

ANIMAL CONTROL PLAN

FOR

Wapanocca National Wildlife Refuge

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Project Leader

Reviewed by: Thomas J. Edwards Date: 4/03/2000
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for GARD

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Regional Director
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ANIMAL CONTROL PLAN

WAPANOCCA NATIONAL WILDLIFE REFUGE

1999

**WAPANOCCA NWR
P.O. BOX 279
TURRELL, ARKANSAS 72384**

Introduction

Station Name: Wapanocca National Wildlife Refuge

Size: 5,484.17 acres

Date Established: January 24, 1961

Establishing and Acquisition Authorities: Migratory Bird Conservation Act

Purpose for which the Refuge was Established: "... for use as an inviolate sanctuary or for any other management purpose for migratory birds". 16 U.S.C. 715d (Migratory Bird Conservation Act)

Refuge Objectives and Goals:

Manage Wapanocca Lake, associated bottomland hardwoods, and cleared agricultural lands to provide needed food and habitat for wintering migratory waterfowl.

To provide habitat capable of supporting 3,700,000 duck and 1,200,00 Canada goose use days annually.

To provide habitat and artificial nesting boxes for the production of 2,500 wood ducks.

To provide environmental education annually to 3,000 students and wildlife interpretation opportunities to 28,000 visitors.

To provide compatible consumptive use opportunities for 4,000 hunter and 100,000 fishing visitors.

National Wildlife Refuge System Mission:

To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

National Wildlife Refuge System Administration Act of 1997:

Each refuge shall be managed in a manner that helps to maintain the biological integrity, diversity, and environmental health of the Refuge System.

Habitat Involved:

Wapanocca NWR

Main habitat types include 30 field impoundments of 190 acres, 360 acres of recent reforestation, 1,100 acres of cropland, 500 acres of floodable bottomland hardwood forests, 860 acres of upland forests (due to hydrological changes are no longer in flood zone), 610 acres of open water and 1,760 acres of cypress/willow swamp.

Private ownership

There are approximately 11,000 acres of private cropland surrounding the refuge of which the watershed flows into ditches that cross the refuge.

I. Beaver and Nutria

A. Description

Wapanocca presents ideal habitat for beaver and nutria because of the large amount of forested wetlands and ditch systems.

There were no known beaver in this section of the state when the refuge was established in 1961. The first evidence of this animal being present on the refuge was observed in early 1962. The population grew to over 250 animals by the mid 1970's. Timber stand damage and problems with maintenance of ditches and water control structures necessitated control measures which were initiated in 1976. Those problems continue today and will continue in the future since favorable conditions exist for the proliferation of this species..

The nutria, an exotic from South America, was first noticed on the refuge in 1993. The population is expanding on the refuge and damage to young cypress trees is already occurring. Damage to dikes and levees caused by nutria on the refuge is not known however problems in Louisiana are well documented. It is only a matter of time before the problem is evident on the refuge.

Neither the beaver or nutria have natural enemies in this area which would control populations.

B. Consultation and Assistance

Mike Hoy, Wildlife Services, USDA, Stuttgart; Barbara Ruby, USDA: APHIS - Wildlife Services, Little Rock ; Arkansas Game and Fish Commission.

C. Control Methods Recommended and Alternatives

1. **Hunting - Almost entirely eliminates non-target species removal.**
 - a. **Public. Public hunting will be allowed during refuge hunts with hunting devices appropriate for that hunt. Few animals are expected to be taken with this method as hunters will not frequent areas used by beaver and nutria. The state requires a**

depredations permit issued by the local game warden for shooting these animals during closed seasons.

b. Refuge Personnel.

i. Night Hunting

Roads and levees adjacent water bodies would be traveled by vehicle with spotlight. Target animals would be dispatched using a .22 rimfire rifle or shotgun with #4 buckshot.

ii Daylight Hunting.

The most efficient times for this method are after winter and spring rains which swell the ditches flowing through the refuge. Beaver are frequently out on the banks or swimming in the ditches after daylight until mid-morning. These animals would be taken using a .22 rimfire rifle or shotgun with #4 buckshot.

2. Trapping - Trapping will be restricted to water sets to minimize the catch of non-target species.

a. Live Trapping - Live trapping will not be utilized as relocating the animals would only put that animal in another's territory creating problems for that animal or it would be located in an area where there would be reintroduction of a nuisance animal. Beaver presently occupy all areas of favorable habitat for them. Nutria is an exotic and should not be introduced in areas they presently are not found in as native species would suffer.

b. Kill Trapping - Conibear 330 kill traps or #4 double spring leg hold traps (drowning sets only) are to be used so animals can be dispatched quickly and as humanely as possible. Trapping of nuisance beaver and nutria is permitted the entire year for landowners by the state.

i. Public - Fur prices are too low to interest the public in trapping without additional compensation. As long as this condition exists trappers will be contracted to trap nuisance animals. If fur prices rise to economically viable trapping levels, special use permits would be issued. Trapping by the public even by contract would be the most cost efficient method of animal removal.

ii. Refuge Personnel - Trapping would be done when a nuisance animal needs to be removed and a contract trapper is not available.

3. **Toxic Baits - Toxic baits for beaver will not be used as there is no known chemical which is registered for use on beaver. Zinc phosphide is registered for use to control nutria but will also kill other rodents which might eat the bait. Canids regurgitate the poison thus removing it from their system before the toxic effect. Approval to use this chemical for nutria control will only be applied for if other control methods fail and nutria control is vital to the refuge mission.**

II. Raccoon and Opossum

A. Description

Raccoon populations have been historically high on the refuge. A hunting program was initiated in 1967 to help control the population. Even when fur prices were good and raccoon hunting popular, there have been dieoffs due to disease. Dieoffs were documented in 1972, 1973, 1982, and 1989. There may have been other disease outbreaks which went unnoticed. Disease outbreaks are more likely to occur among dense populations due to stress physically weakening individuals and the greater likelihood of encountering a sick animal and becoming infected.

Both raccoon and opossum are efficient destroyers of nesting birds. Raccoon predation on woodduck nests has been observed on the refuge.

B. Consultation and Assistance

Mike Hoy, Wildlife Services, USDA, Stuttgart, Arkansas; Barbara Ruby, Wildlife Services, USDA, Little Rock, Arkansas; Arkansas Game and Fish Commission.

C. Control Methods Recommended and Alternatives

1. **Hunting - Almost entirely eliminates non-target species removal.**
 - a. **Public. Hunting of raccoon has become less popular since fur prices plummeted, however there are enough avid raccoon hunters to make this a viable control technique. Raccoon hunting was typically allowed November 1-15 yearly. In 1999, a spring hunt March 1-31 was allowed. In the year 2000 the fall hunt will be extended to end November 30th to help bring populations down to a tolerable level. Although opossum hunting is allowed in conjunction with the raccoon hunts, there is little demand for the hides or meat and few are taken by the public.**

- b. **Refuge Personnel.** Refuge personnel would not be able to devote the time needed to make this a viable program to control the overall population. This method will only be used to eliminate individual problem animals such as those interfering with wood duck banding operations. A depredation permit issued by the local game warden is required by the state to shoot animals during closed seasons.

2. Trapping

- a. **Live Trapping** - This is not a viable alternative as is labor intensive and lack of area to relocate the animals.
- b. **Kill Trapping** - This method will not be considered at this time due to the probability of taking large numbers of non-target species.

3. Toxic bait

There are no known species specific chemicals which are registered for use on these species. General toxicants would eliminate non-target species. This method will only be used to eliminate individual problem animals under conditions that will prohibit the ingestion by non-target animals.

III. Feral "Wild" hogs.

A. Description

A wild hog was first observed on the refuge July 5, 1999. They have become common along the Mississippi River levee across from the refuge. It is easy for them to traverse the two miles between the levee and the refuge. Any free-roaming hogs should be eliminated before a breeding population is established on the refuge. Hogs take a large toll on wildlife and wildlife habitat. There are no domestic hogs raised in the vicinity of the refuge so all hogs encountered will be considered "wild".

B. Consultation and Assistance

This control measure is authorized under 50 CFR 30.11 and 30.12. The Arkansas Game and Fish Commission allows the taking of hogs during open hunting seasons on public lands with weapons legal for that season. They allow feral hogs to be taken on private lands at any time as long as the hunter

has legal access and the landowner's permission.

C. Control Methods Recommended and Alternatives

1. **Public Hunting.** If hogs become established on the refuge, the hunting of hogs will be allowed in conjunction with other refuge hunts.
2. **Refuge Personnel Harvest.** Hogs will be dispatched by refuge personnel whenever they are seen on the refuge.
3. **Live Trapping.** This method will be used when expedient.
4. **Other Control Measures.** Toxic baits will not be considered unless a method is developed to eliminate the possibility of taking non-target animals and then only if hunting fails to give control. The use of salted broken clay pigeons is known to be effective however should not be utilized as it is not a humane method. It clogs the digestive tract creating a slow death.

IV. Feral Cats and Dogs

A. Description

Control is authorized under 50 CFR 30.11 and 30.12. The refuge is only .25 miles from the city of Turrell. Free roaming dogs from Turrell at times form packs which roam the refuge. No longer wanted pets are sometimes dumped on the refuge. Feral dogs and cats are very destructive of wildlife thus are not compatible on the refuge and will be removed.

B. Consultation and Assistance

50 CFR 30.11 and 30.12.

Sherry Bedde, Humane Society Animal Shelter

C. Control Methods Recommended and Alternatives

1. Capture and Adoption

Former pets which can be easily captured will be captured and transported to the animal shelter in West Memphis by volunteers. The animal shelter run by the Humane Society will furnish traps and transfer cages and has agreed to take all animals brought in.

2. Kill

Animals which are too wild to be captured easily will be shot.