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

U.S. Fish & Wildlife Service 1 800/344 WILD http://www.fws.gov

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Oxbow

National Wildlife Refuge





"When one tugs at a single thing in nature, he finds it attached to the rest of the world."

—John Muir



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



Belted kingfisher

Welcome

The winds of change blow through the history of a landscape now known as Oxbow National Wildlife Refuge. Here, where farmers once tilled fertile flood plain soils and, later, soldiers trained, nature has reasserted itself. A place set aside for wildlife, Oxbow is a place where a visitor can witness the wonder and diversity of the natural world.



Beaver

Located just 40 miles west of Boston, the 1,667-acre refuge lies along almost eight miles of the Nashua River in north-central Massachusetts. Within its boundary is a diverse array of habitats beneficial to wildlife: wetlands, forested uplands, old fields, oxbow ponds, and, of course, the river itself. The U.S. Fish and Wildlife Service manages the refuge for a variety of wildlife species, with a special emphasis on migratory waterfowl and birds that are dependent on grass/shrubland habitat.

Oxbow is one of eight national wildlife refuges that compose the Eastern Massachusetts National Wildlife Refuge Complex. These eight ecologically diverse refuges include Assabet River, Great Meadows, Mashpee, Massasoit, Monomov, Nantucket, Nomans Land Island and Oxbow. The refuges include inland and coastal wetlands, forests, grasslands, and barrier beaches that provide important habitat for migratory birds, mammals, reptiles, amphibians and plants.

Oxbow National Wildlife Refuge is one of more than 545 refuges in the National Wildlife Refuge System, administered by the U.S. Fish and Wildlife Service. The National Wildlife Refuge System is the only network of lands and waters in the world managed specifically for the protection of wildlife and wildlife habitat. Units of the system stretch across the United States from northern Alaska to the Florida Keys, and include small islands in the Caribbean and South Pacific. The character of the refuges is as diverse as the nation itself.

Becoming a Refuge

At the turn of the century, the area that is now Oxbow National Wildlife Refuge was rich farmland. For generations, one family owned a large tract of land extending from the present Route 2, southward along the Nashua River to Bolton Flats. Field crops and orchards were abundant. In the early 1800s a carriage road, known as the Union Turnpike, ran east-west through what is now refuge land, carrying people and goods to local communities. Its remnants can be seen along one of the refuge trails.

In 1917, Camp Devens was established, later to become Fort Devens. The Fort was carved from the towns of Harvard, Lancaster, Ayer and Shirley. Oxbow National Wildlife Refuge was established through a number of land transfers from the Department of Defense to the U.S. Fish and Wildlife Service, beginning in 1974. The Service acquired an additional 120 acres in the Town of Harvard in 2001 and will continue to work with partners to protect additional wildlife habitat in the area.



 \mathbb{E}^{d} Moses/USFWS

What is in a Name?

Oxbow NWR gets its name from the oxbow ponds that formed as the meandering Nashua River changed its course over the centuries. These ponds, the river, wetlands, and upland habitat now provide excellent wildlife habitat for a variety of birds, mammals, reptiles, amphibians and invertebrates.



Wood duck

Working for Wildlife

National wildlife refuges exist to benefit wildlife. Refuge managers at Oxbow are working to help migratory birds and other wildlife in a number of ways:

Managing for native species

Wetlands are among the most valuable types of wildlife habitat. Some of Oxbow's wetlands are being invaded by non-native plants; the most obvious and abundant of these is purple loofestrife. The refuge is attempting to control purple loosestrife by releasing host-specific beetles – insects that feed only on this invasive plant and pose no threat to the wetland ecosystem. The impacts of other invasive plants such as common reed (*Phragmites*) will require further research before managers can determine the need or a means to control them.

Baseline wildlife surveys

Refuge biologists are conducting a number of population surveys and inventories focusing on American woodcock, marsh birds, breeding birds, frogs and toads. Research partners provide refuge managers with additional data. All of this information will help to determine future wildlife and habitat management efforts.



Maintaining open field habitat

Managing for species diversity

Open fields are particularly valuable for a number of migratory bird species. Refuge staff maintain 25 to 30 acres of presently existing old field/shrub habitat by mowing every three to five years. Managers are also working to maintain wetlands valuable habitat for a wide array of species. The extensive and regionally significant wetlands occurring in and near the refuge, including their associated tributary drainages and headwaters, have been listed as a priority for protection under the North American Waterfowl Management Plan and the Emergency Wetlands Resources Act of 1986. The refuge's large population of beavers play a natural role in creating and maintaining wetlands.

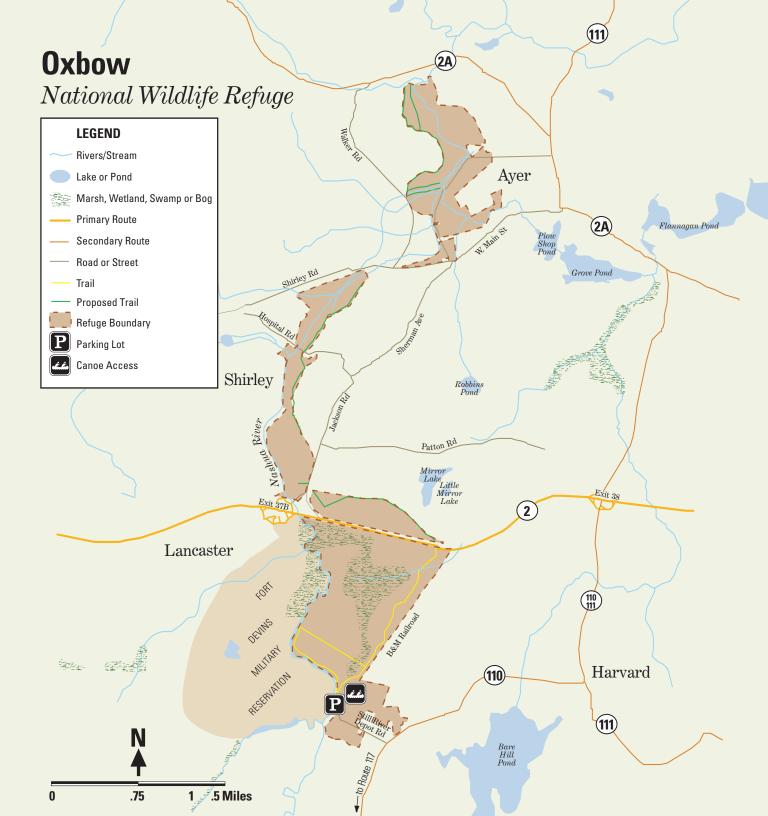
Protecting rare species

A number of plant and animal species rare in Massachusetts occur at Oxbow. The refuge plays a vital role in protecting these various organisms by safeguarding their habitats and by supporting important research. Managers maintain nesting habitat for the Blanding's turtle, which is considered by the state to be threatened in Massachusetts.

Blanding's turtle



ruce D. Flaig





Canoeing

Enjoying the Refuge

Opportunities for wildlife dependent recreation abound at Oxbow. Wildlife observation, photography, and nature study are popular year-round. A twomile self-guided nature trail begins at the parking area, follows the riverbank, crosses two oxbow ponds. and returns along the tank road. Benches and a photoblind are located along this trail. Visitors will observe plenty of evidence of the industrious beaver, and other wildlife. Crosscountry skiing and snowshoeing are popular winter activities. A canoe launch is available adjacent to the parking lot. Use is restricted to daylight hours.

A current schedule of refuge interpretive programs can be found on the refuge web site (see address on back cover).

The refuge is currently open to hunting, in accordance with Massachusetts state laws. Permitted species are white-tailed deer, waterfowl, woodcock, ruffed grouse, turkey, snipe, gray squirrel, and cottontail rabbit. Use of federally approved lead-substitute shot is required for all seasons except

turkey hunting.

Hunting:

Whitetail deer



Making Connections

Oxbow is a place where visitors experience nature on its own terms. Barriers that exist between people and wildlife in developed areas are conspicuously absent here. The refuge provides a setting where one can explore and discover personal connections to the natural world.

Starflower



The refuge is serving as an outdoor classroom for Worcester students participating in the Urban Education Program. The goals of the program are to provide students with meaningful, hands-on learning experiences both on the refuge and in their own urban environments—experiences that may move some of them to pursue environmental careers.

Our Friends

The refuge is fortunate to have the support of a dedicated group of people called *The Friends of the Oxbow*National Wildlife Refuge. The group was formed in 1998 to support the Service, and to encourage individuals to actively participate in helping protect refuge resources. The friends have been active in funding and supporting the Urban Education Program, assessing the biodiversiy of refuge resources, conducting cleanups of the Nashua River and many other programs.

Environmental education at Oxbow NWR



Matt Poole/USFWS

Wildlife Watching Tips

Dawn and dusk are the best times to see wildlife.

Observe from the sidelines. Leave "abandoned" young animals alone. Its parent is probably close and waiting for you to leave. Do not offer snacks; your lunch could disrupt wild digestive systems.

Use binoculars or a long lens for a closer look.

Try sitting in one good location. Let wildlife get used to your presence. Many animals that have hidden will reappear once they think you are gone. Walk quietly and remain in designated areas, being aware of sounds and smells. Often you will hear more than you will see.

Teach children the value of quiet observation. Other wildlife watchers will appreciate your consideration.

Look for animal signs. Tracks, scat, feathers and nests left behind often tell interesting stories.



A Few Simple Rules

- The section of the refuge north of Route 2 is presently closed to public access. Check refuge Web site or call the refuge complex headquarters to see if proposed trails are open to public use.
- Public use of designated trails within the southern unit of the refuge for nature study, hiking, and photography is permitted from one-half hour before sunrise to one-half hour after sunset.
- There are no picnic areas or campsites.
- Pets are not allowed on the refuge.
- Motorized vehicles and bicycles are restricted to the parking area and its access road only.
- Horses are not permitted in the refuge.
- Camping, fires, and swimming and fishing in refuge lakes and ponds is prohibited. River fishing is permitted.
- The disturbance, destruction, or removal of wildlife, vegetation and facilities are prohibited.
- The area was once used for military training. The possibility exists that unexploded ordnance could be present. Do not touch any unusual metallic objects you may discover, but report them to the refuge manager immediately. Army vehicles still occasionally transit the refuge maintenance road from Route 2 to Still River Depot Road. Please be cautious in their presence.

Red-winged blackbird



This is your refuge to enjoy. Please respect the wildlife and other visitors. Remember to take only memories and leave only footprints.



Wood frog

Getting There

From Route 2, take Exit 38 (Route 110/111) south toward Harvard; bear right to stay on Rt. 110 at Harvard Center; and, turn right onto Still River Depot Road at the Still River Post Office. The refuge parking area is at the end of Still River Depot Road, past the railroad tracks.

Green-winged teal

