

U.S. Fish & Wildlife Service

Monomoy National Wildlife Refuge
30 Wikis Way
Chatham, MA 02633
508/945 0594
508/945 9559 Fax
r5rw_mnwr@fws.gov
<http://www.fws.gov/refuge/monomoy/>

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://www.fws.gov>

September 2019



Monomoy

National Wildlife Refuge



Piping plover
Yianni Laskaris/USFWS



“Wilderness is a place where the wild potential is fully expressed; a diversity of living and nonliving beings flourishing according to their own sorts of order...to speak of wilderness is to speak of wholeness.”

—Gary Snyder



Greater Yellowlegs during fall migration, South Monomoy Island
Sarah E. Devlin/USFWS

Welcome



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

Sand stretches for eight miles off the elbow of Cape Cod, forming the barrier islands of North Monomoy, South Monomoy, and Minimoy. Here, among the varied habitats of ocean, dunes, salt and freshwater marshes, and ponds, lies the 7,604-acre Monomoy National Wildlife Refuge. Established in 1944, the refuge provides important nesting and feeding habitat for migratory birds, including the federally threatened piping plover and red knot, and the endangered roseate tern. Visitors to this wilderness refuge encounter a very special place—a sanctuary that supports an amazing diversity of wildlife and plant species.

Monomoy is one of eight national wildlife refuges composing the Eastern Massachusetts National Wildlife Refuge Complex. These ecologically diverse refuges include Assabet River, Great Meadows, Massasoit, Mashpee, Monomoy, Nantucket, Nomans Land Island and Oxbow. Among these protected places are inland and coastal wetlands, forests, grasslands, and barrier beaches which provide vital habitat for migratory and resident birds, mammals, reptiles, fish, invertebrates, amphibians and plants.

Wilderness dunes on South Monomoy Island



M.Hillman/USFWS



Kaiti Titherington/USFWS

Terns fill the sky at dusk on South Monomoy Island

Monomoy’s barrier islands are constantly changing. Sand, eroding and drifting from the outer beaches of Cape Cod, is the foundation of the island refuge. Here, on the edge of the vast Atlantic Ocean, storms, high winds, tide, and surf endlessly change terrain and shore. In this dynamic ecosystem, a remarkable array of lasting habitats and niches have evolved. In effect, Monomoy is a unique study in beach, dune, marsh, and grassland moor ecology. The entire barrier island formation rests on a bed of glacial material left by retreating glaciers an estimated 18,000 years ago. Depending on patterns of erosion and accretion of sand, Monomoy varies in size and shape with the passage of time.

Monomoy evolved from a series of small sand-spit barrier islands in the 1800s to an arm of land connected to the mainland in the early 20th century. In 1958, a spring storm tore the sand spit from the mainland, creating a single island separated from Morris Island and Chatham. Twenty years later, this island split in two during a turbulent blizzard. Left in its wake is the present-day 2.5-mile stretch of North Monomoy Island and the 6-mile-long arm of South Monomoy Island.



Monomoy Point lighthouse

Once a Human Landscape

While Monomoy's character is shaped and reshaped by the sea, it also remains linked with the human history of the New England seacoast. Native people are believed to have inhabited the peninsula 6,000 to 8,000 years ago. Two Native American shell middens have been recorded on refuge property at Morris Island. Little information is known about these sites.

Recorded history of the island began in the 16th century when French and English explorers began mapping the New England coast. By the 18th century, European settlers were firmly established along the Massachusetts coast, including sporadic settlements on Monomoy.

By the 19th century, a small town known as Whitewash Village grew along the southern end of Monomoy near Powder Hole. It flourished for three decades as a shipping and fishing port and as a haven for lost and shipwrecked sailors. But sand drifting in an arc around the southern end of the island finally closed the inlet to boats. Even so, village residents were reluctant to leave, and the settlement persisted well into the 1930s as a summer community.

Monomoy Lighthouse

In 1823, the federal government commissioned a lighthouse on four acres of land on the island's southern beach. The 40-foot, cast-iron tower lined in brick was lighted five years later and was fired by oil. After a century, more powerful lights at Chatham and Nantucket provided guidance for ships, so Monomoy Lighthouse was decommissioned in 1923. However, the structures at Monomoy Light were restored in 1988 and 2010 and are listed on the National Register of Historic Places.

As the decades passed, rough-hewn summer cottages were taken down by the elements or abandoned when life-leases to the original owners expired. The last "camp" remained until the spring of 2000.

In 1970, Congress designated almost 97 percent of the Monomoy islands as federal wilderness, a space "where the earth and its community of life are untrammelled by man, where man himself is a visitor and does not remain." The wilderness designation limits the range of activity permitted within its boundary, providing refuge wildlife with a higher level of protection from human intrusion. Monomoy contains the only designated wilderness area in Southern New England.

Monomoy Point, 1897



Wings Over Monomoy

Monomoy National Wildlife Refuge provides habitat for hundreds of species of nesting, feeding, and migrating birds. Due to its high value for migratory shorebirds, North and South Monomoy Islands were designated as a Western Hemisphere Shorebird Reserve Network (WHSRN) site in 1999 and an Important Bird Area in 2000. WHSRN comprises organizations that promote and support the conservation of shorebirds.

Shorebirds and Seabirds

The shorebirds' fall migration route originates in the Arctic and eastern Canada and heads south, taking them along an "outer coast" flyway that covers the whole outer Cape from Provincetown to Monomoy and west to Brewster and Harwich. It is one of three routes that bring migrating shorebirds, sea ducks and loons across Cape Cod in autumn, and leads large numbers of other shorebirds and seabirds, including tens of thousands of common terns, to Monomoy.

American oystercatcher

Kaiti Titherington/USFWS



Beginning in late July, shorebirds spotted on Monomoy include turnstones, sanderlings, least and semi-palmated sandpipers, black-bellied and semi-palmated plovers, dowitchers, red knots, godwits, dunlins, American oystercatchers and whimbrels. Rare and uncommon species are most likely to be spotted on the offshore portions of the refuge in September.

Shorebirds foraging in Powder Hole in the shadow of Monomoy Light

Sarah E. Devlin/USFWS



USFWS

South Monomoy Island's Station Pond wetlands in late fall

Waterfowl

Remote, freshwater ponds make Monomoy one of the most diverse waterfowl areas in Massachusetts. Such rare species as sora and ruddy duck breed here. Adult and juvenile black ducks, blue- and green-winged teal, mallards, canvasback, gadwall, and northern shovelers are evident by late August and early September. A steady influx of teal, northern pintail, gadwall, and American wigeon occurs through September. October and early November are the peak for eider, long-tailed duck, and scoter.

Surf scoter

Adam Ellis/USFWS



Waterfowl hunting is permitted on the refuge; please refer to the Monomoy hunting brochure for more information.

Other birds

Weather and winds play an important role in determining the numbers of songbird migrants on Monomoy in the fall. Due to a phenomenon known as "wind drift," tail winds from the northwest that cause immature birds to veer from their preferred route over land, unusual sightings can be made particularly on South Monomoy Island. Birds of prey, including northern harriers, great horned owls, peregrine falcons, merlins, sharp-shinned hawks and bald eagles may be seen throughout the fall migration, while snowy owls are frequent winter visitors.



Newly hatched piping plover chicks

Endangered and Threatened Species



Piping plover

Terns

Monomoy is one of the most significant sites in the New England region for the ongoing recovery of the federally threatened piping plover, hosting upwards of 40 pairs of breeding birds each year. The wide, undisturbed dunes and beaches of South Monomoy Island provide ideal nesting, resting, and feeding habitat for these small, sand-colored shorebirds.

The common tern colony, located on South Monomoy Island, has grown to more than 14,000 nesting pairs. Not only is this colony the largest of its kind on the Eastern Seaboard, it is also an important host site for federally endangered roseate terns, which nest alongside other tern species. During the breeding season, 20-30 pairs of roseate terns can be found nesting in the tern colony on South Monomoy Island and feeding in its offshore waters.

Red knot



The red knot, a federally threatened shorebird, undertakes one of the longest migrations known; an estimated 16,000-mile round trip! Protection of breeding, migration, and wintering habitat is critical to this species' recovery. Monomoy provides vital stopover resting habitat for red knots during their southward migration.

Northeastern beach tiger beetle



The federally threatened northeastern beach tiger beetle requires undisturbed sandy habitats free of heavy foot and vehicle traffic, such as those found on Monomoy. In the early 2000's, the beetle was reintroduced to South Monomoy Island, and today their numbers are stable and increasing due to the high quality habitat and protection that the refuge provides. Once found in "great swarms" along coastal beaches from Virginia to southeastern Massachusetts, only three populations of tiger beetles currently exist north of Chesapeake Bay.

Seabeach amaranth

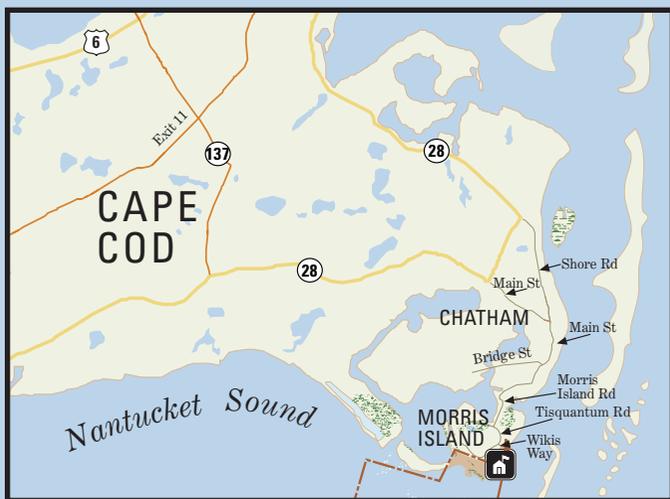


Reintroduced to the refuge in 2017, seabeach amaranth has reddish stems and small, spinach-green leaves. Monomoy, with its wide swaths of remote, wilderness beach undisturbed by artificial beach modification, provides near-ideal habitat for the recovery of this federally threatened native plant species once found from North Carolina to Massachusetts.

Roseate tern



Monomoy National Wildlife Refuge



Other Creatures Great and Small

Monomoy's beaches, sandflats, and tidal marshes provide ideal spawning habitat for horseshoe crabs, which gather here in numbers no longer seen elsewhere on Cape Cod. Their eggs are an irreplaceable food source for the migrating and nesting shorebirds and wading birds that rely on Monomoy as a rest stop during their annual migrations.

Horseshoe crab



Amanda Adams/USFWS

Mammals, including coyotes, deer, raccoons, muskrats, and voles inhabit the refuge. Fowler's toads and a few species of snakes have also made a home on the islands. During summer and fall, butterflies, dragonflies, and damselflies are abundant. More than 260 species of plants have been identified. The dominant vegetation

Gray seals on South Monomoy Island



L. Rein/USFWS

Gray seals

is beach grass, but in summer the freshwater marshes on the south island are a canvas of color; from the muted hues of dusty miller and rose mallow to the golden tones of hudsonia heather and wild asters.

Monomoy hosts the largest haul-out site of gray seals in the U.S. Breeding occurs in winter, and by spring, tens of thousands haul themselves out of the cold waters of the Atlantic to rest and molt on Monomoy's beaches.

For more than a century, bounty hunters and fishermen perceived that these marine mammals were depleting fish stocks. Bounty hunting was banned in Massachusetts in 1962, and marine mammals were further protected in 1972, when the federal Marine Mammal Protection Act was passed. Since then, seal populations continue to recover along the East Coast.

*Hudsonia
in bloom*



USFWS

Largely protected from human intrusion, Monomoy offers some of the most desirable habitat for seals in the region. Harbor and gray seals have continued to thrive on Monomoy. Harp and hooded seals are seen occasionally. Gray seals can be spotted year-round; harbor seals can be found from August through May.

Making Space for Nature

One of the most significant management efforts on Monomoy is the creation of a “safe harbor” for coastal birds. By the early 1990s the refuge’s populations of great black-backed and herring gulls skyrocketed. Their success was tied to the growing human population on Cape Cod, where birds routinely found an easy food source in open landfills. The gulls on Monomoy overwhelmed smaller, less aggressive birds, particularly terns, which were unable to compete for nesting sites with the gulls.

In 1996, the Service began a restoration project by creating a “gull-free-zone” on a portion of South Monomoy, and within the next few years the seabirds and shorebirds showed a significant comeback. Today, an abundance of seabirds, shorebirds, and water birds nest on the islands. This project has directly benefitted the federally protected roseate tern and piping plover, as well.

Tern monitoring on South Monomoy Island



Kate Iaquinoto/USFWS



L. Rein/USFWS

Piping plover monitoring on South Monomoy Island

Science at Work

Biological scientists, technicians, and interns conduct regular monitoring of the many species of wildlife that inhabit the refuge, focusing their efforts on federally-listed threatened and endangered species to monitor their recovery. Common, least, and roseate terns, piping plovers, American oystercatchers, black skimmers, red knots, nesting wading birds, horseshoe crabs, Northeastern beach tiger beetles, and seabeach amaranth are all the subject of annual monitoring and research.

The U.S. Fish and Wildlife Service also actively fosters cooperative relationships through Monomoy National Wildlife Refuge with partner government agencies like the National Park Service and National Marine Fisheries Service, nongovernmental conservation organizations and collectives, research scientists, town and regional committees, volunteers, students, and the public. We all work together to protect our wildlife and promote our public lands!



Birdwatching on South Monomoy Island

Things to do at the Refuge

Monomoy National Wildlife Refuge provides visitors with many wildlife-dependent recreation opportunities. The refuge has long been a favorite destination for birders and anglers. Refuge visitors also enjoy hiking, shellfishing, photography, wildlife observation, and guided natural and cultural history programs and tours.

The refuge headquarters and visitor center is located on Morris Island, along with 3 miles of walking trails winding through a variety of coastal habitats. Overlooks along the trail provide views of the refuge's wilderness islands. A portion of the beach trail is inaccessible at high tide. The visitor center has maps of Monomoy, exhibits, kid-friendly displays, and a small gift shop. The visitor center is open seasonally; call ahead to confirm hours.

Surf fishing



Our Friends and Volunteers

The refuge is fortunate to have both a friends group and a dedicated corps of volunteers who actively support the U.S. Fish and Wildlife Service in meeting its mission. Our partners staff the visitor center, present interpretive programs, help maintain refuge facilities, assist with wildlife surveys, advocate for the preservation of Monomoy Lighthouse, and publicly support a variety of refuge management activities.

Would you like to help us help wildlife? Consider becoming a refuge volunteer! If interested, please contact the refuge manager.

Accessibility

North and South Monomoy islands are **accessible by boat only**. You may reach the islands by private boat, or, in season, by commercial ferry. Portions of the islands may be closed seasonally; check ahead by contacting the refuge visitor center or visit us at [fws.gov/refuge/monomoy](https://www.fws.gov/refuge/monomoy). There is road access to Morris Island, with limited parking available at the visitor center.



Wildlife Watching Tips

Dawn and dusk are the best times to see wildlife.

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

Use binoculars or a long lens for a closer look. Approaching wildlife disrupts their feeding and resting habits.

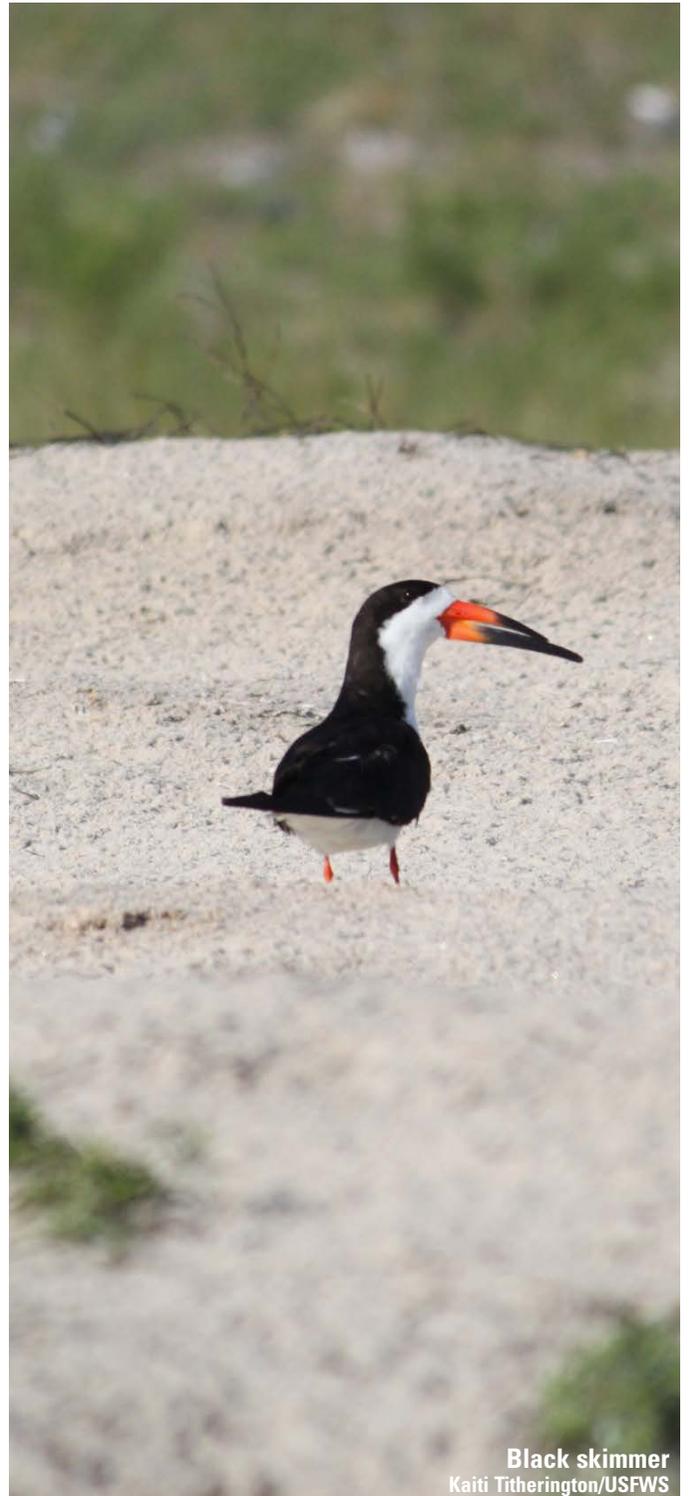
Try sitting in one good location. Let wildlife get used to your presence. Many animals that have hidden will reappear once they think you are gone.

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.

The best birding opportunities that the refuge has to offer are located on the offshore portions of the refuge. Shorebirds can be seen foraging on the flats when they are exposed at low tide. "Area Closed" signs mark the boundaries of important nesting and feeding areas. Help the birds by respecting all closed areas.



Black skimmer
Kaiti Titherington/USFWS

Rules and Regulations

Seals are protected by the Marine Mammal Protection Act. It is against the law to touch, feed or otherwise harass seals. Harassment occurs when your behavior changes their behavior. **Stay back at least 150 feet when observing seals.**

Public 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.

Kites, kitesurfing, drones, and other unmanned aircraft are not permitted.

Fishing on the refuge islands is permitted from sunrise to sunset. Surf fishing from the Morris Island shore is permitted 24 hours a day. There are no picnic areas or campsites on the refuge.

Fires and camping are not permitted.

Leashed dogs are permitted only between September 16 and April 30 at the Morris Island unit. All pets are otherwise prohibited.

Motorized vehicles and bicycles are restricted to the refuge entrance road and parking areas. Bicycles are not permitted on the trails or on refuge beaches. A bicycle rack is available at the Morris Island trailhead.

The disturbance, destruction, or removal of wildlife, vegetation and facilities are prohibited. The Refuge operates under a strict **pack it in, pack it out** policy. There are no trash receptacles at the refuge.

To reduce disturbance to wildlife, entering areas marked with “area closed” and “beach closed” signs is prohibited.

Harbor seal



Lamar Gore/USFWS



USFWS

A Refuge biologist traverses the wilderness.

Part of a Greater Whole

Monomoy National Wildlife Refuge is one of over 560 refuges in the National Wildlife Refuge System, administered by the U.S. Fish and Wildlife Service. With over 850 million acres, the National Wildlife Refuge System is the largest 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 and vast marine monuments in the Caribbean, Atlantic Ocean, and South Pacific. The character of the refuges is as diverse as the nation itself.

Directions to the Refuge

To reach the refuge headquarters and visitor center on Morris Island, take U.S. Route 6 east to State Route 137 south to State Route 28. Take Route 28 east to the rotary in the center of Chatham. From the rotary take Main Street, up the hill to a T-intersection. Turn right and proceed past the Chatham Lighthouse and Coast Guard Station. Bear left after the lighthouse onto Morris Island Road, then take the first right. Follow Morris Island Road to signs for the refuge on the left.

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