

Eastern Massachusetts National Wildlife Refuge Complex contains eight of more than 560 refuges in the National Wildlife Refuge System which is 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. Units of the system stretch across the United \overline{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.

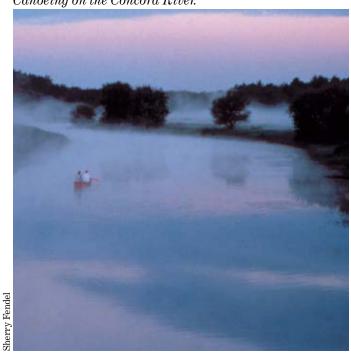
Welcome to the Eastern Massachusetts National Wildlife **Refuge Complex**



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

Situated along the Atlantic Flyway in Massachusetts, the Eastern Massachusetts National Wildlife Refuge Complex is comprised of eight ecologically diverse refuges. The eight separate refuges include inland and coastal wetlands, forests, grasslands, and barrier beaches that provide important habitat for migratory birds, mammals, plants, reptiles, and amphibians. The U.S. Fish & Wildlife Service manages these areas to conserve and protect a diversity of native wildlife habitats and species. The refuge complex encompasses several endangered and threatened species, the only federally designated Wilderness Area in Southern New England, one structure on the National Register of Historic Places, and a National Wild and Scenic River.

Canoeing on the Concord River.



What is a National Wildlife Refuge?

Eastern Massachusetts National Wildlife Refuge Complex (NWR) consists of eight of the more than 560 refuges in the National Wildlife Refuge System administered by the U.S. Fish and Wildlife Service. The National Wildlife Refuge System is charged with maintaining more





Piping plover at Monomoy NWR.



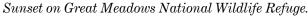
than 150 million acres of habitat for endangered species, over 700 avian species, 220 mammalian species, 250 reptilian and amphibian species, anadromous fish and much, much more.

Wildlife Management

Wildlife management within the complex focuses on creating and maintaining productive habitat for a healthy diversity of species. Management tools include exotic plant control, barrier beach management, avian diversity management, and water level manipulation. Management activities can be as simple as moving old fields, which provide homes for birds and butterflies, or as involved as carefully timed draw-downs of refuge pools. Exotic plant control helps maintain the natural diversity found in wetland and upland communities. Water level manipulation can change the habitat and provide food and



Life in a sea of green.





Paul Olsen

Great blue heron in a sea of water chestnut.



Exotic Plant Management cover for fish and wildlife. Exotic, non-native, invasive plants are a major threat at most of the refuges in the complex. At Great Meadows NWR, two such plants are purple loosestrife and water chestnut. These

exotic plants have practically taken over many of the refuge wetlands and waterways because natural predators are not present in the United States to keep the plants in balance.

Many people agree that purple loosestrife is an attractive plant with its purple flowering stalk. But loosestrife has little to no value to wildlife and dominates wetlands where cattails once flourished. After a decade of research, scientists have found that beetles native to the plant's European habitat are one of the most successful control methods for loosestrife. The release of weevils and beetles seems to be the best management solution. They feed only on purple loosestrife. With the use of these weevils and beetles, we have made progress controlling loosestrife but more remains to be done.

Controlling water chestnut is also difficult. This plant forms a thick green mat atop open water in the summer. Currently, Eastern Massachusetts NWR Complex is managing water chestnut by lowering water levels in refuge pools when possible. This practice is expected to minimize the water chestnut population while encouraging the growth of plants such as millet and smartweed, which are beneficial to wildlife. We also work with neighboring towns to remove water

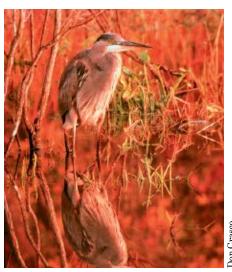
Endangered Species Management chestnut from the Sudbury River. Several barrier beaches are found in the Eastern Massachusetts NWR Complex. These areas are used by a number of threatened and endangered species and are major



Monomoy NWR Beach.

> stopover spots for migratory birds. Intensive management efforts have been underway at Monomoy NWR for many years to increase piping plover and roseate tern nesting success. A restoration project that began in 1996 has increased the availability of nesting habitat for birds protected by the Endangered Species Act on a portion of the refuge. This management has encouraged gulls to nest in other parts of the refuge so they would not compete with less abundant birds for nesting space. Almost immediately after the project began, an increase was seen in the number and diversity of nesting

Reflections of great blue heron.



Oon Crasco

Eastern Massachusetts NWR Complex Assabet River National Wildlife



Refuge

species in the management area. Transferred to the U.S. Fish and Wildlife Service from the U.S. Army in 2000, the 2,220-acre Assabet River NWR is located in the towns of Maynard, Stow, Sudbury, and Hudson. The refuge provides wildlife with a diversity of upland and wetland habitats. The refuge complex visitor center is located at this refuge. Wildlife observation and photography are allowed on 15 miles of trails.

Directions: The main entrance is on Hudson Road in Sudbury, 3 miles west of the town center. The north entrance is off White Pond Road in Stow, about 1 mile south of Rte. 117. The east entrance is at the end of Old Marlborough Road in Maynard, MA

The first refuge in the complex, Great Meadows NWR consists of two main units along 12 miles of the Sudbury and Concord Rivers. The original 250 acres were donated by local resident Samuel Hoar for the conservation of migratory waterfowl. Today this 3,800-acre refuge is composed of freshwater wetlands and upland areas that noted ornithologists have called some of the best inland birding sites in all of Massachusetts. Trails are available at both units.

The complex's main office is located at Great Meadows' Sudbury Unit.

Directions to Sudbury Unit: To reach the headquarters at Weir Hill Road, follow Route 27 (1.7 miles) from Wayland, turn right onto Water Row Road. Follow Water Row Road (1.2 Miles) to the end, and turn right onto Lincoln Road. Travel 1/2-mile, then

 $\begin{array}{c} Great\ Meadows \\ National\ Wildlife \\ Refuge \end{array}$



Eastern Phoebe



Lily pads with water chestnut.



turn left onto Weir Hill Road. *Directions to the Concord Unit:* Travel to this area by following Route 62 east from Concord Center toward Bedford. After approximately one mile, turn left onto Monsen Road. Continue on Monsen Road until you see the refuge entrance on your left. Restroom facilities are available.

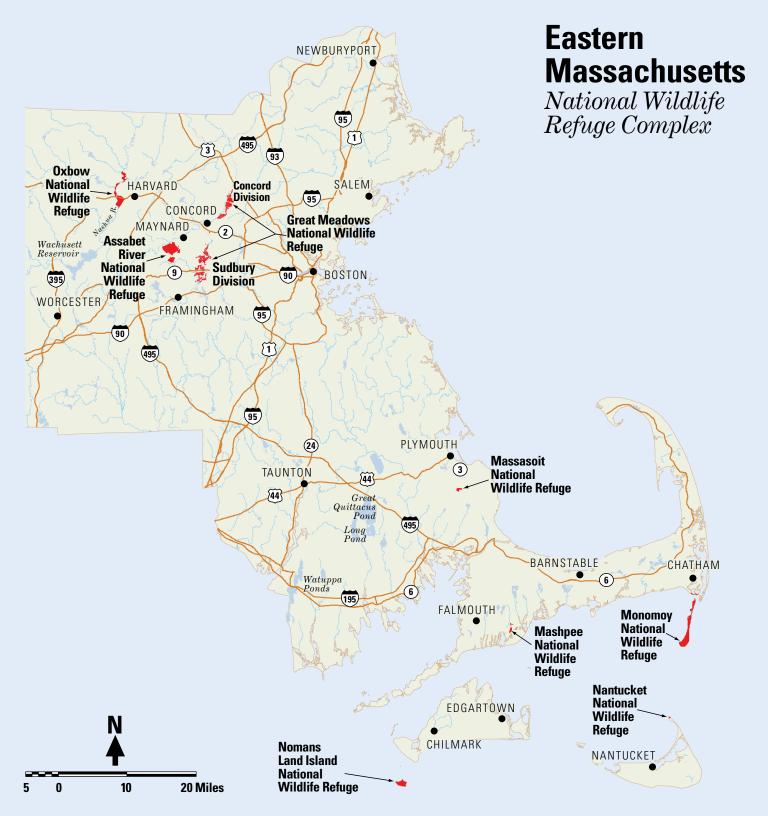
Mashpee National Wildlife Refuge

Located in the towns of Mashpee and Falmouth, this refuge will total 5,871 acres when complete, only a small percentage of which will be owned by the Fish and Wildlife Service. Currently, about 300 acres are in FWS ownership. Managed through a unique partnership among eight federal, state and private conservation groups, this Cape Cod refuge preserves thousands of acres of magnificent salt marshes, cranberry bogs, Atlantic white cedar swamps, freshwater marshes, and vernal pools. It provides habitat for

 $Osprey\ nesting\ at \\ Mashpee\ NWR.$



Cynthia Cronig





Snapping turtle

migratory waterfowl, songbirds, shorebirds, raptors, red fox, and white-tailed deer. Both educational and recreational activities are offered by several partnership groups including the Waquoit Bay National Estuarine Research Reserve.

Directions: Take Route 28 east to Route 151 east to Mashpee Commons. At the rotary take Great Neck Road south to Jehu Pond Conservation area parking lot. There are public use areas on several of the partner's properties.

Silhouette at sunset.



Massasoit National Wildlife Refuge

Located in Plymouth and managed cooperatively with the Massachusetts Division of Fisheries and Wildlife, this 208-acre refuge is home to the Northern red-bellied cooter, a federally endangered species. Research, monitoring, and recovery efforts for the turtle takes place at the refuge, and to protect this endangered turtle, the refuge is closed to public access.



Least Tern at Monomoy NWR.

Monomoy National Wildlife Refuge

Located on the elbow of Cape Cod, in Chatham, this refuge is made up of 7,244 acres of barrier beach, sand dunes, freshwater ponds, and saltwater marshes. Monomov NWR encompasses the only federally designated Wilderness Area in southern New England. Parts of the refuge are seasonally closed to the public to protect habitat for nesting and feeding birds. The trails provide visitors an opportunity to see a large diversity of plants and animals. Monomov NWR is renowned for its ability to support a wide variety of bird species. Its barrier beaches serve as a major stopover during the migration along the Atlantic Flyway. *Directions*: To reach the headquarters on Morris Island, take U.S. Route 6 east to State Road 137, follow SR137 south, to State Route 28 east, follow Rt 28 through Chatham to Chatham Lighthouse and Coast Guard station. Take the first left after the lighthouse, then the first right. Follow Morris Island Road to signs for the refuge on the left.

Nantucket National Wildlife Refuge

Located at the tip of Great Point on Nantucket Island, this 24-acre refuge provides surf fishing, wildlife observation, and summer interpretive programs. The refuge is managed cooperatively with The Trustees of Reservations. The barrier beach habitat at Nantucket NWR provides habitat for piping plovers, migratory waterfowl, and shorebirds. Parts of the refuge are seasonally closed to the public to protect habitat for nesting, feeding, and resting birds. The refuge also provides seasonal access to some of the best saltwater fishing in the northeast.

Directions: The refuge is located approximately six miles from the end of Wauwinet Road at the northern tip of Great Point on Nantucket, and is only accessible by vehicle; oversand vehicle permits must be purchased by

Nantucket Great Point Lighthouse.



Nomans Land Island National Wildlife Refuge The Trustees of Reservations. Just off the coast of Martha's Vineyard, these 628 acres of upland and wetland habitat support many migratory bird species including the peregrine falcon during its fall migration. Due to its prior use as a bombing range and the possibility of unexploded ordnance, the island is closed to the public.



 $Blandings\ Turtle$

Oxbow National Wildlife Refuge

Situated along the Nashua River in Harvard, Ayer, Shirley, and Lancaster, this 1,667-acre refuge is made up of freshwater wetlands. More than 5 miles of walking trails takes visitors along the river bank, across oxbow ponds, and through beaver habitat.

Dragonfly



Directions: The refuge can be reached by taking Route 110 south from Harvard Center for 1.8 miles and turning right onto Still River Depot Road. The refuge entrance and parking lot are across the railroad tracks and adjacent to the river. A new facility is located on Hospital

Opportunities for People



Student field trip and outdoor classroom with USFWS volunteer Bob Reed.

A Few Simple Rules









Road in Devens as well.

At many of our refuges, opportunities for public enjoyment of wildlife and wildlife habitat through environmental education and interpretation are provided.

Public support and involvement are essential elements for a successful refuge. Volunteer and friends groups at individual refuges play a vital role in their success. To get involved, call or visit your local national wildlife refuge and tell them you want to help preserve your national treasures.

All persons using the refuges are asked to comply with local, state, and federal laws, regulations, and ordinances, as well as with any refuge-specific regulations. For more information, contact the headquarters.

Use of designated trails within the refuge for nature study, hiking and photography is permitted from one-half hour before sunrise to one-half hour after sunset.

The refuges are closed to all domestic pets. *No dogs or horses are permitted.*

Bicycles and motorized vehicles are restricted to the entrance roads and parking areas.

Camping, building campfires, swimming, and ATVs/ORVs are not permitted.

Hunting is available at Assabet River, Great Meadows, and Oxbow NWR. Please contact refuge headquarters for specific regulations. Not all parts of these refuges are open to hunting and hunt seasons are limited. A refuge permit is required.



Boating and fishing are allowed in the Concord, Sudbury, and Nashua Rivers, but not in refuge pools. Canoeing, kayaking and fishing are allowed at Puffer Pond at the Assabet River NWR. Surf fishing is allowed at Nantucket and Monomoy NWRs.



The disturbance, destruction, or removal of wildlife, vegetation, and facilities are prohibited.

This is your refuge, but not only yours. Enjoy it, but please do nothing to harm it.

For Further Information, Please Contact:

Eastern Massachusetts National Wildlife Refuge Complex 73 Weir Hill Road Sudbury, Massachusetts 01776 978/443 4661 978/443 2898 Fax

Office Hours

Visitor Center Hours Monday-Friday, $8{:}00~\mathrm{am}$ to $4{:}00~\mathrm{pm}$

Thursday-Sunday, 10:00 am to 4:00 pm located at 680 Hudson Road, Sudbury, MA 01776

Hearing impaired may call the Massachusetts Relay Service at: 1 800/439 2370.

Buttonbush















Dawn and dusk are the best times to see wildlife.

In warmer climates, little is moving on hot summer afternoons or on windy days.

Observe from the sidelines. Leave "abandoned" young animals alone. A parent is probably close by waiting for you to leave. Don't offer snacks; your lunch could disrupt wild digestive systems.

Cars make good observation blinds. Drive slowly, stopping to scan places wildlife might hide. Use binoculars or a long lens for a closer look.

Try sitting quietly 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 in designated areas, being aware of sounds and smells. Often you will hear more than you will see.

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

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







LEGEND



Rivers/Stream



Cranberry bog



Trails



Lake or Pond



Marsh, Wetland, Swamp or Bog



Primary Route



Road or Street



Sudbury Unit



Concord Unit



Refuge Boundary



Refuge Headquarters



Parking Lots



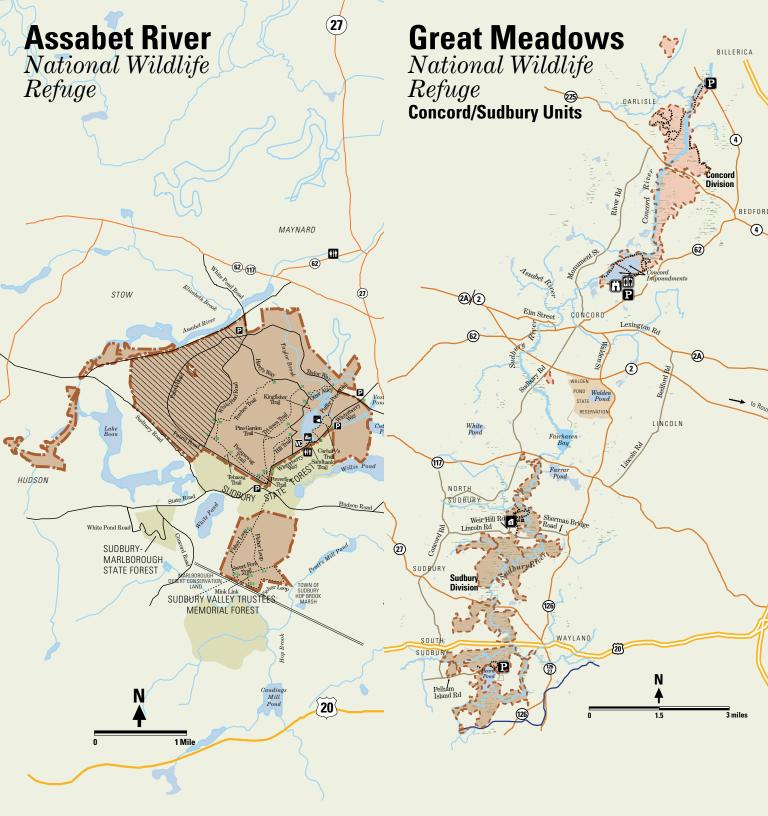
Heated Comfort Station

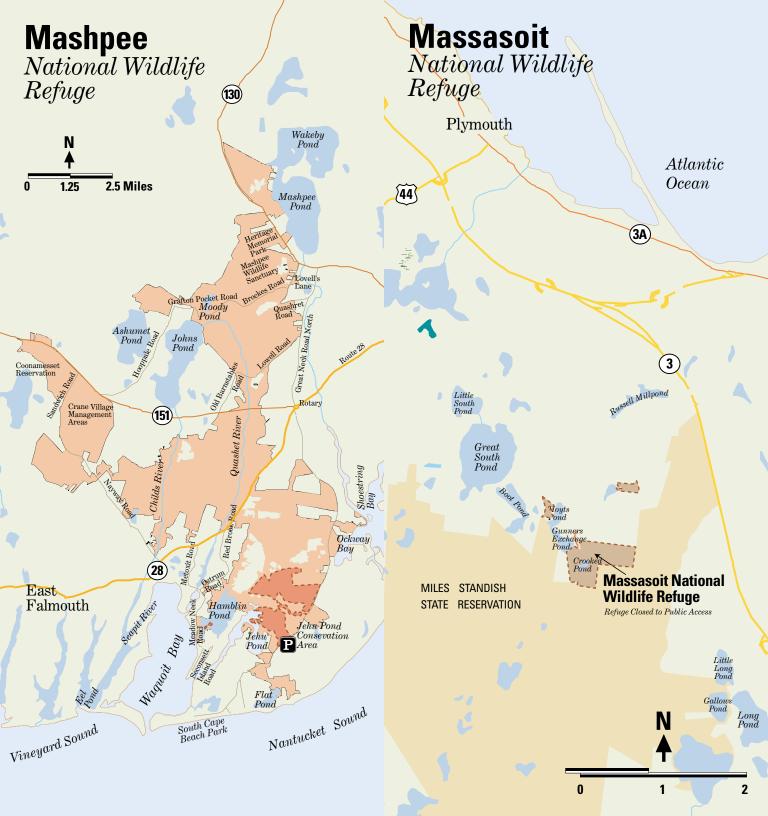


Observation/Photo Blind

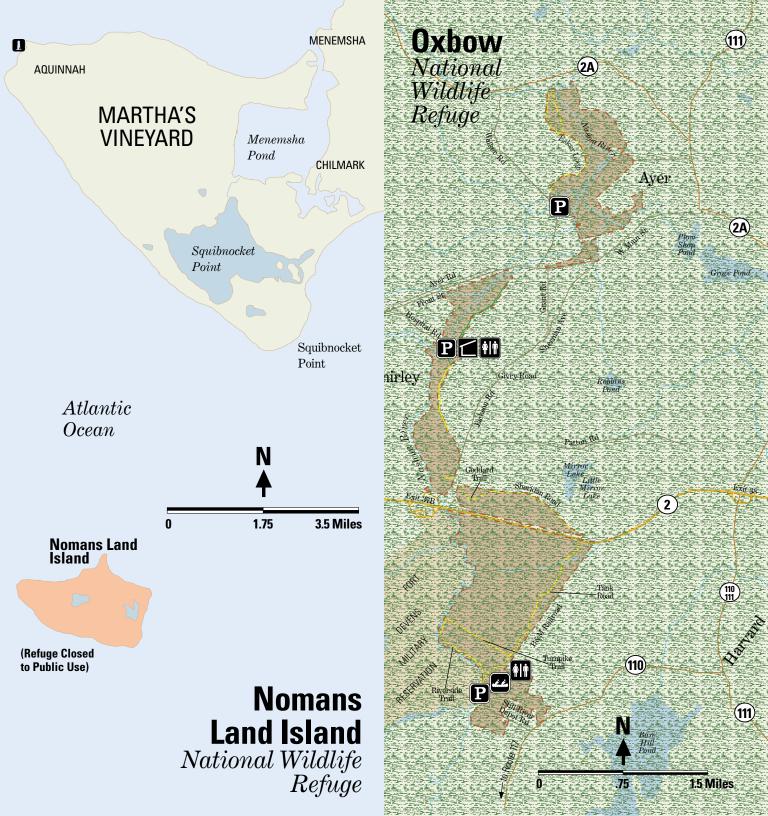


Canoe/Boat Launch









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Sudbury, Massachusetts 01776
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978/443 2898 Fax
r5rw_emnwr@fws.gov
www.fws.gov/northeast/easternmanwrcomplex

Massachusetts Relay Service 1 800/439 2370

U.S. Fish & Wildlife Service http://www.fws.gov/

For Refuge Information 1 800/344 WILD

September 2014

