

Missisquoi National Wildlife Refuge  
29 Tabor Road  
Swanton, VT 05488  
802/868 4781

Federal Relay Service  
for the deaf and hard-of-hearing  
1 800/877 8339

U.S. Fish and Wildlife Service  
1 800/344 WILD  
<http://northeast.fws.gov/>

April 2005

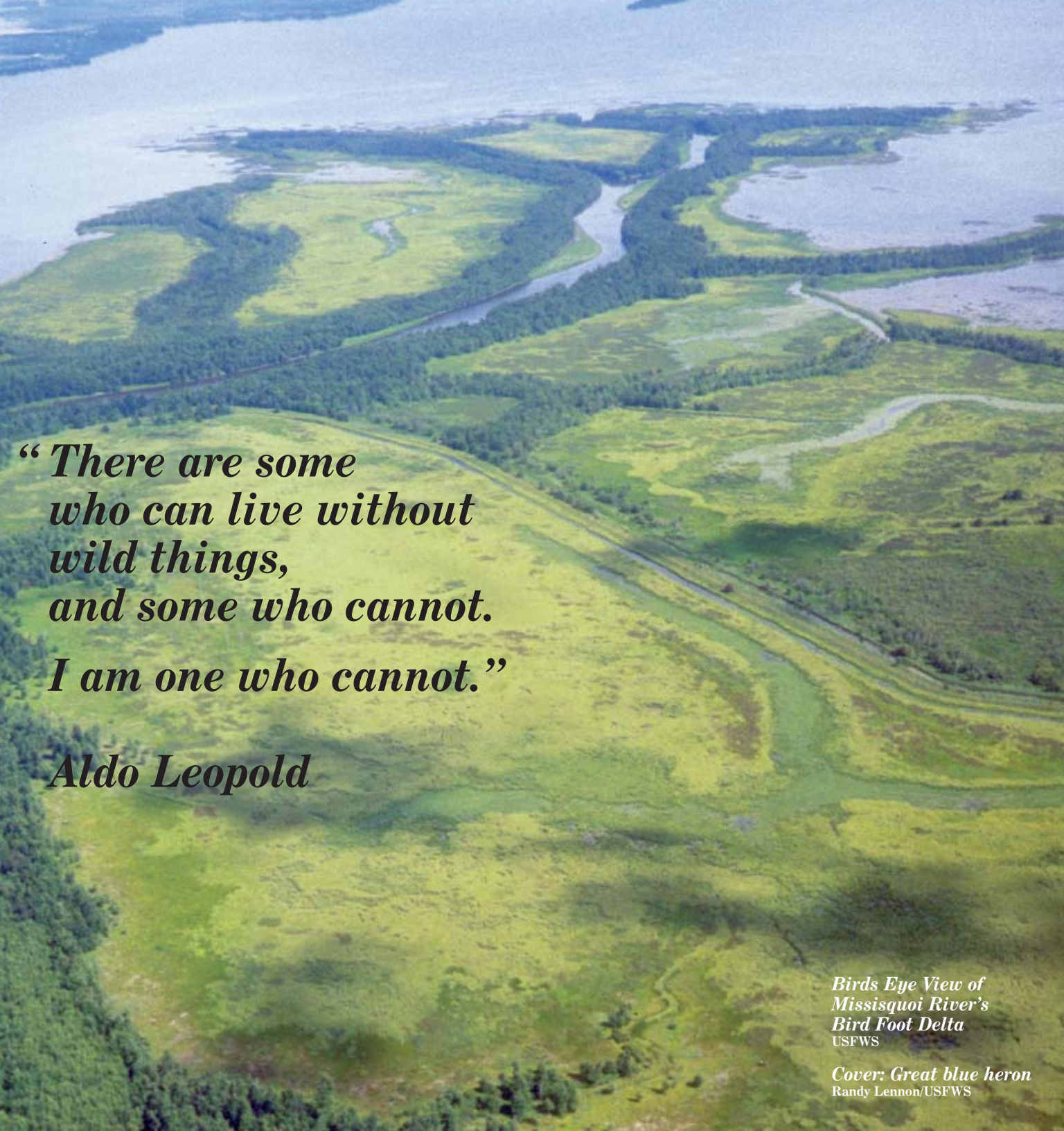


U.S. Fish & Wildlife Service

# Missisquoi

*National Wildlife  
Refuge*





*“There are some  
who can live without  
wild things,  
and some who cannot.  
I am one who cannot.”*

*Aldo Leopold*

*Birds Eye View of  
Missisquoi River's  
Bird Foot Delta*  
USFWS

*Cover: Great blue heron*  
Randy Lennon/USFWS



Scott Nielsen

*Black duck*

## Welcome



This goose, designed by J.N. "Ding" Darling, has become the symbol of the National Wildlife Refuge System.

Missisquoi is one of more than 530 refuges in the National Wildlife Refuge System administered by the U.S. Fish and Wildlife Service. The National Wildlife Refuge System is a network of lands and waters managed specifically for the protection of wildlife and wildlife habitat and represents the most comprehensive wildlife resource management program in the world.



Missisquoi National Wildlife Refuge, established in 1943, is located on the eastern shore of Lake Champlain near the Canadian border in Franklin County, Vermont. The refuge headquarters is two miles northwest of Swanton, on Route 78.

The 6,592-acre refuge includes most of the Missisquoi River delta where it flows into Missisquoi Bay. The refuge consists of quiet waters and wetlands which attract large flocks of migratory birds.

Upland areas of the refuge are a mix of open fields and a hardwood forest of American elm, white ash, white oak, silver and red maple. Both provide habitat for migratory songbirds, resident mammals and other wildlife.

## Wetlands Set Aside as a Migratory Stopover



S. Maslowski/USFWS

*Black duck flying*

Missisquoi refuge is one link in a chain of refuges for migratory birds that extends along the Atlantic Flyway between northern breeding grounds and southern wintering areas. The refuge provides important feeding, resting and breeding habitat for migratory birds, especially waterfowl, in the northern Lake Champlain section of the flyway. Refuge lands also protect the Shad Island great blue heron rookery, the largest colony in Vermont.

Here, the Missisquoi River meanders through beds of wild rice and stands of wetland plants such as arrowhead, bulrush and wild celery. In addition to 5000 acres of natural marsh, the refuge includes 1,200 acres of managed wetlands formed by three impoundments. These pools are a mix of open water and rich stands of emergent plants, shrubs and wooded swamps that offer food and cover for waterfowl. While refuge waters attract waterfowl most of the year, peak use is in the fall, when thousands of ring-necked ducks feed with thousands of green-winged teal, black ducks and mallards. More than 20,000 ducks visit the refuge each year.

## Making the Most of Wildlife Habitat

The management objectives of Missisquoi refuge are consistent with the objectives of the North American Waterfowl Management Plan, an international agreement by federal agencies, states, Canada and private















## Wood ducks

Tim McCabe/S.C.S.



# MISSISQUOI

## National Wildlife Refuge

-  Refuge Boundary
-  Refuge Area
-  Refuge Headquarters
-  Nature Trail
-  Boat Launching
-  Rest Rooms
-  Dikes
-  Water Control Structure
-  Area Closed
-  Parking
-  Wildlife Observation Area
-  Wetland
-  Old Railroad Passage
-  Private land



78



Belted kingfisher

groups to conserve, restore and enhance wetland habitat for waterfowl and other wetland-dependent migratory birds.

A variety of habitat management practices are used at Missisquoi refuge to benefit wildlife. Examples are listed below.

Water levels in refuge impoundments are manipulated to encourage the growth of waterfowl food and cover plants such as wild rice and buttonbush, while also providing good ground-nesting habitat for mallards, black ducks and teal.

Nearly 200 nesting structures are located throughout the Missisquoi delta. These nestboxes, cones and cylinders are helping wood ducks, common goldeneyes, hooded mergansers and black ducks increase their numbers by supplementing natural nesting habitat.

Haying, mowing and controlled burning are methods used by wildlife managers to keep open field from changing back to forest. Many wildlife species benefit from these open field habitats. Waterfowl may nest in the grassy cover, while bobolinks, songbirds and small mammals that use open fields provide a food source for birds of prey such as rough-legged hawks, American kestrels and red-tailed hawks.

Maintaining a healthy diversity of habitats at Missisquoi refuge requires the control of exotic pest plants such as purple loosestrife and common reed grass. If left unchecked, these non-native plants would outcompete native plants and reduce the value of refuge wildlife habitat for migratory birds.

Limited raccoon trapping is used to control predation on waterfowl and other ground-nesting birds. Trapping

also helps protect waterfowl impoundment dikes from muskrat and woodchuck burrowing, and from erosion due to beaver-induced flooding.

## Enjoying the Refuge

*Signs protect visitors, wildlife, and habitat*



*Wildlife Observation, Photography, and Hiking*



Recreational and educational activities consistent with the primary goals of protecting and managing wildlife habitat are available at Missisquoi refuge throughout the year. The refuge is open daily from dawn to dusk.

**Due to the need to protect refuge lands and wildlife resources, special regulations are in place regarding public access and use of refuge.**

The Black Creek and Maquam Creek interpretive trails provide good opportunities for waterfowl and wading bird observation and photography as the trails pass through 1 1/2 miles of wooded lowland. Plan to take along the trail guide and wildlife checklists, available in refuge leaflet boxes or upon request. Insect repellent may be useful during the warmer months. Visitors may also observe wildlife by walking along the 1 mile Mac's Bend Road from Louie's Landing to Mac's Bend next to the Missisquoi River. Two additional trails are located along Tabor Road. The Stephen J. Young Marsh trail is a

## *Mallard drake*





USFWS

### Recreational fishing

short walk from the parking area to the Marsh and the Old Railroad Passage Trail is 1 1/2 miles from the parking area, passing through Maquam Bog and ending at Maquam Bay. The Jeep Trail starts at Mac's Bend Boat Launch and follows the river for 2 1/2 miles to Missisquoi Bay.

### Boating



Boats and canoes may be launched from Louie's Landing all season. A second boat ramp, on Mac's Bend Road, is open from September – November. Boating is permitted along the Missisquoi River and in Lake Champlain where it borders the refuge. Portions of the refuge are closed to boaters, however; to protect wildlife habitat. Please watch for and respect "Closed Area" signs.

### Fishing



Refuge visitors may fish from the banks of the Missisquoi River. Fishing is also permitted from a boat on the Missisquoi River and Lake Champlain in areas that are not posted as closed to public access. A leaflet on fishing at Missisquoi refuge is available on request. Fishing access is available for disabled individuals at Louie's Landing

### Hunting



Portions of the refuge are open to waterfowl, deer, and small game hunting in accordance with state and federal regulations. Current regulations are available from the refuge office.

### Cross-country Skiing



Refuge nature trails are open for this activity.

Berry picking is permitted in the bog off Tabor Road during July and August. Plan to wear boots and carry a compass and insect repellent.

To protect wildlife and visitors, the following are prohibited and subject to state and federal prosecution:

- Camping
- Open fires
- Cutting firewood
- Removing plants or animals
- Littering (state fine: \$500)
- Snowmobiling
- Off-road vehicles
- Leaving vehicles overnight
- Abandoning wild or domestic animals on the refuge

Please note that dogs must be kept and controlled on a leash no longer than 10 feet.

### Pets



### U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service is the only agency of the U. S. Government whose primary responsibility is fish, wildlife and plant conservation. The Service protects a healthy environment for people, fish and wildlife, and helps Americans conserve and enjoy the outdoors and our living treasures. The Service's major responsibilities are for migratory birds, endangered species, certain marine mammals and freshwater and anadromous fish.

### More Information

We hope you enjoy your visit to Missisquoi National Wildlife Refuge. If you would like more information about this refuge, the refuge system or if you would like to volunteer, please contact:

Refuge Manager  
 Missisquoi National Wildlife Refuge  
 29 Tabor Road  
 Swanton, VT 05488  
 (802) 868-4781  
 missisquoi@fws.gov  
<http://missisquoi.fws.gov>