AUG 13 1981

Acting Regional Director, FWS, Twin Cities, MN (OP)

OP - SHB - 340
Hunting

Revised Hunting Plan

Refuge Manager, Sherburne NWR

Attached is an approved copy of your revised hunting plan. You and your staff are to be congratulated on a well written document.

Future changes to the plan may be written as amendments and numbered consecutively from #1.

(Sgd) Daniel H. Bumgarner

Attachment

cc: Area Manager, Twin Cities Area Office (TCAO)

OP/CGale/rlf/8-11-81/ext-3570

D Ale 8-11-81
Weir 8/11/81
Bauer 8/11/81
Bumgarner 8/13/81

REVISED HUNTING PLAN

Sherburne National Wildlife Refuge

January 1981

Fish and Wildlife Service
U.S. Department of the Interior
Region III

HUNTING PLAN

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HUNTING PLAN

Sherburne National Wildlife Refuge

I. INTRODUCTION

Sherburne National Wildlife Refuge was established in 1965. The 30,665 acres in Sherburne County were purchased with monies from the Federal Migratory Bird Hunting Stamp funds. Sherburne is one of seven national wildlife refuges in Minnesota and is located in the east central region of the state, approximately 50 miles northeast of the Minneapolis/St. Paul metropolitan area (Figure 1, Appendix A). An estimated 2½ million people are within a 1½ hour drive of the refuge.

There are a diversity of habitats at Sherburne which include: open grassland, upland brush, oak savanna, mixed hardwoods, planted conifers and an interspersion of wetland types 1 through 8. There are approximately 9,200 acres of woodland, 1,665 acres of brushland, 8,600 acres of grassland, 10,200 acres of wetland (Types 1-5), 500 acres of rivers and streams, and 500 acres of buildings and roads.

II. OBJECTIVES

A. Refuge Objectives

Sherburne has two primary functions: wildlife management and public use. To accomplish these functions, the refuge has identified four major objectives:

1. To enhance waterfowl production and maintenance.
2. To restore and maintain native vegetation and wildlife.
3. To provide and enhance habitat for wildlife diversity.
4. To provide the public with wildlife-oriented opportunities in recreation, interpretation and outdoor classrooms when compatible with the resource and other refuge objectives.

B. Hunting Program Objectives

The hunting program at Sherburne is a management tool as well as an opportunity for wildlife-oriented recreation. It has been designed to achieve the following objectives:

1. To be compatible with refuge objectives.
2. To maintain healthy wildlife populations at levels compatible with refuge habitat.
3. To use renewable resources.

4. To provide safe, quality hunting opportunities.
5. To provide the opportunities for the development of wildlife/wildlands appreciation and sportsmanship.
6. To minimize conflicts between the hunting and non-hunting publics.

III. PROGRAM ASSESSMENT

A. Legal Overview

The Recreational Use of Fish and Wildlife Conservation Area Act of 1962 approved hunting as a valid form of wildlife recreation on national wildlife refuges. This public law authorized such recreation provided it did not interfere with the area's primary purpose and funds are available. The affects of hunting on refuges were examined in the Final Environmental Statement on the Operation of the National Wildlife Refuge System (1976). Public Hunting was determined to be "an acceptable and desirable form of wildlife-oriented recreation" provided it was compatible with refuge objectives and was a quality program.

Additional legal guidance on a federal level has been established for the hunting of migratory birds. The most significant laws directing such hunting on refuges include the Migratory Bird Treaty Act of 1918, the Migratory Bird Hunting Stamp Act, the National Wildlife Refuge System Administration Act of 1966 and the Fish and Wildlife Improvement Act of 1978. The acts provide regulatory guidelines and additional direction for hunting of migratory birds. An Environmental Statement on Migratory Bird Hunting was prepared in 1975. The impacts of migratory bird hunting were examined. The statement recommended that annual regulations continued to be issued permitting and regulating the sport hunting of certain migratory birds.

In order to notify the public of the hunting program on a refuge, the refuge must also submit a brief description of their hunting program and regulations to the Federal Register. Refuges open to hunting are also listed in the Code of Federal Regulations.

B. Planning Documents

Although hunting is regarded as an acceptable form of wildlife-oriented recreation on a national wildlife refuge by the previously mentioned laws, a refuge must submit a formal hunting plan and have it approved before hunting can actually occur on the refuge. Direction for designing a hunting program comes not only from federal and state laws, but from the Refuge System Manual and the refuge master plan. The Manual states

the Fish and Wildlife Service's policies, objectives and general requirements for a quality hunting program. The manual also provides a format in which to write the hunting plan. The refuge master plan focuses specifically on the individual refuge. This master plan identifies the refuge's goals, objectives, and resources and recommends how to achieve the goals and objectives. Whether or not to permit hunting is usually one of the many items addressed in the master plan. The public is encouraged to and usually have provided input into the refuge master plan, as well as the hunting plan.

The initial opening of a refuge to hunting and the refuge's first Hunting Plan must first be approved by the Central Office in Washington, D.C. An Annual Hunting Plan must be submitted and approved by the Area Office. Any ammendments to the Hunting Plan must be concurred by the Area Manager and approved by the Regional Director.

C. Program Relationship to Refuge Objectives

The hunting program at Sherburne has been designed to support refuge objectives by serving as a management tool as well as an opportunity for wildlife-oriented recreation. The program has also been developed to minimize potential conflicts with refuge objectives.

The most significant use of hunting as a management tool involves regulating deer populations at levels compatible with the habitat. This regulation prevents destruction of refuge habitat because of overuse; prevents high population buildups which could overflow to adjacent private farms causing crop depredations; and reduces the chances for starvation, spread of disease and other forms of mortality like vehicle/wildlife collisions.

The present program provides an estimated 4,000 hunters with over 43,900 hours of hunting opportunities on the refuge. The importance of this opportunity increases as more and more private land becomes closed to hunting and Sherburne is one of only three public hunting areas that are greater than 2,000 acres and within a 1½ hour drive of 2½ million people.

The hunting program may create two potential conflicts with refuge objectives. The first possible conflict involves bald eagles, a threatened species. An average of twenty bald eagles migrate through the refuge during the hunting season. These eagles spend most of their time in an area of the refuge that is closed to hunting except for a three day either-sex permit deer hunt. To date, no eagles have been known to have been shot on the refuge nor has any harassment been observed. Since only steel shot is permitted on the refuge for water-

fowl hunting, and because the eagles only stay on the refuge for a short time, secondary lead poisoning in eagles is considered unlikely. Should the eagles ever be significantly disturbed because of the hunting program, corrective action would be taken immediately.

The second possible conflict concerns the non-hunting public. This conflict is minimal because most hunting and non-hunting activities occur in separate areas. This separation of activities is designed to reduce disturbances to hunters, to reduce psychological disturbances to non-hunters and to reduce potential safety problems for the non-hunters during periods of high hunter densities. For the reasons just identified, Environmental Education and Interpretive activities in Area C will be restricted during the short, either-sex deer hunt that occurs in Area C. The purpose of this hunt is to control the deer population in the area. The number of non-hunting visitors who would use Area C during this hunt is estimated at thirty. The biological benefits of this short hunt outweigh the inconvenience to the non-hunting visitors. Also recognized is the existance of an aesthetic disturbance to the non-hunters using the refuge during the hunting season. To reduce this disturbance, over 90% of non-hunting public use has been designed to occur within Area C. Future public use facilities (e.g., auto tour route, visitor center) will be located within the central region of Area C. This area is also buffered from the hunting zones by county roads. Only the Blue Hill hiking trail is immediately adjacent to a hunting area. The trail is bounded on the west and north sides by Area B. These two boundaries are posted every ¼ mile with CLOSED AREA signs and a half of a mile minimum buffer from the trail is provided. An abandoned road system also separates the two areas.

D. Impact on Wildlife Species

1. Hunted Species

Species	Estimated Current Population[1]	Estimated Desired Populations[1]	Estimated Current Harvest	Estimated Current Hunter Density[2] (one time use)		Suggested Hunter Density Standards[3] (hunters/acre)
				Opening	Mid-	
Coot	3,900	8,000	45			1/10
Puddle Ducks	18,000	45,000	470	1/13	1/140	1/10
Diving Ducks	2,500	17,000	45	1/13	1/140	1/10
Woodcock	400	600	20	1/350	1/1000	1/50
Rail	700	1,000	16	1/700	1/1500	1/50
Snipe	500	800	8	1/700	1/1500	1/50
Cottontail Rabbit	1,000	2,500	50	1/525	1/2000	1/50
Snowshoe Hare	800	2,000	70	1/2100	1/800	1/50
Squirrel	12,000	12,000	1,000	1/350	1/1400	1/10
Ruffed Grouse	850	1,000	200	1/200	1/800	1/50
Pheasant	300	400	60	1/105	1/1400	1/50
Whitetailed Deer:	2,000	1,200	400			1/40
Bow & Arrow				1/50	1/300	
Shotgun:Bucks Only				1/45	1/110	
Shotgun:Either Sex				1/70	1/150	
Permit-				1/35	1/40	

[1] Estimate based on fall peak populations.

[2] Estimated hunter density during opening weekend and during mid-season. Hunter density is based on total acreages in area open to hunting except hunter density for waterfowl, which is based on total wetland areas in Area B.

[3] In accordance with the National Wildlife Refuge System public use capacity standards.

Table 1. Overview of hunting effects on hunted species.

a. Migratory Birds

There will be 9,900 acres open to the hunting of migratory birds. This is 32% of the refuge which is less than the maximum 40% that is permitted by law to be open to such hunting. The area open to migratory bird hunting will not be expanded to the 40% maximum until at least 75% of the waterfowl production objective is reached. Waterfowl production in 1980 was estimated at 1,540 birds and the objective is 8,000 birds. The 9,900 acres will include 27% of the refuge's total wetland acreages. Goose hunting will not be permitted on the refuge but may be allowed once a minimum of 75% of the objective level for goose production is achieved. Goose production in 1980 was estimated at 190 geese and the objective level is 800 geese.

Regulations and enforcement of these regulations will help protect waterfowl from avoidable adverse affects of hunting. Waterfowl hunting on the refuge is in accordance with all state seasons and regulations. Steel shot is required for hunting waterfowl which reduces the waterfowl's chance of acquiring lead poisoning while on the refuge.

Currently, waterfowl hunters account for 9% of the hunting pressure on the refuge with the majority of this use occurring during opening weekend. The intensive pressure exerted on waterfowl during the opening weekend results in a significant decline of waterfowl in Area B during the remainder of the season. The inclusion of two new impoundments in Area B should reduce the hunter's impact on waterfowl in Area B and provide continued hunting opportunities throughout the season.

b. Small Game

Hunting will have little impact on small game. The refuge small game hunt is in accordance with state seasons and regulations. Because most small game species have a high mortality, significant percentage of the population will die each year regardless of whether or not it is hunted. At present, small game hunting accounts for 38% of the hunting pressure and the hunter density is well below suggested hunter densities (Table 1.).

c. Deer

The hunting program will serve to maintain the deer population at a level that is compatible with the habitat. That portion of the refuge which is designated as Area C illustrates how hunting can serve as a valuable management tool.

Area C had not been open to deer hunting during the 1973-1979 period and the deer population had increased to the point of having a detrimental effect on the native vegetation. The population after seven years had increased to an estimated 93 deer per square mile in Area C. In order to reach the recommended 25 deer per square mile, the area will be open to a shotgun either-sex permit hunt each year. The number of permits issued will be contingent upon the deer population and safe hunter densities. Presently, deer hunting accounts for 53% of the hunting pressure (Table 1).

2. Non-Hunted Species

Some non-hunted species such as hawks, songbirds and chipmunks will probably be shot by hunters. Experience to date has not shown that such illegal shooting of non-target species has occurred very often or has had a detrimental effect on the species involved. In order to minimize the shooting of non-target species, a high enforcement profile on the refuge will be maintained. State hunter education programs that address hunter ethics may also help to alleviate the taking of non-game species as well as wanton waste.

E. Public Reaction

The current hunting program has never been considered a controversial issue. Comments have been received from both hunters and non-hunters, and in general the public's reaction to the program has been positive. Many hunters feel that the main advantages to the hunting program at Sherburne are: 1) easily accessible to a large number of people; 2) few restrictions; 3) opportunity to participate in a variety of hunts and; 4) generally not over crowded.

Existing opposition to the current refuge hunting program is minimal. Some adjoining land owners complain of refuge hunters entering onto their land. Proper boundary posting, providing accurate refuge maps and an active public relation program should alleviate this problem. An effective public information program would assist in dealing with two additional opponents

of the hunting program - those who object to hunting in general, and those who disagree with some of the specifics of the program. Public meetings and public appearances of staff to interested organizations, etc. are avenues in which to address the values of the hunting program at Sherburne as well as the rationale behind our regulations and types of hunts. Providing objective facts about the hunting program may reduce opposition.

F. Evaluation

The hunting program is reviewed by the Area Manager prior to each hunting season. Any ammendments to the Hunting Plan must be concurred by the Area Manager and approved by the Regional Director.

A variety of surveys are conducted throughout the year in order to monitor and effectively evaluate the hunting program. Wildlife surveys focus on waterfowl and deer. Weekly waterfowl surveys are conducted during April and May to determine breeding populations, during July and August to estimate production and surveys in September through November determine the migration populations. The data gathered from these surveys will be used to determine when waterfowl production objectives are reached and when acreage for migratory bird hunting can be increased.

To monitor the refuge deer population, aerial counts in the winter and track counts in the summer are conducted each year. These counts, along with recording the number of deer taken during the hunting season, provide data needed to determine not only how many permits to issue during the either-sex deer hunt but how the hunting program in general is affecting the deer population.

Informal surveys are also conducted on hunters who use the refuge. The purpose of these surveys is to evaluate hunter density and hunter success. Contact with the hunter also provides some feedback from them regarding their reaction toward the program.

The proposed hunting program was presented to the public during two public meetings and during a National Hunting and Fishing Day program on the refuge. Majority of the participants at the meetings were in agreement with the proposed program. The results of the public meetings are included in Appendix B.

IV. PROGRAM DESCRIPTION AND IMPLEMENTATION

A. Program Overview

Sherburne will be open to the hunting of migratory birds (ducks, coot, rail, woodcock, and snipe), small game (ruffed grouse, squirrel, rabbit, hare an pheasant) and big game (deer). The hunting of these species will be in accordance with federal and state seasons and regulations. These seasons and regulations are identified in the State Synopsis distributed to the public each year. Only special regulations for hunting on the refuge are identified and described within this section.

The 28,600 acres open to hunting will be divided into three areas (Figure 3). Migratory bird hunting will be permitted in Area B (9,900 acres), small game in Areas A and B (21,000 acres), and deer hunting in Areas A, B and C (28,600 acres)(Figure 3). Access to these areas will be by way of county and refuge roads. Hunters will be required to park their vehicles at designated parking lots. The 42 parking areas will be located so a hunter is rarely more than one mile from a parking area, road, or trail (Figure 4, Appendix A). At present an estimated 2,065 acres are closed to hunting. This will be reduced to 700 acres once the maintenance shop is relocated and a residence is removed. The temporary closed to hunting areas are located on the western half of the refuge as noted in Figure 3.

Hunting on the refuge continues to increase year after year. In 1980, there was an estimated 11,200 hunting visits recorded on the refuge. The deer hunts account for most of the total hunting pressure while the small game hunt ranks second and migratory bird hunting receives the least amount of hunting pressure.

There doesn't appear to be any significant conflict between the various types of hunters on the refuge. Hunting seasons, regulations and required habitats tend to separate these hunters. Minor conflicts between various types of hunters will exist, but conflicts that would significantly hinder or prevent a hunter from having a safe and quality recreational experience will be prevented. Conflicts between various types of hunters will be recorded and corrective action will be taken if serious conflicts develop.

HUNTING AREAS

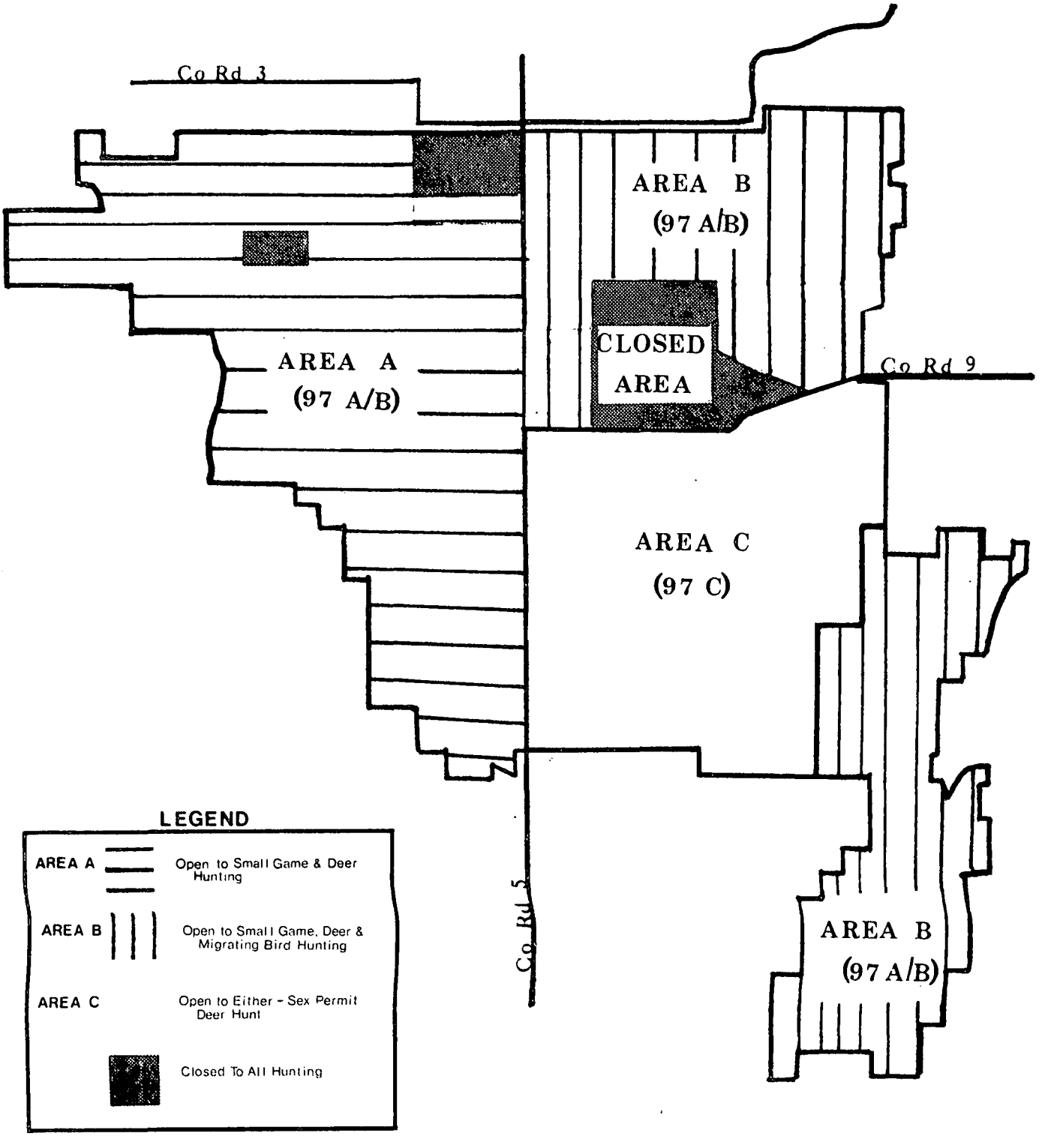


Fig. 3. Location of designated hunting areas.

B. Migratory Birds: Duck, Coot, Rail, Woodcock, Snipe

1. Objectives for Migratory Bird Hunt

a. To provide a safe, quality wildlife-oriented form of recreation compatible with refuge objectives.

b. To use a renewable resource.

c. To not consistently exceed a hunter density of 1 hunter per 10 acres for waterfowl hunting and a hunter density of 1 hunter per 50 acres for hunting rail, snipe and woodcock.

d. To maintain consistency with state seasons and regulations whenever possible.

2. Special Refuge Regulations

a. Hunters must use steel shot to hunt ducks and coot regardless of shotgun gauge. Possession of lead shot shell while hunting ducks and coot is prohibited.

b. Field possession of migratory birds is prohibited in area of refuge closed to migratory bird hunting.

c. Only non-motorized boats can be used and must be launched at designated access sites.

d. Decoys and boats must be removed from the refuge at the end of each day.

e. Blinds must be removed at the end of each day except for blinds made entirely of marsh vegetation.

3. Program Specifics

Migratory bird hunting will be permitted in Area B (Figure 4). This area encompasses 9,900 acres of which 2,900 acres are wetland habitat. This area will provide the duck hunter with the opportunity to use boats, blinds and decoys.

Thirty-two percent of the refuge will be open to migratory bird hunting instead of the 40% that is permitted by law under the National Wildlife Refuge System Administration Act of 1966. Additional acreage may be opened once a minimum of 75% of the objective level for waterfowl production is reached and hunt boundaries may be readjusted to include more wetland habitat.

The principal waterfowl species bagged will be mallard, wood duck, and blue-winged teal. Other species less often bagged will include the ring-necked duck, wigeon, pintail, gadwall and coot. Goose hunting may be allowed when at least 75% of the objective level for goose production is achieved.

The use of steel shot, regardless of shotgun gauge, while hunting ducks and coots will be required. Implementation of the steel shot requirement will assist in reducing the waterfowl's chance of acquiring lead poisoning on the refuge.

Waterfowl hunters presently account for 9% of the hunting pressure on the refuge with the majority of this use occurring during opening weekend. The intensive pressure exerted on waterfowl during the opening weekend results in a significant decline of waterfowl in Area B during the remainder of the season. The inclusion of two new impoundments will provide greater hunting opportuntities throughout the season. This is expected to disperse and therefore reduce present hunter densities. Should hunter densities consistently exceed one hunter per 10 acres, additional regulations of a permit system will be considered.

C. Small Game: Ruffed Grouse, Pheasant, Gray and Fox Squirrel, Rabbit and Hare

1. Objectives for Small Game Hunt

a. To provide a safe, quality wildlife-oriented form of recreation compatible with refuge objectives.

b. To use a renewable resource.

c. To maintain consistency with state season and regulations.

d. To not consisitently exceed a hunter density of 1 hunter per 50 acres and a density of 1 hunter per 10 acres when squirrel hunting.

2. Special Regulations

None

3. Program Specifics

Small game hunting will be permitted in Areas A

and B (Figure 4). The 21,000 acres includes a good distribution of grassland, woodland and wetland habitats. This contributes to the variety and abundance of small game available on the refuge. The small game season on the refuge will be the same as the state's season. This generally runs from mid-September to the end of February depending upon the species.

The principle species bagged will be gray squirrel and ruffed grouse. Snowshoe hares, cottontail rabbits and fox squirrels will be taken in lesser number. Currently, small game hunting accounts for 35% of the hunting pressure. The hunter density for the various species are well within the desired hunter densities.

D. Deer

1. Objectives for Deer Hunting

a. To maintain the deer population at a level that is compatible with refuge habitat, adjacent agricultural lands, and vehicle traffic.

b. To maintain a healthy and stable deer population.

c. To provide a safe, quality wildlife-oriented form of recreation.

d. To maintain consistency with state season and regulations.

e. To not consistently exceed a hunter density of 1 hunter per 40 acres.

2. Special Refuge Regulations

a. Blinds and/or platforms may not be used if they are nailed to a tree and must be removed at the end of each day.

b. Only hunters with a refuge permit will be allowed to hunt deer with firearms during the Either-Sex Permit Hunt.

3. Program Specifics

There will be three types of deer hunts on the refuge: Archery, Shotgun:Antlered Bucks Only and Shotgun:Either-Sex Permit. Deer hunting accounts for 53% of the hunting pressure on the refuge.

The archery hunt will be permitted in Areas A and B, a total of 21,000 acres (Figure 3). Deer taken during this hunt may be registered by a local conservation officer or by designated staff on the refuge. At present, hunter density is within the suggested hunter density range. During the 1980 archery hunt, about 50 deer were taken which indicated a 16% hunter success.

The Shotgun:Antlered Bucks Only season will be permitted in Areas A and B which is 21,000 acres (Figure 3). Deer taken during the hunt are usually registered at the refuge check station but can also be registered at an official registration station within Zone 3. Hunter density is high during the opening weekend. Hunter density during the opening weekend for the 1980 season was estimated at one hunter per 45 acres. Hunter success was estimated to be about 12%.

The Shotgun:Either-Sex Permit Hunt will be held in Areas A, B and C. During this hunt, Areas A and B are regarded as one unit and referred to as 97 A/B and Area C is 97 C (Figure 4). A separate number of permits will be issued for both Area 97 A/B (21,000 acres) and 97 C (7,500 acres). The number of permits assigned to each area will be contingent upon the deer populations and safe hunter density for the areas. This hunt will be held during the state's season which is usually scheduled for the end of November. Deer taken during this hunt must be registered at the refuge check station. In 1980, hunter success in 97 A/B was 35% while success was 95% for 97 C. The reason for the extremely high success rate in 97 C was attributed to the fact that the area had not been open to hunting since 1973.

Deer hunting in 97 C is based solely on biological reasons. The deer population in 1980 had increased to over 90 deer per square mile which is almost 70 deer per square mile over the recommended density. The Shotgun:Either-Sex Hunt was selected to reduce and maintain the deer population in Area C because it has the highest kill rate over the shortest time period. Hunters with a permit for Area C may scout the area prior to the hunt. These hunters must also check in and have their permit validated at the refuge check station before entering Area C to hunt.

E. Public Information

An informed hunter is germane to a safe, quality hunting

program. The hunting regulations and types of hunts will be published in the Federal Register and the state game synopsis. A news release on refuge hunting opportunities will be sent to nearby cities. The hunting program will be further explained by refuge staff at public meetings and special programs such as National Hunting and Fishing Days. At each main entrance to the refuge, there will be a hunting map and list of regulations on display and hunting leaflets will be available at major hunter parking lots. Hunters requiring additional information can contact a refuge staff member during the week at the main office or a refuge law enforcement officer on the weekend during the hunting season.

F. Funds, Manpower, and Materials Needed

The cost of the hunting program is estimated to be $25,500. This program will account for approximately 28% of the total I & R budget. An average of $2.00 - $3.00 will be spent per hunting visit. Noted below is an overview of the cost attributed to the hunting program. A detailed analysis of the program's costs are identified in Appendix C.

Law Enforcement	$14,000
Deer Check Station	$ 2,000
Public Information & Planning	$ 4,000
Maintenance	$ 2,000
Materials	$ 3,000
Survey	$ 500
Total Cost:	$25,500

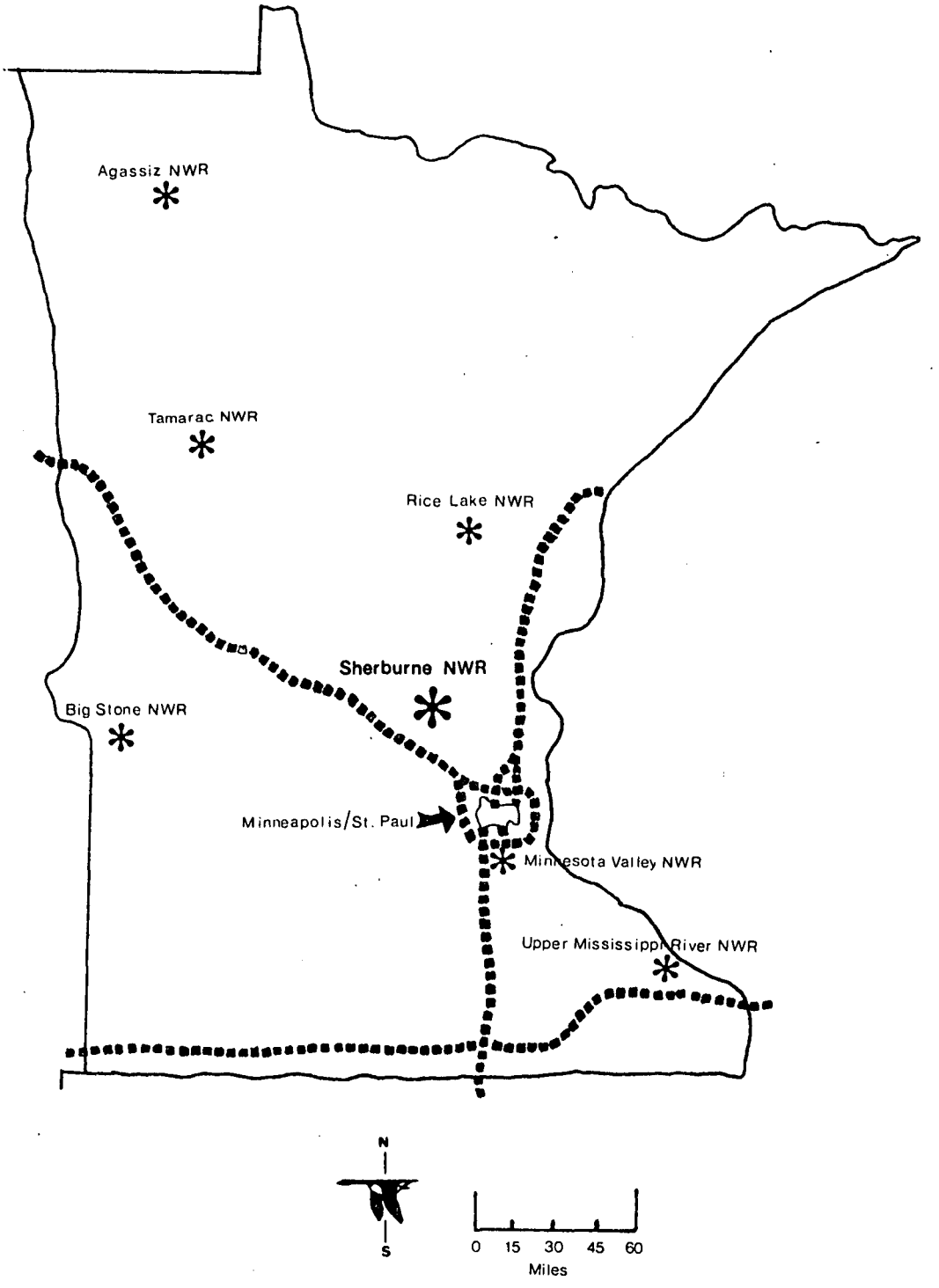


Fig. 1. Location of Sherburne National Wildlife Refuge.

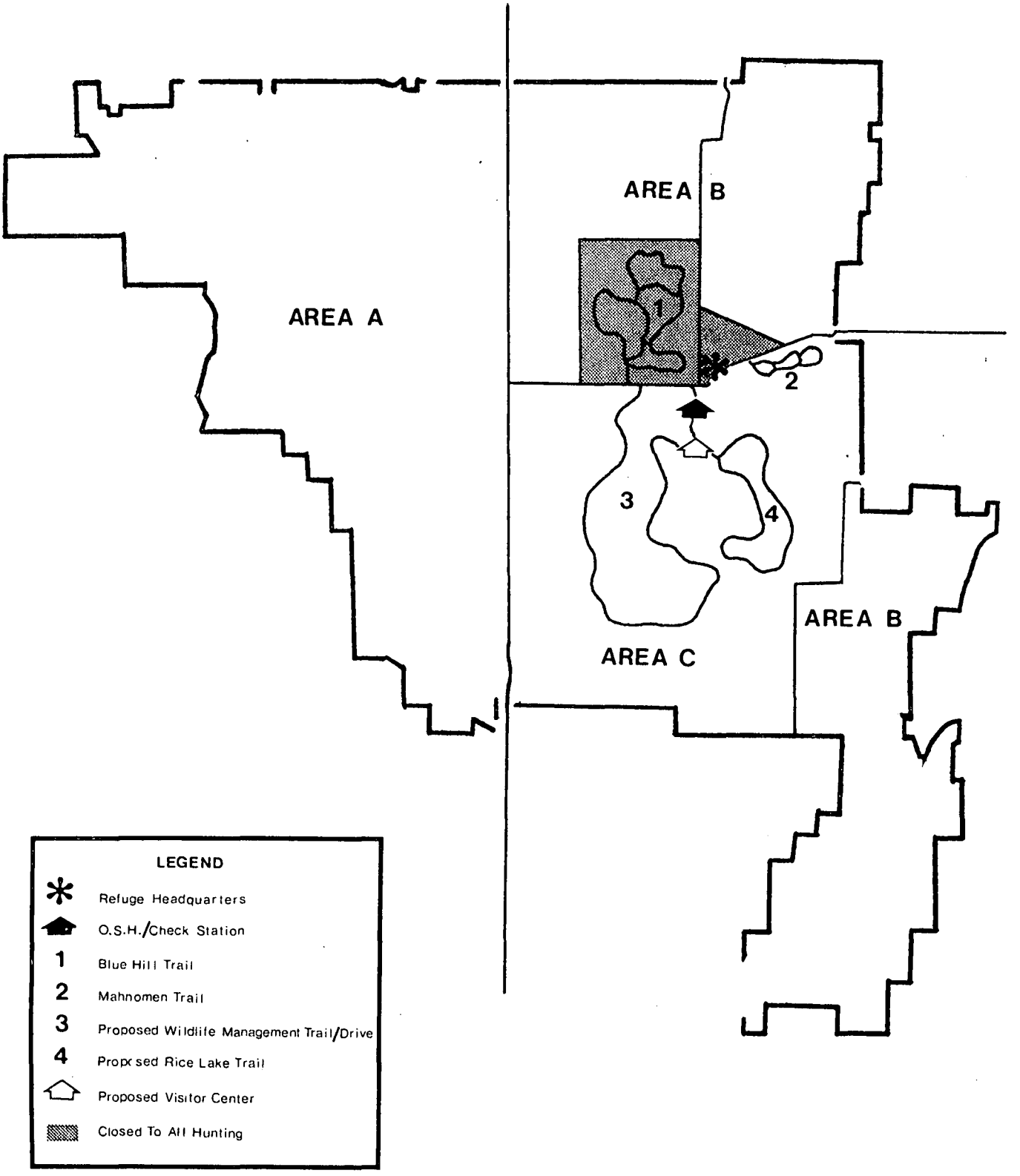


Fig. 2. Location of Non-consumptive Public Use Areas and Facilities.

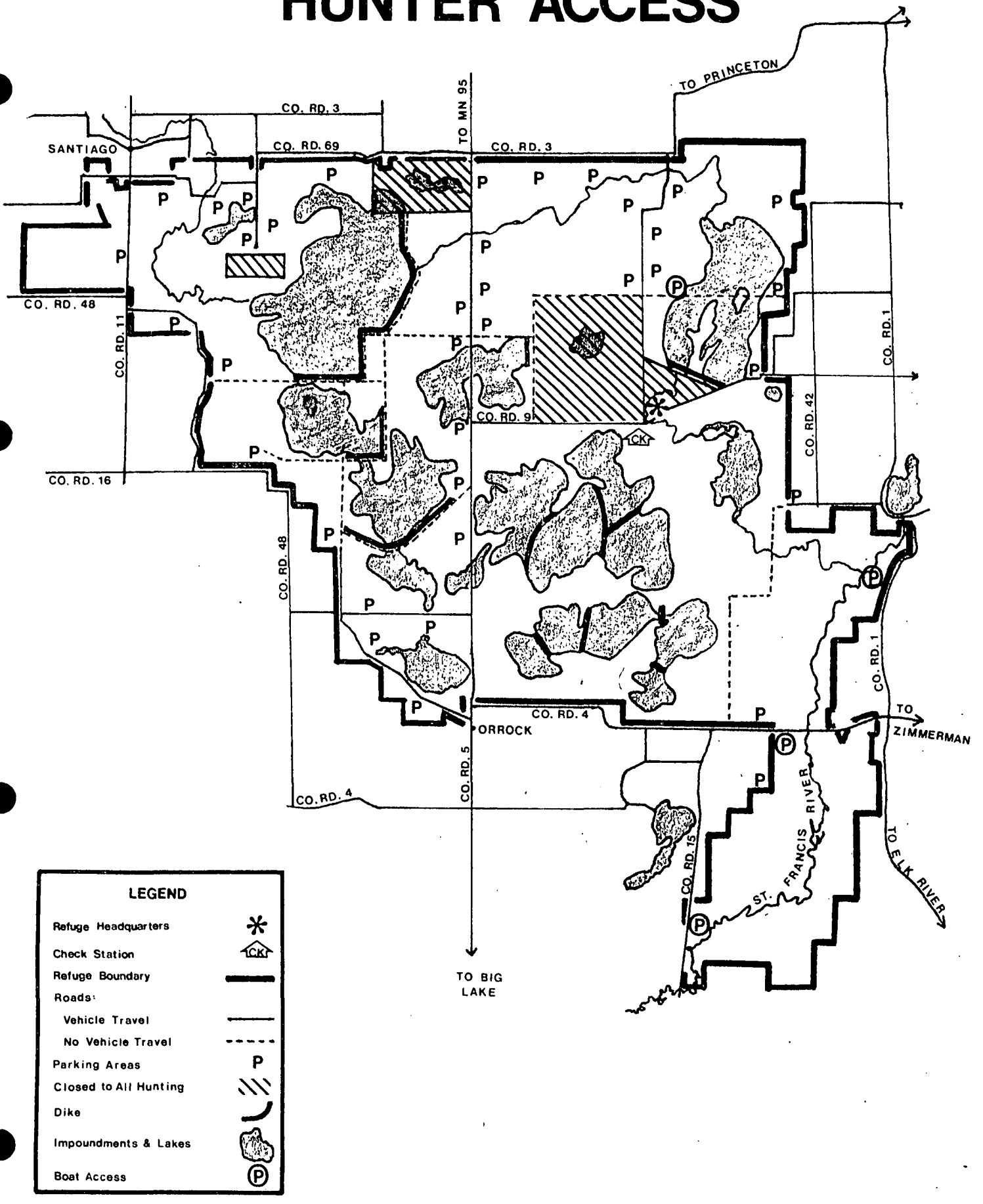


Fig. 4. Location of designated hunter parking lots.

United States Department of the Interior

IN REPLY REFER TO:

FISH AND WILDLIFE SERVICE
Sherburne National Wildlife Refuge
Route 2
Zimmerman, Minnesota 55398

December 8, 1980

The Sherburne National Wildlife Refuge would like to thank you for your participation in the public meeting on the refuge hunting program. Enclosed is a summary of the responses from the hunting questionaire that was administered during the meetings, and a summary of the proposed hunting program for the immediate future. This information, along with a formal hunting plan, will be forwarded to our Area and Regional Offices for review. Implementation of the plan is contingent upon their approval. The hunting program as described is also subject to review each year and may be changed if the need arises. We welcome your future input on the program.

Sincerely,

R.V. Papike
Refuge Manager

SUMMARY OF RESPONSES FROM PUBLIC MEETINGS (9/4/80 & 9/11/80)

HUNTING QUESTIONAIRE

1. Which of the following statements on HUNTER ACCESS do you AGREE WITH ?

68% [72] I am SATISFIED with the AMOUNT OF HUNTER ACCESS as described in the PROPOSED HUNTING PLAN.

8% [8] I feel there should be LESS HUNTER ACCESS than described in the PROPOSED HUNTING PLAN.

21% [22] I feel there should be MORE HUNTER ACCESS than described in the PROPOSED HUNTING PLAN.

3% [3] Other (please explain): _____

1% 1 Invalid _____

106 RESPONSES

2. Which of the following statements on HUNTING AREAS do you AGREE with ?

46% [48] I am SATISFIED with the AMOUNT of HUNTING AREAS as described in the PROPOSED HUNTING PLAN. (If you checked this response, please skip Question #2a and proceed to Question #3)

36% [37] I am NOT SATISFIED with the AMOUNT OF HUNTING AREAS as described in the PROPOSED HUNTING PLAN. (If you checked this response, please answer Question #2a and then proceed to Question #3)

18% 19 Invalid ([1]See other side for explantation)

104 RESPONSES

2a. If you were NOT SATISFIED with the AMOUNT of HUNTING AREAS, which of the following statements do you AGREE with ?

13% [5] I feel there should be LESS ACREAGE OPEN TO HUNTING than described in the PROPOSED HUNTING PLAN.

- [1] LESS ACREAGE for hunting DUCKS.
- [ ] LESS ACREAGE for hunting DEER.
- [1] LESS ACREAGE for hunting SMALL GAME.
- [4] ALL of the ABOVE.

87% [33] I feel there should be MORE ACREAGE OPEN TO HUNTING than described in the PROPOSED HUNTING PLAN.

- [11] MORE ACREAGE for hunting DUCKS.
- [11] MORE ACREAGE for hunting DEER.
- [6] MORE ACREAGE for hunting SMALL GAME.
- [7] ALL of the ABOVE.

38 RESPONSES

(CONTINUED ON BACK)

3. Which of the following statements on ACREAGE OPEN TO DUCK HUNTING do you AGREE WITH ?

56% [55] The Refuge SHOULD NOT OPEN MORE ACREAGE to duck hunting UNTIL 100% of WATERFOWL PRODUCTION GOALS ARE REACHED.

20% [20] The Refuge SHOULD NOT OPEN MORE ACREAGE to duck hunting UNTIL 75% to 95% of WATERFOWL PRODUCTION GOALS ARE REACHED.

9% [9] The Refuge SHOULD NOT OPEN MORE ACREAGE to duck hunting UNTIL 50% to 70% of WATERFOWL PRODUCTION GOALS ARE REACHED.

4% [4] The Refuge SHOULD NOT OPEN MORE ACREAGE to duck hunting UNTIL 25% to 45% of WATERFOWL PRODUCTION GOALS ARE REACHED.

8% [8] The Refuge SHOULD OPEN up MORE ACREAGE to duck hunting IMMEDIATELY.

2% 2 Invalid

98 RESPONSES

4. Additional Comments: _____

_____

_____

_____

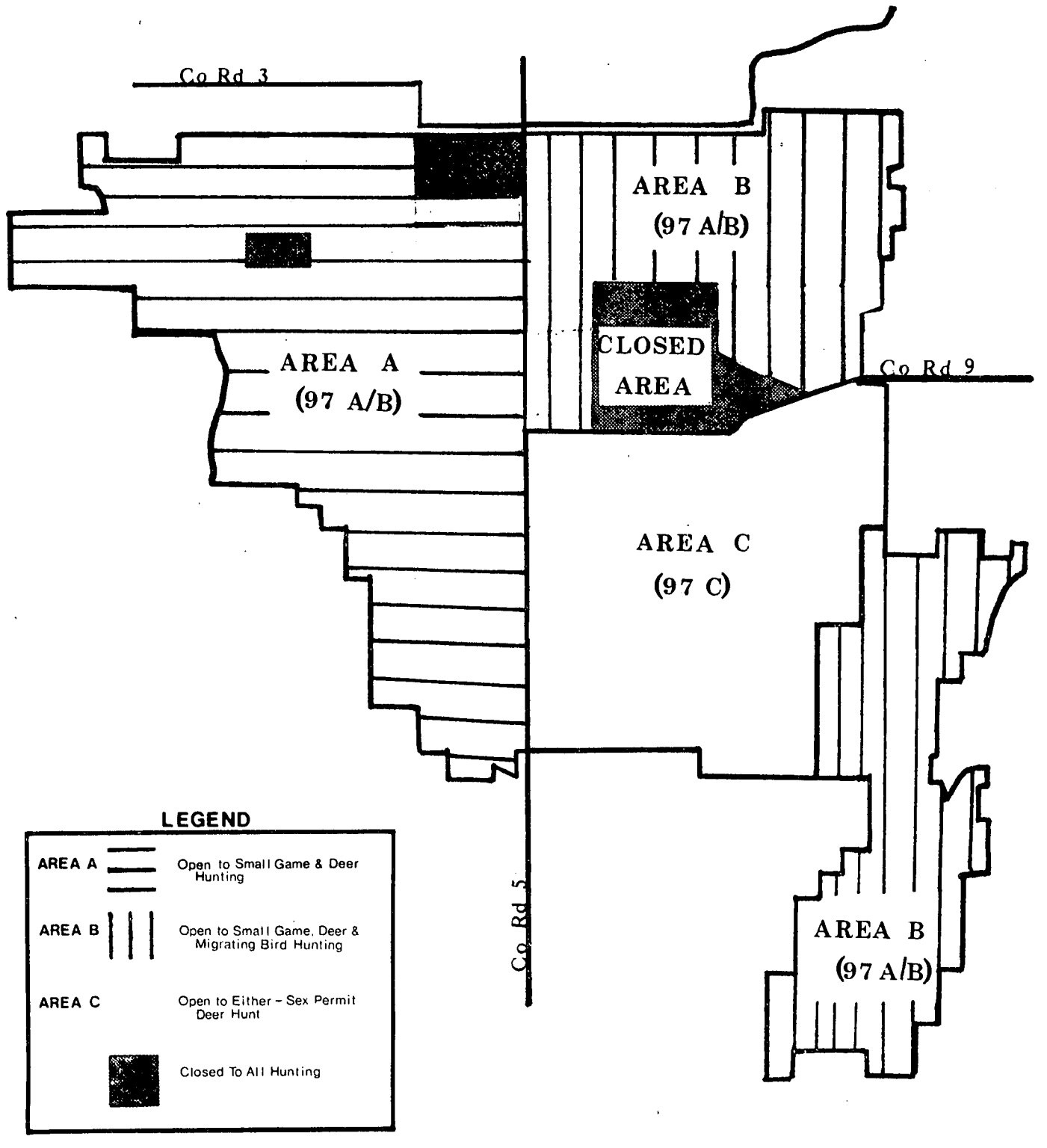
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THANK YOU!

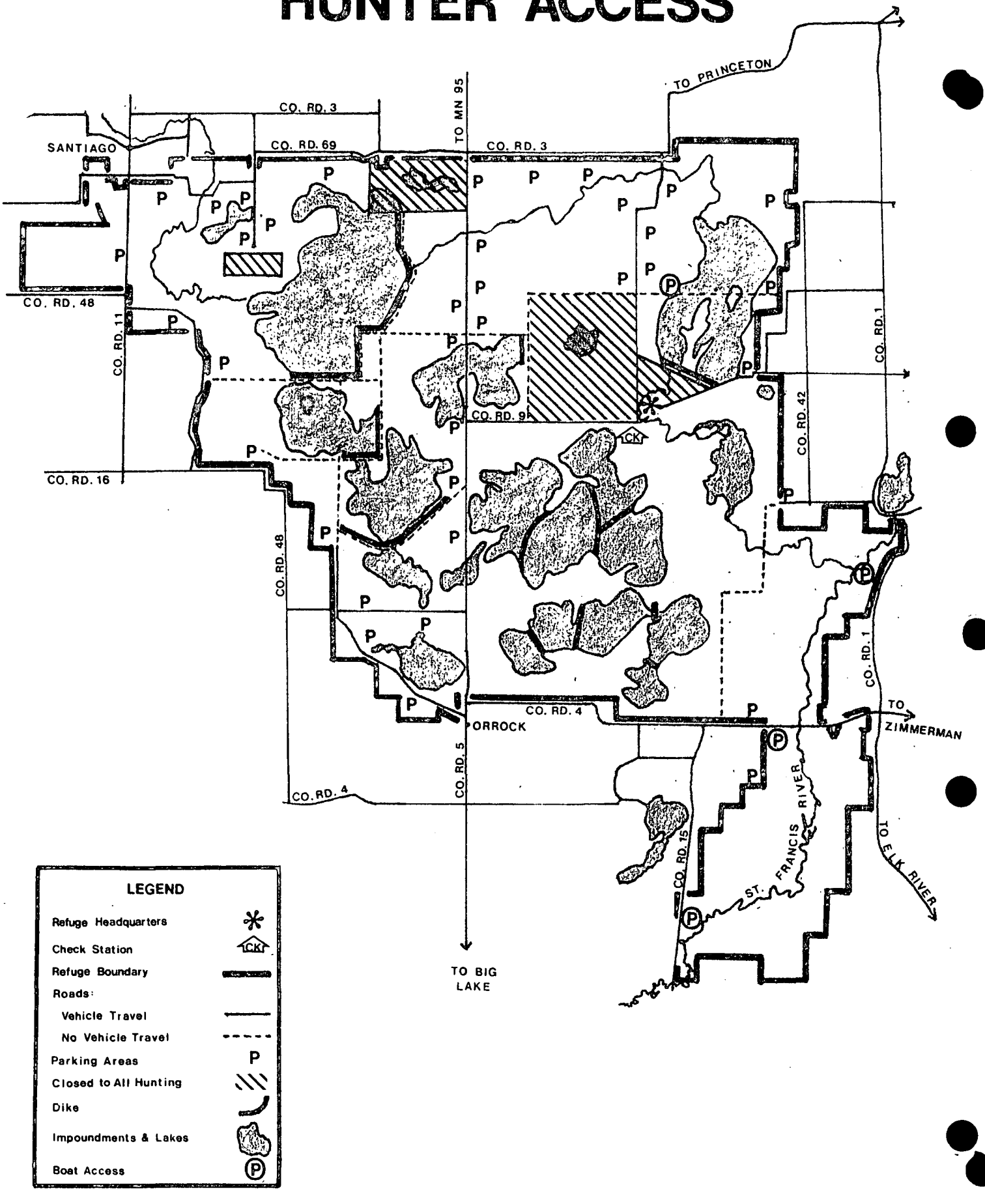
[1] 19 of the questionaires were classified as Invalid because the participant checked more than one answer. Noted below are the categories of these invalid responses:

Satisfied & more acreage for small game - 3
Satisfied & all of the above - 4
Satisfied & more acreage for duck hunting - 2
Satisfied & more acreage for deer hunting - 10

HUNTING AREAS



HUNTER ACCESS



HUNTING PROGRAM UPDATE

HUNTER ACCESS

The only change in hunter access from past years concerns the closure of two interior road systems as discussed during the public meeting. Sixty-eight percent of the people who completed a questionaire during the meetings were satisfied with the amount of access. Twenty-one percent of the respondents felt there should be more access. The primary reasons for closing these roads to vehicle travel are to maintain a high quality hunt, reduce administrative and law enforcement costs, reduce vandalism and off-road trespassing in addition to protecting the dike system.

The interior road system west of County Road 5 (often referred to as West Carpenter Road) will remain closed to vehicle travel as it was this year. The three mile stretch of road north of County Road 4 to the St. Francis River (referred to as Nikko road) will also be closed to vehicle travel. During the public meetings, the area directly east of Nikko road was scheduled to be closed to hunting. It has since been decided that for the immediate future, the area will remain open to all hunting but Nikko road will be closed. In addition to the parking lots located at the north and east sides of this area, a new parking lot will be constructed along County Road 4 for access into the southern section of the area.

Three additional parking lots are scheduled for construction. One parking lot will be located along County Road 11. Two lots will be located in the northeast section of Area B for access to the two impoundments that will be open to waterfowl hunting.

Five parking lots have been identified as boat accesses (see Hunter Access map). Hunters using a boat will be required to use one of the accesses.

HUNTING AREAS

That portion of Area B which is located north of County Road 4 was proposed to become part of Area C. Including these 2,500 acres in Area C would have closed it to all hunting except the Antlerless Permit Hunt. Given that change, forty-six percent of the people who completed questionaires stated they were satisfied with the amount of hunting area. Most of the thirty-six percent who were not satisfied with the amount of hunting area felt there should be more acreage open to hunting. It was decided that for the immediate future, the area would not become part of Area C but remain as Area B. However, the road into this area will be closed to vehicle use.

That part of Area B which is located in the northeastern section of the refuge (see map) has been increased by 1,250 acres.

The 7,540 acres designated as Area C on the enclosed refuge map will only be open for the State's three day Antlerless Permit Hunt. The purpose of a deer hunt in this area is based solely on biological reasons. The management goal is to reduce and then maintain the deer population with the least amount of impact on the area. Because firearm hunts have a significantly higher kill rate than bow hunts, only firearm hunters will be included in this hunt. It is felt that the refuge provides the bow hunter with sufficient recreational opportunities. The bow hunter has a total of 75 days in which to hunt on over 20,000 acres.

At present, only hunters with an antlerless permit are allowed to hunt deer during the Antlerless Hunt on the refuge. This restriction is to maintain a safe, quality hunt in addition to regulating the number of deer taken on the refuge.

The State Department of Natural Resources is responsible for the selection process of antlerless permit hunters. The refuge is investigating if the State will allow a party of four or less to apply for an antlerless permit as well as an individual hunter.

TYPES OF HUNTS

The types of hunts available on the refuge will be the same as in past years. Noted below is a summary of the types of hunts and the areas open to these hunts. All hunting seasons will be in accordance with State seasons.

	AREA A	AREA B	AREA C
SMALL GAME			
Ruffed Grouse	X	X	CLOSED
Gray & Fox Squirrel	X	X	CLOSED
Rabbit & Hare	X	X	CLOSED
Pheasant	X	X	CLOSED
MIGRATORY BIRDS			
Ducks & Coot	CLOSED	X	CLOSED
Rails	CLOSED	X	CLOSED
Woodcock	CLOSED	X	CLOSED
Wilson's Snipe	CLOSED	X	CLOSED
BIG GAME			
Deer(Bow & Arrow)	X	X	CLOSED
Deer:Shotgun(Antlered Bucks Only)	X	X	CLOSED
Deer:Shotgun(Antlerless Permit Only)			
97 A/B Permit	X	X	CLOSED
97 C Permit	CLOSED	CLOSED	X

The only change in the types of hunts on the refuge concerns the waterfowl hunt. In the past, the hours open to duck hunting on the refuge were identical to the State's hours. In an effort to increase the quality of duck hunting and to provide additional protection to the local waterfowl breeding population we are proposing a daily noon closure. The only exception to this will be if there is a noon opening on the first day of the waterfowl season. The hours on the first day of duck hunting on the refuge will then be the same as the state's. The remaining days in the season will have a noon closure.

LAW ENFORCEMENT COSTS: 1980

Deer: B & A (early)	14 hrs./wkend. x 4 wkends. = 56 hrs. 56 hrs. x $13.30/hr. = $7,448.	8 hrs./wk. x 5 wks. = 40 hrs. 40 hrs. x $13.30/hr. = $532.
Deer: B & A (late)	8 hrs./wkend. x 3 wkends. = 24 hrs. 24 hrs. x $13.30/hr. = $319.	5 hrs./wk. x 2 wks. = 10 hrs. 10 hrs. x $13.30/hr. = $133.
Deer: Shotgun - Bucks Only	72 hrs./wkend. x 2 wkends. = 144 hrs. 144 hrs. x $13.30/hr. = $1,915.	10 hrs./wk. x 1 wk. + 1 day = 12 hrs. 12 hrs. x $13.30/hr. = $160.
Deer: Shotgun - Antlerless	36 hrs./day x 3 days = 108 hrs. 108 hrs. x $13.30/hr. = $1,436.	
Small Game	30 hrs./wkend. x 8 wkends. = 240 hrs. 240 hrs. x $13.30/hr. = $3,192.	8 hrs./wk. x 7 wks. = 56 hrs. 56 hrs. x $13.30/hr. = $745.
Migratory Birds	20 hrs./wkend. x 4 wkends. = 80 hrs. 80 hrs x $13.30/hr. = $1,064.	8 hrs./wk. x 5 wks. = 40 hrs. 40 hrs. x $13.30/hr. = $532.
Totals:	832 hrs. +	158 hrs. = 990 hrs.

990 (total hrs. in L.E.) - 200 (hrs. of overtime) = 790 hrs. of regular costs

790 hrs. x $13.30[1]/hr. = $10,507

200 hrs. x $15.25[2]/hr. = $3,050

Total L.E. Costs: $13,557

[1]Based on an average of Law Enforcement Personnel cost to the refuge.

[2]Based on an average of Law Enforcement Personnel overtime salaries.

	Regular	Overtime
GS 12/4	$15.55	$14.50
GS 11/4	$13.15	$14.50

DEER CHECK STATION COSTS: 1980

Shotgun: Antlered Bucks Only	20 hrs./wkend. x 2 wkends. = 40 hrs. 40 hrs. x $10.39/hr. = $416.				10 hrs./wk. x 1 wk. = 1 day = 12 hrs. 12 hrs. x $10.39/hr. = $125.
Shotgun: Antlerless Permit 1st day -	24 hrs./day x 3 days = 72 hrs. 72 hrs. x $10.39/hr. = $748.08.				
Preparation and Analysis	24 hrs. x $10.39/hr. = $249.36				
Total:	148 hrs.	x	$10.39[1]/hr.	=	$1,537.72

[1] Based on GS-9/4 hourly cost to the refuge.

PUBLIC INFORMATION AND PLANNING

	Hrs.	$/Hr.	$
Refuge Manager (GS-12)	16	x $15.55 =	248.80
Primary Assistant (GS-11)	16	x $13.15 =	210.40
Assistant Manager (GS-7/9)	8	x $10.23 =	81.84
Maintenance (WG-9)	8	x $11.16 =	89.28
Clerical (GS-5)	150	x $7.27 =	1,090.50
Outdoor Recreation Planner (GS-9)	100	x $10.23 =	1,023.00
Biologist (GS-9)	32	x $10.23 =	327.36
			$3,071.18

MAINTENANCE

Preparation (before hunting season)

140 hrs. x $10.00[1]/hr. = $1,400.

Repair (during hunting season)

30 hrs. x $11.16[2]/hr. = $334.80

Total: $1,934.80

MATERIALS

Hunting Leaflet	$1,000.
Signs	$ 600.
Fuel 25¢/mile x 5,000 miles	$1,250.
	$2,850.

SURVEY (hunters)

75 hrs. x $5.90[3]/hr. = $442.50

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[1] Based on an average of a WG-6 and WG-9 hourly cost to the refuge.

[2] Based on a WG-9 hourly cost to the refuge.

[3] Based on a GS-5 hourly cost to the refuge.

Signature Page

Prepared by: Pat Larson Date: 5/5/81
Patricia L. Larson

Submitted by: R. L. Engle Date: 5-5-81

TCAO Approval: [signature] Date: 7/27/81

Approval: Daniel H. Baumgartner Date: 8/13/81