfall off of State Road 45 in Hyde County. Two roads will be opened to all-terrain vehicle (ATV) use only. These roads are Trux Road through the Frying Pan Unit and the road south of New Lake to the Intra-Coastal Waterway.

This is 39 miles of roads open for public hunter travel. During rainy weather some of these roads become

impassable and may be closed. Maintenance will be a constant problem.

B. Anticipated Public Reaction To The Hunt

Public reaction to proposed hunting will, in general, be favorable. Negative reaction can be expected over the following:

1. No dogs for running deer.
2. No bear hunting.
3. No rifles for hunting deer.
4. Limited access and the number of roads open to vehicular traffic.

Some opposition from animal rights organizations is also possible. Some opposition from adjacent landowners is also possible due to potential for trespass problems.

C. Hunter Application, Selection and Registration Procedures

The only permits required will be for falconry and night hunting for raccoon and opossums. These will not be restricted.

Should hunting pressure exceed limits that provide a safe hunt, a permit system could be necessary in future years.

Deer check stations will only be manned when necessary to gather biological data and when it is necessary for hunters to register deer before leaving the refuge, i.e., the Pungo Units special either sex deer hunt.

D. Media Contacts

The proposed hunts will be publicized in all major newspapers in North Carolina and southeastern Virginia. Annual hunt dates will also be publicized in the two-state area. The Commission will annually publish the hunt dates and application procedure in its Inland Fishing, Hunting and Trapping Regulations Digest.

Area Closed to
Hunting XXX

Pungo Unit ///

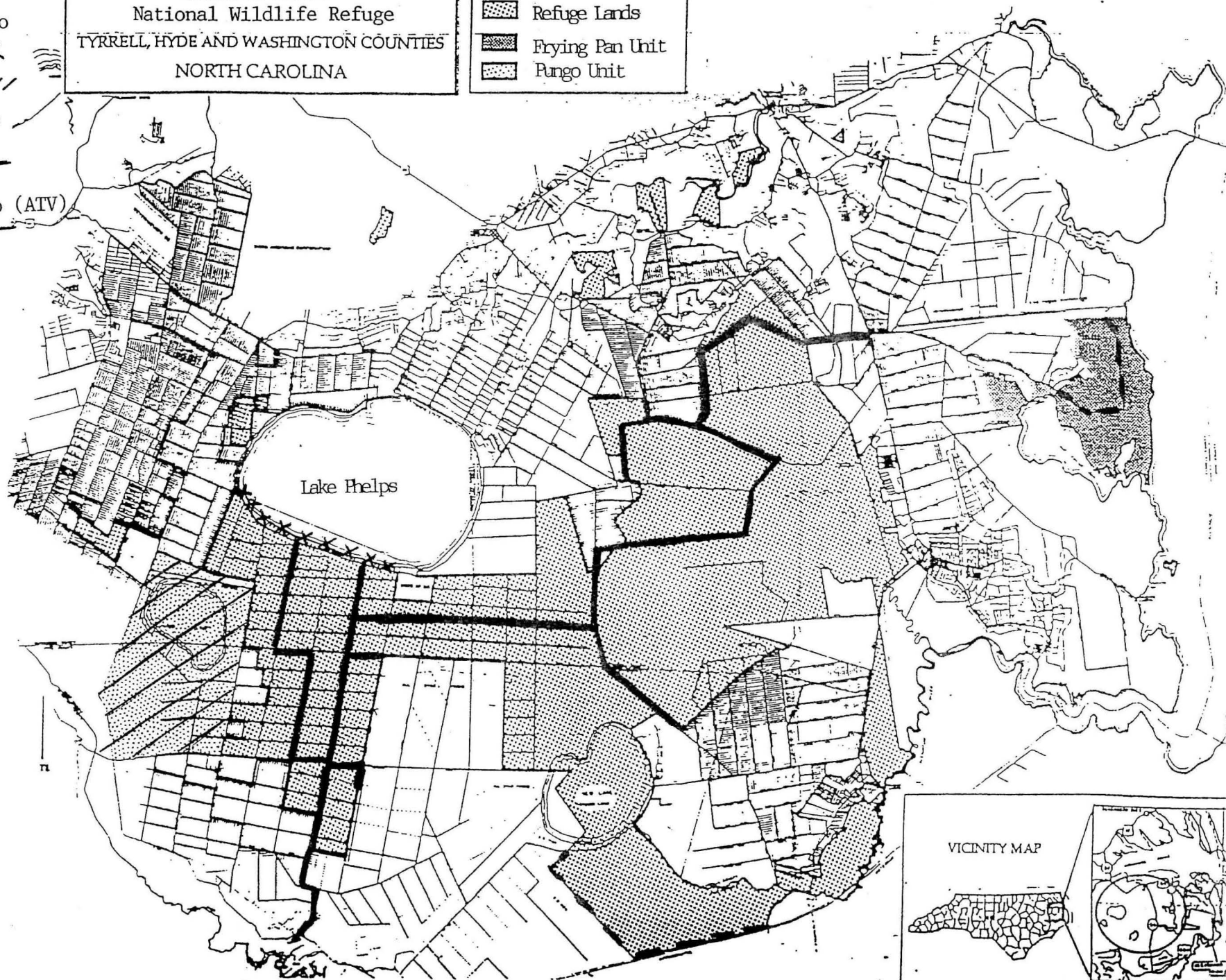
Roads open to
Vehicular
Traffic —

Roads open to (ATV)
Traffic - - -

Pocosin Lakes
National Wildlife Refuge
TYRRELL, HYDE AND WASHINGTON COUNTIES
NORTH CAROLINA

LEGEND

- Refuge Lands
- Frying Pan Unit
- Pungo Unit



VICINITY MAP

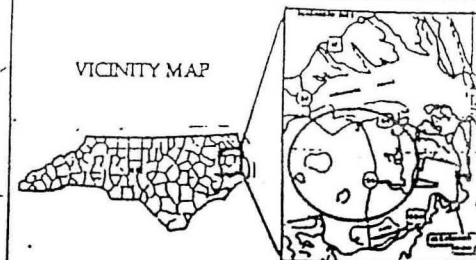


Figure 1

Sport Hunting
Decision Document Package
for
POCOSIN LAKES NWR



Contents
2. E/A FONSI

UNITED STATES FISH AND WILDLIFE SERVICE

ENVIRONMENTAL ACTION MEMORANDUM

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and have determined that the action of:

the opening of Pocosin Lakes National Wildlife Refuge to big game, upland game, and migratory bird hunting

- _____ is a categorical exclusion as provided by 516 DM 6 Appendix 1. No further documentation will be made.
- X _____ is found not to have significant environmental effects as determined by the attached Environmental Assessment and Finding of No Significant Impact.
- _____ is found to have special environmental conditions as described in the attached Environmental Assessment. The attached Finding of No Significant Impact will not be final nor any actions taken pending a 30-day period for public review [40 CFR 1501.4(e)(2)].
- _____ is found to have significant effects, and therefore a "Notice of Intent" will be published in the Federal Register to prepare an Environmental Impact Statement before the project is considered further.
- _____ is denied because of environmental damage, Service policy, or mandate.
- _____ is an emergency situation. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other supporting documents:

Hunt plan, EA/FONSI, Section 7, Compatibility Statement, Letter of concurrence, Refuge specific regulations

James W. Sullivan 2/22/92
Regional Director Date

Jim Savory, Refuge Manager
Initiator 12/18/91
Date

Sam O. Drake Jr. 12-30-91
ARD/Refuges and Wildlife Date

Karen S. Cartledge 12/30/91
Date

Dennis E. Chase 1-15-92
REC acting Date

Date

K. J. Adley 15 Jan 92
ARD/AWE Date

FINDING OF NO SIGNIFICANT IMPACT
FOR
INITIATION OF MIGRATORY GAME BIRD, UPLAND AND BIG GAME HUNTING
ON
POCOSIN LAKES NATIONAL WILDLIFE REFUGE

I have determined that the proposal to initiate migratory game bird, upland and big game hunting on Pocosin Lakes National Wildlife Refuge will not have a significant effect on the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969. Accordingly, an Environmental Impact Statement will not be prepared.

The determination is based on the following reasons:

1. Huntatable populations of game species exist on the refuge.
2. Unless controlled by some external means, the white-tailed deer and raccoon population will increase to a point harmful to themselves and/or refuge habitat.
3. Public hunting will not be harmful to endangered species.

Supporting References:

1. Environmental Assessment (attached)
2. Section 7 Evaluation (attached)
3. Deer Harvest Data (in North Carolina Wildlife Resources Commission and refuge files)
4. Refuge Environmental Assessment (in refuge files)
5. Refuge Objectives (in refuge files)

01/24/92
Date


Regional Director

FINAL
ENVIRONMENTAL ASSESSMENT
PROPOSED OPENING
POCOSIN LAKES NATIONAL WILDLIFE REFUGE
TO HUNTING

Tyrrell, Hyde and Washington Counties
North Carolina

For Further Information Contact:

Refuge Manager
U.S. Fish and Wildlife Service
Pocosin Lakes National Wildlife Refuge
Rt. 1, Box 195-B
Creswell, North Carolina 27928

Prepared by:

U.S. Department of the Interior
U.S. Fish and Wildlife Service
Creswell, North Carolina

November 1991

I. PURPOSE AND NEED FOR ACTION

A. Introduction

The U.S. Fish and Wildlife Service (Service) is proposing to open Pocosin Lakes National Wildlife Refuge (NWR) to migratory game bird, upland game and big game hunting (Figure 1). The purpose is to control animal populations and to provide enhanced people (hunter) use on the refuge. The Service recognizes that hunting is an integral part of a comprehensive wildlife management program and that significant positive benefits can be attributed to a well-managed hunt. In addition, the Service considers hunting to be an acceptable, traditional form of wildlife-oriented recreation that can be used as a management tool to effectively manipulate wildlife population levels. As a management objective, hunting provides the public with an opportunity to utilize a renewable resource. The removal of surplus deer can prevent overpopulation of the herd which could be detrimental to the animal's health and well being and negatively impact the environment.

Farmers situated around the refuge annually destroy many white-tailed deer in order to reduce crop depredation. As a very large landowner in the area (112,000 acres), it is the responsibility of the Service to do its part in controlling the population level of the deer herd. Public deer hunting will reduce the potential of herd overpopulation and refuge habitat being overbrowsed.

Upland game hunting and waterfowl hunting are traditional forms of recreation that have taken place on the former First Colony Farms' lands for many years. All these

wildlife resources provide a surplus each year that can be harvested if populations are monitored through adequate survey techniques. Hunting for raccoon, opossum, fox and squirrels will reduce competition with wood ducks for nesting cavities and reduce predation on eggs and incubating females. It will also reduce predation on other nesting birds. Hunting the above species is compatible with refuge objectives, it is based on sound wildlife management principles and is in the public's interest on Pocosin Lakes National Wildlife Refuge (Appendix 1).

B. Scoping

Service personnel held several meetings with private landowners, North Carolina Wildlife Resource Commission biologists, Fish and Wildlife Service biologists, and enforcement officers to discuss the details of this proposal. Fifty (50) questionnaires were also sent to private landowners, hunt clubs, environmental organizations, North Carolina Wildlife Resource Commission biologists and Tyrrell, Hyde and Washington County Managers for comment. Information concerning Fish and Wildlife resources of the area was provided by Service and Commission personnel.

II. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

The proposed action will allow the public to hunt upland game, big game, and waterfowl on Pocosin Lakes NWR according to established regulations. Alternatives to this proposal are listed below.

1. No action
2. Big game hunting only
3. Big game and upland game hunting

4. Big game, upland game and migratory bird hunting
(preferred alternative)

A. No Action Alternative

Under this alternative, hunting would not be allowed on the refuge. Wildlife populations on the area (deer and raccoon) could eventually expand beyond their habitat carrying capacity.

B. Big Game Hunting Only Alternative

This alternative would allow for deer hunting only. The season would follow the state listed season, but would have to allow for special "any sex" deer hunts to control herd size. This alternative would provide the potential to properly manage the level of deer numbers and protect the habitat from overbrowsing. It would also provide some relief to landowners on deer crop depredations. Small mammal populations (fox, raccoon) could expand to a point that they may impact waterfowl populations.

C. Big Game and Upland Game Hunting Only Alternative

This alternative would allow all traditional types of hunting except migratory game bird hunting, primarily waterfowl. The deer herd would be properly managed and competition for wood duck nest cavities would be reduced. Habitat destruction and crop depredations from deer would be low.

D. Big Game, Upland Game and Migratory Bird Hunting
(Preferred Alternative)

Under this alternative 99,700 acres of the refuge would be opened to public hunting of big game, upland game and migratory bird hunting.

The seasons would follow North Carolina Wildlife Resources Commission's regular state seasons and be further regulated by refuge specific regulations and Fish and Wildlife Service policy. Refuge management goals and objectives may require occasional modifications as harvest data, public use and other refuge programs are developed. Hunt plans and regulations will be altered each year as dictated by wildlife population levels and other refuge programs.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

General - The Pocosin Lakes NWR was established in 1990 to protect 93,000+ acres of pocosin type wetlands in Tyrrell, Hyde and Washington Counties. The refuge also includes the 6,000 acre Frying Pan Unit (which was administered by Alligator River NWR) and the 12,350 acre Pungo NWR (which was administered by Mattamuskeet NWR) to form a single 111,500+ acre refuge.

Vegetative Communities - The predominant vegetation type of the refuge is southeastern shrub bog which is known as pocosin. This type is characterized by a very dense growth of mostly broadleaf evergreen shrubs and scattered pond pine. The area is in various stages of succession ranging from broom sedge to mature pond pine. Most of the habitat has been subjected to drainage of one degree or another.

The North Carolina Natural Heritage Program has identified three areas of pocosin in Tyrrell and Hyde Counties as potential natural areas. These are described as follows:

A. Upper Alligator River Pocosin
(26,000 acres on refuge)

The elevation in this area ranges from 0 - 10 feet and averages 5 feet. The vegetation consists of pond pine, leatherwood, Zenobia, fetterbush, greenbriar, bitter gallberry, and leatherleaf. No agriculture was ever attempted in this area and there are relatively few logging or canal roads. McDonald and Ash (1981) considered this area "the best of unmodified pocosin on the Albemarle Pamlico Peninsula."

B. Harvester Road Tall Pocosin
(7,000 acres on refuge)

The elevation in this area ranges from 10 to 17 feet. The vegetation consists of pond pine, dangleberry, bitter gallberry, Zenobia and greenbriar. The shrub layer is extremely dense. This area was cleared for agriculture during the 1950s. The land is flat and the soils are extremely deep peat.

C. New Lake Fork Pocosins
(7,100 acres on refuge)

The elevation in this area ranges from 0 - 5 feet. The vegetation consists of pond pine, titi, Zenobia, fetterbush and greenbriar. The shrub layer is dense.

The refuge also contains 2,175 acres in eight tracts on or near the Scuppernong River. Most of its acreage consists of bottomland hardwood forest, a few stands of loblolly pine, and a few Atlantic white cedar stands. The dominant species of bottomland hardwood forest are

blackgum, and Carolina ash with smaller components of red maple, water tupelo, loblolly pine, and bald cypress. The elevation ranges from 1 - 4 feet.

West of the Harvester Road Tall Pocosin area the pocosin becomes progressively more modified. This area was cleared for the second time in the 1970s. Drainage ditches were installed every 330 feet. The area near the Washington County line is dominated by low shrubs and small pond pines and grades further to the west to sections dominated by broomsedge.

This whole area is almost 18,000 acres in size. Over 1,000 acres south of Coulbourn Road were farmed, and several areas were intensively grazed. The area was also burned over in 1981 and 1985 by intensive wildfires.

Surface waters on the refuge include 4,020 acres of the 4,800 acre New Lake, 4.5 miles of shoreline along the 16,600 acre Lake Phelps and several portions of the Scuppernong and Alligator Rivers. There are also over 175 miles of canals that were dug through the refuge as a result of previous agricultural and timbering activities.

Organic soils (peat) occur on the great majority of the refuge. These normally waterlogged soils exceed 4 feet in depth on most of the area. Large areas have depths in excess of 8 feet.

At least 207 species of birds are known to occur on the Pocosin Lakes NWR. The most common winter song birds are the American robin, yellow-rumped warblers, mockingbirds, cardinals, common grackles, and the red-winged blackbird. Yellow-rumped warblers and other passerines use the low

shrub pocosins, vegetated canal banks and forest edges. They feed on fruits of bayberry and wax myrtle.

Mourning doves and bobwhite quail are very abundant in the western portion of the refuge that was subjected to extensive land clearing. The most common raptors include American kestrel, sharp-shinned hawks, red-tailed hawks, red-shouldered hawks, and northern harriers.

Waterfowl that use Lake Phelps, New Lake, Pungo Lake, and the Alligator River include Canada geese, snow geese, tundra swan, mallard, black duck, wood duck, green-winged teal, hooded merganser, ruddy duck, pintail, common merganser, gadwall, American widgeon, ring-necked, scaup, bufflehead.

White-tailed deer, black bear, bobcat, gray fox, red fox, marsh rabbit, cottontail rabbit, raccoon, and opossum are found throughout the shrub bog community. The refuge has one of the highest densities of white-tailed deer in eastern North Carolina. The mink, river otter, muskrat and nutria are restricted to aquatic areas in the pocosins.

Representative amphibians and reptiles include the southern leopard frog, bullfrog, southern toad, pine woods treefrog, spotted turtle, eastern box turtle, eastern painted turtle, eastern cottonmouth, timber rattlesnake, and black rat snake.

Lake Phelps contains a diverse fish population. The primary game species are largemouth bass, white perch, bluegill, and chain pickerel. There are also substantial populations of channel and white catfish. The Waccamaw killifish is found only in Lake Phelps and North

Carolina's Lake Waccamaw. The Scuppernong River supports a commercial and recreational fishery. Important game fish in the river include largemouth bass, sunfish and crappie.

Pungo Lake and New Lake do not support a significant game fish population. Both lakes are very shallow and have poor water quality.

Endangered species likely to occur on the refuge are the bald eagle and an occasional Arctic peregrine falcon. The red-cockaded woodpecker and American alligator have been reported adjacent to the refuge. Ospreys also have been sighted on Lake Phelps. The Waccamaw killifish occurs only in Lake Waccamaw and Lake Phelps, North Carolina. Additionally, sensitive joint vetch, a candidate for Federal Listing, occurs in Hyde County but is not known to occur within the Refuge.

III. DESCRIPTION OF ENVIRONMENTAL CONSEQUENCES

This section addresses the environmental impacts of the four (4) alternatives on the affected environment. The anticipated environmental, social, economic, and cultural consequences of the alternatives are also presented in Table 1.

The alternatives have varying degrees of impacts, especially in relation to refuge habitat carrying capacity, wildlife and plant resources, potential to enhance wood duck and gallinaceous bird nesting, recreational opportunities, public relations aspects, perceived increased trespass potential and recreational opportunities.

A Section 7 endangered species evaluation was completed and resulted in a "will not effect" conclusion for the hunting

seasons proposed under the preferred alternative. All refuge hunts will continuously be monitored to identify potential impacts to listed species and other refuge resources.

A. Alternative 1: No Action

Under this alternative, wildlife populations on the area (deer and raccoon) could eventually expand beyond their habitat carrying capacity and threaten their existence through unnecessary disease and malnutrition. Small game and migratory bird (rabbit, quail, doves, ducks and geese) populations will go unutilized. These wildlife resources normally produce a surplus of animals that can safely be harvested each fall. Bobwhite quail, for example, will lose 80% of their population each year to mortality whether they are hunted or not.

Competition with nesting waterfowl will not be decreased. Traditional recreational opportunities (hunting) will be eliminated. Public relations will be severely impacted on a local and state level. Public resentment in eastern North Carolina may negatively impact refuge operations. Businesses that cater to hunters will be hurt economically. Land acquisition may be more difficult if the land will not be hunted. However, the potential for increased trespass problems with adjacent landowners will decrease under this alternative. Road maintenance costs will also decrease.

There will be little or no potential for conflicts between refuge user groups and no hunter-related littering. This alternative will also decrease the wildfire potential since there will not be any hunter activity during the fall fire season.

B. Alternative 2: Big Game Hunting Only

Washington, Tyrrell and Hyde Counties have some of the highest deer densities in the state. Hyde County will have a 30-day, any-sex deer hunt in 1992. Pungo NWR (adjacent to Pocosin Lakes NWR) has been open for deer hunting for 20 years. The deer population is still on the verge of overpopulation. When the population exceeds the carrying capacity, biological parameters within the herd (APC's, weight, antler size, age, structure, reproductive rates) indicate the deterioration of herd quality. This alternative will allow monitoring the status of the herd based on the above parameters and adjusting the harvest level to maintain a quality herd. Hunting is the major control mechanism for preventing problems caused by deer overpopulation.

This alternative will decrease habitat overbrowsing, crop depredation problems, road kills and a deer die-off caused by overpopulation. This alternative will forego the harvest of small game and migratory bird species. The hunting public will be denied many quality recreational experiences. Deer hunting will pose a trespass problem for adjacent landowners.

Scheduling problems may result with other user groups. The cost of administering the hunt and maintaining roads is less than alternatives 3 and 4. The potential for littering will increase compared with Alternative 1.

C. Alternative 3: Upland and Big Game Hunting Only

This alternative would allow all traditional types of hunting except migratory bird hunting. The deer herd would be reduced and the potential for disease and

habitat overbrowsing reduced. Competition by raccoons for wood duck nest cavities would also be reduced. Small game populations would be utilized and supply a significant amount of public recreation. Administrative costs and road maintenance would increase. Competition between user groups would also increase. Trespass problems for adjacent landowners would also increase. The length of the hunt time and recreation days would increase to the end of February. Littering problems would also increase under this alternative.

Traditional waterfowl hunting would not be allowed and hundreds of hours of quality outdoor recreation would be lost. Public relations will be negatively impacted on a local and state level.

D. Alternative 4: Migratory Game Bird, Upland Game and Big Game (Preferred Alternative)

Hunting will be allowed on the majority of the new refuge lands (98,000 acres) with the following exceptions. Land between Shore Drive (Keep Road) and Lake Phelps will be closed to all hunting, and New Lake (Alligator Lake) will be closed to waterfowl hunting (Figure 1). Long-term adverse impacts on wildlife resources and habitat would be minimal. Temporary losses would involve renewable wildlife resources. White-tailed deer numbers would be maintained within the habitat carrying capacity. Habitat overbrowsing and the incidence of disease would be low. Wood duck, other migratory birds and gallinaceous bird nesting could potentially be enhanced because of the reduction in raccoon numbers. The surplus of small game populations would be utilized and would provide thousands of hours of public recreation. Public relations on a local and state-wide basis would improve. Local

businesses that cater to hunters would prosper economically since the hunting season is six months long.

Adjacent landowners may perceive a potential for increase in trespass problems, although there is a large trespass problem with the hunt clubs at the present time. Various hunt seasons will have to be monitored to avoid user group conflicts. An unknown number of people may disagree with the philosophy of hunting on a National Wildlife Refuge.

A few hunt clubs in the area are opposed to opening the refuge to hunting since many of them lease the land at the present time. Public hunting will increase the number of hunters participating in the sport.

Hunt administration costs will increase and road maintenance will increase. Littering will also increase. The wildfire potential will also increase under this alternative since the hunt season runs through the fall fire season. There would also be an increased disturbance to non-target wildlife species; however, transient endangered species would not be impacted.

IV. CONSULTATION AND COORDINATION WITH OTHERS AND PUBLIC PARTICIPATION

Discussions concerning the proposal addressed in this assessment were conducted with North Carolina Wildlife Commission District I biologists and conservation officers. Discussions were also held with several Fish and Wildlife Service biologists, refuge managers and regional office staff.

A scoping questionnaire was developed and sent to Washington, Tyrrell and Hyde County Managers; North Carolina Wildlife

Federation; N.C. Bowhunters Association; N.C. Chapter Quail Unlimited; N.C. Chapter Ducks Unlimited; N.C. Chapter Audubon Society; twenty one (21) local hunt clubs; and twenty-three (23) adjacent landowners. Only twenty (20) responses were returned from this initial mailing. Generalized comments were listed as follows:

- 4 individuals wanted dog running for deer
- 2 individuals wanted restricted dog running for deer
- 9 individuals were against dog running for deer
- 2 individuals requested bear hunting
- Need more deer hunting
- Need more swan hunting
- No rifles should be used on refuge
- Several individuals did not want guiding on the refuge.

Three public meetings were held in Washington, Tyrrell and Hyde Counties on September 30, October 1, and October 3, 1991. There were over fifty (50) people present in Washington County, thirty-five (35) in Tyrrell County, and five (5) in Hyde County. The main concerns listed by the participants are listed below:

- Hunt club members wanted dog running for deer.
- Need to have a bear season.
- Not enough refuge roads would be open to the hunters.
- Several individuals wanted to use rifles on the refuge.
- Hyde County should have an access route to the refuge.
- Night hunters should be required to secure a daily Special Use Permit instead of a yearly permit.
- An area should be set aside for archery hunting only.
- Charge a user fee for lands that are opened to hunting.

It was explained to the hunt club members that the Service supports hunting programs that provide participants with fewer

conflicts between hunters, relative undisturbed wildlife and limited interference from or dependence on mechanized aspects of the sport. The refuge will not offer black bear hunting opportunities until more data is known about the population. Very little is known about bear numbers in eastern North Carolina. There are over 100 miles of roads on the refuge. Enough refuge roads will be open to the public to allow hunters access to all areas. If they were all open to public travel during the hunt season, there would be excessive maintenance costs.

It was explained to the hunt clubs that during some portions of the deer season there may be over 800 hunters on the refuge at one time. High powered rifles would cause a dangerous situation.

An access route from Hyde County is being developed to accommodate this request.

An annual Special Use Permit should be adequate to control a small amount of raccoon and opossum hunters. A special archery hunt was held at for Pungo Refuge during the month of November 1991. Based on the results of this hunt, a decision will be made whether to have a special hunt in 1992.

User fees have been established for drawings but not for general refuge hunts.

In addition to the comments expressed at the public meetings and in the questionnaire, a letter was received from the North Carolina Wildlife Resources Commission. Most of their comments were included in the Hunt Plan. Their requests to have a bear season, utilize rifles for deer hunting and allow dogs for deer hunting were not included as part of the plan.

Literature Cited

1. McDonald, Charles B., and Andrew Ash. 1981.
Natural Areas Inventory of Tyrrell County, North Carolina. N.C. Coastal
Energy Impact Program. CEIP Report No. 8.
2. U.S. Fish and Wildlife Service. 1990.
Final Environmental Assessment, Pocosin Lakes National Wildlife Refuge.
U.S. Fish and Wildlife Service.
3. U.S. Fish and Wildlife Service. 1982.
National Wildlife Refuge System Refuge Manual.
U.S. Fish and Wildlife Service.

TABLE 1. ENVIRONMENTAL, SOCIAL AND CULTURAL CONSEQUENCES OF THE FOUR ALTERNATIVES ARE SUMMARIZED.

Alternatives	No. 1	No. 2	No. 3	No. 4
Habitat carrying capacity	decrease	maintained	maintained	maintained
Wildlife Resources				
-adverse impacts to wildlife populations	moderate	low	none	none
-enhanced wood duck and gallinaceous bird nesting	none	none	moderate	moderate
-disturbances to endangered species	none	none	none	none
-disturbance to wintering geese and ducks	none	low	low	low
Fire hazard	low	moderate	moderate-high	high
Land use changes	none	none	none	none
Adverse water resource impacts	none	none	none	none
Cultural resources impacts	none	none	none	none
Fishery resource impacts	none	none	none	none
Recreational opportunities	decrease	medium increase	medium-high increase	high increase
Public relation impacts	negative	slightly negative	slightly positive	positive
Conflict between user groups	none	low	moderate	moderate
Neighbor's trespass problem	none	possible increase	possible increase	possible increase
Littering potential	low	increase	increase	increase

Pocosin Lakes
NATIONAL WILDLIFE REFUGE

TYRRELL, HYDE AND WASHINGTON COUNTIES
NORTH CAROLINA

LEGEND




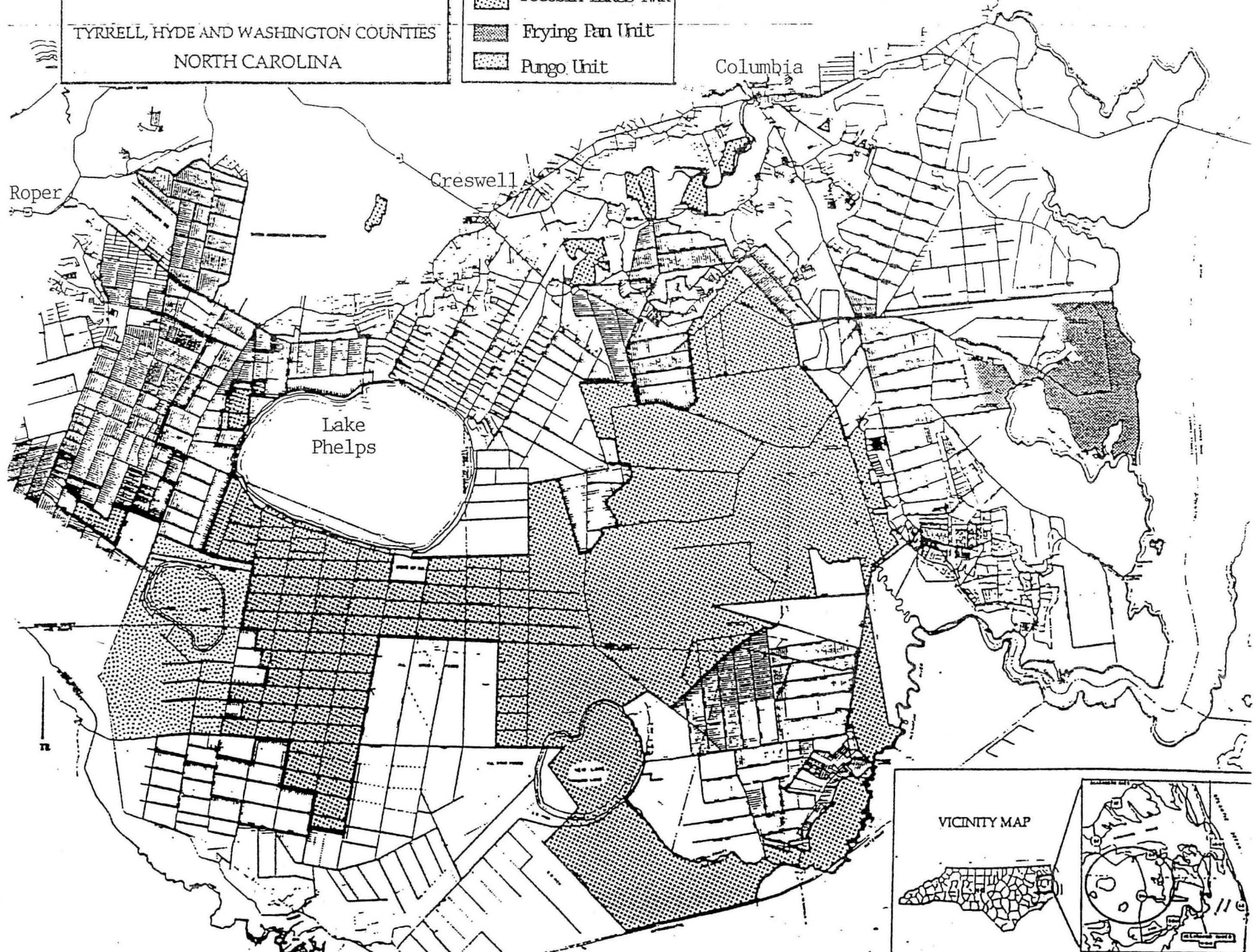
-  Pocosin Lakes NWR
-  Frying Pan Unit
-  Pungo Unit

FIGURE 1



Appendix A

OBJECTIVES

The overall goals of the National Refuge System and the authorizing legislation for the establishment of Pocosin Lakes Refuge led to the development of the following Refuge specific objectives:

1. to protect and enhance habitat for those species which are classified as endangered, threatened, or of special concern;
2. to protect and restore wetlands which will contribute to the Presidential Initiative of "No Net Loss of Wetlands;"
3. to protect the watershed of nearby lakes, rivers and estuaries which support recreational and commercial fisheries and which provide wintering habitat for Canada geese, snow geese, tundra swans, and a variety of ducks;
4. to protect organic soils and pocosin wetlands from wildfires;
5. to protect and enhance production habitat for wood ducks and songbirds; and wintering habitat for other waterfowl;
6. to provide opportunities for wildlife-oriented interpretation, outdoor recreation; and environmental education.

The overall purposes of the Pocosin Lakes NWR are to protect and enhance a unique type of wetlands and provide significant wintering habitat for waterfowl.

Sport Hunting
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for
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Contents

3. Section 7 Evaluation

SECTION 7 EVALUATION

REGION: Pocosin Lakes National Wildlife Refuge
Creswell, N.C.

LOCATION (ATTACHED MAP): 99,500 acres located in Tyrrell, Hyde, and Washington Counties

LISTED SPECIES OR CRITICAL HABITAT CONSIDERED:

Bald Eagle - E

Peregrine Falcon - E

NAME AND DESCRIPTION OF ACTION:

Initiate migratory game bird, upland game and big game hunting on Pocosin Lakes NWR.

OBJECTIVES OF THE ACTION:

To maintain the white-tailed deer population within habitat carrying capacity, annually reduce competition with wood ducks for natural cavities and allow traditional quality recreation. The action will also utilize the surplus of wildlife produced each year.

EXPLANATION OF IMPACT OF ACTION ON LISTED SPECIES OR CRITICAL HABITAT:

Bald Eagle - Nesting does not occur on the refuge. Birds are transient.

Peregrine Falcon - No impact, Birds are transient.

RECOMMENDATIONS TO AVOID ADVERSE IMPACTS OR ENHANCE SPECIES CONSERVATION:

During hunter contacts the refuge's importance to endangered species will be emphasized. All hunters will be reminded of the refuge's high priority objectives and the importance of abiding by regulations.

REVISED: 7/88

SECTION 7 EVALUATION

PAGE 2

PROJECT LEADER

Jim Sweeney

DATE

11-4-91

MAY ADVERSELY AFFECT: _____

NOT LIKELY TO ADVERSELY AFFECT: XX

COMMENTS:

FWE FIELD SUPERVISOR:

U. D. DeGaulle

DATE

11-12-91

MAY ADVERSELY AFFECT: _____

NOT LIKELY TO ADVERSELY AFFECT: XX

COMMENTS:

ARD _____

DATE _____

MAY ADVERSELY AFFECT: _____

NOT LIKELY TO ADVERSELY AFFECT: _____

COMMENTS:

ARD-FWE _____

DATE _____

MAY ADVERSELY AFFECT: _____

NOT LIKELY TO ADVERSELY AFFECT: _____

COMMENTS:

REGIONAL DIRECTOR _____

DATE _____

NOT LIKELY TO ADVERSELY AFFECT: _____

COMMENTS:

BIOLOGICAL OPINION: _____

REVISED: 7/88

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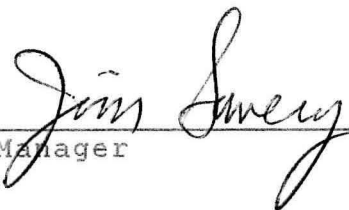
4. Compatibility Statement

Compatibility and Funding Statement
for
Initiation of Migratory Game Bird,
Upland and Big Game Hunting
on
Pocosin Lakes National Wildlife Refuge

Creswell, North Carolina

The Pocosin Lakes National Wildlife Refuge was established in 1990 under authority contained in the Fish and Wildlife Act of 1956, 16 USC 742(a) - 754, 742f (a)(4), 742f (b)(1). Time and space zoning have been implemented in plans for conducting migratory game bird, upland and big game hunting on the refuge. Therefore, the program will be integrated with the management of other wildlife species on the refuge, including utilization of refuge habitats by migratory waterfowl and endangered species.

Hunting is widely recognized as an integral part of a comprehensive wildlife conservation program. The recreational harvest of large ungulates, such as deer, through hunting is known to be essential to herd health where natural predators are absent. Recreational harvest will help control deer and raccoon populations which will reduce population stresses of competition, disease and parasites, and enhance white-tailed deer management efforts and wood ducks nesting success. The harvest of surplus bobwhite quail, squirrel and rabbits will supply many hours of recreation without an adverse impact on the resource. Therefore, the initiation of migratory game bird, upland and big game hunting are compatible with the purposes for which the refuge was established, and is in compliance with the Refuge Administration Act. The initial cost of the hunting program will be approximately \$20,000 and the annual cost thereafter will be approximately \$15,000--\$20,000. Within an annual budget of \$300,000 the necessary funds will be available for the administration of this hunting program. Therefore, the proposed hunting program is in compliance with the Refuge Recreation Act.


Refuge Manager

12-18-91
Date

Sport Hunting
Decision Document Package
for
POCOSIN LAKES NWR



Contents

5. Letter of Concurrence



DEC 05 1991

North Carolina Wildlife Resources Commission

512 N. Salisbury Street, Raleigh, North Carolina 27604-1188, 919-733-3391
Charles R. Fullwood, Executive Director

November 19, 1991

Mr. Jim Savery, Refuge Manager
Pocosin Lakes National Wildlife Refuge
United States Department of Interior
Fish and Wildlife Service
Route 1, Box 195-B
Creswell, North Carolina 27928

Dear Mr. Savery:

The draft hunt plan for the Pocosin Lakes National Wildlife Refuge (Refuge) has been received. The North Carolina Wildlife Resources Commission (Commission) supports public hunting on the refuge and has met with U.S. Fish and Wildlife Service (Service) staff to provide input on the hunt plan. The plan is well written and designed to meet multi-use objectives of the refuge. The Commission challenges the Service to consider the following comments and suggestions.

Page 11; 6: The Commission recommended that non-consumptive uses be scheduled so not to conflict with hunting related activities.

Page 17; A. 1: In addition to the special use permit required by the Service, a state commercial guide license will be required for commercial guiding.

Page 17; A. 2: Prohibiting use of dogs for deer hunting is inconsistent with Commission policy that supports traditional hunting methods. While hunting deer with dogs can cause some problems, limited hunting with dogs will

allow use of the Refuge by a broader cross section of hunters and will have no adverse effect on deer populations. Allowing dogs will be consistent with Service policy which allows the use of dogs for waterfowl, raccoon and small game.

Page 17; A. 3: The Commission supports the use of rifles and pistols in addition to the weapons listed. A regulation requiring sportsmen who use these weapons to fire them from a height not lower than 8 feet should eliminate most safety concerns.

Page 17; A. 6. The wording of this regulation is confusing and needs clarification.

Page 18; A. 10: The Commission encourages the Service to increase access on the Refuge by designating additional ATV trails. ATV damage to roads should be minor, while providing significant access improvements.

Page 18; A. 12: The Commission supports a controlled/limited black bear harvest on the Refuge. Road kill and bear depredation complaints which surround the refuge indicate that surplus bears are available for harvest. The Commission recommends that the Service consider a limited harvest to help reduce non-hunting mortalities and to alleviate depredation problems.

In addition to these comments, the Commission supports fox and bobcat hunting. These species were not mentioned within the hunt plan.

Page 20; E.: The Commission suggests that the Service consider designating hunter campgrounds to accommodate sportsmen.

Pages 21, 22, 23; Access.: The Commission recommends that the access time permitted before and after legal shooting hours be changed to 1 1/2 hours. This change will primarily benefit big game hunters who may need additional time to carry in and remove stands and to transport a kill to their vehicle.

Page 22; (gg) 1.: The Commission recommends that, "during the muzzle-loading and gun season" be added to this regulation.

In addition to our comments on the draft hunt plan, we concur with the Draft Environmental Assessment and believe that the environmental review record can be concluded with a Finding of No Significant Impact. (Minor suggested changes are provided for your review.)

Thank you for the opportunity to provide these comments and suggestions concerning this draft hunt plan and Environmental Assessment. If we can provide further assistance, please call on us.

Sincerely,

A handwritten signature in cursive script that reads "Charles Fullwood".

Charles R. Fullwood
Executive Director

cc: Earl Gillis, Wildlife Biologist Supervisor II
David Rowe, District 1 Wildlife Biologist

ENVIRONMENTAL ASSESSMENT COMMENTS

POCOSIN LAKES NATIONAL WILDLIFE REFUGE

Page 2; Paragraph 2: Question the statement concerning hundreds of deer destroyed annually while in the act of crop depredation. Is this a documented number?

Page 3; Paragraph 1: Add fox and bobcat to species to be hunted. Reduction in these predators may reduce loss to other nesting birds.

Page 4; B: Deer herds may be kept in check; however small mammal populations (fox, raccoon) could expand to a point that they may impact waterfowl populations.

Page 8; Paragraph 3: Duck species listed do not appear to be complete. Many diver species are not mentioned.

Page 8; Paragraph 4: Add marsh rabbit to species.

Page 9; Paragraph 3: Fails to mention endangered plants when discussing endangered species.

Sport Hunting
Decision Document Package
for
POCOSIN LAKES NWR



Contents

6. Refuge-Specific Regulations

D. Media Contacts

The proposed hunts will be publicized in all major newspapers in North Carolina and southeastern Virginia. Annual hunt dates will also be publicized in the two-state area. The Commission will annually publish the hunt dates and application procedure in its Inland Fishing, Hunting and Trapping Regulations Digest.

REFUGE-SPECIFIC HUNTING REGULATIONS

32.12 - Migratory Game Birds

(dd) North Carolina

Pocosin Lakes National Wildlife Refuge

Hunting of ducks, snow geese, swans, doves, woodcock, rails and snipe is permitted on designated areas of the refuge subject to the following conditions:

1. Access permitted 1 1/2 hours before and after legal shooting times.
2. Firearms must be unloaded while being transported by a vehicle or boat under power.
3. Only portable blinds and temporary blinds constructed of natural materials are permitted. Portable blinds must be removed following each day's hunt.
4. Hunting permitted during state season.

32.22 - Upland Game

(gg) North Carolina

Pocosin Lakes National Wildlife Refuge

Hunting of quail, rabbit, squirrel, raccoon and opossum is permitted on designated areas of the refuge subject to the following conditions:

1. Permits are required for any night hunting.
2. Access permitted 1 1/2 hours before and after legal shooting time.
3. Firearms must be unloaded while being transported by a vehicle or boat under power.
4. Hunting permitted during state season except opossum and raccoon will be closed during state bear season including 5 days before and after that season.

32.32 - Big Game

(gg) North Carolina

Pocosin Lakes National Wildlife Refuge

Hunting of white-tailed deer is permitted on designated areas of the refuge subject to the following conditions:

1. Each hunter must wear 500 square inches of fluorescent orange material above the waist,

visible from all directions during the muzzle loading and gun seasons.

2. Shotguns and primitive weapons only. Pistols and modern rifles are prohibited.
3. Firearms must be unloaded while being transported by a vehicle or boat under power.
4. Access permitted 1 1/2 hours before and after legal shooting time.
5. Hunting permitted during state season.
6. Dogs are not permitted.
7. All stands must be removed from the refuge following each day's hunt. The construction or use of permanent stands, blinds, platforms, or ladders is prohibited.