

FWS/ARW-RF1

DEC 15 1987

Memorandum

To: Refuge Manager, Seney NWR
From: Regional Refuge Supervisor, RF1
Subject: Disease Prevention and Control Plan

Your Disease Prevention Plan for the Seney National Wildlife Refuge has been reviewed and is approved as written. Since our approval was delayed, many of the contacts are now out of date. You may wish to review the plan and just list the job titles and phone numbers for updating. If you have any questions, please contact Bob Foster at (612) 725-3313.

/s/ John W. Ellis

John W. Ellis

Attachment

cc: Div. Biologist (Minn. Valley NWR)
Regional Pilot

RF1:BFoster:mm:12/15/87:x3701



United States Department of the Interior

TAKE
PRIDE IN
AMERICA

FISH AND WILDLIFE SERVICE

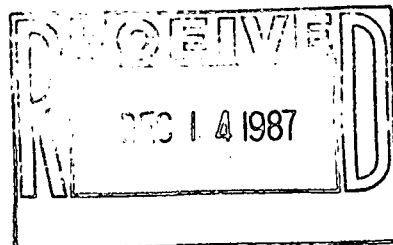
Minnesota Valley National Wildlife Refuge

4101 East 80th Street

Bloomington, MN 55420

IN REPLY REFER TO:

December 10, 1987



Memorandum

To: Regional Refuge Supervisor, RFP

From: Regional Biologist, RB1

Subject: Disease Prevention and Control Plan

The attached Disease Prevention and Control Plan for Seney National Wildlife Refuge has been reviewed and should be approved. The plan is out of date because of recent personnel changes in the Regional Office and at Seney NWR; as a result, several people who are listed as contacts in the event of a disease outbreak are no longer there. This problem could be avoided in future plans by listing the job title rather than name of the contact person.

Jan Eldridge
Jan Eldridge

Attachment

DISEASE PREVENTION AND CONTROL PLAN

Seney National Wildlife Refuge

Submitted by: Donald M. Frickie Date: _____
(Refuge Manager)

Reviewed by: Jan Pedrigo Date: 12/9/87
(Division Biologist)

Reviewed by: Stephen D. Wilds Date: 12/16/87
ACTING (Regional MB Coordinator)

Approved by: Robert Foster Date: 12-15-87
(Regional MB Disease Coordinator)

DISEASE CONTINGENCY PLAN

SENEY NATIONAL WILDLIFE REFUGE

SENEY, MICHIGAN

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Introduction

This plan provides an outline of general guidance for resolving a potentially hazardous disease outbreak to waterfowl that may occur on or in the vicinity of the Seney National Wildlife Refuge. This document serves as a ready reference source for background information, an inventory of personnel, equipment and resources available at the Seney National Wildlife Refuge.

Basic Refuge Data

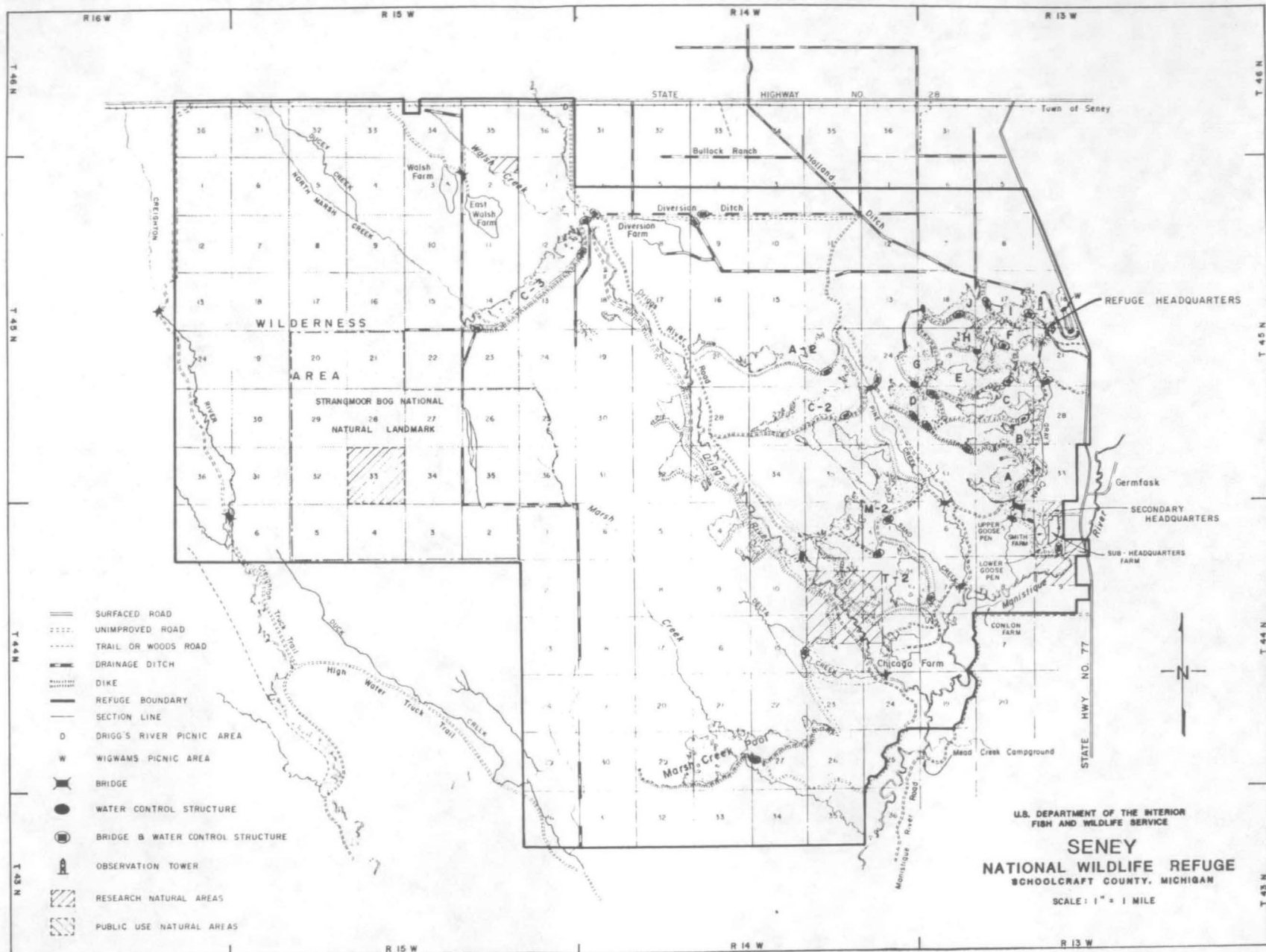
The Seney National Wildlife Refuge is located in the east central part of Michigan's Upper Peninsula. It is a part of what is known as the Great Manistique Swamp which is located in Schoolcraft County. Refuge headquarters is situated two miles north of Germfask on Highway M-77 and one mile west on the refuge entrance road.

The area is comprised of marshes and swamps interspersed with sandy knolls, ridges and plains. Twenty-one impoundments have been constructed on the developed portion of the refuge. The refuge was established in 1935 and presently contains 95,455 acres. Of this total, about 7,200 acres is open water, 61,000 acres marsh-muskeg, 27,000 acres uplands and 425 acres croplands. Most of the open water would not exceed two to three feet in depth.

Much of the marsh-muskeg type is not suitable waterfowl habitat being either too dry or covered with dense emergent vegetation. Upland areas are vegetated with northern forest associations and small grass sedge meadows.

Of the approximately 450 acres of Seney National Wildlife Refuge (NWR) which is considered to be cropland, 200 acres is farmed on a regular basis. Of the 200 acres farmed about 100 acres is in small grains, buckwheat or corn, and 100 acres is in hay. The remaining 250 acres is hay which has not been harvested in several years.

Refuge Maps



Disease History

Leucocytozoon disease is present in the Seney National Wildlife Refuge goose population. Leucocytozoon, a blood parasite, is transmitted by black flies (Simulium Spp.). This transmission takes place during the spring when adult geese have a relapse of the disease and are bitten by the black fly. The black fly vector in turn bites the recently hatched goslings which are then infected. Goslings which are younger than seven to eight weeks of age become debilitated, listless and unable to follow the adult birds. Death usually results. Older goslings appear to be relatively unaffected by the parasite. However, they become host to the parasite the rest of their lives.

During some years, the refuge loses virtually 100 percent of its recruitment of Canada geese to the parasitic disease. The somewhat cyclic nature of the disease has puzzled researchers. Records indicate losses of almost all goose recruitment during the years of 1944, 1951, 1955, 1960, 1964, 1968, 1972 and 1977. Researchers from the Michigan Department of Natural Resources, Rose Lake Wildlife Research Center, have worked with the refuge staff in efforts to solve this problem. The outlook is very hopeful.

Aspergillosis apparently takes a minor toll of goslings and possibly a few older birds each year. These losses were last confirmed in 1964 and 1965 during Glen Sherwood's 1965 study of the Seney Canada goose population.

No other recorded disease outbreaks have occurred on the Seney National Wildlife Refuge since 1935.

Disease Surveillance

Primary surveillance for disease outbreaks is carried out by all staff members during their normal daily routine throughout the refuge. In addition, spring and fall waterfowl censuses are conducted annually.

Upon discovery of a possible disease die-off or problem, the staff member making the discovery will notify the Refuge Manager. The Refuge Manager will assess the disease problem and notify the following individuals and/or agencies.

1. John Winship, Regional Wildlife Disease Biologist, at 612/725-3313
2. Richard Toltzmann, Regional Refuge Supervisor-Division I, at 612/725-4701
3. Field Diagnostician, National Wildlife Health Laboratory, at 608/264-5411
4. Steven Schmidt, Veterinarian for Rose Lake Wildlife Research Center, Department of Natural Resources, at 517/373-9358

Water Resources

Precipitation averages approximately 32 inches a year. Refuge water supplies for wildlife management purposes come from Holland Ditch, Clarks Ditch, Driggs River, Walsh Ditch and Marsh Creek. All refuge outflow enters the Manistique River at several points along the south refuge boundary.

The Seney National Wildlife Refuge Water Management Plan, on file at the refuge headquarters and the Regional Office in the Twin Cities, deals in detail with river flows, pool acreages, water control, etc. It is hereby made a part of this plan.

Refuge Resources

1. Personnel

The refuge is staffed with four natural resource professionals, a secretary, an automotive worker and two maintenance workers.

Other Fish and Wildlife Service personnel who are located in the state of Michigan include the staffs at: Shiawassee National Wildlife Refuge, Wildlife Assistance Office in East Lansing, Jordan River National Fish Hatchery, Pendills Creek National Fish Hatchery and Hiawatha Forest National Fish Hatchery. See Appendix A for further listings.

The State of Michigan Department of Natural Resources personnel from the nearby District Office located in Newberry are available to assist in any disease outbreak. They could respond to a disease emergency with a force of approximately 50 people. See Appendix B for further listings.

2. Equipment

See Appendix C

3. Communications

Proper communications is a "must" in conducting safe and harmonious activities. The refuge shall make optimum use of radios and telephone communication during disease control work.

Operation will be in accordance with the Michigan Department of Natural Resources General Procedures for Radio Communications publication. All personnel will become familiar with the operating procedure outline. In addition, operation of Federal frequency radios will be in accordance with Fish and Wildlife Service radio operating procedures. See Appendix C for radio equipment listing and individual staff member's call signs.

4. Automotive and Fuel Services

An automotive maintenance shop located at the refuge headquarters is available for repair and maintenance of vehicles and equipment. In addition, there is petroleum storage and a refueling station with a capacity of 1,000 gallons of regular gas, 1,000 gallons of unleaded gas and 500 gallons of diesel fuel.

5. Bird Hazing Equipment

The refuge has ten propane exploders and six propane bottlegas tanks. A bottlegas supplier located in Germfask could supply additional bottle-gas containers during an emergency. Additional propane exploders can be obtained from Horicon National Wildlife Refuge within 24 hours.

Two shotguns designed to use crackershells are available at the Seney NWR along with an approximate 750 rounds of crackershell ammunition.

Additional hazing equipment is available within 24 hours from the Service's Wildlife Assistance Office in Lansing, Michigan.

Supply Sources

The remote location of the Seney NWR requires that adequate supplies of most needed items and equipment be purchased by the Regional Office or at some other location where these supplies are more readily available. The Regional Pollution Response Coordinator has at his disposal two response trailers equipped to handle ecological and chemical emergencies. One or both trailers could be pressed into service during a disease emergency. These trailers are located at La Crosse, Wisconsin and Sandusky, Ohio. See Appendix D for equipment list.

Dry ice can be obtained from only one source in Michigan's Upper Peninsula.

City Sales
Lake Antoine Road
Iron Mountain, Michigan 49801

(906) 774-3555

They will deliver quantities of dry ice in excess of 250 pounds.

Lodging

Local: Fox River Motel
M-28
Seney, MI
(906) 499-3332

Seney Country Inn
M-28
Seney, MI
(906) 499-3376

Seney Motel
M-28
Seney, MI
(906) 499-3302

Manistique: 25 motels and 11 restaurants located a distance of 45 miles from the refuge are available

Newberry: 17 motels and 8 restaurants located a distance of 37 miles from the refuge are available

Food

Golden Grill Restaurant (catering)
M-28
Seney, MI
(906) 499-3323

Seney Country Inn Restaurant
M-28
Seney, MI
(906) 499-3376

Poor Boy Restaurant
M-28
McMillan, MI
(906) 293-3151

Eagle Nest Restaurant
M-77
Germfask, MI
(906) 586-9801

Working Sites

1. Clean Areas

The primary clean working area will be the refuge headquarters. Included in this site are the visitor center, refuge office and manager's residence. The office and visitor center have meeting rooms and two telephone lines. There is parking for approximately 35 vehicles. Both State and Federal radio communications are available.

2. Transition Area

This site includes the refuge shop and equipment area. A single phone line is available as well as both State and Federal radio communications. Water supplies are available for washing of equipment. Showers are available for personnel in the student and log cabins.

Contaminated Area

1. Primary Site

The subheadquarters which is located four miles south of the refuge headquarters should be considered first. The site has a three stall garage and office. Animal holding facilities and water are not available.

2. Secondary Site

The refuge storage site located 1/8 mile east of the refuge maintenance garage should be considered as a second site. The house of a refuge maintenance worker is located nearby to provide security to the site. A steel, eight stall shed is available for use. Water is not available.

Biological Information

1. Canada Geese

The first fall migrants arrive around September 10. The population peaks during the first two weeks in October. All geese have left the refuge by December 15. The 10 year average fall migration population by month is listed on the next page.

<u>Date</u>	<u>Numbers</u>
September 15-30	2216
October 1-30	7580
November 1-30	4245
December 1-15	55

Spring migration starts in late March and ends in early to mid-May. Peak spring populations for the past five years average 727 birds during the last week in April and the first week in May.

Seney NWR does not receive migrant goose use to any great extent in either spring or fall. Migrants which do use the refuge during the fall period usually come from the James and Hudson Bay areas.

The Seney resident flock migrates along a narrow corridor on the east side of Lake Michigan through western Indiana and eastern Illinois to Tennessee National Wildlife Refuge.

2. Ducks

First spring migrants arrive during early April peaking by mid-April. Migration out of the area is completed by late May. Fall build-up begins in late August and the majority of ducks are gone by mid-November. Production on the refuge is limited with ring-necked ducks and hooded mergansers producing the majority of young.

Peak Duck Numbers During Past 10 Years

<u>Year</u>	<u>Fall Peak</u>	<u>Spring Peak</u>
1973	4,560	990
1974	7,851	2,074
1975	6,169	1,252
1976	13,551	2,412
1977	12,050	2,331
1978	10,830	930
1979	9,100	1,720
1980	9,986	1,714
1981	15,252	2,105
1982	13,344	1,481

Duck migration routes have not been extensively studied so little information is available for duck migration patterns. It appears that the majority of migrant mallards, black and wood ducks migrate southeast on the east side of Lake Michigan through the Lower Peninsula into Ohio and Ontario then head toward the east coast. A few appear to travel southwest on the west side

of Lake Michigan into Wisconsin and Illinois. Local ring-necked ducks travel southeast to winter in Florida. Migrant blue-winged teal travel about due south apparently wintering on the southern U.S. coast, Mexico, Central and South America.

3. Endangered Species

The refuge has two endangered species. This includes about 10 bald eagles and an unknown number of eastern timber wolves. The eagles are resident to the refuge area about 11 months of the year. During the spring, summer and fall, the eagles use the refuge pools for fishing and hunting of migratory waterfowl. During winter months, eagles feed on carrion, small mammals and starved deer in nearby deer yards to the south of the refuge.

Wolves have been infrequently seen on the refuge during early winter and spring. It is likely that they use the refuge as part of their home range.

It is expected that during a large disease die-off both species would use the diseased animals for food.

Reporting

1. Accurate records will be kept following the initial report
2. Wildlife losses from disease will be reported in the appropriate refuge output report
3. A final report, Wildlife Disease Loss Report, will be submitted for each incident (instructions and format per 7 RM 17.16).

APPENDIX A

U.S. Fish and Wildlife Service
Bishop Henry Whipple Federal Building
Fort Snelling
Twin Cities, Minnesota 55111

Richard Toltzmann
Regional Refuge Supervisor-
Division I
(612) 725-4701

U.S. Fish and Wildlife Service
Bishop Henry Whipple Federal Building
Fort Snelling
Twin Cities, Minnesota 55111

Steven Wilds
Wildlife Biologist
(612) 725-4701

U.S. Fish and Wildlife Service
Bishop Henry Whipple Federal Building
Fort Snelling
Twin Cities, Minnesota 55111

~~John Winship~~ ~~State Biologist~~
Regional Disease Biologist
~~(612) 725-3313~~

Shiawasee National Wildlife Refuge
6975 Mower Road, RR 1
Saginaw, Michigan 48601

Joe W. Hardy
Refuge Manager
(517) 777-5930

U.S. Fish and Wildlife Service
Wildlife Assistance Office
310 Manly Miles Building
East Lansing, Michigan 48823

Leonard Schumann
Sr. Wildlife Biologist
(517) 337-6713

Jordan River National Fish Hatchery
Route 1, Box 64A
Elmira, Michigan 49730

Laurence C. Wubbels
Hatchery Manager
(616) 584-2461

Pendills Creek National Fish Hatchery
RR 1, Box 214
Brimley, Michigan 49715

Peter Drake
Hatchery Manager
(906) 437-5231

Hiawatha Forest National Fish Hatchery
RR 1, Box 214
Brimley, Michigan 49715

Marvin Johnson
Asst Hatchery Manager
(906) 248-5231

Marquette Biological Station
U.S. Fish and Wildlife Service
446 E. Crescent Street
Marquette, Michigan 49855

William Daugherty
Field Supervisor
(906) 226-6571

APPENDIX A

Ludington Biological Station
U.S. Fish and Wildlife Service
229 So. Jebavy Drive
Ludington, Michigan 49431

Robert Morman
Supervisor-Fishery Biologist

APPENDIX A

REFUGE PERSONNEL

Seney National Wildlife Refuge
HCR #2, Box 1
Seney, Michigan 49883

Refuge Headquarters
(906) 586-9851

Seney National Wildlife Refuge
HCR #2, Box 2
Seney, Michigan 49883

Donald N. Frickie
Refuge Manager
(906) 586-3144

Seney National Wildlife Refuge
HCR #2, Box 4
Seney, MI 49883

Margaret M. Anderson
Assistant Refuge Manager
(906) 586-3032

Rural Route 1, Box 91
Gulliver, MI 49840

James A. Kesel
Biologist
(906) 283-3292

Rural Route 1, Box 91
Gulliver, MI 49840

Deborah J. Kesel
Secretary
(906) 283-3292

Rural Route
Germfask, MI 49836

Lawrence Zellar
Automotive Worker
(906) 586-9860

Rural Route
Germfask, MI 49836

Glen C. Losey, Jr.
Maintenance Worker
(906) 586-3704

Seney National Wildlife Refuge
HCR #2, Box 3
Seney, MI 49883

Terrence B. Papple
Maintenance Worker
(906) 586-9825

APPENDIX B

STATE OF MICHIGAN

Wildlife Pathology Laboratory
Rose Lake Wildlife Research Center
Department of Natural Resources
8562 E Stoll Road
Rural Route 1
East Lansing, Michigan 48823

Steven Schmidt
Veterinarian

(517) 373-9358

District Office
Department of Natural Resources
309 W. McMillan Avenue
Newberry, Michigan 49868

District Wildlife Biologist

(906) 293-5131

Thompson Field Office
Department of Natural Resources
Route 1, Box 335
Manistique, Michigan 49854

Greg Stoll
Area Habitat Biologist

(906) 341-6917

Sault Ste. Marie Field Office
Department of Natural Resources
P.O. Box 798
Sault Ste. Marie, Michigan 49783

Tom Weise
Area Habitat Biologist

(906) 635-5281

Animal Health Unit
Department of Agriculture
305 Ludington
Escanaba, Michigan 49829

(906) 786-5462

Schoolcraft County Health Department
Courthouse
Manistique, Michigan 49854

(906) 341-5876

APPENDIX C

EQUIPMENT AND COMMUNICATIONS

Radio Repair Service

Normally all repair on Michigan Department of Natural Resources frequency will be done by the Newberry Station radio technician. Federal frequency radios will be repaired by commercial firms under an individual repair order.

Radio Identification Numbers

Radio identification numbers are assigned to permanent staff members at the Seney National Wildlife Refuge, rather than to vehicles, as follows:

ID-11 Headquarters, Base Station
ID-13 Deborah J. Kesel Secretary
ID-14 Glen C. Losey (JR), Maintenance Worker
ID-15 Terrence B. Papple, Maintenance Worker
ID-16 Lawrence Zellar, Automotive Worker
ID-17 Margaret M. Anderson, Assistant Refuge Manager
ID-20 James A. Kesel, Biologist
ID-21 Donald N. Frickie, Refuge Manager
ID-22

The office base units are Motorolas. The unit on Michigan Department of Natural Resources frequencies of 44.64 MHz and 44.72 MHz has a 20-foot antenna. The unit of Federal frequency of 34.83 MHz has a 60-foot antenna.

Portable Radios

State Frequency:

- . two 5 watt Motorola portable
- . two 15 watt General Electric Porta-Mobiles
- . two 1.5 watt Motorola Handi-Coms

APPENDIX C

Service Frequency:

- . four 1.5 watt Motorola Handi-Coms

Vehicle Radios

- | | |
|---|---|
| . 1976 Chevrolet pickup 4X4 | General Electric, 100 watts
(State frequency-44.64 MHz) |
| | Motorola Mobile, 100 watts
(Federal frequency-34.83 MHz) |
| . 1976 Dodge pickup 4X2 | Motorola Mobile, 100 watts
(Federal frequency-34.83 MHz) |
| . 1974 IHC pickup
4X4, 1 ton | General Electric, 100 watts
(State frequency-44.64 MHz) |
| | Motorola Mobile, 100 watts
(Federal frequency - 34.83 MHz) |
| . 1977 Chevrolet Sedan-Delivery | Motorola Mobile, 50 watts
(State frequency-44.64 MHz) |
| . 1978 Plymouth Volare
Station Wagon | Motorola Mobile, 100 watts
(Federal frequency-34.83 MHz) |
| . 1979 Chevrolet pickup 4X4 | General Electric, 100 watts
(State frequency-44.64 MHz) |
| | Motorola Mobile, 100 watts
(Federal frequency-34.83 MHz) |
| . 1979 Ford Fairmont
Station Wagon | Motorola Mobile, 100 watts
(Federal frequency-34.83 MHz) |
| . 1980 Chevrolet, LUV, pickup
4X4 | Motorola Mobile, 100 watts
(Federal frequency-34.83 MHz) |
| . 1980 Chevrolet, LUV
pickup 4X2 | Motorola Mobile, 100 watts
(Federal frequency-34.83 MHz) |
| . 1981 Ford F100 pickup 4X2 | General Electric, 100 watts
(Federal frequency-34.83 MHz) |
| . For future vehicles | Motorola Mobile, 50 watts
(State frequency-44.64 MHz) |
| | Motorola Mobile, 100 watts
(State frequency-44.64 MHz) |

APPENDIX C

Boats

- . One 24-foot motorboat
- . One 16-foot Boston Whaler, 85 hp Mercury
- . Three 16-foot sport boats with either 4.5 or 4 hp motors
- . Two canoes

Aircraft

A paved strip airport is located 11 miles south of the refuge at Blaney Park on M-77 for light aircraft. *Unusable*

Schoolcraft County Airport is located 5 miles east of Manistique, 30 miles southwest of the refuge, and has a paved runway.

Luce County Airport is located 2 miles east of Newberry on M-28, 32 miles east of the refuge, and has a grass runway.

USFWS SPILL RESPONSE TRAILER
INVENTORY I 123777
NATIONAL FISHERY RESEARCH LABORATORY
LA CROSSE, WISCONSIN

5 boxes	Plastic bags 27" X 11" X 42" (100/box)
3	Titan portable electric heaters
1	Universal dial scale
1	Hand scale (inside box for Universal dial scale)
1	Small First Aid Kit
1	Large First Aid Kit
1 roll	Disposal aprons (100/roll)
6	Westinghouse heating lamps
1	Markel portable electric heater 1500 watts
2	20-foot extension cords
6 pair	Scissors
1 box	3-gallon pails (12/box)
1 box	3-gallon pails (10/box)
4	Heavy duty hoses (50 feet/hose)
1 bundle	Large burlap bags (100 lbs)
1 bundle	Rags (50 lbs)
2	Heavy duty extension cords
11	Safety goggles (Cessco)
4 dozen	Socks (bird hoods)
4	Folding tables 72" X 30"

INVENTORY

Page 2

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12 boxes	Amber Lux liquid detergent (4 1-gallon containers/box)
4 bundles	Cardboard boxes 16" X 12" X 12"
1 box	44-gallon plastic garbage cans (4 cans/box)
1 box	Adhesive tape (12 10-yard rolls/box)
1	Utility strip
3	Lanterns
6	Batteries
2 boxes	Insulated gloves (1 dozen pairs/box)
2 boxes	Rubber gloves (1 dozen pairs/box)
3 pair	Size 10 steel toe boots
3 pair	Size 11 steel toe boots
2 pair	Size 9 steel toe boots
3 pair	Size 8 steel toe boots
1 pair	Size 8 chestwaders
1 pair	Size 9 chestwaders
1 pair	Size 10 chestwaders
2 packages	Heavy duty aprons (1 dozen/package)
1	Size 36 coverall (gray)
1	Size 38RG coverall (blue)
1	Size 38 coverall (blue and white)
2	Size 40 coveralls (gray)
1	Size 42L coverall (gray)
1	Size 42RG coverall (gray)
2	Size 44 coveralls (gray)
1	Size 46RG coverall (gray)

INVENTORY

Page 3

I 123777

3 sets	Small rubber rainsuits (jacket and pants)
4 sets	Medium rubber rainsuits
4 sets	Large rubber rainsuits
3	Long handled nets
1	Large bale rags
8	Brown plastic 1/2 bushel tubs
2	1200 watt hair dryers
1 package	400 Q-tips
5	Clamp style lamp holders
1	Tube KY lubricating jelly
1	Zodiac Mark II GR - 14' inflatable boat (6 man) including navigation lights, launching wheels, cover, bench seats, fuel tank seat box, and water- proof pouch
1*	Evinrude 25Hp manual start outboard motor
9	60cc Plastic syringes
19	12-14 French, 16 inch rubber catheters
10	Clinical thermometers (oral)
3 gross	Safety pins
5	1/2 oz. tubes opthalmic ointment
5	1-gallon containers of mineral oil
2	Bottles Hematest reagent tablets
1	1-pound container of A & D ointment
1	1-gallon container of Zephrein disinfectant
3*	Room thermometers

*Will be added in the near future

INVENTORY

Page 4

I 123777

25 SOS Manuals
4 HELP Manuals
4 Personal flotation devices
3 Shotguns
Cracker shells (250 rounds)
1 Tool box equipped with:

plyers
wrenches
screw driver
tape
knife
measuring tape
hammer
scissor
marker pens

Key for spare tire is located in the tool box
(taped to inside top)

Appendix D

USFWS SPILL RESPONSE TRAILER
INVENTORY I 123778
PLUM BROOK STATION
SANDUSKY, OHIO

5 boxes	Plastic bags 27" X 11" X 42" (100/box)
2	Titan portable electric heaters
1	Universal dial scale
1	Hand scale (inside Universal dial scale box)
1	Small First Aid Kit
1	Large First Aid Kit
1 roll	Disposable aprons (100/roll)
6	Westinghouse heating lamps
3	Extension cords (20 feet/cord)
1	Markel portable electric heater 1500 watts
6 pair	Scissors
1 box	Burlap bags (50/box)
1 bundle	Burlap bags (20/bundle)
2 boxes	3-gallon pails (12/box)
4	Heavy duty hoses (50 feet/hose)
1 bundle	Rags (50 lbs.)
2	Heavy duty extension cords
11	Safety goggles (Cessco)
4 dozen	Socks (bird hoods)
4	Folding tables 72" X 30"
12 boxes	Amber Lux liquid detergent (4 1-gallon containers/box)

Appendix D

INVENTORY

Page 2

I 123778

1 box	44-gallon plastic garbage cans (4 cans/box)
4 bundles	Cardboard boxes 16" X 12" X 12"
24 rolls	Adhesive tape (10 yards/roll)
2 boxes	Insulated gloves (1 dozen pair/box)
2 boxes	Rubber gloves (1 dozen pair/box)
3	Lanterns
5	Batteries
3 pair	Size 10 steel toe boots
2 pair	Size 9 steel toe boots
3 pair	Size 11 steel toe boots
3 pair	Size 8 steel toe boots
1 pair	Size 8 chestwaders
1 pair	Size 10 chestwaders
2 packages	Heavy duty aprons (1 dozen/package)
1	Size 36 coveralls (gray)
2	Size 38 coveralls (blue and white)
1	Size 38RG coveralls (blue)
3	Size 40 coveralls (gray)
1	Size 42L coveralls (gray)
1	Size 42RG coveralls (gray)
2	Size 44 coveralls (gray)

INVENTORY

Page 3

I 123778

4 sets	Small rubber rainsuits (jacket and pants)
3 sets	Medium rubber rainsuits
4 sets	Large rubber rainsuits
25	SOS Manuals
4	HELP Manuals
3	Long handled nets
1	Large bale rags
8	Brown plastic 1/2 bushel tubs
2	1200 watt hair dryers
1	package 400 Q-tips
5	Clamp style lamp holders
1	Tube KY lubricating jelly
1	Zodiac Mark II GR - 14' inflatable boat (6 man) including navigation lights, launching wheels, cover, bench seats, fuel tank seat box, and waterproof pouch
1	Evinrude 25 Hp manual start outboard motor
9	60cc plastic syringes
19	12-14 French, 16 inch rubber catheters
10	Clinical thermometers (oral)
3 gross	Safety pins
5	1/2 oz. tubes opthalmic ointment
5	1-gallon containers of mineral oil
2	Bottles Hematest reagent tablets
1	1-pound container of A & D ointment
1	1-gallon container of Zephrein disinfectant

INVENTORY

Page 4

I 123778

3	Room thermometers
4	Personal flotation devices
3	Shotguns
	Cracker shells (250 rounds)
1	Tool box equipped with:
	plyers
	wrenches
	screw driver
	tape
	knife
	measuring tape
	hammer
	scissor
	marker pens
	Key for spare tire located in the tool box (taped to the inside top)

APPENDIX E

Special ServicesFirst Aid

- . All refuge personnel are qualified for general first aid

Hospitals

- . Newberry Helen Newberry Joy Hospital
West Harrie Street
293-5181
- . Manistique Schoolcraft Memorial Hospital
Main Street
341-2163
- . Munising Munising Memorial hospital
Sand Point Road
387-4110

Ambulance Service

- . Newberry Luce County Ambulance Service
293-8253
- . Manistique City Ambulance Service
341-5445
- . Munising Bowerman - Halafax Ambulance Service
367-2400
- Alger County Ambulance Service
387-2121
- . Curtis Curtis Ambulance Service
586-9401

Doctors

- . Newberry Dr. W.F. Hicks Office: 293-3213 Residence:
Dr. R.D. Gibson Office: 293-5191 Residence: 293-5923
Dr. E.P. Javellana Office: 293-8487 Residence: 293-8563
Dr. J.P. Bender Office: 293-5757 or 293-8021
Residence: 293-3133

APPENDIX E

. Manistique Dr. John Clark, MD Office: 341-2153; Residence 341-4420
Dr. Ruben Fabrega, MD Office 341-2153; Residence 341-8039
Dr. Neil Grossnickle, MD Office 341-2153; Residence 341-6066
Dr. Richard Keskey, MD Office 341-5108
Dr. Robert Urban, MD Office 341-2153; Residence 341-6743
Dr. Duane Waters, MD Office 341-2153; Residence 341-5310
Summer Residence 341-5773
Dr. Merle Wehner, MD Office 341-2153; Residence 341-2425

State Police

. Manistique 341-2101
. Newberry 293-5151
. Munising 387-4550

Sheriff Department

. Manistique 341-5622
. Newberry 293-8431
293-5501
. Munising 387-2075
. Curtis 586-9694

Fire Department

. Germfask 586-9900
. Curtis 586-9601