

Briefing Paper

NWR & WMD-

1982

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REFUGE STAFF

Waubay National Wildlife Refuge
Waubay, South Dakota

Refuge Manager - JOHN W. KOERNER, PFT, GS-485-11

Transferred from Pierre Area Office, Pierre, SD in February, 1982 where position of Area BLHP Coordinator was occupied.

Primary Ass't. Ref. Mgr. - HARVEY O. SMITH, PFT, GS-485-9

Transferred from Lake Francis Case Project under Corps of Engineers at Pickstown, SD in December, 1977 where position of Park Manager was occupied.

Secondary Ass't. Ref. Mgr. - WILLIAM J. KURTENBACH, PFT, GS-485-7

Transferred from Devils Lake NWR, ND in November, 1978 where position of Biological Aid was occupied.

Wildlife Biologist - LINDA L. WATTERS, PFT, GS-486-7

Transferred from Job Corp Center under the U.S. Forest Service at Nemo, SD in July, 1978.

Refuge Assistant - DENNIS D. OKROI, PPT, GS-303-5

Started out as laborer in 1969. Converted to 301 Series in 1971 to present.

Maintenance Worker - G. ROGER WADDEL, WG-4749-6

Came on-board in August, 1977 from S. Dak. Dept. of Game, Fish, and Parks where position of Day County Conservation Officer was occupied.

Biological Aids - 2 - RICHARD DOLNEY and EMIL J. GRUBA, Temporary, GS-404-3

Both men have worked approximately April through September appointments since 1969.

Youth Conservation Corps (YCC) - 1 - LOREN L. WELCH

Started work June 1, 1982 with projected termination date of July 30, 1982.

1983 ycc Scott Bates

Volunteer - 1983 - Kenneth Husmann

OPERATIONS AND MAINTENANCE FUNDING

Funding received for O and M type function are listed from 1978. A general break-down between Refuge and District activities can be figured at a 70/30 percent ratio.

<u>FY</u>	<u>Allotment</u>	<u>Refuge</u>	<u>District</u>
1978	134,000	40,200	93,800
1979	153,700	46,110	107,590
1980	156,950	47,085	109,865
1981	178,300	53,490	124,810
1982	173,400	52,020	121,380

O and M funding has not been adequate to keep time with inflation and the continued growth of the district. Without the aid of additional funding, that of the BLHP program, items such as the station's vehicle fleet, farming equipment, and improvement of the district's grasslands would fall far below Service Standard.

The following table illustrates the impact only fixed costs and salaries have on the O and M allotment for FY 82.

<u>Description</u>	<u>Balance Left</u>
Salaries (PFT & PPT)-----128.0	45.5
Salaries (Temporary's)--- 13.5	31.9
Salaries (YCC)----- 1.2	30.7
Heating Fuel----- 1.1	29.6
Gas----- 9.4	20.2
Telephone----- 1.5	18.7
Electricity----- 1.0	17.0

Based on the above computations, an estimated 90% comes off the top just to exist. The remaining amount, \$17,000, doesn't get far when talking of vehicle replacement, herbicide, or grass seed purchases, not to count the unforeseeable that comes up like repairs for equipment or a wildfire on the district.

HISTORY OF BLHP FOR
WAUBAY REFUGE and WETLAND DISTRICT

<u>FY</u>	<u>BLHP Budget In \$1000</u>	<u>Description</u>	<u>Dollars In \$1000</u>
1977	58.0	HQ Water Systems Contract	12.5
		Equipment Truck	16.2
		Utility Tractor w/Attachments	14.0
		Two 4-WD Pickups	11.0
		Two Radios and Office Equipment	4.3
1978	61.9	Refuge Fencing Contract	26.2
		WPA Water Control Structure	16.2
		Equipment (Vehicle, Drill, Mower)	15.5
		Native Grass Seedings	4.0
1979	62.5	Farm Equipment (Tractor)	25.8
		Truck w/Snowplow and One 4-WD	29.0
		Grass Seed (Natives)	5.7
		Native Grass Seedings	1.2
		Gas	.8
1980	343.0	Refuge & WMD Fence Contracts	130.3
		Refuge & WMD Water Control Structures	24.4
		Shop Heating Contract	12.0
		Gravel East/West Entrance Road	5.0
		Vehicle and Other Supplies	10.0
		Native Grass Seed	24.0
		Vehicle, Equipment, Supplies	46.6
		Herbicide	2.9
		FA Shop Rehab.	7.8
		Gas	5.1
		Carry Over	-74.9
1981	29.0	1982 Jeep 4-WD	8.0
		Native Grass Seed	3.9
		Herbicide and Shop Supplies	5.5
		Labor	9.8
		Gas and Misc.	1.8
TOTAL-----		554.4	

U.S. Fish and Wildlife Service WAUBAY NATIONAL WILDLIFE SERVICE--FACT SHEET

4

Location

RR #1, P.O. Box 79
Waubay, SD 57273
(605) 947-4695

(east side of Waubay Lake in Day
County, South Dakota)

Mandates

Executive Orders 7245 & 8013--
Waubay NWR established to provide
breeding ground for migratory
birds and other wildlife

Date Established

December 10, 1935

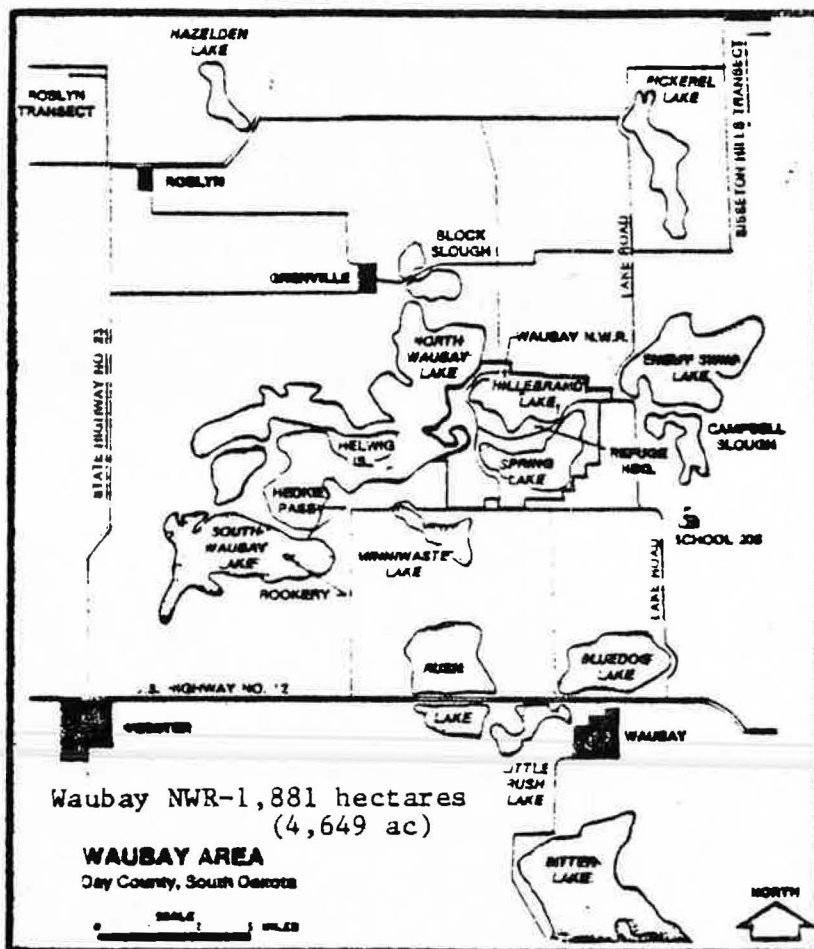
FWS Policy Direction

Assure survival of endangered or
threatened plants and animals

Perpetuate migratory birds resources
for the benefit of people

Preserve natural diversity and
abundance of mammals and non-migratory
birds

Provide understanding and appreciation
of fish and wildlife ecology and man's
role in his environment



Landscape Characteristics

Gently rolling grasslands interspersed with deciduous woodlands, wetlands
and croplands, including a remnant of the original prairie wetlands

Elevation between 549 meters (1800 ft) and 579 meters (1900 ft)

Annual rainfall averages 56 centimeters (22 in)

Wildlife

132 species of birds, including Blue-winged Teal, Gadwall, Mallard, Giant
Canada Goose, shore, marsh and waterbirds

Occasionally, Bald Eagles and Peregrine Falcons visit the refuge

35 species of mammals

10 species of reptiles and amphibians

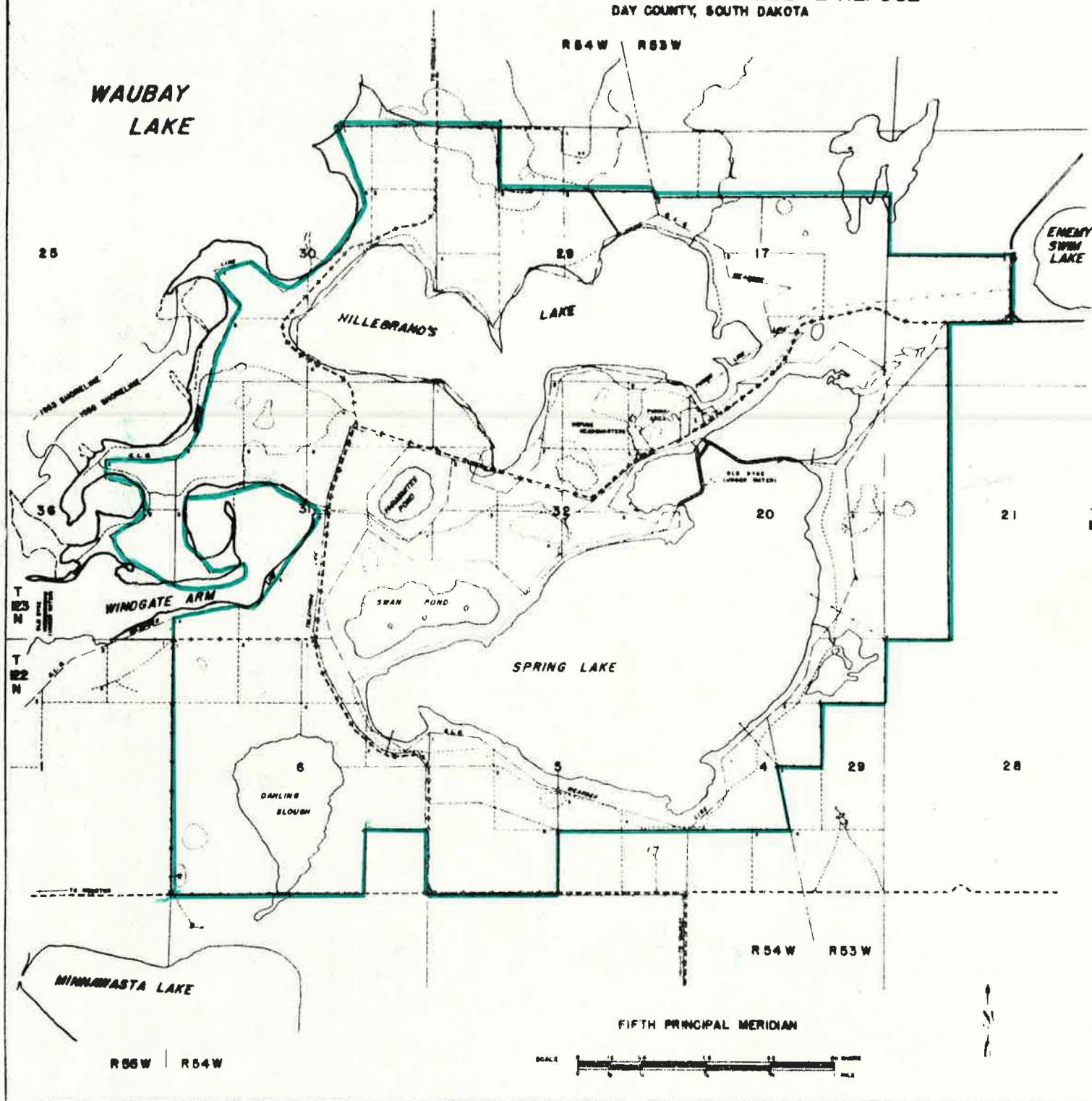
Public Use

Public hunting--White-tailed Deer

Wildlife observation--tower, short walking trail, county and refuge roads

Picnic area with shelter

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SPORT FISHERIES AND WILDLIFE
WAUBAY NATIONAL WILDLIFE REFUGE
DAY COUNTY, SOUTH DAKOTA



MANAGEMENT ACTIVITY

Principle activities consist of crop production and grassland management.

Crop production is performed on approximately 250 acres with 35 acres being performed by force account, and the balance is completed with cooperative farming agreements. Both grain and green browse crops are produced. The farming program is used to provide food for migratory waterfowl, resident game, and to help alleviate food depredations.

Grassland management includes using such techniques as prescribed burning, grazing and haying. These techniques are used to reduce litter, brush control, to encourage either a warm or cool season community, and to stimulate tall, dense cover to benefit nesting waterfowl. This year three sites totalling approximately 70 acres were burned. Early spring grazing (April 19-June 15) was used on two sites totalling 175 acres with 180 AUM's.

U.S. Fish and Wildlife Service WAUBAY WETLAND MANGEMENT DISTRICT--FACT SHEET

Location

HQ at Waubay NWR

RR #1, P.O. Box 79

Waubay, SD 57273

(605) 947-4695

District--Waterfowl Production Areas owned in fee title scattered in Clark, Codington, Day, Grant, Marshall, and Roberts counties of South Dakota

Date Established

January 19, 1959

Mandates

Public Laws 85-585 & 87-383--

District established to preserve wetlands for waterfowl breeding habitat

Public hunting areas

FWS Policy Direction

Assure survival of endangered or threatened plants and animals

Perpetuate migratory bird resources for the benefit of people

Preserve natural diversity and abundance of mammals and non-migratory birds

Provide understanding and appreciation of fish and wildlife ecology and man's role in his environment

Land Status

237 areas totaling 9620 hectares (25,412 ac.) Perpetual easement wetland acres - 80,400

Various road and utility right-of-ways

Mineral and oil reservations

Life tenacy on buildings

Hunting closures

Wildlife

246 species of birds including occasional visits by Bald Eagles and Peregrine Falcons

36 species of ~~mammals~~

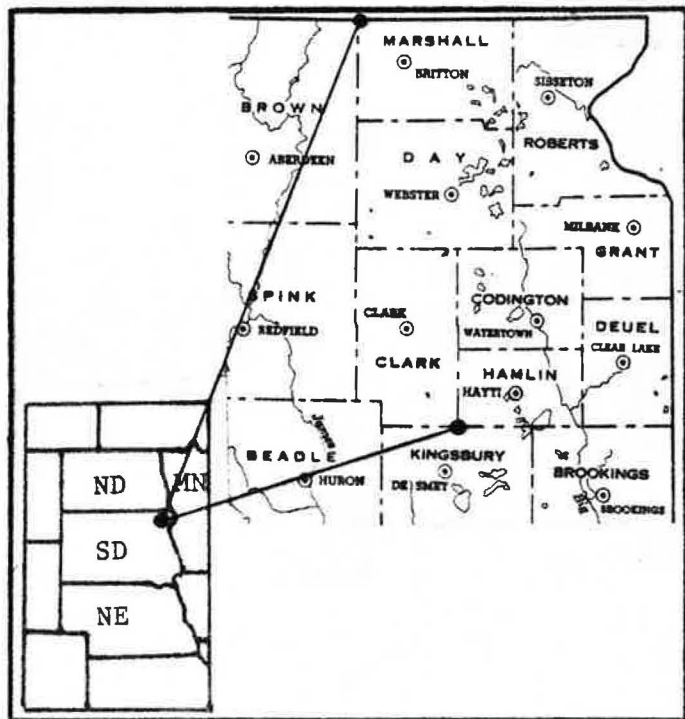
10 species of reptiles and amphibians

Public Use

Public hunting for upland game, big game & waterfowl

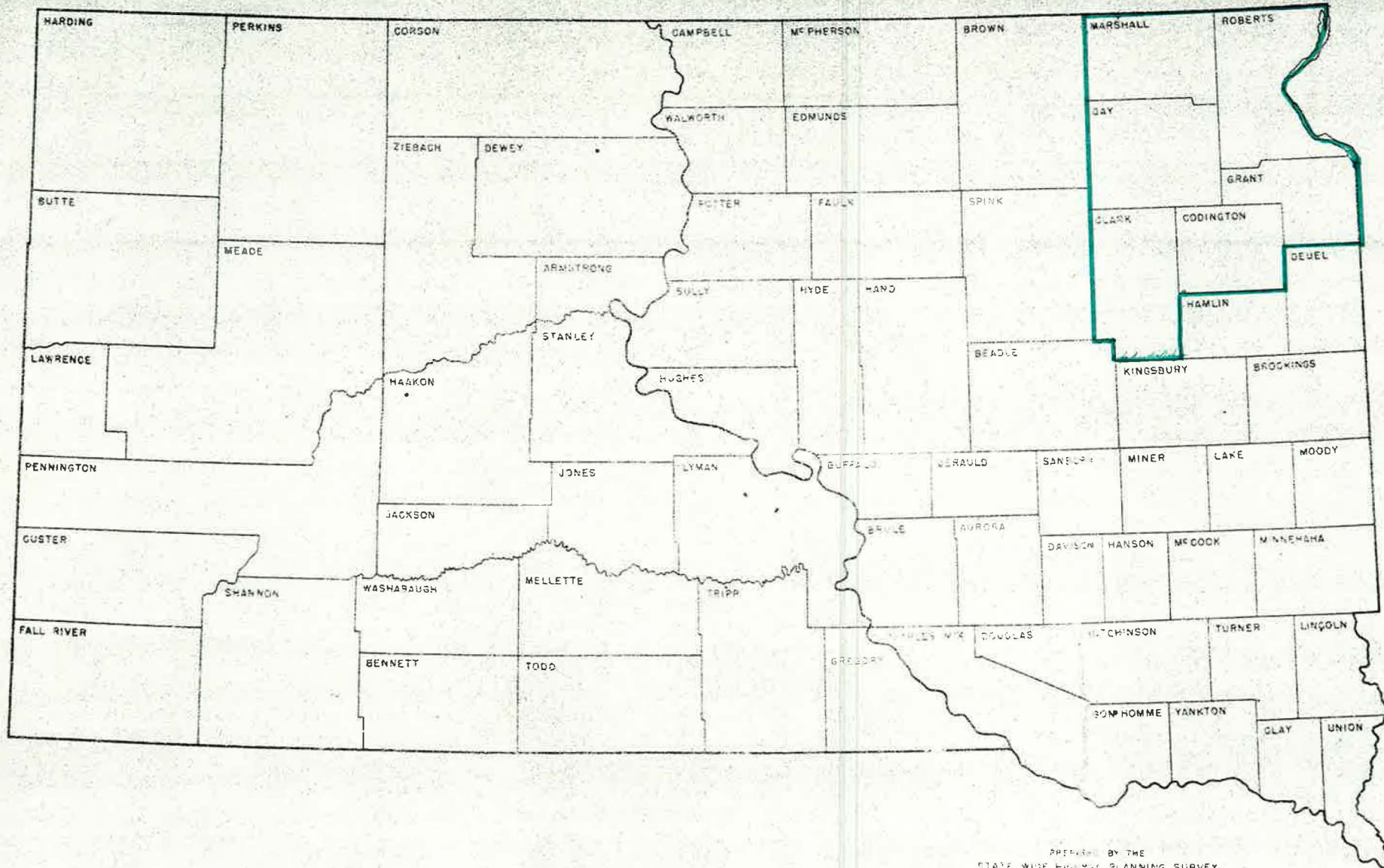
Trapping for furbearers

Wildlife observation



SOUTH DAKOTA

COUNTY OUTLINE MAP



PREPARED BY THE
STATE WIDE HIGHWAY PLANNING SURVEY
DAKE
1967
48 MILES

WPA MANAGEMENT ACTIVITY

Principle activities include farming, haying, grazing, prescribe burning, fence construction and repair, roadside mowing, noxious weed control, and environmental restoration.

Farming is performed primarily to help alleviate crop depredations by waterfowl. Prescribe burning and spring crowd grazing were used in an attempt to remove excessive mulch and to benefit warm season native grass. Burning was conducted on 40 acres on one WPA while spring grazing (May 1-June 15) was used on 18 WPA's totalling approximately 1275 acres. The average stocking rate was 1.05 AUM's per acre. Approximately 400 acres were hayed on 15 WPA's to remove excessive mulch.

Roadside mowing is required by all landowners bordering township roads. This requirement is usually fulfilled by obtaining the service from an adjoining landowner. Approximately 46 miles of township roadside mowing is required within the Waubay District.

Noxious weed control is required by state law. The primary target species are leafy spurge, canada and sow thistle, and creeping jenny. This activity accounts for approximately 140 man days of field labor. The control efforts are performed on approximately 1500 acres annually.

Environmental restoration includes the installation and repair of ditch plugs and the cleanup of building sites and old fences. This year, this activity was performed on 18 WPA's thus far.

REFUGE PUBLIC USE

Public use facilities on the refuge include a picnic-recreation area, 1/2 mile nature trail, and 100 ft. observation tower, all open from May 1st through Labor Day. An average of 3100 A/H are spent picnicking while 6600 A/H are expended observing wildlife, either on foot or by vehicle. Conducted tours of the refuge are also given upon request for various groups (schools, Scouts, Bible Camps, SDOU, etc.).

The only game hunted on the refuge is White-tail Deer, with hunters spending about 800 A/H during the rifle season and 35 A/H during the archery season.

Total public use for the past 3 years averaged 10,734 A/H with 29,500 visits made to the refuge.

WMD PUBLIC USE

Most of the public use on the wetland district involves hunting of one type or another. On an average, 23,000 A/H are spent hunting waterfowl, 8500 A/H on upland game birds (Ring-necked Pheasants and Hungarian Partridges), 3200 A/H on deer, either with gun or bow and arrow, and 340 A/H hunting other game such as rabbits, gophers, etc. About 900 A/H are spent trapping on WPA's and about 205 A/H fishing. In 1981, the first Mourning Dove season was held since 1972, with hunting generally light throughout the district.

General wildlife observation amounts to about 600 A/H each year in the form of bird watching, photography, hiking, and viewing from vehicles.

HISTORY OF GIANT CANADA GOOSE AT WAUBAY REFUGE

At one time South Dakota was in the heart of the range of suitable habitat for the giant Canada goose. By 1900 the giant Canada goose was all but extirpated in South Dakota due to year round hunting and egg gathering by early settlers. In 1937 a local individual named Jack Rommel, donated his giant Canada goose flock to Waubay NWR after a law was passed prohibiting the use of live decoys to hunt Canada geese. This flock provided the seed for one of the few scattered flocks which remained in northeastern South Dakota.

In the early 60's the South Dakota Game, Fish, and Parks and Bureau of Sport Fisheries and Wildlife decided to enhance the production of Canada geese in their former range. By the late 60's the local fall population had grown to nearly 1000 birds, with most of the birds within a 15 mile radius of Waubay Refuge. The population continued to grow throughout the 70's with some dispersion occurring also. Currently the fall population is approximately 3600 with production occurring throughout the six county wetland management district.

DEPREDATION CONTROL

Waterfowl depredations are becoming a serious problem in portions of the Waubay Wetland District. The primary culprits are locally-reared ducks and geese, and moulting geese which walk out of the wetlands into the adjoining grain fields. The rate of depredations has probably not increased in recent years, but with much higher interest rates and lower commodity prices, the farmers are much less tolerant of these activities.

The majority of waterfowl depredation complaints occur in Day and Marshall Counties, with the number of complaints depending to a large extent upon the weather during harvest season. At present, 11 propane exploders with 20 lb. tanks are available from this office to loan out to farmers for depredation relief along with a supply of several hundred black and orange lath flags.

In 1981, 7 cooperative farmers agreed to hay portions of 9 WPA's in Day and Marshall Counties and then plant these areas in 1982 to either barley or Durum in an effort to provide an alternate food source for waterfowl other than private land. A total of 311 acres are being farmed with 103 acres to be left for the government's share.

On the refuge, 2 cooperator's have planted 56 acres to rye or oats with 19 acres to be left for the refuge's share, while another 35 acres of rye and millet are being farmed by force account.

All grain farmed by cooperators will be swathed with the refuge's share left lying in the field until a minimum of 10 days prior to the waterfowl hunting season. At that time, the cooperators will remove any unused excess grain by baling it to be used as a winter wildlife food supply.

MASTER PLANNING

Waubay was selected in FY 1981 as Region 6's representative to "field test" the 9-Step Albuquerque Master Planning Process.

It was selected (1) because it is a combination refuge and wetland district and (2) because of past manager Bob Johnson's 20 years experience at Waubay coupled with his impending retirement.

THE PROCESS:

The process identified the direction and management strategy for the refuge and wetland district. These will be evaluated in light of policy requirements, agency responsibilities, and public input.

The Process has three major phases:

1. Resource Inventory Phase - All available information about the refuge and wetland district was compiled. A complete cultural resources survey was conducted on the refuge; potential refuge outputs were identified; resource maps were developed; and, most importantly, ideas from the public were gathered by mail and meetings held in each county within the wetland district.
2. Potential Use Analysis Phase - During this phase, the collected information was analyzed to evaluate current programs as well as a capability analysis to determine which areas of the refuge and district were suitable for the various uses being anticipated. Also, trade-offs were identified and the first cut at conflict resolution was addressed.
3. Management Plan Development Phase - Preliminary objectives were established based on what was learned in the analysis phase. We are presently at the point of developing alternatives to accomplish these objectives and management strategies to be implemented during the next 9 years. The next step is to again solicit input from the public and finally, to select the alternative which best meets the needs of the refuge, the resource, and the community. The final product will be a Management Plan Report with definitive objectives and long range management strategies.

THE RESULTS TO DATE:

The planning team has developed five major alternatives or orientations to accomplish the objectives established for Waubay Refuge and Wetland District.

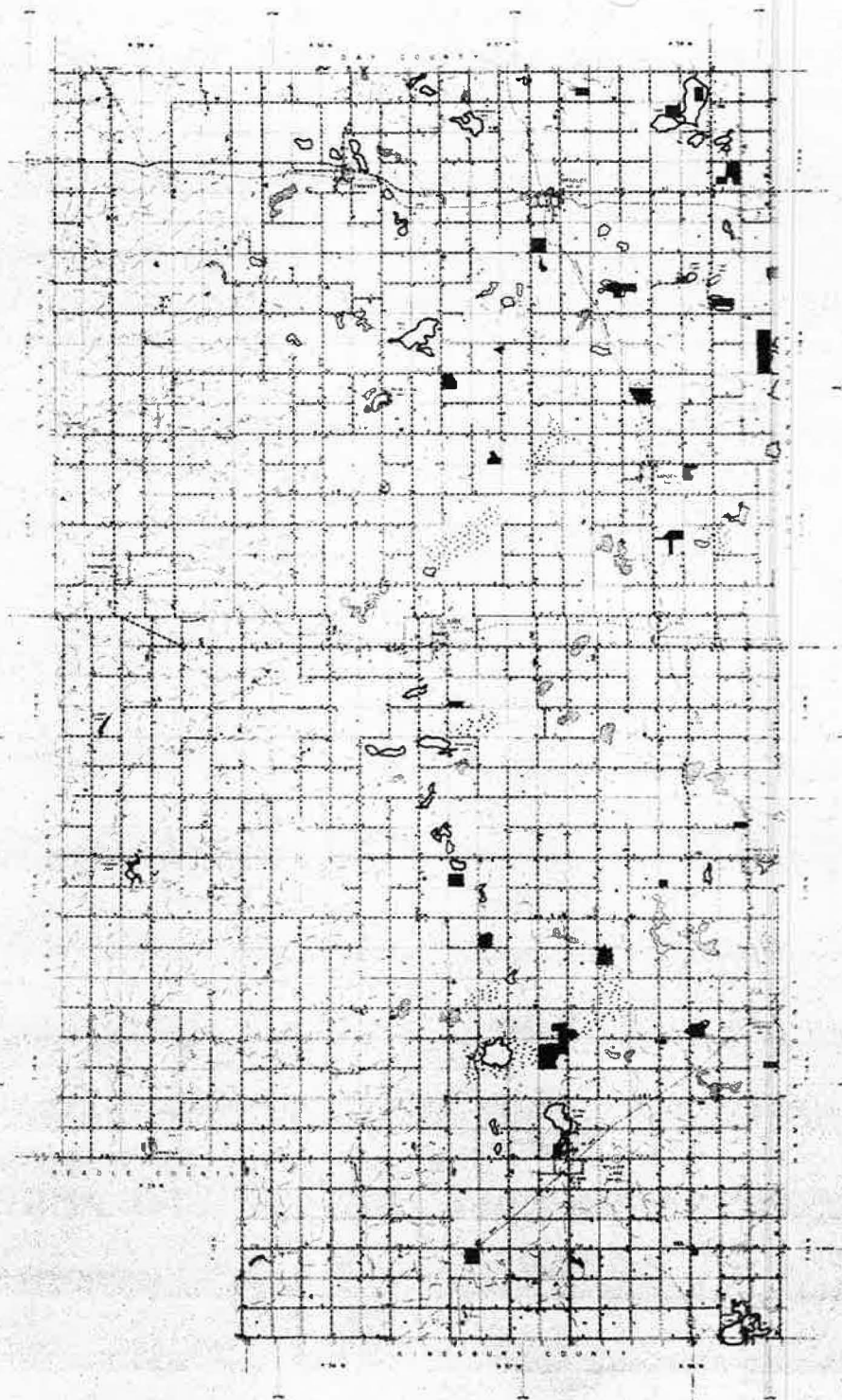
They are:

1. "No Action" Alternative. This represents existing refuge and district plans and management with no major change in emphasis.
2. "Custodial" Level Of Management - This alternative would concentrate on maintaining the integrity of refuge lands, complying with legal mandates, and switching to less labor-intensive management techniques.
3. Maximized Waterfowl Production - This alternative would concentrate on dabbler and diver production constrained only by mandated activities.
4. Wildlife Diversity and Public Use Emphasis - This alternative would incorporate habitat management techniques designed to enhance a diversity of wildlife species while improving visitor opportunities.
5. The Preferred Alternative - This is the alternative preferred by management. It combines what we believe is the best mix from the previous four alternatives for achieving the objectives for the Waubay Refuge and Wetland District.

WHAT'S NEXT:

Our plan is to develop a leaflet describing the planning process, the objectives, and the alternatives and send it to the public for comment.

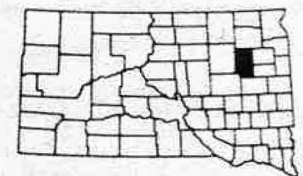
After public comments are received and evaluated, the objectives will be finalized, an alternative for management selected, and the final report will be written.



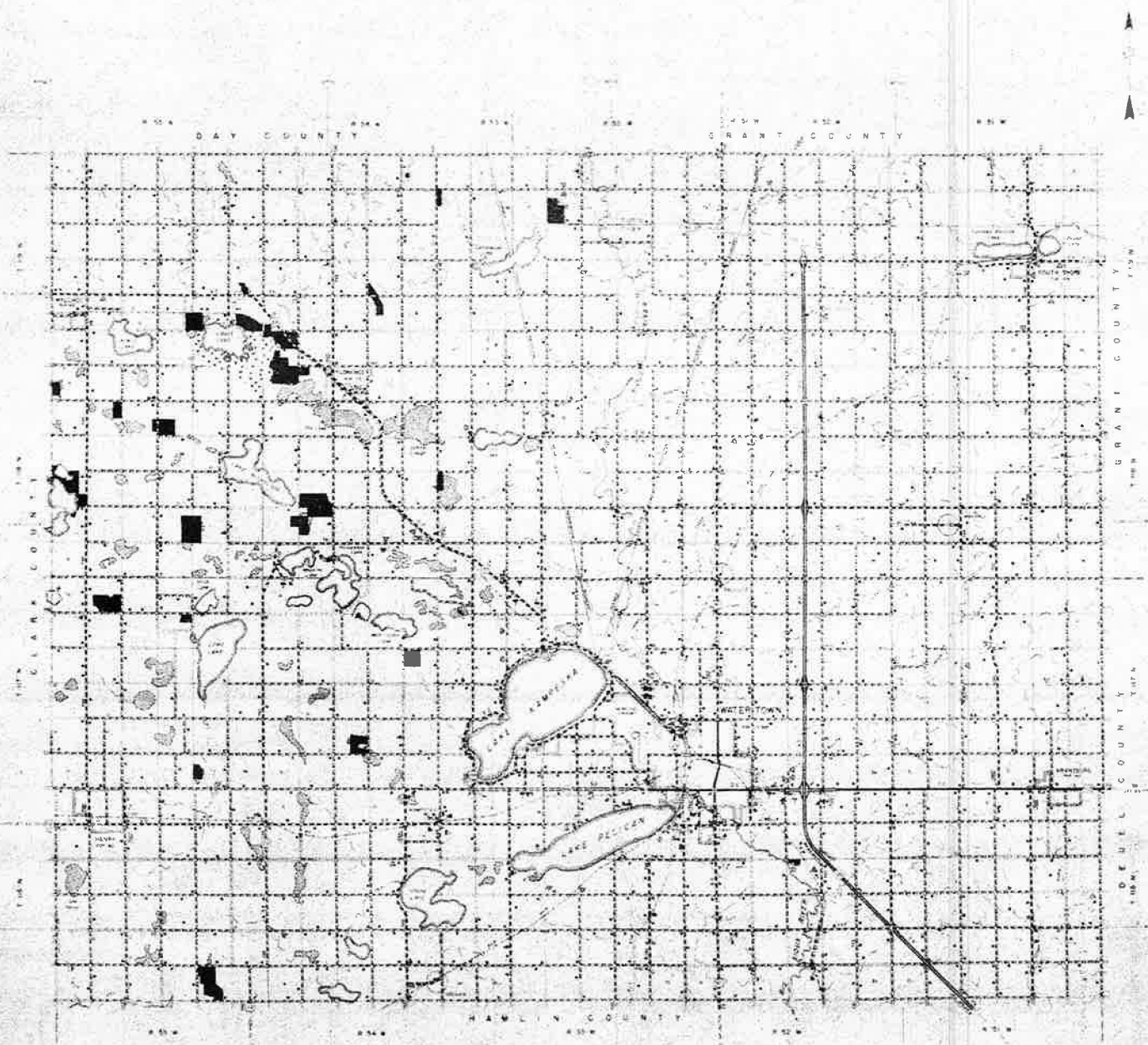
CLARK COUNTY

LEGEND

Waterfowl Production Areas (Federal)	.....	.....
Primitive Road	.....	.....
Gravel or Stone Road	.....	.....
Bituminous Road	.....	.....
Section Line	.....	.....
Pond or Lake	.....	.....









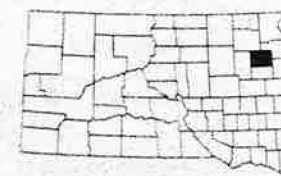
LOCATION MAP



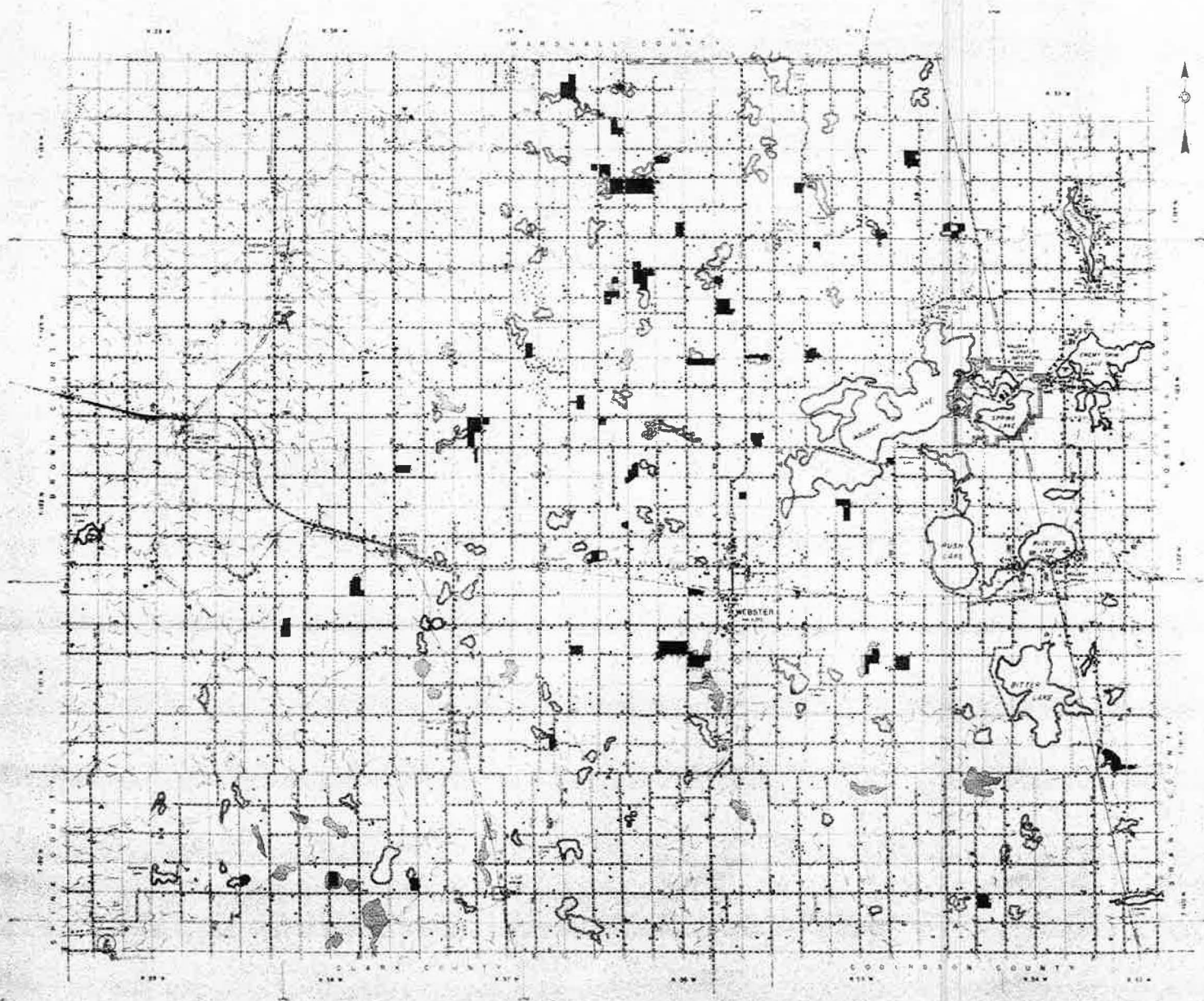
CODINGTON COUNTY

LEGEND

- Waterfowl Production Areas (Federal) 
- Primitive Road 
- Gravel or Stone Road 
- Bituminous Road 
- Section Line 
- Road or Lake 



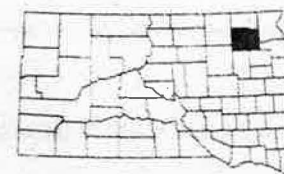
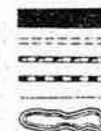
LOCATION MAP



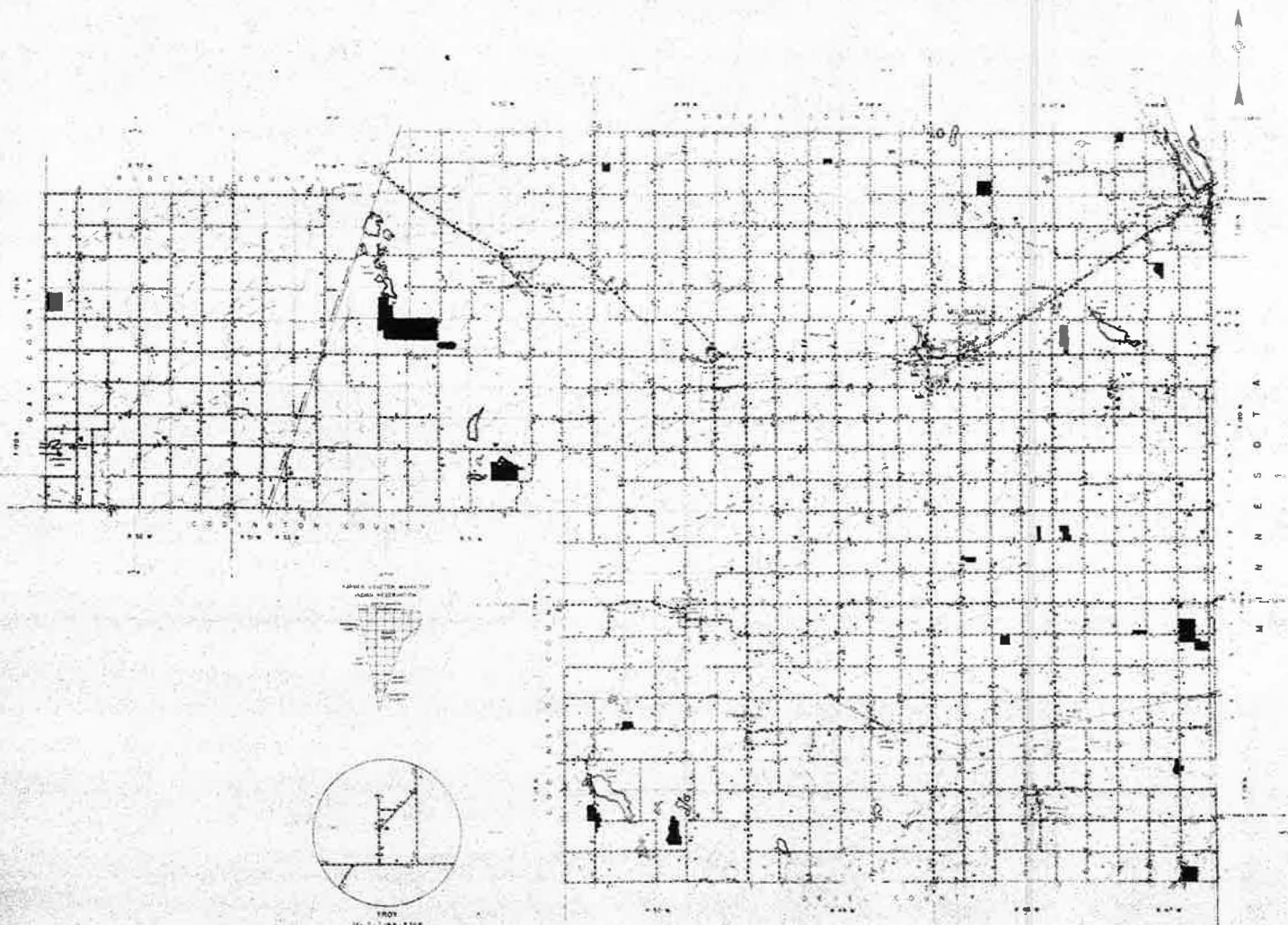
DAY COUNTY

LEGEND

Waterfowl Production Areas (Federal)
 Primitive Road
 Gravel or Stone Road
 Bituminous Road
 Section Line
 Pond or Lake



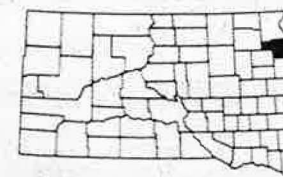
LOCATION
MAP



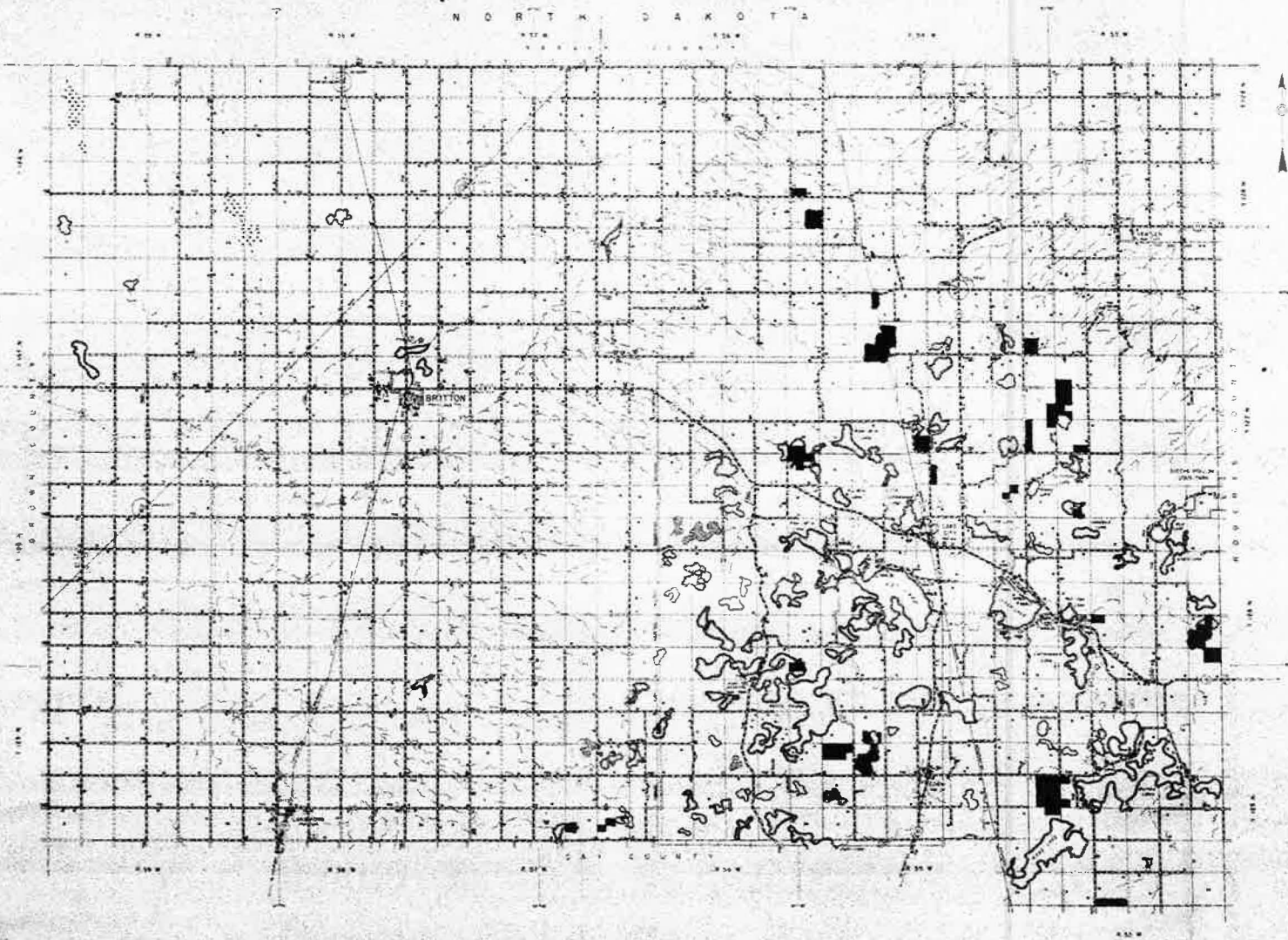
GRANT COUNTY

LEGEND

Waterfowl Production Areas (Federal)	
Primitive Road	
Gravel or Stone Road	
Bituminous Road	
Section Line	
Pond or Lake	



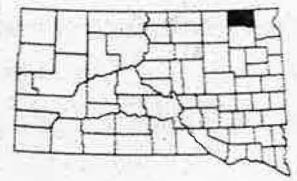
LOCATION MAP



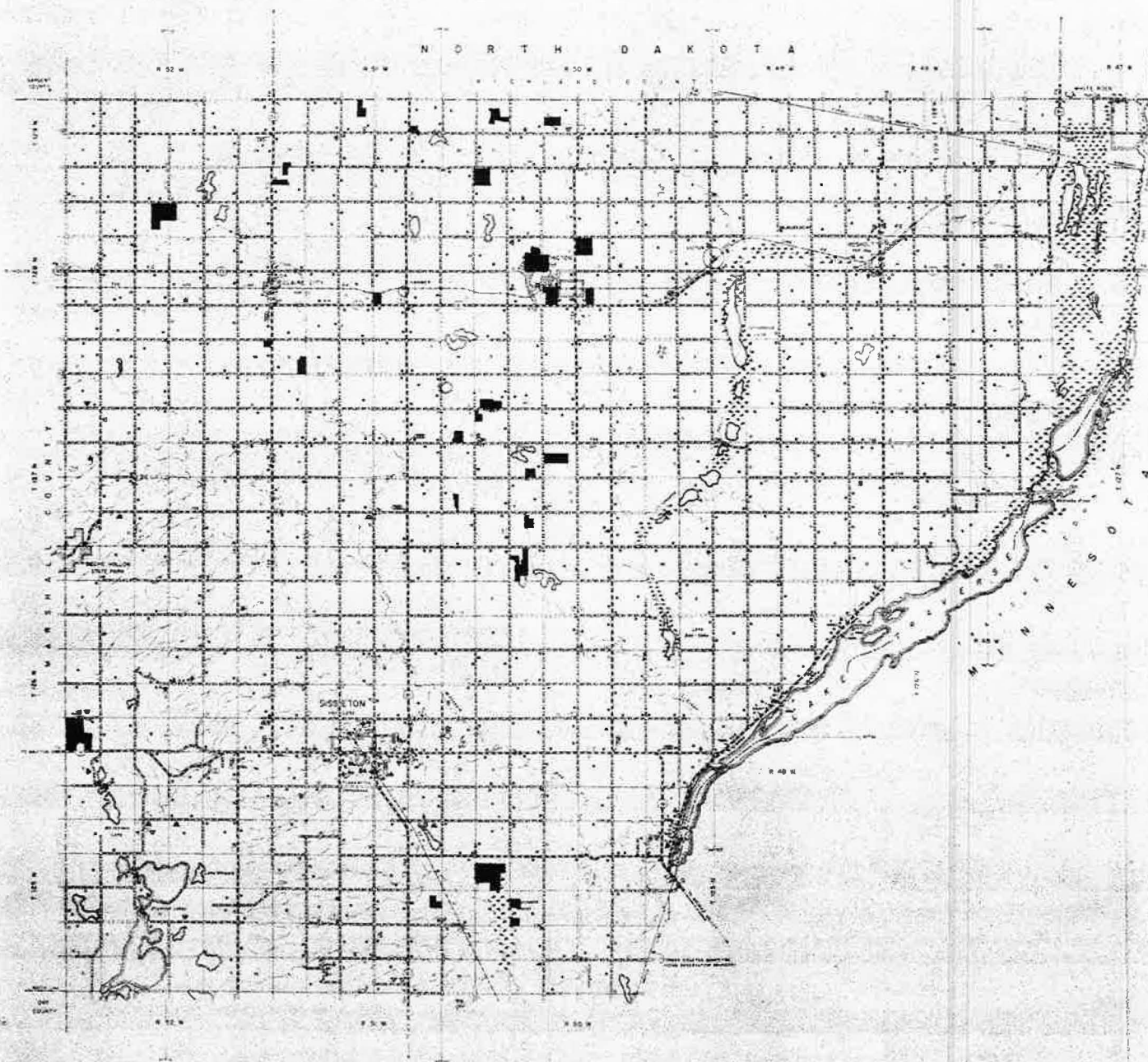
MARSHALL COUNTY

LEGEND

- Waterfowl Production Areas (Federal)
- Primitive Road
- Gravel or Stone Road
- Bituminous Road
- Section Line
- Pond or Lake



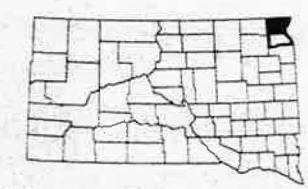
LOCATION
MAP



ROBERTS COUNTY

LEGEND

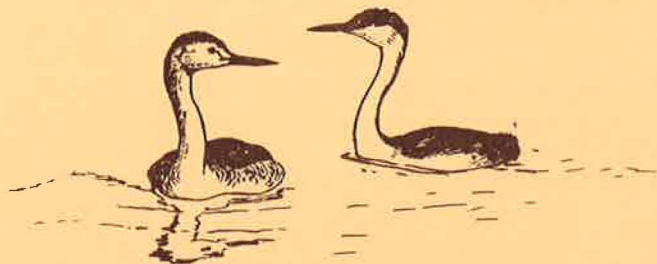
- Waterfowl Production Areas (Federal)
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**LOCATION
MAP**

BIRDS OF WAUBAY

NATIONAL WILDLIFE REFUGE



ENJOY YOURSELF!

Your visit today can be the beginning or the extension of a very satisfying learning experience. We sincerely hope your adventures are successful and rewarding.

LOONS—GREBES—PELICANS—CORMORANTS—HERONS AND
BITTERNS—SWANS, GEESE, AND DUCKS

DUCKS—VULTURES—HAWKS AND EAGLES—FLACONS—OSPREYS—
GROUSE AND PHEASANTS—CRANES—RAILS AND COOTS—PLOVER—
SNIPES AND SANDPIPERS—AVOCETS—PHALAROPES—GULLS AND
TERNS

WELCOME TO WAUBAY NATIONAL WILDLIFE REFUGE

George Catlin, American Artist, viewed the prairie hill country of eastern South Dakota in 1835 and described the area as follows: *"It gradually and gracefully rises on each side, by swell after swell without tree or bush or rocks . . . and is everywhere covered with green grass, affording the traveller, from its highest elevations, the most unbounded and sublime views of nothing at all—save the blue and boundless ocean of prairies that lie beneath and all around him, vanishing into azure in the distance, without a speck or spot to break their softness."*

Waubay National Wildlife Refuge is located in these same prairie hills so vividly described by Catlin; and, although more than 140 years of white settlement have brought sweeping changes to

these lands, Waubay Refuge retains much of the natural character of prairie lands.

The name Waubay, of Sioux Indian origin, means "a nesting place for birds." This is a fitting description, for the marsh and grasslands of the refuge are a natural attraction for numerous nesting birds.

Established in 1935, the refuge contains 4,650 acres and is located 10 miles north of Waubay, South Dakota. The marshlands, lakes, grasslands, brush, and trees support diverse and abundant wildlife and attract both eastern and western birds.

Birding on the refuge is best during the spring and fall months when peak waterfowl numbers occur.

This folder lists 232 species that have been recorded by refuge personnel and visiting bird watchers since the refuge was established. Another 14 species of accidental or extremely rare occurrence are added at the end of the list.

ENJOY YOURSELF!

Your visit today can be the beginning or the extension of a very satisfying learning experience. We sincerely hope your adventures are successful and rewarding.

LOONS—GREBES—PELICANS—CORMORANTS—HERONS AND
BITTERNS—SWANS, GEESE, AND DUCKS

DUCKS—VULTURES—HAWKS AND EAGLES—FLACONS—OSPREYS—
GROUSE AND PHEASANTS—CRANES—RAILS AND COOTS—PLOVER—
SNIPES AND SANDPIPERS—AVOCETS—PHALAROPES—GULLS AND
TERNs

DOVES—CUCKOOS—OWLS—GOATSUCKERS—SWIFTS—
HUMMINGBIRDS—KINGFISHERS—WOODPECKERS—FLYCATCHERS—
HORNED LARKS—SWALLOWS—JAYS AND CROWS—CHICKADEES—
NUTHATCHES—CREEPERS—WRENS—MOCKINGBIRDS AND
THRASHERS—THRUSHES—KINGLETS—PIPITS—WAXWINGS—SHRIKES—
STARLINGS—VIREOS

WARBLERS—WEAVER FINCHES—BLACKBIRDS—TANAGERS—
GROSBEAKS—FINCHES, SPARROWS AND BUNTINGS

Species nesting on the refuge are indicated by an •. The relative abundance of each species at each season is coded as follows:

S—March-May
S—June-August

F—September-November
W—December-February

a—abundant common species, very numerous
c—common certain to be seen in suitable habitat
u—uncommon present, but not certain to be seen
o—occasional seen only a few times during a season
r—rare seen at intervals of 2 to 5 years

	S	S	F	W
Common Loon	r		r	
• Red-necked Grebe	c	c	c	
• Horned Grebe	c	o	u	
• Eared Grebe	u	o	u	
• Western Grebe	c	c	c	
• Pied-billed Grebe	c	c	a	
White Pelican	c	c	c	
• Double-crested Cormorant	c	c	c	
• Great Blue Heron	c	c	c	
Green Heron	r			
Little Blue Heron	r			
Great Egret (Common Egret)		r		
• Black-crowned Night Heron	c	c	c	
• Least Bittern		o		
• American Bittern	c	c	c	
Whistling Swan	o		c	
• Canada Goose	c	c	c	o
White-fronted Goose	o		o	
Snow Goose (Snow and Blue)	o		c	
• Mallard	a	c	a	o
• Black Duck	o	o	o	
• Gadwall	a	c	a	
• Pintail	c	c	c	r
• Green-winged Teal	c	o	c	
• Blue-winged Teal	a	a	a	
Cinnamon Teal	r	r		
• American Wigeon (Am. Widgeon)	c	u	c	
• Northern Shoveler (Shoveler)	c	c	c	
• Wood Duck	o	o	o	
• Redhead	c	c	c	
• Ring-necked Duck	u	o	u	
• Canvasback	c	u	c	
• Lesser Scaup	a	o	a	
• Common Goldeneye	u	o	u	
Bufflehead	u	o	u	
Old Squaw	r		r	
White-winged Scoter	r		r	
• Ruddy Duck	c	c	c	
Hooded Merganser	u		u	

LOONS—GREBES—PELICANS—CORMORANTS—HERONS AND
BITTERNS—SWANS, GEESE, AND DUCKS

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STARLINGS—VIREOS

	S	S	F	W
Common Merganser	c		u	
Red-breasted Merganser	r		r	
Turkey Vulture	r	r	r	
Goshawk	o		o	
• Sharp-shinned Hawk	u	u	u	
• Cooper's Hawk	u	u	u	
• Red-tailed Hawk	c	c	c	
Broad-winged Hawk	o	o	o	
• Swainson's Hawk	u	u	u	
Rough-legged Hawk	o	o	o	
Ferruginous Hawk	r		r	
Golden Eagle	o	o	o	
Bald Eagle	o	o	o	
• Marsh Hawk	c	c	c	o
Osprey	r	r		
Prairie Falcon	r	r		
Peregrine Falcon	o	o		
Merlin (Pigeon Hawk)	o	o		
American Kestrel (Sparrow Hawk)	c	u	c	
• Sharp-tailed Grouse	r	r	r	r
• Gray Partridge	u	u	u	u
• Ring-necked Pheasant	c	c	c	c
Sandhill Crane		o	o	
• Virginia Rail	u	u	u	
• Sora	c	c	c	
• American Coot	a	c	a	
Semipalmated Plover	c		c	
• Piping Plover	o	o	o	
• Killdeer	c	c	c	
American Golden Plover	u		u	
Black-bellied Plover	u		u	
Ruddy Turnstone	u	o	u	
Common Snipe	u		c	
Long-billed Curlew	r			
• Upland Sandpiper (Upland Plover)	c	c		
• Spotted Sandpiper	u	u	u	
Solitary Sandpiper	o			
• Willet	c	o	c	
Greater Yellowlegs	c	u	c	
Lesser Yellowlegs	c	u	c	
Pectoral Sandpiper	c	u	c	
White-rumped Sandpiper	c	u	c	
Baird's Sandpiper	u	u	u	
Least Sandpiper	c	u	c	
Dunlin	u		u	
Dowitcher Species	o	o	o	
Stilt Sandpiper	o	o	o	
Semipalmated Sandpiper	a	u	a	
Buff-breasted Sandpiper	r		r	
• Marbled Godwit	c	c	u	
Hudsonian Godwit	o	o		
Sanderling	o	o	o	
American Avocet	u	u		
• Wilson's Phalarope	c	u	c	
Northern Phalarope	c	u	c	
Herring Gull	u		u	
Ringed-billed Gull	c	c	c	
• Franklin's Gull	c	c	a	
• Forster's Tern	c	c	c	
• Common Tern	c	c	c	
• Black Tern	c	c	c	

DUCKS—VULTURES—HAWKS AND EAGLES—FALCONS—OSPREYS—
GROUSE AND PHEASANTS—CRANES—RAILS AND COOTS—PLOVER—
SNIPES AND SANDPIPERS—AVOCETS—PHALAROPES—GULLS AND
TERNs

DOVES—CUCKOOS—OWLS—GOATSUCKERS—SWIFTS—
HUMMINGBIRDS—KINGFISHERS—WOODPECKERS—FLYCATCHERS—

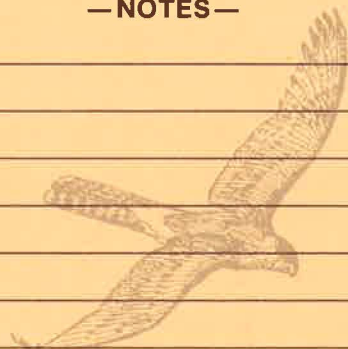
	S	S	F	W
• Mourning Dove	c	c	c	
Yellow-billed Cuckoo	r	r	r	
Black-billed Cuckoo	c	c	c	
Screech Owl	u	u	u	u
• Great Horned Owl	c	c	c	c
Snowy Owl			o	o
• Burrowing Owl	r	r	r	
Long-eared Owl	r		r	r
Short-eared Owl	u	u	u	u
Saw-whet Owl				r
• Common Nighthawk	c	c	c	
Chimney Swift	o	o		
• Ruby-throated Hummingbird	u	c		
Belted Kingfisher	u	u	c	
• Common Flicker (Yellow-shafted and Red-shafted)	c	c	c	
• Red-headed Woodpecker	o	o	o	
Yellow-bellied Sapsucker	o	o	o	
• Hairy Woodpecker	c	c	c	c
• Downy Woodpecker	c	c	c	c
• Eastern Kingbird	c	c	u	
• Western Kingbird	c	c	u	
Great Crested Flycatcher	u	u		
Eastern Phoebe	o	o	o	
Yellow-bellied Flycatcher	r	r	r	
• Alder Flycatcher (Traill's)	c	c	c	
Least Flycatcher	c	u	c	
Eastern Wood Pewee	u	u		
Olive-sided Flycatcher	r	r		
• Horned Lark	a	c	a	o
Rough-winged Swallow	r	z	r	
• Tree Swallow	o	o	o	
• Bank Swallow	c	c	c	
• Barn Swallow	c	c	a	
• Cliff Swallow	u	u	u	
• Purple Martin	c	c	c	
• Blue Jay	c	c	c	o
Black-billed Magpie	o		u	o
• Common Crow	c	u	c	o
• Black-capped Chickadee	c	c	c	c
• White-breasted Nuthatch	c	c	c	c
Red-breasted Nuthatch	o		u	o
Brown Creeper	c		c	o
• House Wren	c	c	c	
• Long-billed Marsh Wren	c	c	c	
• Short-billed Marsh Wren	u	u	u	
Mockingbird	r	r		
• Catbird	c	c	c	
• Brown Thrasher	c	c	c	
• American Robin (Robin)	a	c	a	
Hermit Thrush	u		u	
Swainson's Thrush	u		u	
Gray-cheeked Thrush	o		o	
Veery	r			
• Eastern Bluebird	u	u	u	
Golden-crowned Kinglet	u		u	o
Ruby-crowned Kinglet	u		u	
Water Pipit	o		o	
Bohemian Waxwing			o	o
• Cedar Waxwing	u	u	u	o
Northern Shrike			o	o
• Loggerhead Shrike	u	u	u	
• Starling	u	u	u	u
Yellow-throated Vireo		r		
Red-eyed Vireo	r			
Warbling Vireo	u	u		

	S	S	F	W
— Black-and-white Warbler	c		c	
— Tennessee Warbler	c		c	
— Orange-crowned Warbler	u		u	
— Northern Parula (Parula)	r		r	
— • Yellow Warbler	c	c	c	
— Magnolia Warbler	u		u	
— Cape May Warbler	r		r	
— Yellow-rumped Warbler (Myrtle and Audubon's)	c		c	
— Blackburnian Warbler	r		r	
— Chestnut-sided Warbler	u		u	
— Bay-breasted Warbler	r			
— Blackpoll Warbler	c		c	
— Palm Warbler	r		o	
— Ovenbird	c		c	
— Northern Waterthrush	u		u	
— • Common Yellowthroat (Yellowthroat)	c	o	c	
— Mourning Warbler	r		o	
— Yellow-breasted Chat	o	o		
— Wilson's Warbler	o		u	
— Canada Warbler	r	r	r	
— American Redstart	c	o	o	
— • House Sparrow	c	c	c	c
— • Bobolink	c	c	c	
— • Western Meadowlark	c	c	c	r
— • Yellow-headed Blackbird	c	c	c	
— • Red-winged Blackbird	a	c	a	
— • Orchard Oriole	o	o		
— • Northern Oriole (Baltimore and Bullock's)	c	c		
— Rusty Blackbird	c		c	
— • Brewers Blackbird	u	u	u	
— • Common Grackle	c	c	c	
— • Brown-headed Cowbird	c	c	c	
— Scarlet Tanager	r	r		
— Rose-breasted Grosbeak	u	u	u	
— Indigo Bunting	r	r		
— Lazuli Bunting	r	r	r	
— Dickcissel	u	u	u	
— Evening Grosbeak				o
— Pine Grosbeak			o	o
— Common Redpoll			o	o
— Hoary Redpoll			r	r
— Pine Siskin	o		o	o
— • American Goldfinch	c	c	c	
— White-winged Crossbill			o	o
— Red Crossbill				r
— Rufus-sided Towhee	u	r		
— • Lark Bunting	o	o	o	
— • Savannah Sparrow	u	u	u	
— • Grasshopper Sparrow	c	c	c	
— • Sharp-tailed Sparrow	r	r	r	
— • Vesper Sparrow	c	c	c	
— • Lark Sparrow	r	r	r	
— Dark-eyed Junco (Slate-colored Junco)	c		c	o
— Tree Sparrow	c		c	o
— • Chipping Sparrow	u	u	u	
— • Clay-colored Sparrow	u	u	u	
— Field Sparrow	r	r		
— Harris' Sparrow	c		c	r
— White-crowned Sparrow	c		c	
— White-throated Sparrow	c		c	
— Fox Sparrow	o		o	
— • Lincoln's Sparrow	u		u	
— Swamp Sparrow	o		o	
— Song Sparrow	c	c	c	
— Lapland Longspur	u		u	u
— • Chestnut-collared Longspur	u	o	u	r
— Snow Bunting	u		c	c

For further information or to report unusual sightings, contact the Refuge Manager, Waubay National Wildlife Refuge, R.R. 1, Waubay, South Dakota, 57273. Telephone: 605/947-4695.

Waubay National Wildlife Refuge is one of a system of refuges administered by the U.S. Fish and Wildlife Service and dedicated to the preservation of wildlife. The financial base for this system was firmly established in 1934 through the passage of the Migratory Bird Hunting Stamp Act. This Act requires waterfowl hunters to purchase annually a migratory bird or "duck stamp." Funds collected from duck stamp sales have been used to purchase numerous refuges that provide habitats necessary to sustain a variety of wildlife for both hunters and nonhunters to enjoy.

— NOTES —



WAUBAY



WAUBAY

NATIONAL WILDLIFE REFUGE

A NESTING PLACE FOR BIRDS

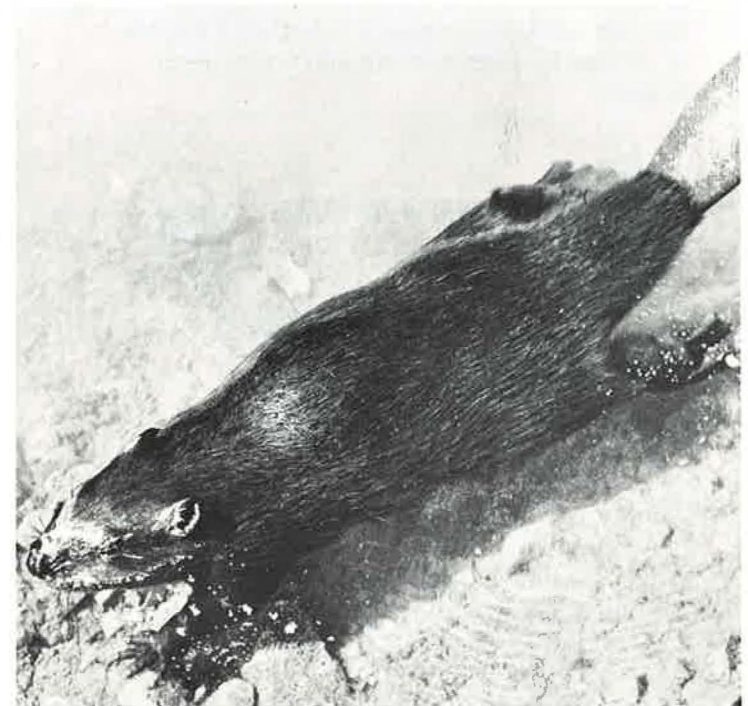
The artist George Catlin described this area over 140 years ago as a “blue and boundless ocean of prairies.” It has changed over the years as the land became settled and farm fields replaced the rolling grasslands and prairie potholes. The Waubay National Wildlife Refuge, located in Day County, South Dakota preserves a remnant of the original prairie wetlands, and has truly become a “nesting place for birds.” Over 103 species of birds have been recorded as nesting on the Refuge.

Established in 1935, Waubay is one of over 370 National Wildlife Refuges maintained by the U.S.

Fish and Wildlife Service. Its primary purpose is the conservation and propagation of waterfowl by providing needed habitat. As wetland drainage eliminates marshlands, the nesting places for birds gradually diminish. Conservation and protection of what remains is vital in order to ensure a variety of waterfowl species for the future. Waubay National Wildlife Refuge is part of this effort.

WILDLIFE

You may see blue-winged teal, gadwalls and mallards which nest here in the spring. The spectacular Giant Canada geese, prototype for the species, nests here at Waubay Refuge.



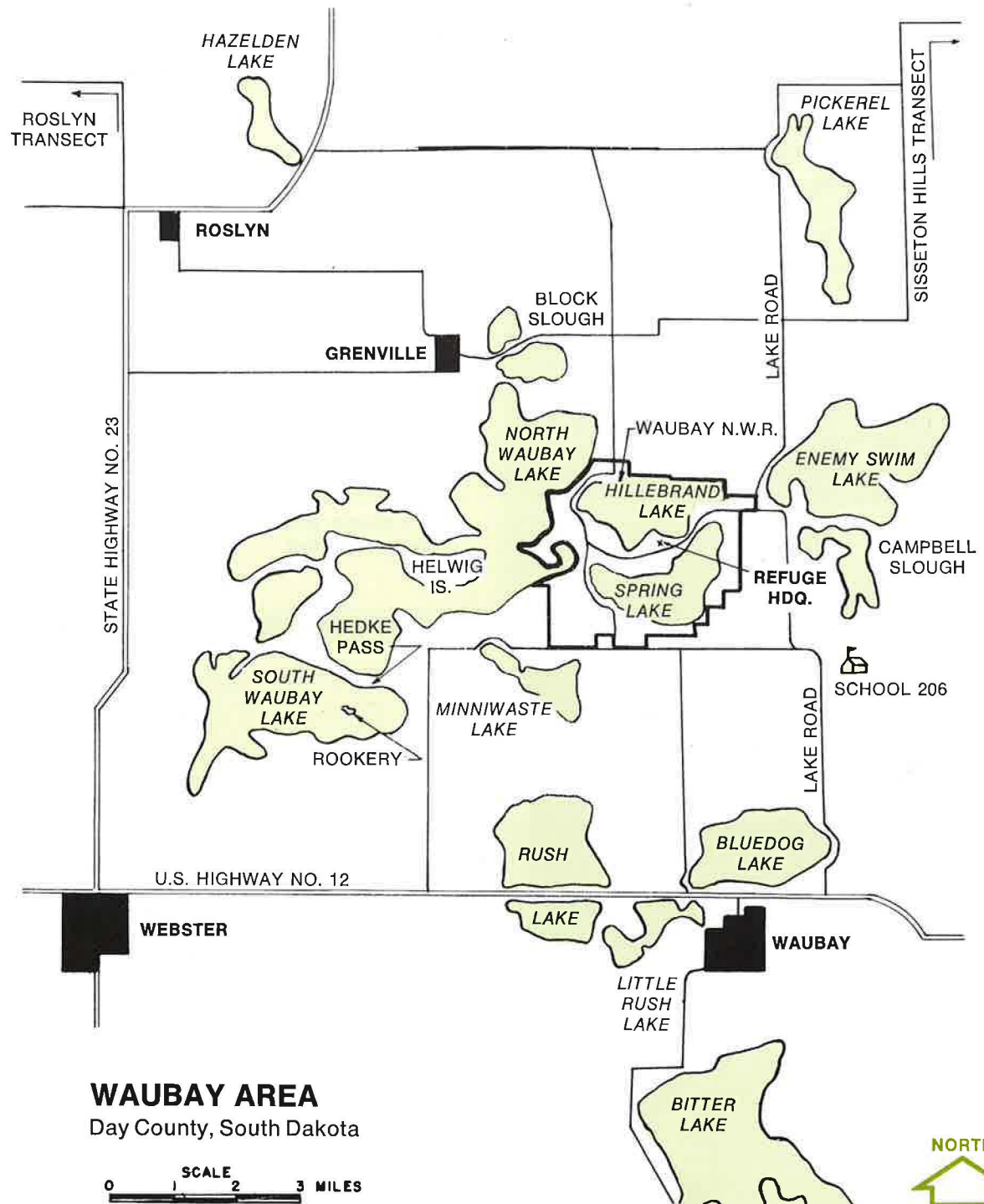
Birdwatchers will also find black-crowned night herons, black terns, white pelicans, bobolinks and eastern kingbirds. Shorebirds such as avocets, willets and yellowlegs search the mudflats and shallow water for food, etching delicate foot patterns in the mud. Waubay is the only refuge to nest five species of grebes: eared, horned, pied-billed, red-necked and western.

Small mammals found on the refuge include raccoons, muskrats, fox and mink. Beavers have constructed many dams in Grand Coulee and the resulting small ponds form excellent habitat for nesting ducks and geese.

REGULATIONS

1. All visitors are requested to register at Refuge Headquarters.
2. Boating, swimming or camping are not permitted on the Refuge.
3. Hunting is prohibited except during the proper season. Hunters must comply with all regulations and should check with the Refuge for further information.
4. Fishing is not permitted on the Refuge.
5. All vehicles are restricted to designated roadways.
6. Fires are permitted only in designated areas.
7. All plants, animals, and birds on the Refuge are protected.





WAUBAY

DUCK STAMP

Waubay National Wildlife Refuge is one of a system of refuges administered by the U.S. Fish and Wildlife Service and is dedicated to the preservation and conservation of wildlife. The financial base for this system was established in 1934 through the passage of the Migratory Bird Hunting Stamp Act. This Act required waterfowl hunters to purchase an annual migratory bird or duck stamp. Funds collected from duck stamp sales have been used to purchase numerous waterfowl refuges that provide habitats necessary to sustain a variety of wildlife for both hunters and nonhunters to enjoy.



DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE



Where to write

Refuge Manager
Waubay National Wildlife Refuge
RR #1, Waubay, South Dakota 57273