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

Deer © Bill Silliker, Jr.

Cover: Great blue heron Randy Lennon/USFWS





Welcome

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 hardwood mix of American elm, white ash, white oak, silver and red maple, and open fields. Both provide habitat for migratory songbirds, resident mammals, and other wildlife.

Wetlands Set Aside as a Migratory Stopover 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 500 acres of natural marsh, the refuge includes 1,800 acres of managed wetlands formed by three diked 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. Although refuge waters attract waterfowl most of the year, peak use is in the fall, when thousands of ring-necked ducks settle in to feed with thousands of green-winged teal, black ducks, and mallards. More than 20,000 ducks are anticipated annually.

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

Wood ducks John and Karen Hollingsworth/USFWS





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 areas from changing back to woodland over time. 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

Enjoying the Refuge

woodchuck burrowing, and from erosion due to beaver-induced flooding.

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.

Wildlife observation, photography, and hiking

The Black Creek and Maquam Creek interpretive trails provide good opportunities for waterfowl and wading bird observation and photography as the trails pass through 11/2 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 Mac's Bend Road, next to the Missisquoi River.

Boating

Boats and canoes may be launched from First Landing (Louie's Landing) all season. A second boat ramp, on



Mallard USFWS



 $\underset{\rm USFWS}{\it Recreational fishing}$

Mac's Bend Road, is only open from September 1 until the end of the waterfowl hunting season in December. 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.

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.

Blueberry picking

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.

Frog picking

This activity is permitted from July 15 to September 30 in the mowed refuge fields along Route 78 and Mac's Bend Road. To avoid overharvesting, the limit has been set at 12 frogs per person per day. A valid Vermont hunting license or a combination hunting/fishing license is required.

To protect wildlife and visitors, the following are prohibited:

- 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.

We hope you enjoy your visit to Missisquoi National Wildlife Refuge. If you have further questions, please stop at the refuge office or write to:

Refuge Manager Missisquoi National Wildlife Refuge 371 North River Street Swanton, VT 05488-8148 Telephone: (802) 868-4781 Missisquoi National Wildlife Refuge 371 North River Street Swanton, VT 05488-8148 802/868 4781

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