



Explore Cape Cod National Seashore

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Welcome

Superintendent's Message National Parks: Good for the Body and Soul

Of the nearly 300 million people who visit U.S. national park areas each year, many seek outdoor adventure and recreation, cultural experiences, or opportunities to observe nature in its wildest form. Still others come for the spiritual aspect of parks that can enrich our souls and recharge our emotional batteries.

Have you ever walked silently among the coast redwood trees at Muir Woods or watched a peregrine falcon soar over the Grand Canyon? Do you have the experience of standing within the deafening roar and mist of a waterfall at Yosemite or at Lincoln's feet at the National Mall in Washington at night? These places, with their grandeur, immensity, age, or history can envelop us, drawing us in to something that is larger than our own lives.

I feel this way at Cape Cod National Seashore when I am immersed in the views at Fort Hill. Beyond its beauty, I imagine the Native people who lived here for thousands of years. I sense the anticipation of the Pilgrims on the Mayflower as it passed by. Perhaps your sense of wonder is piqued by a walk along a solitary stretch of the Great Beach, anytime of the year, or while exploring a trail in the tranquility of winter, or while observing the night sky from Marconi Beach on a summer night.

In addition to providing a sense of renewal, national park areas can provide touchstone experiences. During the celebration of the U.S. Bicentennial in 1976,



GEORGE PRICE,
SUPERINTENDENT

people flocked to Morristown National Historical Park in New Jersey to see the precise spot where General Washington directed the Revolutionary Army in 1779-80.

While serving as a park ranger at Minuteman National Historical Park in Concord, Mass. I recall seeing tearful visitors at the Minuteman Statue at the North Bridge. They had made a pilgrimage to see the statue that symbolized the citizen soldier, and to touch the icon depicted on war bonds and posters that represented fathers, brothers, and sons who fought for their country.

Shortly after the September 11 terrorist attacks, there were stories of people making pilgrimages to national park areas. Was it to stand on ground that represented all that our nation had endured as a way to put into perspective the horrific events of 9/11?

continued page 2

Superintendent's Message *continued*

Was it to gather strength from immense landscapes and ageless natural processes that put our own human lives into context? Or were they simply seeking refuge and a sense of peace?

In my travels around Cape Cod National Seashore, I've spoken with many people who describe powerful memories of times spent here. Some have lost family and are returning to remember. Others come to regroup during times of personal or family crisis. They often describe these visits as soothing, rejuvenating, and even spiritual.

As you enjoy all that the national seashore and the surrounding communities have to offer, I encourage you to seek out the places and experiences that will enrich your soul and inspire you to return again and again to find peace and perspective in this remarkable place.

George E. Price, Jr.
Superintendent

On the cover: *Marconi Beach, Wellfleet*, by Philip Keohan. Philip is a professional photographer and an interpretive park ranger at Cape Cod National Seashore. His photographic prints are available at the Eastern National bookstores at both seashore visitor centers.



National Park Service
U.S. Department of the Interior

Cape Cod National Seashore

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Wellfleet, MA 02667

Superintendent: George E. Price, Jr.

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Park Headquarters

508-771-2144

Fax Number

508-349-9052

Salt Pond Visitor Center

508-255-3421

Province Lands Visitor Center

508-487-1256

Race Point Ranger Station

508-487-2100

Oversand Office at Race Point Ranger Station

Route Information: 508-487-2100 ext. 0926 (April 15 through November 15)

Permit Information:

508-487-2100 ext. 0927

Nauset Ranger Station

508-255-2112

North Atlantic Coastal Lab

508-487-3262

Website: www.nps.gov/caco

Emergencies: 911

CAMPING

The National Park Service does not operate a campground at Cape Cod National Seashore. Camping is available at private and state-operated facilities (see page 17). Overnight camping and parking within Cape Cod National Seashore are prohibited. A limited number of self-contained vehicle permits for overnight stays on Race Point Beach are available through the seashore's oversand permit office at Race Point Ranger Station, Provincetown.

General Information

Cape Cod National Seashore's 40 miles of pristine ocean beach and 44,000 acres make it a premier destination for exploring natural and cultural features and enjoying recreational activities.

VISITOR CENTERS



View from Salt Pond Visitor Center terrace. NPS photo

Salt Pond Visitor Center: open daily from 9 AM to 4:30 PM (later during the summer). This visitor center offers magnificent views of Salt Pond, Nauset Marsh, and the Atlantic; an outstanding museum; and regularly scheduled films in the theater. Exhibits showcase the Outer Cape's location in the Gulf of Maine ecosystem and Wampanoag culture and history. Restrooms are available in the parking area. The Nauset Marsh and Buttonbush trails and the Nauset Bicycle Trail are nearby. Location: off Route 6, Eastham. Telephone: 508-255-3421.



View from Province Lands Visitor Center observation deck. NPS photo/Keohan

Cape Cod National Seashore has two visitor centers: Salt Pond in Eastham and Province Lands in Provincetown. Both centers have staff to assist visitors with orientation and trip planning; and stores featuring books, maps, puzzles, games, apparel, and other seashore-related items provided by the park's education partner, Eastern National.

Province Lands Visitor Center: open daily from 9 AM to 5 PM, May 1 through October 31. Just two miles from the tip of the Cape, this center features an observation deck with 360-degree views; a small exhibit area; showings of park orientation films every half hour (9 AM to 4 PM). Whales are often viewable from here. Restrooms are available in the parking area. The Province Lands Bicycle Trail and Race Point Beach are nearby. Location: off Race Point Road, Provincetown. Telephone: 508-487-1256.

PARK FILMS

Salt Pond and Province Lands visitor centers routinely show the following films throughout the day:

The Sands of Time (12 minutes) showcases the formation of Cape Cod by the ice, wind, and waves, and describes the processes that continue to shape the Cape today.

Wooden Ships and Men of Iron (12 minutes) depicts Cape Cod's fascinating maritime history, including whaling and the life-saving service. It contains graphic footage of an early 20th-century whaling ship hunting and processing whales.

Voice of Cape Cod (12 minutes) describes Guglielmo Marconi's history-making transatlantic wireless communication that took place on the windswept bluffs of Cape Cod in January 1903, forever changing communication technology.

Thoreau's Cape Cod (12 minutes) is the story of Henry David Thoreau's 19th-century adventures, discoveries and writings on Cape Cod.

Return of the Tides (10 minutes) discusses the Herring River estuary in Wellfleet and the planned tidal restoration project that will re-establish native salt-marsh habitat in the area. (Salt Pond Visitor Center only.)

CAMPFIRES

A limited number of campfire permits per day, per seashore beach, may be reserved up to three days in advance in person or by phone. Locations are: Salt Pond Visitor Center for Coast Guard, Nauset Light, and Marconi beaches; or Province Lands Visitor Center for Head of the Meadow, Race Point, and Herring Cove beaches. Fire permits for the Oversand Route are issued through the Oversand Station at Race Point. Permits are free and must be picked up at the reserving visitor center prior to 3:30 PM the day of the fire. Demand often exceeds the number of permits available.

How to Reserve a Fire Permit: Reserve on: Sun Mon Tues Wed Thurs Fri Sat
For a fire on: Wed Thurs Fri Sat Sun Mon Tues

Beginning in 2015, Cape Cod National Seashore will use an online reservation system for fire permits. Check back in spring 2015.

ACCESSIBILITY

Park trails near Doane Rock in Eastham and the Marconi Station Site in Wellfleet have been surfaced to accommodate wheelchairs. Large-print versions of some park publications and the Buttonbush Trail are available for people with impaired vision. Park films have captions and audio descriptions. Coast Guard and Herring Cove beaches provide accessible parking, restrooms, changing facilities, and beach wheelchairs. Herring Cove Beach features showers that accommodate wheelchairs.

BIKING



NPS photo

There are three bicycle trails under the care and maintenance of Cape Cod National Seashore: Nauset Trail in Eastham (1.6 miles), Head of the Meadow Trail in Truro (2 miles), and the Province Lands Trail in Provincetown (loop trail 5.45 miles). Massachusetts state law requires children 16 and younger to wear protective helmets when operating a bicycle or riding as a passenger. It is advisable that all riders, regardless of age, wear protective headgear to ensure a safe and enjoyable experience. Ask for a brochure with trail maps at both visitor centers, or check: www.nps.gov/caco/planyourvisit/biking-at-cape-cod-national-seashore.htm

- Bike accidents injure more people each year at the seashore than all other activities combined.
- *Bike safety starts with helmets.* Regardless of age, all riders are urged to wear protective headgear. Massachusetts state law requires children 16 and younger to wear protective helmets when on a bicycle, even if only a passenger.
- Take time to fit your helmet properly – snug and level on your head.
- Test ride your bike to check brakes, seat, and handlebar settings.
- Trail conditions vary. Stay alert for sharp curves, steep hills, and sand-covered sections.
- Keep an eye out for park volunteers on bike patrols, and show them you care about safety and are a safe rider.
- Biking is prohibited on seashore beaches.

SELF-GUIDING TRAILS



NPS photo

There are 12 Self-Guiding Trails at the seashore that are open year round: in Eastham - the Fort Hill, Red Maple Swamp, Buttonbush, Nauset Marsh, and Doane trails; in Wellfleet - the Atlantic White Cedar Swamp and Great Island trails; in Truro - Pamet Area Bearberry Hill Overlook, Small's Swamp, Highlands Woods Walk, and Pilgrim Spring trails; and in Provincetown - the Beech Forest Trail. Interpretive folders with information on natural and historic features are available at some trailheads. See page 19 for more detailed information about trails.

Beach Activities and Fees

Cape Cod National Seashore manages six ocean beaches in four towns: Eastham (Coast Guard and Nauset Light beaches), Wellfleet (Marconi Beach), Truro (Head of the Meadow Beach), and Provincetown (Race Point and Herring Cove beaches). All national seashore beaches include the following facilities and services: showers, paved parking, restrooms, changing rooms, drinking water, water-quality testing, and lifeguards (late June through Labor Day). Two beaches, Coast Guard in Eastham and Herring Cove in Provincetown, are accessible to people with disabilities and have wheelchairs capable of traveling over sand.

2014 BEACH ENTRANCE FEES AND NATIONAL PARK PASSES

Beach entrance fees are collected daily from late June through Labor Day at all six seashore beaches. Fees are also collected on weekends and holidays from Memorial Day to late June, and after Labor Day through the end of September, at Herring Cove, Race Point, Nauset Light, and Coast Guard beaches.

Daily Vehicle	\$15
Cape Cod National Seashore Season Pass	\$45
America the Beautiful: <i>National Parks and Federal Recreational Land Pass</i> (accepted at any National Park area and other Department of Interior sites) *	\$80
Interagency Senior Pass (allows entry for those age 62 or older, U.S. citizen, permanent resident) *	\$10
Interagency Access Pass (allows entry for those legally blind or permanently disabled) *	FREE
Annual Pass for U.S. Military Available to U.S. military members and dependents in the Army, Navy, Air Force, Marines and Coast Guard and, Reserve and National Guard members. Must be obtained in person by showing a Common Access Card (CAC) or Military ID (Form 1173). * Photo ID required for pass use.	FREE

AMERICA THE BEAUTIFUL, THE NATIONAL PARKS AND FEDERAL RECREATIONAL LANDS PASS

This pass provides several options for people to use at federal recreation sites, including national parks and wildlife refuges where entrance fees are charged. You can purchase this and all passes at beach entrance stations and seashore visitor centers.



General Safety and Regulations

National Park Service rangers provide assistance and enforce regulations that protect you and the national seashore. Observe the following:

- Do not disturb natural or cultural features including wildlife; all are protected by federal law. Do not feed wildlife.
- Keep trails, roadsides, and other areas clean. Use trash receptacles and recycle bins, or take trash with you.
- Glass containers, flotation devices (rafts, rubber tubes), snorkels, and masks are prohibited on lifeguard-protected beaches.
- Public nudity is prohibited.
- State licenses are required for saltwater and freshwater fishing. Town licenses for shellfishing are required. Regulations and fees vary by town.
- Surfing and windsurfing are permitted in waters outside lifeguard-protected areas.
- Possession or use of metal detectors is prohibited.
- Permits are required for all beach fires. They may be obtained on a first-come, first-served basis at Salt Pond Visitor Center in Eastham, the Province Lands Visitor Center in Provincetown, and the Oversand Station at Race Point. Do not bury coals. (See campfire information on page 2.)
- Sand collapses easily. Climbing steep slopes or digging deep holes above knee level is hazardous and prohibited.
- Swim only where there are lifeguards, and obey their directions. Lifeguard-protected beaches are marked with signs. Be alert for rip currents and underwater obstacles. Keep children within reach. Use sunscreen to avoid sunburn. Use a waterproof sunscreen if you intend to go swimming.
- Smoking is prohibited on protected swimming beaches when lifeguards are on duty.

For more information about park regulations, check the Superintendent's Compendium available at www.nps.gov/caco/management

PETS

Cape Cod National Seashore requires that pets be controlled by a leash at all times. Leashes may not exceed 6 feet. Pets are not permitted in public buildings, picnic areas, on lifeguard-protected beaches, on trams, in posted sensitive habitats, on bicycle trails (unless otherwise posted), or on trails except for the Highlands Woods Walk in Truro.

FISHING AND HUNTING

A license is required for saltwater and freshwater fishing. Town licenses for shellfishing are required. Regulations and fees vary by town.

Upland wildlife and migratory waterfowl may be hunted in certain areas in season. Federal, state, and local laws apply. Ask for a brochure about hunting at visitor centers, or check: www.nps.gov/caco/parkmgmt/hunting-information.htm for more information and maps of open and closed areas.

TICKS, INSECTS, AND POISON IVY

Take precautions to avoid contact with insects. Deer ticks may carry Lyme disease. Mosquitoes may carry encephalitis or the West Nile virus. Browntail moth "tents" cause skin irritation. Stay on trails, out of tall grasses, and inspect clothes and skin. Use bug spray and wear proper clothing. • Poison ivy is prolific in many locations. The rash it produces can cause severe discomfort. "Leaves of three, let it be."

OVERSAND PERMITS AND SPECIAL PARK USES

Permits for driving on seashore oversand routes are required and available for purchase at Race Point Ranger Station in Provincetown. Oversand permits cannot be acquired for rental vehicles. Bird nesting activity may require some route closures during the spring and summer. Call 508-487-2100 ext. 0927 for permit and general information (April 15 through November 15). Call 508-487-2100 ext. 0926 for route closure information, or access the park's website for an up-to-date map of open and closed areas.

Special use permits for events, weddings, and commercial filming permit applications are posted on the park's website at: <http://www.nps.gov/caco/planyourvisit/permits.htm>

BEACH SAFETY



NPS photo

LOCATING YOUR BEACH GEAR: Do not settle in front of an on-duty lifeguard chair or one that is soon to be opened. This area must be kept clear for equipment. Lifeguards respond quickly to distressed or drowning swimmers. Stay out of this area to avoid an accident or delay a rescue.

WHEN YOU HEAR A WHISTLE: Lifeguards will signal swimmers when they are in or approaching a hazardous area or because they are swimming too far out for adequate supervision.

RIP CURRENTS ARE DANGEROUS: A rip current can carry a swimmer out from shore and be difficult to swim against. Do not panic if you get caught in one. Do not tire yourself out trying to swim against it. Normally, they are not wide. Swim parallel to the shore a short distance, then swim to the shore out of the current. Look for the "Break the Grip of the Rip" sign located at each beach.

BEACH WARNING FLAGS:

Each morning, a colored flag is flown at the head lifeguard chair. A sign at each beach describes the meaning of each color.

Green: Low Hazard. Calm conditions

Yellow: Medium Hazard. Moderate surf and/or currents

Red: High Hazard. High surf and/or strong currents

Red: Water closed to the public (with no-swim symbol)

Purple: Dangerous marine life

BEACH PARKING LOT TRENDS

Coast Guard Beach/Little Creek Tram, Eastham: Tram parking area fills on most holiday weekends; moderate turnover. Beach access via Little Creek tram and parking area, a half-mile away. Drop-off and pickup of passengers and belongings at the beach are PROHIBITED. Limited handicapped parking (state-issued plate or placard required) at the Coast Guard Station parking area. (360 spaces)

Nauset Light Beach, Eastham: Public parking area fills by 10 AM daily during the summer; minimal turnover. Drop-off and pickup of passengers and belongings at the beach are PROHIBITED. (94 spaces)

Marconi Beach, Wellfleet: Parking area fills during weekends and some weekdays during July and August; moderate turnover. (528 spaces)

Head of the Meadow Beach, Truro: Parking area rarely fills. (285 spaces)

Race Point Beach, Provincetown: Parking area rarely fills during June and July. When the parking area does fill, it is usually one to two hours after Herring Cove fills. Access is also available on *The Shuttle*. (360 spaces)

Herring Cove Beach, Provincetown: Parking area rarely fills in June. Parking area fills occasionally in July and August; moderate turnover after 1 PM. Access is also available on *The Shuttle*. Seasonal snack bar. (North area, 140 spaces; South area, 400 spaces)

Watching for Wildlife



NPS photo

Gray Seals

Gray seals (*Hali-choems grypus*) pull themselves out of the water and onto nearby sandbars and the beach to rest. Resting, also called “hauling out,” is an important activity.

Human disturbance alters the natural behavior of seals. Noise, sudden movements, and people, boats, or pets getting too close can all disturb seals. When seals are disturbed, they may return to the water as individuals or as a group. Seals that are continually approached never get a chance to rest, leaving them vulnerable to predators and illness.

It’s normal for seals to be on land. Seals are semi-aquatic, meaning they often spend a portion of each day on land. Young seals may haul out on land for up to a week. Many seals have scratch marks and scars from hauling out; this is no cause for alarm.

Once hunted to near extinction, seals are now protected under the Marine Mammal Protection Act and National Park Service regulation. It is against the law to disturb or harass them.

Seals consume a variety of fish, shellfish, and crustaceans. They do not eat on land.

Gray seals have been nicknamed “horse heads” because of the long, straight slope of their profile. Males are dark brown, gray, or black with small, lighter spots. Females are tan or lighter gray with darker spots. Males may reach 8 feet in length and weigh over 700 pounds. Females average 6.5 feet and weigh up to 450 pounds.

To protect the seals and to avoid a fine of up to \$5,000 or six months in jail:

- Remain *at least* 150 feet from the seals. In some circumstances it is better to keep even farther away. Move back if the seals begin vocalizing, going into the water, or if all seal eyes are watching you.
- Observe from a distance with binoculars.
- Keep pets on a leash. This is a national seashore regulation. Dogs are likely to startle a resting seal, causing an aggressive, defensive response that might injure your pet, you, or the seal.
- Do not approach haul-out sites in boats or on boards. Kayaks, canoes, and stand up paddleboards can elicit an alarm response and cause seals to rapidly enter the water.
- Do not swim among seals. Seals can scratch and bite. Also, they are an important prey species for great white sharks that inhabit these waters.

[Link here to the seashore’s video on seals.](#)



If you see an entangled, sick, or injured seal, call NOAA’s Northeast Region Marine Mammal Stranding Network at 866-755-6622 .



NPS photo

Piping Plovers

Piping plovers (*Charadrius melodus*) are small shorebirds that winter along the southeast coast of the United States. Each spring, they return to Cape Cod to establish territories and form pairs.

Starting in April and extending into summer, plovers build their nests and lay eggs above the high-tide line,

usually in front of the dunes. Their nests are little more than shallow depressions scraped directly into the sand.

The female typically lays four eggs that the male and female take turns incubating. The eggs hatch in about 25 days. Within hours of hatching, the tiny, downy chicks begin learning how to search for food.

Plovers feed by running and darting to catch insects, amphipods, and other invertebrates found on the surface of the sand and mudflats or living in the wrack deposited at the high-tide line. Wrack (washed-up seaweed and marshgrass) is rich in these invertebrates and is an important feature of natural beaches.

Piping plover adults, nests, and chicks all blend into their surroundings to avoid detection by predators. When predators (real or perceived) approach too closely, an adult will run down the beach dragging its wing, as if injured, or call loudly as a distraction. Although this behavior may prevent chicks from being eaten, it leaves the eggs and chicks vulnerable to cold or over-heating. For chicks, the stress of running for cover burns calories needed for growth and maturation.

Watching for Wildlife

Cape Cod Great White Shark Safety **SHARK ADVISORY**

Great white sharks live in these waters. Sharks prey on seals. Avoid swimming near seals.



Cape Cod’s waters are part of a natural and wild marine ecosystem with a rich diversity of sea life, including sharks. Seals are the major prey species for great white sharks (*Carcharodon carcharias*), and as the seal population increases, the great white shark has become more numerous. In recent years, there have been confirmed reports of great white sharks feeding on seals close to shore near swimming beaches. While it is rare for a great white shark to bite a human, it did occur in Truro in 2012.

Be shark smart. To stay safe and to protect wildlife:

- Follow instructions of lifeguards and national seashore staff. Become familiar with the beach flag warning system. Take time to read signs at the beaches.
- Do not swim near seals.
- Swim close to shore, where your feet can touch the bottom.
- Swim, paddle, kayak, and surf in groups.
- Do not swim alone in the ocean at dawn and dusk.
- Avoid isolation.
- Limit splashing and do not wear shiny jewelry.
- Keep your distance (at least 150 feet) from seals, whether they are resting on land or are in the water. It is against the law to disturb them.

Shark Sightings

- Notify a lifeguard if a shark is spotted.
- Beaches will be temporarily closed to swimming or surfing.
- Beach-goers will be notified when they can re-enter the water.

Shark Facts

- Sharks have existed for more than 400 million years.
- As top predators, sharks are critical for maintaining a healthy and balanced marine ecosystem.
- Great white shark numbers have increased in Cape Cod near-shore waters because of a growing seal population.



NPS photo

Other Resources

Massachusetts Shark Research Program
Division of Marine Fisheries:
www.mass.gov/marinefisheries

Global Shark Tracking
OCEARCH:
www.ocearch.org

Supporting Local Shark Research and Education
Atlantic White Shark Conservancy: www.atlanticwhiteshark.org

Sharing the Beach with Plovers is Easy if You Know How

At Cape Cod National Seashore, our goals are to protect the park’s resources while providing visitors an opportunity to experience and enjoy them in a manner that leaves the resources unimpaired.

- ❖ Pay attention to signs and follow the instructions.
- ❖ Don’t feed wildlife or leave food scraps or trash on the beach; this attracts predators to nesting areas.
- ❖ Keep your dog on a leash no more than 6 feet long at all times, and comply with dog restrictions.
- ❖ You might see pedestrian detours or be asked to move quickly through areas to minimize disturbance. Please follow the instructions, and in most cases you’ll be able to continue your walk without harm to plovers or their young.
- ❖ Set up your beach blanket far from posts and strings (symbolic fencing) used to identify suitable shorebird nesting habitat. This fencing minimizes disturbance to nesting plovers from people walking by, but not from the prolonged presence of people. Set up several meters away, or choose an area without symbolic fencing.
- ❖ Be aware of park rules and regulations regarding boat landing, kite flying, and dogs. If you are uncertain, check at a park visitor center or the Oversand Office at Race Point Ranger Station.
- ❖ Plovers are fascinating! Check out the plover slide show at: <http://www.nps.gov/caco/naturescience/the-piping-plover.htm>
- ❖ Learn more about piping plovers and their conservation at: <http://www.fws.gov/northeast/pipingplover/recplan/index.html>
- ❖ Bring your binoculars and field guide on your next beach walk to observe and enjoy these birds from a distance.

Watching for Wildlife

Eastern Spadefoot Toads at Cape Cod National Seashore



NPS photo

The eastern spadefoot toad (*Scaphiopus h. holbrookii*) is one of 12 species of amphibians found at Cape Cod National Seashore. The toad has a plump body with tiny warts, vertically oriented pupils, and a golden, lyre-shaped marking on its back. It owes its name to a spade-like protrusion, called a tubercle, on its hind feet. The toad uses the tubercle to dig burrows, where it

spends most of its life, only emerging to breed or feed. Spadefoots emerge on rainy nights in spring and summer, especially when water tables are high and rain is heavy, and move en masse to temporary pools, where they mate. Spadefoots have adapted to these unpredictable, infrequent, and short-lived conditions by being “explosive breeders.” Eggs hatch within one week into tadpoles. Tadpoles develop into toadlets in as few as two weeks if they can avoid predators and if their ponds do not dry out.

Data collected by Cape Cod National Seashore’s Inventory and Monitoring Program indicate that the Province Lands area supports perhaps the largest concentration of eastern spadefoot toads in the northeast. Unfortunately, much of this data is based on animals killed on roads on rainy nights. During nighttime road surveys in 2001, almost half of 153 toads found were road killed. In addition, there are concerns that reduction in groundwater levels may cause ponds to dry out more frequently, further reducing the odds for successful reproduction.

How You Can Help The first step in protecting these threatened toads, as well as other amphibians, is to be aware of their breeding habits and their vulnerability to vehicles. When driving on warm, rainy nights, slow down to avoid running over the many frogs, toads, and salamanders on roadways. Some roads within the park, such as Province Lands Road, may be closed on such nights to protect spadefoots and other amphibians. Please respect these closures to preserve this rare species in one of its last New England strongholds.

Commonly Observed Birds at Cape Cod National Seashore

excerpts from an article by Robert P. Cook, PhD., Wildlife Biologist

Birds are perhaps the most conspicuous and easily observed of the Cape Cod National Seashore’s wildlife - at least some species are. The seashore’s 46,000 acres provide a wide diversity of freshwater, marine, and upland habitats for the roughly 370 species of birds that occur here. About 80 of these species nest here, during the spring and summer months, with the remainder using the park for migratory stopovers or to overwinter. While some birds are nocturnal, secretive, or well-camouflaged, many species are active and out in the open during daylight hours, providing even the most casual observer an opportunity to observe them. As you go about your activities visiting Cape Cod National Seashore, keep an eye out for these species. They are the “tip of the iceberg,” so to speak, of the many bird species that depend on the seashore for food and shelter.

The **GREAT BLACK-BACKED GULL** occurs in eastern North America and western Europe and is the world’s largest gull. Along with herring and ring-billed gulls, they are often referred to as “seagulls,” which is not quite accurate, since gulls are found on and along the coast, rather than out at sea. Much of the success of gulls is because they are opportunistic in their feeding habits. The great black-backed gull is both an effective predator of smaller water birds, and a scavenger. It can be found along the beaches and mud flats of Cape Cod year round.



The **COMMON TERN** is one of four species of terns that nest at the seashore. The others are the diminutive least tern, the endangered roseate tern, and the Arctic tern. Terns are commonly observed patrolling the shallow waters along the beach, hovering and diving down into the water after small fish such as the sand lance. Terns spend their summers here on Cape Cod, nesting in colonies on sandy beaches. Their colonies afford them protection against many predators, which they drive off by collectively dive-bombing. Their use of the beach in summertime makes them vulnerable to disturbance by dogs and humans, and seashore staff protect tern colonies with “symbolic fencing.” Please stay out of these areas. Along with our many summer visitors, terns leave Cape Cod in September and migrate down to Central and South America.



While it can be seen on Cape Cod year round, the **GREAT BLUE HERON** does not nest here, and is most abundant in late summer and early fall. They nest inland in colonial “rookeries” in wooded swamps. After the nesting season, many move to the coast, where they take advantage of the summertime abundance of fish and frogs in our many ponds and marshes. They feed during the day, especially when the tide is out, and spend the night perched together in treetop “roosts.”



The **RED-TAILED HAWK** is a year-round resident and the most common of the five species of hawks that nest in the seashore. It is a large, broad-winged, fan-tailed hawk, often seen perched in trees along Route 6 or soaring overhead. It hunts for small mammals, such as squirrels and rabbits, and its relative tolerance for humans has allowed it to maintain its numbers in a landscape increasingly dominated by human activity.



While these may be some of the more conspicuous of the seashore’s birds, there are many more species awaiting the interested visitor. Checklists and field guides can be obtained at the bookstores at Salt Pond and Province Lands visitor centers.

Watching Whales from Shore

In spotting whales from shore, often a spout or the back of the whale is all that you will see. Fortunately for those trying to identify whales from land, each species has a unique spout, back, and dorsal fin shape when surfacing.

Perhaps the most common, humpbacks are often seen in groups and exhibit an array of spectacular behaviors from propelling themselves completely out of the water, or “breaching,” to tail and flipper slapping. When not engaged in these distinctive behaviors, humpbacks can be identified by their “humped” profile when breaking the surface and by a low, bushy, split spout. They also commonly roll their tail out of the water as they begin a deep dive.



Humpback whale, photo courtesy of Provincetown Center for Coastal Studies, taken under NOAA permit 633-1778.

Marathon Migrations

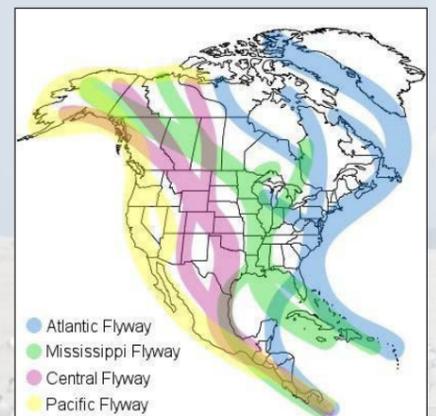
Each fall, thousands of migrating shorebirds rest and feed on national seashore beaches for several weeks. This process, called staging, is critical to birds traveling along the Atlantic Flyway between breeding grounds as far north as the Arctic, and wintering grounds as far south as the Antarctic. Roseate terns and red knots are among the more than 40 species of birds that stage at national seashore beaches. As many as 40,000 birds may be here at any one time.

The birds need quiet seclusion to rest after long periods of foraging at sea. Young roseate terns, which are still dependent on their parents for food and learning to fish, need to eat as much as possible to build up their flight muscles. Once they leave North America, they stop only briefly in the Caribbean before continuing to South America. Red knots arrive at our beaches very thin. They eat constantly to increase fat mass before migrating, gaining up to 10 percent of their body weight each day. For a 100-pound person, this is equivalent to gaining 10 pounds a day!

Enjoy this dramatic scene from a distance, and walk around, and not through, groups of resting birds. Human activity that startles the birds causes them to use precious energy needed for migration.



Researchers estimate that at least **75 percent of the entire North American breeding population of endangered roseate terns rest and feed at Cape Cod National Seashore during migration. Staging is critical to help prepare the birds for migrations of up to 4,500 miles.**

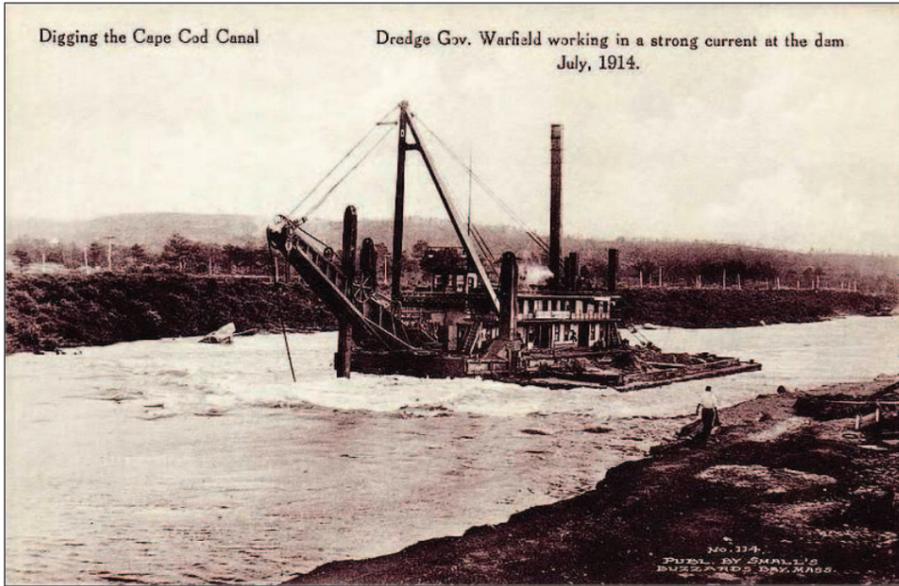


The Atlantic Flyway is the primary migration route for more than 500 bird species and millions of individual birds. Over 40 species rest and feed on national seashore beaches during migration.

1914 to 2014: A Century of the Cape Cod Canal

by William Burke, Historian, Cape Cod National Seashore

Cape Cod Canal celebrates its 100th anniversary in 2014. In this article, Park Historian William Burke reflects on its history and significance.



Canal Dreams: 1627

A stout trading post of hewn oak timbers stands tall on a snow-covered plateau near a tidal creek. The icy morning stillness is broken by the grinding sound of wood on ice as a crew of Pilgrims dressed in homespun linen and wool drag a heavy boat up to a point near the structure. You can see their labored breath as clouds of vapor rise from their throats. They have arrived. Their boat is laden with trade goods that include tobacco and beaver pelts. A man emerges from the trading post, excited and relieved. Soon, Native people and Dutch traders from New Amsterdam will arrive, eager to greet, barter, and bargain. Thus, one of North America's first privately owned commercial enterprises is open again for business.

This drama was repeated many times during the 1620s and 1630s as the Pilgrims from the infant Plimoth Colony 20 miles to the north established the Aptuxet Trading Post, precisely in the middle of what three centuries later would become the Cape Cod Canal.

The Pilgrims were following a natural valley at the shoulder of the Cape, an

ancient Native travel and trade route that some called "Manomet" – "Trail of the Burden Carriers." It was a shortcut from Cape Cod Bay to Buzzards Bay and took full advantage of two creeks – Scusset from the east and Manomet from the west – that nearly met in the middle, leaving only three miles to portage small boats or goods packed in backpacks.

The shortcut saved 130 miles of treacherous travel around the outer arm of Cape Cod. Governor William Bradford's crew took advantage of the route "to avoid the compassing of Cape-Cod and those dangerous should's; and to make any vioyage to ye southward in much shorter time and with farr less danger." Captain Myles Standish suggested a canal be built.

In the meantime, the debt-laden Pilgrims would expand their fur trade to Long Island Sound and points south, complementing their two other trading posts on the Connecticut and Kennebec rivers.

All Talk, No Action: 1627-1899

Early visionaries longed to complete a water route through the valley to ensure safe transportation, trade, national

defense, and prosperity. Yet Harvard University Historian Henry Kittredge summarized it well: "If ever a strip of land was a parade-ground for surveyors first and a battlefield for legislative vituperation afterwards, it was the route of the Cape Cod Canal."

"No less than seven projects for a Cape Cod Canal are to come before the legislature this year. Meanwhile, despite all threats, the Cape hangs onto the mainland with the grim determination characteristic of its people."

Editor of the Barnstable Patriot, 1898

From the time of the Pilgrims until 1899, there were numerous attempts by various groups to build a canal. All would fail. Even George Washington suggested a canal during the British blockade of the Colonies, which forced the Continental Army to portage supplies through the same valley, and later during the War of 1812.

As the nation flexed its economic muscles through the 1800s, the robust commerce of coal, stone, and timber relied on coastal schooners, barges, and square-riggers, which all had to run the gauntlet of the Outer Cape.

By the 1890s, 30,000 ships rounded Cape Cod per year. Between 1875 and 1903, the United States Life-Saving Service on the Cape reported 687 wrecks, with the loss of over 100 lives and the staggering loss of \$2 million in vessels and cargo. Even the establishment of 13 full-time life-saving stations and paid crews couldn't stem the tide of tragedy.

Thomas Wolcott, founder of the Philanthropic Society in 1797, which was dedicated to getting a canal built, stated that the construction of a canal would be an act "so humane, so patriotic, so religious."

"Blending of the Waters" and Later Improvements: 1899 - Present

Finally, in 1899, Massachusetts granted a charter to the Boston, Cape Cod, and New York Canal Company. They proposed a 25-foot-deep channel, 100 feet wide, along with two highway bridges and a railroad bridge.

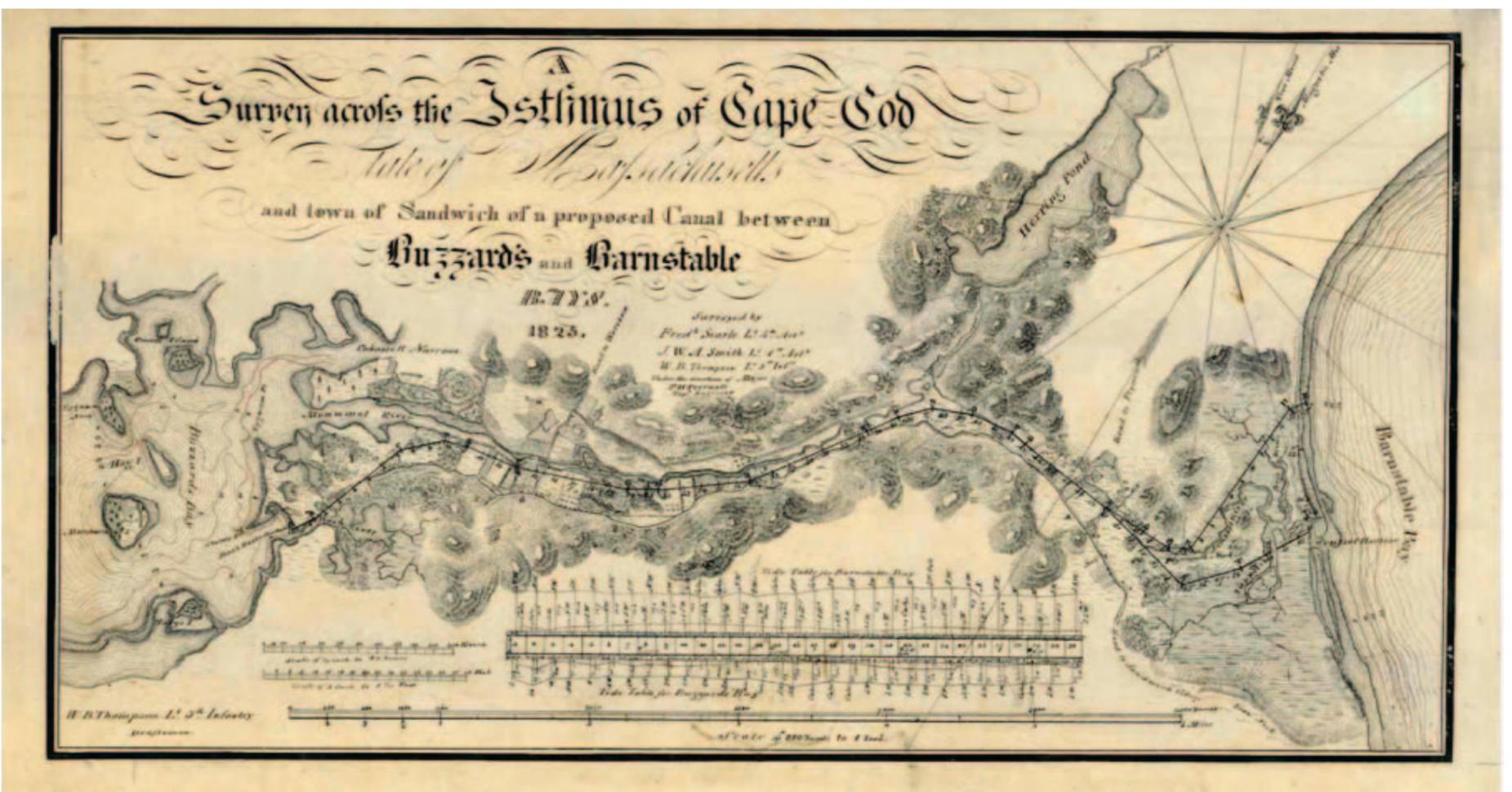
Through the extraordinary efforts of August Perry Belmont, a prominent New York financier with ties to the town of Bourne through marriage, and visionary engineer William Parsons, who worked on the proposed Panama Canal, the canal was finally built and opened on July 29, 1914.



Courtesy of the Army Corps of Engineers.

Pushing things along had been heightened concerns over national security with a world war emerging in Europe. The first paying vessel through was a private yacht, which paid \$8. In its first year, the canal collected \$33,000 in tolls from 587 vessels.

continued on next page



Cape Cod Canal - Proposed Route in 1825 "A Survey across the Isthmus of Cape Cod, State of Massachusetts" US Army Corps of Engineers Major R.H. Perault National Archives Reprint: www.old-maps.com Original size 12" x 20"

Map courtesy of the National Archives.

“So Humane, So Patriotic, So Religious”: A Century of the Cape Cod Canal *continued*



Courtesy of The Boston Globe, June 23, 1935: More than 30,000 automobiles traversed the great new Cape Cod Canal highway bridges on the opening of the new four-lane highways. A crowd of 100,000 witnessed the bridge dedication and parade. Hundreds of curious sightseers crossed the new structures on the wide 5-foot sidewalk. This picture shows cars going across the Bourne Bridge as seen from the south.

In 1927, in its last year of private ownership, the canal generated \$511,000 in tolls, while servicing over 5,700 vessels. However, the canal’s narrow shores and shoaling discouraged additional traffic.

The U.S. government, recognizing the canal’s strategic value for the nation’s commerce and national defense, purchased the canal for \$11.5 million.

Over the next decade, the United States Army Corps of Engineers undertook a massive effort to improve the canal, utilizing 1,400 men during the Great Depression to widen it to 500 feet and deepen it to 35 feet. New bridges were needed to span the wider canal that was serving increasingly larger vessels. Seven hundred men worked four shifts for 18 months to complete the bridges. On March 21, 1935, the new Sagamore and Bourne bridges opened for traffic, and later that year a new vertical-lift railroad bridge went into operation. The canal now serves 20,000 vessels annually and is the widest sea-level canal in the world.

The Irony of It All

For the 35 million annual users of the bridges that are the only land link to the mainland, the sight of the canal often causes more dread than relief. There are traffic snarls and construction delays on

“May the meeting of these waters bring happiness and prosperity to our country and save some of the misery which the waters of the Cape have caused in the past.”

Augustus Belmont, April 21, 1914, on opening the last sluiceway connecting the waters from Cape Cod and Buzzards Bay

the bridges. One bumper sticker jokes to unknowing visitors that there is a special permit to use a non-existent tunnel under the canal.

Did You Know?

The direction of the tidal current in the canal changes every six hours, and the peak water flow is over 5.2 knots. This led to early proposals for locks to be installed on each end, but fear of the canal freezing up in winter with limited tidal flow scratched the proposal.

The Cape Cod Canal Visitor Center along the canal in Sandwich offers fun exhibits and programs and is open early May through late October seven days a week. Contact them at 508-833-9678 or at: www.capecodcanal.us.

There are currently proposals to add an additional bridge to ease traffic. Suggestions to alleviate congestion are as numerous as there were early proposals for a canal.

Yet for me, the canal and her bridges act as symbolic milestones in my life, admittedly unrelated to bridge and canal technology. I remember my numerous passages over the canal to visit my mother, who was battling cancer. I remember straining to see the top of the Bourne Bridge after returning from a long, dusty vacation drive out to Wyoming. I will remember, in the not-so-distant future, crossing the canal on the way to visiting potential colleges with my oldest daughter – symbolic of a young adult leaving her birthplace en route to a new beginning.

But there are certain nights – black, icy, windy nights – when I see the canal from above and see her reassuring lights guiding unseen vessels along. It is then that I am reminded of the canal’s original purpose, her winding beauty, and her watery ribbon of safe passage.

Historic Buildings at Cape Cod National Seashore

The Penniman House, 70 Fort Hill Road, Eastham



The Penniman House, completed in 1868, was styled after the French Second-Empire period. It included every known comfort of the day and many innovative ideas. The Captain Edward Penniman family enjoyed this fine home for nearly 100 years. *Directions:* Take Route 6, approximately one mile north of the Orleans rotary, at Fort Hill. Seasonal tours and open houses. Limited parking.

Nauset Light, intersection of Ocean View Drive and Cable Road, Eastham



Nauset Light, moved in 1996, remains a navigational aid. Nauset Light Preservation Society volunteers conduct tours Sunday afternoons from early May through October; additional Wednesday afternoons in July and August. Donations accepted. www.nausetlight.org. *Directions:* Take Route 6 to the traffic light at Salt Pond Visitor Center at Nauset Road. Turn onto Nauset Road and follow signs to Coast Guard and Nauset Light beaches. Park at Nauset Light Beach. *Beach fee may apply.*

The Three Sisters Lighthouses, Cable Road, Eastham



In 1838, three brick towers were built in a row 150 feet apart on the cliffs of what is now the Nauset Light Beach area. Known as the Three Sisters, the original brick towers fell victim to erosion in 1892 and were replaced with three movable wooden towers that are now arranged in their original configuration off Cable Road. Seasonal tours and open houses. Located ¼ mile west of Nauset Light on Cable Road.

Atwood-Higgins House, 269 Bound Brook Island Road, Wellfleet



The Atwood-Higgins House is a fine example of a properly framed Cape Cod cottage, which grew from a half-house in the early 1700s to a full-Cape with eight rooms by the 19th century. The oldest house owned by the national seashore is flanked by an eclectic collection of later vintage buildings. *Directions:* Take Route 6. Turn onto Pamet Point Road in Wellfleet at the Truro town line. Take Pamet Point Road and follow signs to Atwood-Higgins. Seasonal tours. Limited parking.

Pamet Cranberry Bog House, 86 North Pamet Road, Truro



Originally constructed around 1830, the Bog House is located among former cranberry bogs in the Pamet Valley. It supported cranberry harvesting that occurred there until the 1960s. Views of the house can be seen from atop Bearberry Hill. *Directions:* Follow North Pamet Road in Truro, off Route 6, to its end. Limited parking.

Highland House, 27 Highland Light Road, North Truro



The Highland House Museum occupies the Highland House, a classic example of a turn-of-the-century summer resort hotel built on the Highlands in 1907. A visit to the museum provides insight into the lives of the people of Truro dating back to early European settlers and the Native Americans who preceded them. Open June 1 through September, Monday to Saturday, 10:30 AM to 4:30 PM. \$5 adults; 12 and under/members free. 508-487-3397. www.trurohistorical.org. *Directions:* Take the Cape Cod Light exit, Route 6, onto Highland Road, and follow signs.

Highland Light, 27 Highland Light Road, North Truro



Highland Light was the first lighthouse on Cape Cod. Erected in 1797, Highland Light, also known as Cape Cod Light, has warned seafarers for over 200 years of the treacherous Outer Cape coastline. Operated by Eastern National. Open daily mid-May through mid-October. Tours daily 10 AM to 5:30 PM, \$4 all ages. Children must be 48 inches tall. 508-487-1121. www.highlandlighthouse.org *Directions:* Take the Cape Cod Light exit, Route 6, onto Highland Road, and follow signs.

Old Harbor Life-Saving Station, 191 Race Point Road, Provincetown



At Old Harbor, the National Park Service interprets the dramatic story of shipwrecks and the role of the U.S. Life-Saving Service in preventing shipwrecks and performing rescues. During the summer, reenactments of the historical breeches-buoy drill are performed weekly. Seasonal open houses. *Directions:* Take Route 6 to Race Point Road in Provincetown. Park at Race Point Beach. *Beach fee may apply.*



Family Foray: Be a Seashore Scientist!

Do you visit Cape Cod National Seashore beaches to swim or play in the sand? Scientists look at the beach from a different point of view. They divide the beach into zones. They study plants and animals that have adapted to beach and dunes conditions for survival. Some animals are listed as threatened or endangered, for example: piping plovers and the northern beach tiger beetle. Be a seashore scientist and explore the plant (flora) and animals (fauna) of the backshore, the wide, flat areas between the foreshore and the dunes or beach cliff, and the wrackline (or driftline), where debris is deposited by waves. Look for how the flora and fauna have adapted to live and grow in the different beach zones, and see if you can determine where the wrackline material came from.

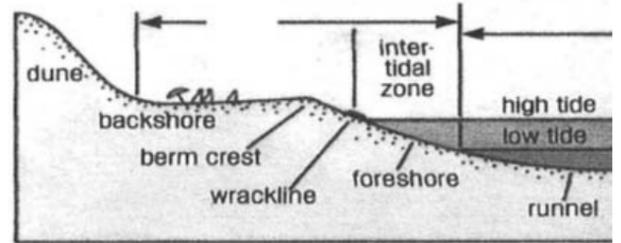
Use the park map in this newspaper, or ask a ranger for directions to one of the six national seashore beaches.

What you need to bring : Curiosity and investigative skills. If you want to record your observations, bring a clipboard or firm writing surface, paper, pencils or pens. A magnifier, and "Beachcombers Guide to North Atlantic Seashore," (Mass. Audubon Society) or other field guides are also helpful, but not necessary.

Staying safe: Keep off sliding and eroding dunes and cliffs. Watch for poison ivy. Check for ticks. DO NOT TOUCH sharp, rusted, or unknown litter. Wear appropriate clothing and footwear, sunscreen, and a hat.

Getting started: When you arrive at the beach, locate the wrackline or driftline the part of the beach where waves have deposited a line of debris. **Clue:** it is usually a darker line on the sand, and appears to have grass and other plant material in it.

Find a spot along the wrackline and look carefully at what's in it. Use your magnifier to see things up close. Look for washed up plant and animal debris.



How did the wrackline get here?

Bring your curiosity and investigative skills to the beach, make some interesting discoveries, and have fun at the same time! NPS photo

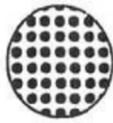
Find evidence of two plants in the wrackline. Are they land plants or are they from the sea? How do you know?
 Find evidence of five animal species, such as shells and feathers. Can you identify the animals they are from?
 Find something made by people. How did it get onto the beach?

Move to the backshore, which is the dry, level, sandy part of the beach.

Examine the sizes of sand grains that make up the beach sand. Find some particles that match the sizes within these circles. Why are the grain sizes different? How does the size of sediment relate to beach erosion?



Sand
0.06-2mm



Granules
2-4mm



Cobbles
4-6 mm

Find small holes made by little invertebrates on the backshore or that live on the beach and dig near the wrackline. Are there more holes or animal evidence near sand grains, granules, or cobbles?

Look for footprints: find prints from at least 3 different animal species. What animals do you think made the prints?

Why were the animals on the beach? Find something on the beach one of the animals might eat.

Listen: List 3 things you hear.

Smell: List 3 things you smell.

Evidence of humans: List 3 things:

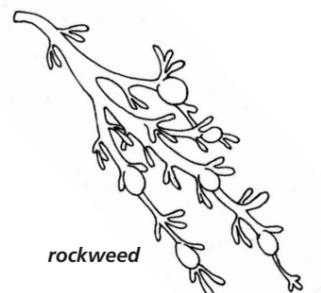
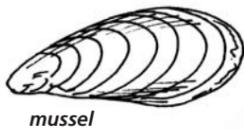
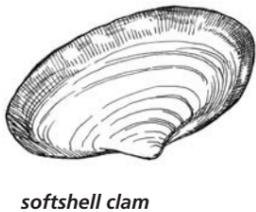
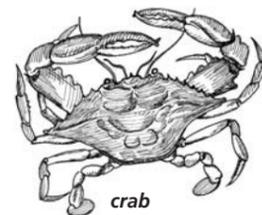
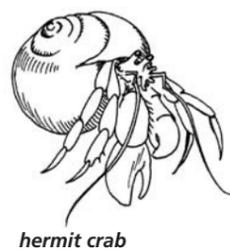
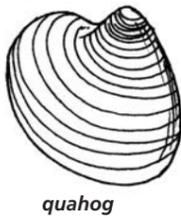
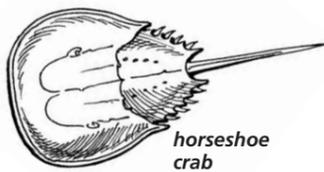
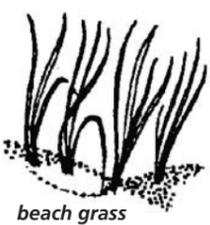
Think About It... If you came back on a day when the weather is the opposite of today, or in a different season, what changes would you find? Would the zones and wrackline be in the same locations?

Exploring Sandy Beaches and Dunes

Investigate the wrackline and dune plants. Circle plants and animals you find.

Name _____ Date _____

Location _____ Weather _____



Become a *Cape Cod National Seashore Junior Ranger*. Join a growing group of young people who are interested in the world around them and involved in their nation's history. Stop at a visitor center desk, ask for your own Junior Ranger booklet, and start your adventure today!

For more Junior Ranger fun when you return home, check out "WebRangers" at www.nps.gov/webrangers. Be sure to check out the Junior Ranger Program at other national parks you may visit in the future!



Do you enjoy Cape Cod National Seashore? Share your favorite photos, video clips, and stories with the National Park Foundation's Summer Scrapbook and you could win a national park trip and other great prizes! Learn more at: www.nationalparks.org/summer

RANGER-LED ACTIVITIES, JULY 1 through AUGUST 31, 2014

-  Denotes activities that are accessible with minor assistance. Contact park staff if you have questions about accessibility.
- ✓ Long pants (shorts for canoe trips), appropriate footwear, hats, sunscreen, bug spray, and water are recommended for outdoor activities.

-  Denotes National Park Service Healthy Parks Healthy People programs featuring parks as cornerstones of mental, physical, and spiritual health.
-  Denotes activities especially suited for families with children.

PROGRAM RESERVATIONS AND FEES

RESERVATION POLICY: All programs requiring reservations may be reserved no more than one week in advance.

- Canoe Adventures: \$25 per adult, \$18 per child 16 and under. Minimum age is 6. Canoe experience is mandatory.
- Salt Pond Paddle: \$20 per adult, \$15 per child 16 and under. Minimum age is 6. No experience required.
- Canoe Lesson: \$15 per person. Minimum age is 12.
- Beginner's Surfcasting Lesson: \$20 per person. Minimum age is 12.
- Fish, Snails, and Horseshoe Crab Tales: \$15 per family, or \$5 per person.
- Tickets are nonrefundable, available no more than one week in advance, and must be purchased with a credit card either in person at visitor centers or by phone, prior to 4:30 PM daily.
- All equipment is provided unless otherwise noted. • You may have to wade and assist with moving equipment during canoe programs. • Wear shoes (required) that can get wet.

Salt Pond Visitor Center,
50 Nauset Road, off Route 6
Eastham 508-255-3421

Province Lands Visitor Center,
171 Race Point Road, off Route 6
Provincetown 508-487-1256

Yoga on the Beach: \$11 per person; and Roads Less Traveled: \$6 per person. Reserve at www.recreation.gov (24 hours); search on *Cape Cod National Seashore, tours and tickets*; or call 1-877-444-6777 (10 AM to midnight). Reservations accepted beginning at 10 AM one week in advance of the program date.

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Eastham - Program Descriptions and Meeting Locations
			7:30 AM			7:30 AM	BEGINNER'S SURFCASTING LESSON - 1½ hours. \$20 (minimum age 12). Learn the basics of saltwater fishing and practice the skill, but don't expect to bring home supper! No fishing license required. Meet at the Coast Guard Station, Coast Guard Beach at the end of Doane Road. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 18, TO REGISTER. SEE PROGRAM RESERVATIONS AND FEES ABOVE.
					7:30 AM		WALK: SEARCHING FOR BIRDS - 2 hours, distance varies. Free. Join a skilled birdwatcher at various sites in the park for bird identification and observations. Bring binoculars if you have them. Meet at the Salt Pond Visitor Center to caravan to selected sites.
					7:30 AM		YOGA ON THE BEACH - 1½ hours. \$11. Stretch the body and the spirit in the most serene of settings. Join a ranger and certified yoga instructor for an all-level, interdisciplinary-style class held in the cool morning air at beautiful Coast Guard Beach. Meet in the parking area at Coast Guard Beach at the end of Doane Road. \$11 PER PERSON. RESERVE AT WWW.RECREATION.GOV (24 HOURS); SEARCH ON <i>CAPE COD NATIONAL SEASHORE, TOURS AND TICKETS</i>; OR CALL 1-877-444-6777 (10 AM TO MIDNIGHT). RESERVATIONS ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE. 
						9 AM	WALK: CHRONICLES FROM THE BEACH - 1 hour, up to ½ mile. Free. Join lifelong Cape Codder and author Dana Eldridge on this stroll along the beach as he shares some of his most memorable stories from his life growing up at the edge of the sea. Meet Dana at the loading zone in the Little Creek shuttle parking area (\$15 parking fee) for Coast Guard Beach on Doane Road, and ride the tram to the beach.
9:30 AM		9:30 AM		9:30 AM			WALK: BEACH BREAK - ¾ hour, ½ mile. Free. Different days bring different topics on this short walk starting from the beautiful overlook at Coast Guard Beach at the end of Doane Road. <i>Sundays - Seashore Lore, Tuesdays - Life's a Beach, Thursdays - Curious About Sharks and Seals?</i> RESERVED PARKING. CALL SALT POND VISITOR CENTER AT 508-255-3421, EXT. 18, NO MORE THAN ONE WEEK IN ADVANCE TO RESERVE A PARKING SPACE. * PORTIONS OF PROGRAMS ACCESSIBLE. 
		9:30 AM to 11:30 AM					OPEN HOUSE: SEASHORE SCIENCE - Free. Drop by the Salt Pond Visitor Center to visit with one of the park scientists and learn about Cape Cod National Seashore natural resources and related monitoring tools and techniques, research projects, and management activities. 
	10:30 AM						CANOE LESSON - 1 hour, 1 mile. \$15 (minimum age 12). Learn basic paddling technique and how to control a canoe, while exploring the protected habitat of the Salt Pond. Meets the basic experience required for park-sponsored trips. Meet at the Salt Pond Visitor Center. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 18, TO REGISTER. SEE PROGRAM RESERVATIONS AND FEES ABOVE.
	10:30 AM						ACTIVITY: TAKE THE CAPE HISTORY CHALLENGE! - 20 minutes. Free. Take this fun, hands-on challenge by trying to identify curious bits and pieces of Cape Cod history. Be a history detective and discover the larger history stories behind the old stuff left behind. Great for kids, too! Come meet Park Historian Bill Burke, and get updates on what's new with the seashore's old stuff. Meet in the activity room at Salt Pond Visitor Center.  
			10:30 AM				ACTIVITY: SECRETS OF THE SEASHORE - 1 hour. Free. This indoor program for ages 4 to 6 examines animals found in Cape Cod's intertidal zone. Meet a seashore celebrity and create a creature craft. Adults must remain with children. Meet in the activity room at Salt Pond Visitor Center. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 18, TO REGISTER.  
					10:30 AM no program July 4 and 18		ACTIVITY: SMALL FRY SPECIAL - ¾ hour. Free. Children, bring your parents to the Salt Pond Visitor Center for stories about critters that live here in the Cape Cod National Seashore. Geared for young children. Adults must remain with children.  
	T 11 AM	OH 1 - 4 PM	OH 1 - 4 PM	OH 1 - 4 PM		T 11 AM	CAPTAIN EDWARD PENNIMAN HOUSE: A WHALING FAMILY'S STORY - Free. Learn about the Penniman family through a tour of their home and stories of their travels. Examine some of the hardships, adventures, and lifestyle of a whaling family. T = TOUR, BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, TO REGISTER. OH = OPEN HOUSE, BROWSE THROUGH. Meet at the Penniman House at Fort Hill, 70 Fort Hill Road. Limited parking.
11:30 AM		11:30 AM		11:30 AM			ACTIVITY: OPERATION EXPLORE! - ½ hour. Free. Join a ranger for a discovery activity designed for ages 8 and up. Meet on the terrace at the Salt Pond Visitor Center. *MAY BE ACCESSIBLE WITH 24-HOUR NOTICE BY CALLING SALT POND VISITOR CENTER, 508-255-3421.  
			2 PM				WALK: LORE OF NAUSET MARSH - 1 hour, 1 mile. Free. Explore the rich natural and human history around Nauset Marsh. Learn how each has affected the other over time. Meet on the terrace at Salt Pond Visitor Center.
5 PM		5 PM					TOUR: THREE SISTERS LIGHTHOUSES - 1 hour, ½ mile. Free. These 19th-century lighthouses once provided a beacon for sailors off the shore of Nauset Light Beach. Learn of their history and importance. Meet at the northeast corner of Nauset Light Beach parking area at the intersection of Ocean View Drive and Cable Road. <i>Beach fee may apply.</i> 

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Eastham - Program Descriptions and Meeting Locations
4:30 to 7:30 PM			4:30 to 7:30 PM				TOUR: NAUSET LIGHT - Lighthouses have guided mariners off Cape Cod shores since the late 1700s. Climb to the top of this iconic light. Park at Nauset Light Beach, at the intersection of Ocean View Drive and Cable Road. <i>Beach fee may apply. Conducted by Nauset Light Preservation Society. www.nausetlight.org. Donations accepted.</i>
		7 PM					TUESDAY NIGHTS AT SALT POND VISITOR CENTER - 1 hour. Free. Authors, performing artists, historians, and scientists will offer insights into seashore resources and stories. Details on page 12. 
			7:30 PM July; 7 PM August				CAMPFIRE: NAUSET LIGHT BEACH - 1½ hours, ½ mile. Free. Join us for an evening of fun as we gather around the campfire for stories, songs, or activities about the nature of Cape Cod and its rich past. Meet in the parking lot at Nauset Light Beach, at the intersection of Ocean View Drive and Cable Road. Bring a blanket and bug spray. 
				8:30 PM July; 8 PM August			WALK: WHOOO'S OUT TONIGHT? - 1 hour, ½ mile. Free. Explore the sights and sounds of the night and examine nocturnal animal adaptations. Meet at the parking area at Coast Guard Beach, at the end of Doane Road. Parking is limited. 
Times vary	2:30 PM	Times vary	2:30 PM	9:30 AM	Times vary	11:30 AM	CANOEING: SALT POND PADDLE - 1½ hours, 1½ miles. \$20 per adult, \$15 per child 16 and under (minimum age 6). Take a leisurely paddle in the protected waters of Salt Pond and nearby area of Nauset Marsh to explore its beauty and diversity. Meet at the Salt Pond Visitor Center amphitheater. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 18, TO REGISTER. SEE PROGRAM RESERVATIONS AND FEES ON PAGE 9. 
Times vary							ACTIVITY: SHELLFISHING DEMONSTRATION - 1 hour. Free. Learn about local shellfish and the tradition of shellfishing. Observe some shellfishing techniques at Salt Pond at low tide. Suitable for children 6 years of age and up. Adults must remain with children. This is not a wading program. Meet at the Salt Pond Visitor Center amphitheater. Sundays: July 6 - 2:30 PM; July 13 - 8:30 AM; July 20 - 2:30 PM; July 27 - 8:30 AM; August 3 - 1 PM; August 10 - no program; August 17 - 1 PM; August 24 - no program; August 31 - 11:30 AM. 
					Times vary		CANOEING: CANOE ADVENTURE - up to 3 hours, 3 miles. \$25 per adult, \$18 per child 16 and under (minimum age 6). These trips may explore Nauset Marsh, kettle ponds, or a bay, or may focus on a specialized topic. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 18, FOR A LIST OF PROGRAM TOPICS, DETAILS, AND TO REGISTER. SEE PROGRAM RESERVATIONS AND FEES ON PAGE 9. 

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Wellfleet - Program Descriptions and Meeting Locations
			11 AM	11 AM No program August 21			TOUR: ATWOOD-HIGGINS HOUSE - 1 hour. Free. Learn about early 18th-century Cape Cod architecture and one of the Outer Cape's early colonial settlement sites. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 18, TO REGISTER. 269 Bound Brook Island Road. <i>Directions:</i> Take Route 6. Turn onto Pamet Point Road, Wellfleet, at the Truro town line, follow signs.
					2 PM No program July 4		WALK: BOMBS AND BLACKOUTS - up to ¾ hour. Free. Join Ranger Dana Eldridge at Marconi Site (the former Camp Wellfleet) to examine the impact WWII had on the region. Hear his personal stories of the remnants of war washed upon the beaches, Coast Guard patrols, target practice, and torpedoed ships. Meet on the observation deck at the Marconi Site, 195 Marconi Station Road, Wellfleet.
	Times vary		Times vary				ACTIVITY: FISH, SNAILS, AND HORSESHOE CRAB TALES - 1½ hours, 1 mile. \$15 per family, or \$5 per person. Wade into the tidal flats of Cape Cod Bay with seine and dip nets to discover many of the hidden animals found in this intertidal habitat. Foot protection, such as water shoes, is suggested. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 18, TO REGISTER. Meet at the Great Island parking area where Chequessett Neck and Griffin Island roads meet. SEE PROGRAM RESERVATIONS AND FEES ON PAGE 9. Mondays: July 7 - 12:30 PM; July 14 - no program; July 21 - 12:30 PM; July 28 - 5:30 PM; August 4 - 10:30 AM; August 11 - 5 PM; August 18 - 11 AM; August 25 - 4:30 PM. Wednesdays: July 2 - 8:30 AM; July 9 - 2 PM; July 16 - 8 AM; July 23 - 2:30 PM; July 30 - no program; August 6 - 12:30 PM; August 13 - no program; August 20 - 1 PM; August 27 - 6 PM. 

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Truro - Program Descriptions and Meeting Locations
9 AM No program July 13							WALK: NATURE TALES AND REMOTE TRAILS OF BALLSTON BEACH - 2 hours, 2 miles. Free. Join the great-grandson of Sheldon William Ball and explore the area that was once the Ballston Beach Seaside Summer Colony. Ascend Bearberry Hill for dramatic views of the ocean and the Pamet River Valley. Along the way, experience heathlands, forest, and sea cliffs. The terrain is rugged, with steep hills and soft sand. Wear sturdy shoes and a hat. Bring sunscreen, bug spray, and water. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR MEETING LOCATION AND TO REGISTER.
					9 AM No program July 11		WALK: DUNE VIEWS OVER EAST HARBOR - 1½ hours, 1½ miles in soft sand. Free. Climb atop a parabolic dune to gain 360-degree views of ocean, cranberry bogs, harbor, and Provincetown. Discover the story of how the harbor was turned into a "lake," then back into a harbor. Meet in the bike trail parking lot at the end of High Head Road, off Route 6, in Truro (stay left and continue on the dirt road). This program involves moderate hiking in soft sand and ascending steep dunes. Bring sunscreen, water, bug spray, and appropriate footwear.
						10 AM No program July 12	WALK: HISTORIC HIGHLAND DISTRICT - 1 hour, ½ mile. Free. From its establishment in 1797, Highland Light has been a constant presence in the Highlands of Truro, but the surrounding landscape has changed. Learn how the history of the Highlands District tells the story of the Outer Cape's transition from isolation area to summer resort over the past two centuries. Meet at the picnic table outside the Highland House Museum, 27 Highland Light Road. 
		10 AM					WALK: HIGHLAND LIGHT: CAUTIONARY ACCOUNTS FROM A CHANGING SHORELINE - 1 hour, ½ mile. Free. The natural coastal processes responsible for the shifting offshore sand bars that made light-houses like Highland Light so important for mariners eventually threatened the very ground the structure stood upon. Learn how coastal processes like erosion have been impacting Cape Cod, and its inhabitants, for thousands of years. Meet outside the lighthouse, 27 Highland Light Road.
10 AM to 5:30 PM	10 AM to 5:30 PM	10 AM to 5:30 PM	10 AM to 5:30 PM	10 AM to 5:30 PM	10 AM to 5:30 PM	10 AM to 5:30 PM	TOUR: HIGHLAND LIGHT - Enjoy magnificent views from Cape Cod's oldest lighthouse. Open daily through mid-October. \$4 all ages. Children must be 48 inches tall. 508-487-1121. 27 Highland Light Road. Operated by Eastern National. www.highlandlighthouse.org .
	10:30 AM to 4:30 PM	10:30 AM to 4:30 PM	MUSEUM: HIGHLAND HOUSE MUSEUM - Browse through an amazing array of objects from the Truro Historical Society's collection. Monday to Saturday, June 1 through September 30. \$5 adults; 12 and under and members free. 27 Highland Light Road. <i>Hosted by volunteers of the Truro Historical Society. www.trurohistorical.org.</i>				

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Truro - Program Descriptions and Meeting Locations
			3:30 PM				<p>WALK: TRURO'S COLD WAR PAST - 1½ hours, ¾ mile. Free. Tour the former North Truro Air Force Station. Learn about its role in our Cold War past and exciting plans for its future as the Highlands Center. 43 Old Dewline Road. <i>Directions:</i> Take Route 6 to Cape Cod (Highland) Light exit in Truro. Travel past the turn to the lighthouse. Turn left onto Old Dewline Road. Meet in the parking area.</p>
Times vary			Times vary				<p>WALK: SEALS OF CAPE COD - 1 hour, 1 mile in soft sand. Free. Here's an exciting opportunity to visit seals at a local haul-out site. Learn about their natural history and biology, as well as appropriate wildlife-viewing techniques so as not to disturb the seals. BY RESERVATION ONLY NO MORE THAN 7 DAYS IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR MEETING LOCATION AND TO REGISTER.</p> <p>Sundays: July 6 - noon; July 13 - 6 PM; July 20 - noon; July 27 - 6 PM; August 3 - 10:30 AM; August 10 - 5 PM; August 17 - 10:30 AM; August 24 - 4:30 PM; August 31 - 9 AM.</p> <p>Wednesdays: July 2 - 9 AM; July 9 - 2:30 PM; July 16 - 8:30 AM; July 23 - 3 PM; July 30 - no program; August 6 - 1 PM; August 13 - 6 PM; August 20 - 1:30 PM; August 27 - 5:30 PM</p>
Sun	Mon	Tues	Wed	Thur	Fri	Sat	Provincetown - Program Descriptions and Meeting Locations
		9 AM					<p>WALK: HELLTOWN, SNAKE HILLS, AND HERRING COVE - 2 hours, 2 miles. Free. The dunes between Herring Cove Beach and Race Point Light offer some spectacular views. Explore dune and beach ecology as you approach Hatches Harbor, an important salt-marsh area where you might see migratory and staging shorebirds concentrating in great numbers for their fall migration. Meet at Province Lands Visitor Center to caravan to the walk location. Long pants recommended to guard against ticks and poison ivy.</p>
						9 AM	<p>HIKE: ROADS LESS TRAVELED - 2 to 4 hours, 4 to 6 miles, strenuous. \$6 per person. Wake up early and join a ranger for an energetic hike off the beaten path and into some unique and secluded places. This hike is paced for a cardiovascular workout and may be strenuous. Wear good walking shoes; bring water, sunscreen, a hat, and insect repellent. Pets are not permitted. Destinations vary weekly. \$6 per person. RESERVE AT WWW.RECREATION.GOV (24 HOURS); SEARCH ON CAPE COD NATIONAL SEASHORE, TOURS AND TICKETS; OR CALL 1-877-444-6777 (10 AM TO MIDNIGHT). RESERVATIONS ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE. DESTINATIONS VARY WEEKLY AND ARE LISTED AT WWW.RECREATION.GOV.</p>
		4 PM			10 AM	4 PM	<p>WALK: DUNES OF THE PROVINCE LANDS - 1 hour, 1 mile in soft sand. Free. Explore an enchanting dune landscape of unusual plants and wild cranberry bogs, while learning about the Province Lands' unique place in American history. Meet at Province Lands Visitor Center. Wear shoes appropriate for walking in soft sand, and bring water. Check in at the desk inside Province Lands Visitor Center.</p>
		10 AM	10 AM		10 AM		<p>ACTIVITY: LIFEGUARD DEMONSTRATION - ½ hour. Free. Join a lifeguard for a surf-rescue demonstration on the beach and learn how to stay safe while swimming in the ocean. Meet at the head lifeguard stand at each beach: Tuesday, at Race Point Beach; Wednesday, at Herring Cove Beach; Friday, at Head of the Meadow Beach in Truro. All ages. <i>Beach fee applies.</i></p>
			10 AM				<p>SCAVENGER HUNT: THE AMAZING RACE - PROVINCETOWN - 1 to 1½ hours, 2 miles. Free program, parking fee may be required. Discover Provincetown's history one clue at a time. Race against time to win the grand prize while experiencing the town's unique treasures and best-kept secrets. Wear comfortable shoes. Meet the ranger at the Provincetown Town Green, Bas Relief Park on Bradford Street, across from the town hall. Use public parking in town. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, TO REGISTER.</p>
		10 AM					<p>ACTIVITY: SEAL PUP STORIES - ½ hour. Free. Where are seals born, and what do they need while growing up? Join a naturalist for an indoor program about seals, including short activities and a story, geared toward ages 3 to 8. Parents must remain with children. Meet at Province Lands Visitor Center.</p>
				11 AM			<p>TALK: MARINE LECTURE SERIES - 1 hour. Free. Weekly presentations by the director of marine education for the Provincetown Center for Coastal Studies. Meet at Province Lands Visitor Center. July 3 - <i>Whales of Cape Cod</i>; July 10 - <i>History of Whaling and The Charles W. Morgan</i> (historic whaleship from Mystic, Conn. in Provincetown this week); July 17 - <i>Seals of Cape Cod: A Comeback Story</i>; July 24 - <i>Our Ocean World and the Spectre of Climate Change</i>; July 31 - <i>Whales of Cape Cod</i> (one of many <i>Whale Week</i> activities sponsored by the Center for Coastal Studies); August 7 - <i>Marine Animal Disentanglement</i>; August 14 - <i>Trashing our Seas, Plastic Pollution in the 21st Century</i>; August 21 - <i>Cape Cod Marine Environment, Past, Present, and Future, From Cape Cod to Cape Croaker?</i>; no program August 28.</p>
	2 PM						<p>SNORKEL ADVENTURE - 2 hours. Free. Explore the amazing underwater world of Cape Cod and witness a freshwater or saltwater ecosystem firsthand. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR MEETING LOCATION AND TO REGISTER. ALL EQUIPMENT PROVIDED. MINIMUM AGE 10. EXPERIENCED SWIMMERS ONLY.</p>
2 PM to 4 PM	2 PM to 4 PM	2 PM to 4 PM	2 PM to 4 PM	2 PM to 4 PM	2 PM to 4 PM	2 PM to 4 PM	<p>OPEN HOUSE: OLD HARBOR LIFE-SAVING STATION - Free. Built in 1898, Old Harbor is the last intact life-saving station of the original 13 on Cape Cod. The station has been extensively restored and refurnished. A visit feels like stepping into a turn-of-the-century working station while the crew is out on patrol. Check out the 1937 motor surfboat – new this year! Park at Race Point Beach, 191 Race Point Road, and take the short walk to Old Harbor. <i>Beach fee may apply.</i></p>
			4 PM				<p>HIKE: ART IN THE DUNES - 3 hours, 2½ to 3 miles in loose sand. Free. On this long hike into the Province Lands dunes, view firsthand the quality of light, natural environment, and isolation that have long attracted artists and writers to Provincetown. You may meet an artist-in-residence at a dune shack. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR MEETING LOCATION AND TO REGISTER. SPACE IS LIMITED.</p>
				6 PM			<p>HISTORICAL REENACTMENT: BEACH APPARATUS DRILL - 1 hour. \$5 for adults; \$2 for seniors over 62, and children 7 to 17; children 6 and under, free. Listen for the keeper's command, "Open the boat room doors!" and return to the days of shipwrecks and lifesaving along Cape Cod. Watch uniformed surfmen fire a line from a cannon to a "ship" in distress and haul the "victim" to shore. This is our 35th year reenacting this 1902 rescue drill. Takes place at Old Harbor Life-Saving Station, Race Point Beach, 191 Race Point Road.</p>
	7:30 PM July; 7 PM August no program July 7						<p>CAMPFIRE: HERRING COVE BEACH - 1 hour. Free. Enjoy sunset on the beach and an evening of folklore and games around the campfire. Bring a beach chair or towel to sit on. Meet the rangers in front of the new bathroom and concessions stand, just south of the Herring Cove Beach entrance. 6 Province Lands Road. * <i>Accessible with assistance if Province Lands Visitor Center is notified in advance, 508-487-1256.</i></p>

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Provincetown - Program Descriptions and Meeting Locations
		Times vary			Times vary		<p>ACTIVITY: FISH, SNAILS, AND HORSESHOE CRAB TALES - 1½ hours, 1 mile. \$15 per family, or \$5 per person. Get your feet wet as you explore the abundance and diversity of life in an intertidal zone in Provincetown. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR MEETING LOCATION AND TO REGISTER. SEE PROGRAM RESERVATIONS AND FEES ON PAGE 9.</p> <p>Tuesdays: July 8 - 1:30 PM; July 15 - no program; July 22 - 1:45 PM; July 29 - no program; August 5 - 12 noon; August 12 - no program; August 19 - 12:30 PM; August 26 - no program.</p> <p>Fridays: July 4 - 10 AM; July 11 - 3:30 PM; July 18 - 10 AM; July 25 - 3:30 PM; August 1 - 9 AM; August 8 - 3 PM; August 15 - 9 AM; August 22 - 3 PM; August 29 - no program.</p>
			Times vary				<p>CANOE ADVENTURE: LONG POINT - up to 3 hours, 3 miles. \$25 per adult, \$18 per child 16 and under (minimum age 6). Paddle along the breakwater to explore the West End marsh and views of Long Point dunes. If conditions permit, swimming and snorkeling may be possible. BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR MEETING LOCATION AND TO REGISTER. SEE PROGRAM RESERVATIONS AND FEES ON PAGE 9.</p> <p>July 2 - 3 PM; July 9 - 8 AM; July 16 - 2:30 PM; July 23 - 9 AM; July 30 - 1:30 PM; August 6 - no program; August 13 - 1 PM; August 20 - no program; August 27 - 12:30 PM.</p>

Special programs

TUESDAY NIGHTS at SALT POND VISITOR CENTER

Programs are on Tuesdays at 7 PM at Salt Pond Visitor Center, off Route 6, Eastham, last about 1 hour, and are free to the public. Doors open at 6:30 PM. Due to limited seating, please arrive early. Sponsored by Friends of the Cape Cod National Seashore. ♿

JULY 1 - LIFE AT SEA: A VOYAGE IN SONG - Explore the life of a sailor, a whaler, and a fisherman; hear the songs that illustrate the life they pursued at sea. Sing along with musician David Coffin and his concertina. 

JULY 8 - ATLANTIC WHITE SHARK RESEARCH - To date, the Massachusetts Shark Research Program has tagged 39 great white sharks off Cape Cod. Join John Chisholm and Cynthia Wigren as they highlight what has been learned, as well as the ongoing work of the Massachusetts Shark Research Program and the Atlantic White Shark Conservancy.

JULY 15 - LIVE LOOK AT OWLS - Join Perry Ellis from Mass Audubon's Blue Hills Trailside Museum and find out what makes owls special, the role they play in the environment, and how humans affect their ability to survive. Get a chance to see several live owls up close and ask an experienced naturalist your owl questions. 

JULY 22 - SCIENCE AS A WAY OF THINKING ABOUT AND UNDERSTANDING NATURE - Cape Codders often notice the dramatic or everyday events in nature. How are scientists using these observations over the long-term to understand nature and to prepare us for the future enjoyment of Cape Cod? Join Cape Cod National Seashore Geographic Information Systems Specialist Mark Adams as he uncovers the connections between nature and science at the seashore.

JULY 29 - WILDLIFE AT CAPE COD NATIONAL SEASHORE: THE RARE AND UNSEEN AMONG US - Join Cape Cod National Seashore Wildlife Biologist Dr. Robert Cook for a look at some of the lesser-known and less conspicuous species of wildlife that the park supports. Learn about what we do and do not know about the roles that they play in the ecology of the park.

AUGUST 5 - COASTAL RESOURCES, NATIVE MOTIFS: TRADITIONAL WAMPANOAG ARTS - Southern New England artist Elizabeth James-Perry presents an illustrated talk on Native American adornment and material culture, including traditional weaving and the coastal artistic tradition of wampum. James-Perry, who is of Aquinnah Wampanoag heritage, will show some of her wild-harvested fibers, woven pouches, and wampum.

AUGUST 12 - SONGS FOR THE EARTH - Paul Kaplan presents engaging songs on a wide variety of environmental topics. Serious or funny, the songs can lead to a better understanding of both the fragility and the resilience of life on earth. Actively participate in helping Kaplan fill the room with sound. 

AUGUST 19 - THE CANAL STORY - One hundred years ago, the Cape Cod Canal became a reality. Discover what this waterway is all about and how it became the engineering marvel you see today. Join U.S. Army Corps of Engineers Park Ranger Samantha Gray as she reveals the rich history, unique features, and modern-day operations of the Cape Cod Canal.

AUGUST 26 - PETTICOATS AT SEA: THE STORY OF A CLIPPER SHIP FAMILY - History is full of stories about the captains of America's great clipper ships, but did you know that women and children also lived and sailed on these ships? Performer Joan Gattorna portrays the story of Johanna Sears and her family, a story based on the true-life adventures of several New England families whose daughters and sons proved their courage and skill when faced with perils at sea. 

PROVINCE LANDS MINI-FEST 171 Race Point Road, Provincetown Friday, August 1, 2 to 4 PM. Free!

In celebration of Provincetown's family week, join us at the picturesque outdoor Province Lands amphitheater for games and crafts.

Zoë Lewis and Peter Donnelly perform at 3 PM

These popular local musicians return for their fourth-annual Province Lands concert! Join us for lively sing-along music and family fun.

Sponsored by Friends of the Cape Cod National Seashore



Zoe Lewis

NATURE'S AMBASSADOR: THE LEGACY OF THORNTON W. BURGESS Salt Pond Visitor Center, Eastham. August 6, 3 PM, 45 minutes. Free.

Join author Christie Palmer for a reading and history of the renowned 20th-century naturalist and children's author, born and raised here on Cape Cod. Geared toward families. Ms. Palmer will be available to autograph copies of her book, which are sold in the Eastern National book and gift shop.

FOURTH ANNUAL SCIENCE SYMPOSIUM

Thursday, August 28, 1 to 4 PM.
Salt Pond Visitor Center

This showcase of natural-science research being conducted in the Cape Cod National Seashore will feature short presentations by current researchers and will be aimed at general audiences. Check the park's website at www.nps.gov/caco closer to the date for details. Refreshments courtesy of Friends of the Cape Cod National Seashore.

Partner Programs



FRIENDS FUNDRAISER features JIMMY TINGLE Wednesday, July 23, 7 to 9 PM. Payomet Performing Arts Center, Truro

Stand-up comic, social and political humorist JIMMY TINGLE LIVE "Making Comic Sense." Music by Toast and Jam. Complimentary beverages and light hors d'oeuvres. Live auction. Door prizes. Free unlimited parking and comfortable tent seating. All proceeds to fund the purchase of mammal monitoring

cameras, and Climate Friendly Park initiatives such as the beach recycling programs and a movie on sustainable practices. Additional information, and to purchase tickets at \$50 per person, www.fccns.org.

An Evening of Celtic Music - Thursday, July 10, 7 PM, Salt Pond Visitor Center, Eastham.

Free. Join Billy Hardy and Beth Sweeney, a dynamic Celtic fiddle and instrumental duo, for an evening of Irish and other Celtic music.

The Symbiotic Relationship between Humpback Whales and Marine Birds: An Illustrated Talk by Peter Trull - Wednesday, July 16, 7:30 PM, Salt Pond Visitor Center, Eastham. Free.

Peter Trull has been involved in marine research since 1976. As a researcher and education director at the Center for Coastal Studies in Provincetown in the 1990s, he developed and taught classes related to whales and marine birds, the topic of this fascinating lecture. The lecture follows the annual meeting of Friends of the Cape Cod National Seashore at 6:30 PM. All are welcome.



Outer Cape Chorale Chamber Singers Thursday, August 7, 7 PM, Salt Pond Visitor Center, Eastham. Free.

Enjoy an evening of song with this popular local group.

Concerts at Herring Cove Beach - Concessioner Far Land on the Beach is hosting "Wednesday Night Music Concerts on the Beach," June 25 through August 27, 6:30 to 8:30 PM. Three performers are sponsored by Friends of the Cape Cod National Seashore: July 16: Peter Donnelly and the New Beach Band; August 6: Zoe Lewis and her Rubber Band; and August 27: Chandler Travis Philharmonette.

The Friends is a nonprofit organization whose purpose is to enhance people's enjoyment of the seashore through financial and volunteer support. www.fccns.org



Wood kiln at Highlands Center

Fired Up!

Truro Center for the Arts at Castle Hill will be loading its Highlands Center wood kiln with pottery and firing the work to 2300 degrees in July and August. Curious? Stop by! Visit www.castlehill.org for more information.

Under the Tent: Payomet Performing Arts Center ♿

"Small Tent, Big Shows." Music headliners: Aztec Two-Step, David Bromberg Quintet, Judy Collins, Delbert McClinton, Marcia Ball, Ben Taylor, Chris Smither, and more. Outer Cape premiere of acclaimed hit *Red*, directed by Daisy Walker. For tickets or more details, call the Payomet at 508-487-5400 or check their website at payomet.org.

A Guide to Guides

by Christine Harris,
Interpretive Ranger

As you explore the trails, marshes, and beaches of the Cape Cod National Seashore, chances are you will come across some aspect of the natural world with which you are unfamiliar. Many curious naturalists, both amateur and expert, rely on field guides to help reveal the identity of the plants and animals they encounter. If you're curious about something you've found, study the unfamiliar specimen and take note of the details of its appearance including its shape, size, color, sound, and smell. If possible, take a picture. These field marks will be important when you consult a guide later on.

When you visit the Eastern National bookstores at the Salt Pond and Province Lands Visitor Centers, you'll see a large selection of field guides from which to choose, covering virtually any species of plant or animal that you may observe on Cape Cod or in New England. You can choose from books about wildflowers, trees, marine mammals, shells, tide pools, birds, scat and tracks, butterflies, lichens and many other topics. With so many choices, it can be difficult to determine which guide best suits your needs. Here are a few considerations.

Using a local guide can be useful if you are seeking advice on specific locations to look for a species.

Level of Difficulty

When you've found a guide of interest, read a species account and see if it includes any terminology with which you are unfamiliar. If you come across unfamiliar terms, are you able to find a clear definition of them somewhere else in the book such as a "How to Use this Book" section or glossary? If you can't find any information about unknown terminology, the author is likely assuming a higher level of familiarity with the subject matter and may be catering to a more advanced audience. Unless you are willing to do some research, you may want a more basic guide. Some guides are geared toward children and appeal to their natural curiosity.

Illustrations or Photographs?

When leafing through field guides, you'll notice some use photographs for identification, while others use drawings.

Mostly this is a matter of personal preference, but there are a few things to keep in mind. When a guide uses drawings, the illustrations are often drawn in a way to best show important field marks and other keys to identification.

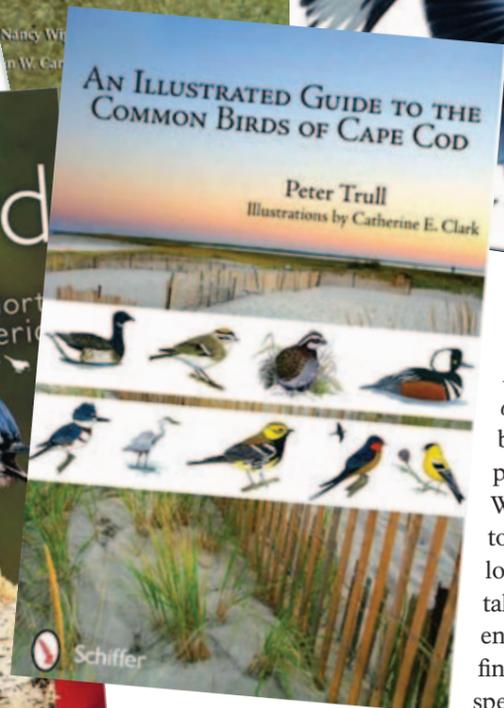
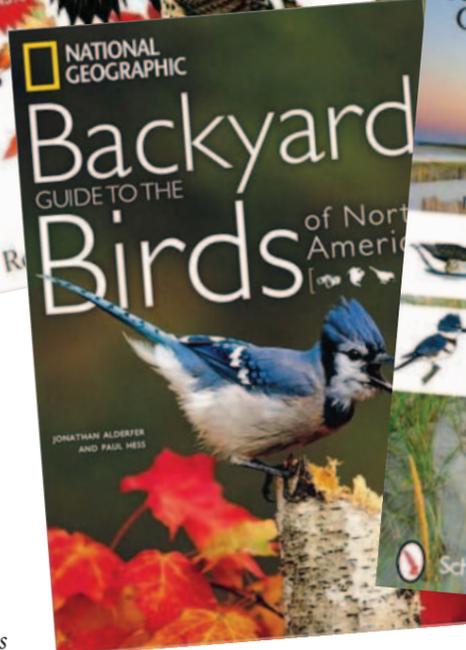
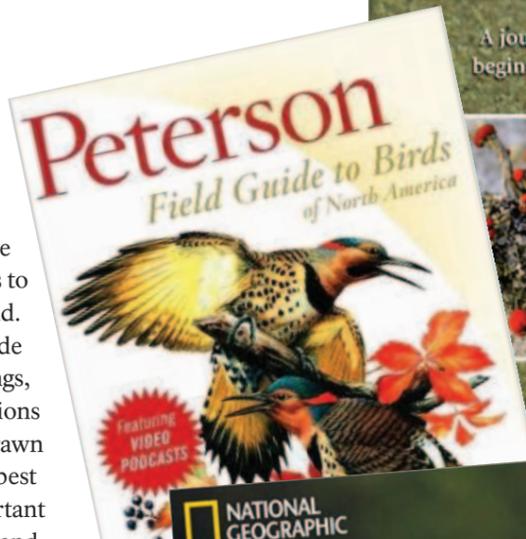
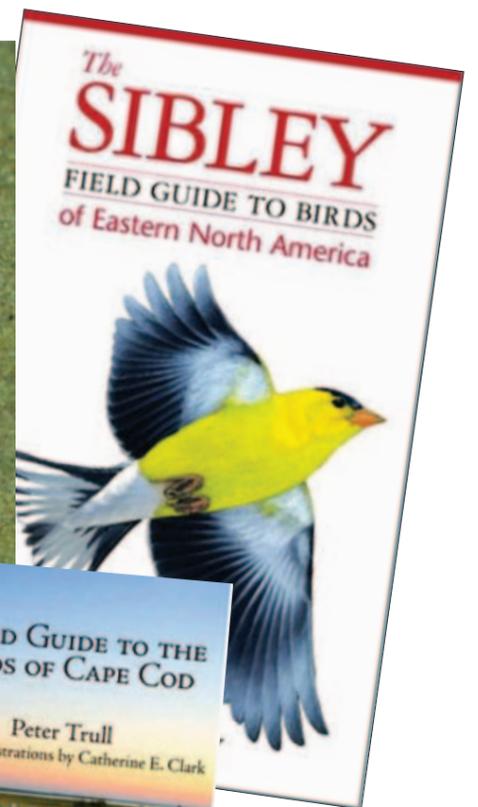
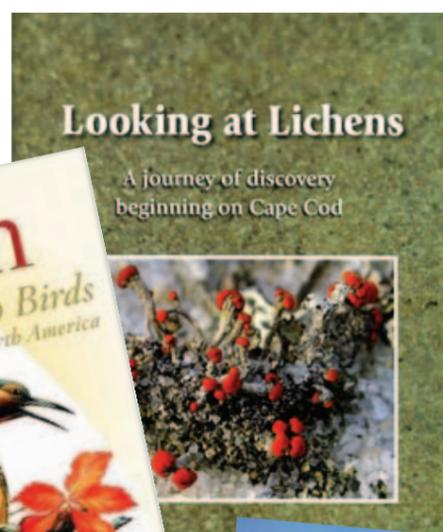
Some guides will have multiple drawings of the same species. For example, David Allen-Sibley's *The Sibley Field Guide to Birds of Eastern North America* includes multiple illustrations of each bird to show different plumages, behaviors, and the appearance of the species in flight.

As pointed out in *The Peterson Field Guide to Birds of North America*, another guide that uses illustrations, "A photograph, while modern and colorful, can capture only one moment in time," thus making it difficult to see all identifying features in one image. The *Stokes Beginner's Guide* series includes guides to shorebirds, butterflies, and dragonflies among others, and serves as an example of how best to use photographs for identification.

These guides use carefully selected, high-quality photos to show different angles and markings. If you can't decide between photographs and drawings, there are guides that include both, such as the *National Geographic Backyard Guide to the Birds of North America*.

Portability

Consider how you will use the guide. If you are looking for something to bring on long hikes, you may want to opt for a smaller, lighter-weight guide or a waterproof pamphlet-style guide. Though technically not "field" guides, many larger guides to identification exist that can be great for home reference, though they may be impractical to take into the field.



In *Looking at Lichens: A Journey of Discovery Beginning on Cape Cod*, written by Nancy Wigley with photographs by Susan W. Carr, each photograph includes the location where it was taken on Cape Cod, enabling the reader to find an example of the species.

Geographic Region

If you anticipate using the guide in different parts of the country, you may want to get a guide to North America. If you want something less extensive and more focused, there are guides to New England or Eastern North America. If you are looking for something very specific, choose Cape Cod-specific guides. Using a local guide can be useful if you are seeking advice on specific locations to look for a species.

An Illustrated Guide to the Common Birds of Cape Cod, written by Peter Trull and illustrated by Catherine E. Clark, includes useful advice that only an experienced local birder could give, such as "Nickerson State Park, Brewster, and the White Cedar Swamp at the Marconi site, Wellfleet, are places to look for [the Northern saw whet owl], especially in winter and spring."

An advantage to using a local guide is that it will likely include a smaller number of species than a regional guide, thus making it easier to hone in on what you are looking for.

Field Test a Few Guides

If you are having trouble determining which guide is best for you, see what your local library has to offer, and borrow a few different field guides to test them. Once you purchase a guide, take some time to look through it and familiarize yourself with it at home before you head out into the field. The more you familiarize yourself with the book, the less time you will be spending in the field thumbing through pages, and the more time you can spend enjoying being outdoors and observing nature. Beyond species identification, field guides may also describe species interactions, habitats, natural history, and biology.

With a trusty field guide in hand, many of the wonders of our natural world will be revealed.



Field guides can enhance discovery experiences when exploring the national seashore. NPS photo

Use Your Cell Phone to Learn About Cape Cod

National Seashore!



Dial and Discover.

Cell phone tour stops are located throughout the seashore. Look for the green and brown "Dial and

Discover Seashore Stories" signs at Salt Pond, Coast Guard Beach, Fort Hill, the Marconi Site, and Province Lands Visitor Center. Cell phone tour scripts are available at visitor centers for people with hearing impairments.

The Fort Hill Quest is a GPS-based information scavenger hunt of the Fort Hill area in Eastham. Download the coordinates and clue booklet from the seashore website, www.nps.gov/caco/planyourvisit/outdooractivities.htm, or pick up a free copy at Salt Pond Visitor Center in Eastham.

Return of the Native: Recent Recovery and Return of Long-Absent Species to Cape Cod

by Robert P. Cook, Ph.D., Wildlife Ecologist; and Jonathan G. Way, Ph.D., Park Ranger

Nowadays, when so much wildlife news is about species declines and possible extinctions, it is encouraging to know that some species are doing well and are on the rebound. Here on Cape Cod, where many of the wildlife species that were present when Europeans arrived in the 17th century have long been absent, we now have many examples of historically native wildlife returning to the forests and waters where they once lived.

Although Native Americans had long lived in small numbers on Cape Cod with limited impacts, the combined effects of the fur trade, clearing of the original forests for timber and farming, hunting for food, and predator control by European settlers brought about the decline and local disappearance of many of the Cape's native wildlife species.

Particularly affected were large and mid-sized mammals such as the white-tailed deer, wolf, bobcat, mountain lion, porcupine, otter, fisher, and beaver; as well as game birds such as wild turkey and the now extinct heath hen, a "prairie chicken" native to scrub and heathlands along the Northeast's coastal plain. Most of these wildlife declines had occurred by the mid-19th century, a point in time when, because of forest clearing, only about 20 percent of Outer Cape Cod was forested.

But, the tide was beginning to turn as New England farmers began moving west to take advantage of the more fertile lands that were becoming available and New England forests began to slowly recover on abandoned farmlands. Moreover, by the end of the 19th century, the age of unregulated hunting and trapping was coming to an end, allowing some remnant animal populations a chance to recover.

For some species, enough individuals survived locally to allow populations to recover on their own. White-tailed deer, reduced by the late 19th century to small populations in the Berkshires and in the pine-oak woodlands near Cape Cod, responded to a short hunting moratorium and have become a common species. Other species required a bit more help, and probably more time for the forests to recover.



WILD TURKEY: Long associated with the Pilgrims, who settled Cape Cod in the 1600s, the wild turkey had long been absent from Cape Cod. The local population was restored via transplants in the mid 1990s. This forest-dwelling bird feeds extensively on acorns and is quite capable of flying. It roosts at night in trees. NPS Photo, Judith Oset

The last known wild turkey in Massachusetts was killed in 1851, and over a century elapsed before they were successfully restored to western Massachusetts with animals from New York. The offspring of these birds, in turn, were transplanted throughout eastern Massachusetts, with



FISHER: Fisher are large, tree-dwelling members of the weasel family. Famous as one of the few species able to prey on porcupine, (a species currently not present in the seashore), they are presumably feeding on squirrels and rabbits. Photo, Scott Landry, Provincetown Center for Coastal Studies

28 birds released in Wellfleet in 1995-96. Now, there are large, conspicuous flocks of wild turkeys in many areas of the park.

For some species that have returned to Cape Cod on their own, the process has simply required more time.



SHARP-SHINNED HAWK: Colonial-era deforestation of the Outer Cape had long eliminated this disturbance-sensitive, forest-nesting hawk as a nesting species. It was documented as a nesting species in the seashore for the first time in 2013. Photo, Mark Faherty, Massachusetts Audubon Society, Wellfleet Bay Wildlife Sanctuary

The sharp-shinned hawk has long been present seasonally as a migrant on Cape Cod. But, it is a disturbance-sensitive, forest-nesting species, and as the late Massachusetts Audubon's Wallace Bailey, first director of the Wellfleet Bay Wildlife Sanctuary, wrote in 1968, "this hawk needs more extensive undisturbed forests than remain on the Lower Cape." Since then, the forests have continued to expand and mature, and in 2013, the first nesting of sharp-shinned hawk in the seashore was documented, appropriately by staff of the Wellfleet Bay Wildlife Sanctuary.

However, for animals that travel on foot, the process is more complicated.

Although northern New England, where there were fewer people and more of the original forests and wildlife survived, provided a refuge for many species, they were restricted there. As the regrowth and

maturation of forest habitats continued, particularly in southern New England, populations of these species were able to move south and re-colonize their native range. However, given the distance to Cape Cod from northern New England, as well as human barriers to wildlife travel, such as highways and the Cape Cod Canal, the re-colonization process can be slow.

River otters returned to the seashore a few decades ago, and they are now widespread and common in wetlands and shallow ponds. The first modern record of fisher here was in 1999, but it was not until a few years ago that this large tree-dwelling weasel was suddenly observed all over the seashore. Black bear and bobcat have also recently made forays back onto Cape Cod. The travels of the "Cape Cod Bear" to Provincetown was a major story here in 2012, and in 2013 a bobcat was documented in Falmouth, on the Upper Cape.

The shores and beaches of Cape Cod have also seen changes during historical times. When English explorer Martin Pring visited Truro in 1603, he noted the abundance of seals, as did Henry David Thoreau in the mid-19th century. However, in the late-19th century, a number of states, including Massachusetts, enacted bounties on seals, which effectively brought about their disappearance from Cape Cod and much of the Northeast.

With the end of bounties on Massachusetts seals in 1962, and passage of the Marine Mammal Protection Act in 1972, populations of seals have recovered. Gray seals are now common along the beaches



GRAY SEALS: Common on Cape Cod when Europeans arrived in the 1600s, bounties begun in the late 1800s effectively eliminated seals from the area. With an end to bounties and with the beginning of legal protection, populations of seals, such as gray seals, have recovered. Photos: NPS, and Center for Coastal Studies, under NOAA Permit No. 14903.



and shores of Cape Cod and are one of the most conspicuous and easily observed of our large resident mammals. With the return of seals, sightings of the great white shark, a well-known seal predator, have also increased on the Outer Cape. Although most of us grew up thinking of seals as "exotic" animals, the truth is their absence here was an unnatural condition. The current state, with an abundance of seals and sharks (which Thoreau also noted as common), more closely reflects the natural condition, unaffected by humans.



GREAT WHITE SHARK: The great white shark occurs in oceans around the world and is known as a primary predator of marine mammals. With the recovery of seal populations on Cape Cod, sightings of great white sharks have increased in recent years. NOAA Photo

Eastern coyotes arrived on Cape Cod in the early 1980s and were widespread and common a decade later. The eastern coyote, also called coywolf, is a hybrid between the western coyote and eastern wolf (*Canis lycaon*), the species of wolf that historically lived on Cape Cod.

The coyote that now lives on Cape Cod is genetically very similar to the native eastern wolf and is intermediate in body size between it and western coyotes. Thus, although the Cape's original wolf species is now extinct in this region, many of its genes survive in the eastern coyote, which has replaced it and now performs many of its ecological roles and functions in the Cape Cod wildlife community.

As encouraging as the recent return of native species is, wildlife at Cape Cod National Seashore still faces many challenges, even within Cape Cod's largest protected natural area. National Park Service goals include managing the seashore to preserve and protect native wildlife populations and communities, and, as much as possible, the natural processes necessary to support existence of those populations and communities. Given the history and extent of human activity on Cape Cod, this is a challenging task.

Many natural processes, such as wildfires, no longer function as they did 400 years ago, and the density of humans on the landscape is also far greater. Habitat loss and alterations and human-provided foods (from garbage, food scraps left on the beach, or intentionally and illegally feeding wildlife) can lead to unnaturally high populations of some species at the expense of others.

In the long term, one measure of the seashore's success will be how many of Cape Cod's historically native wildlife species continue to survive as populations here. The recent return of these long-absent species certainly helps toward that goal.



Photo of river otter taken by an early model camera trap during pilot studies in the Seashore in 2002. That work helped demonstrate the extent of the otter's return here. USGS Photo

Technology Helps Monitor Returning Mammals

Because they are so varied in size and habits and hard to live trap, it would be difficult and expensive to inventory and monitor all the species of medium-sized mammals that may occur on Cape Cod. Capturing enough animals to generate an estimate of population size using traditional “mark and recapture” methods is often not feasible.

In the past few decades, standardized methods to document mammals without capturing them have been developed. These include: “camera traps” (aka “trail cameras”), which are set up near game trails and use motion detectors to photograph animals as they walk by and a “cubby” box with tracking plate, a long, square, wooden tube that animals crawl into that “captures” tracks on an ink-covered aluminum sheet.

Although it is usually not possible to identify individuals and estimate the actual size of a population, these methods still provide important information on the presence and distribution of species, and an “Index of Abundance” that can be used to monitor population trends over time. Cape Cod National Seashore is in the early stages of implementing a long-term program to monitor medium and larger mammals using these methods.

Management of the Exotic, Invasive Common Reed (*Phragmites australis*) at Cape Cod National Seashore

by Stephen M. Smith, Ph.D., Plant Ecologist

An exotic plant is one that is not native to a given location but instead has been accidentally or deliberately introduced to a new location by human activity. An invasive plant is one that is able to spread rapidly and aggressively alter or displace indigenous plant communities after its arrival.

Exotic, invasive plants have become a problem of enormous proportions around the globe. They can change species composition, reduce species diversity, alter soil properties, change habitat structure, alter natural fire patterns, and frequently have a lower or no value as food for wildlife.

Much like many other natural or semi-natural places, the National Park Service’s (NPS) Cape Cod National Seashore has its share of exotic invasives that are a management challenge.

Common reed (*Phragmites australis*) is one of the most abundant invasives at the seashore. Originating in Eurasia, *Phragmites* is a large perennial grass that is now found in wetlands throughout temperate and tropical regions of the world. In suitable conditions, it can spread at a rate of five meters (~16 feet) or more per year through horizontal stems, which put down roots at regular intervals. *Phragmites* can grow in deep water and may even form floating mats. The erect stems range between 2 to 6 meters in height and populations develop such high densities that all other vegetation is excluded. It also tolerates salty water and can persist in areas with salinities up to 75 percent full-strength seawater.

Within Cape Cod National Seashore, *Phragmites* occurs in a variety of ecosystems. These include vernal wetlands, cranberry bogs, kettle ponds, and tidally restricted marshes.

As a component of the NPS mandate to control exotic vegetation wherever possible, the seashore has developed a multifaceted approach that includes both mechanical (e.g., cutting and drowning) and chemical means of control.

Cutting and drowning is only feasible for newly established populations that are relatively small. A more natural means of control can be achieved through tidal restoration. The last alternative, used only when stands are large and vigorous and other techniques cannot be applied, is herbicide.

Drowning by Manual Removal of Stems

While *Phragmites* is somewhat tolerant of complete immersion in water, prolonged flooding is a major stressor – especially when stems, which act as “snorkels” to provide oxygen from the atmosphere to the roots, are cut underwater.

During 2002-2004, the seashore experienced very high levels of precipitation and, consequently, very high water levels in its freshwater kettle ponds. At five of these ponds (Ryder, Round, Snow, and Great ponds in Truro and Long Pond in Wellfleet), *Phragmites* stems were cut just a few inches above pond bottom in an attempt to drown out the root systems.

Thanks to the abnormally high water levels, the effort proved quite successful, with a 90 to 100 percent reduction in live *Phragmites* (Figure 1).

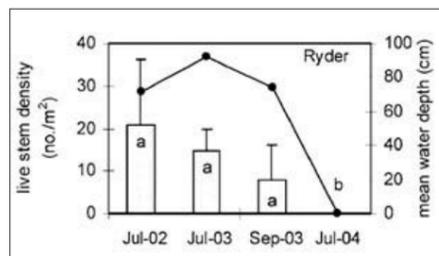


Figure 1. This graph shows the statistically significant decline in live *Phragmites* stem density (number/m²; vertical bars) between 2002/03 (a) and 2004 (b) as a result of manual removal; and the mean water depth (cm; solid line) over the project period.

Tidal Restoration

Hatches Harbor salt marsh is located at the northern end of Cape Cod in the town of Provincetown.

In 1930, in an attempt to control nuisance mosquito populations, an earthen dike was constructed that severed approximately half the marsh from tidal influence. As a result, water salinity plummeted to near freshwater, allowing the establishment and rapid expansion of *Phragmites* over roughly a third of the marsh.

In 1998, four large rectangular box culverts were built into the dike to allow seawater to flow into the marsh.

Since that time, due to restoration of tidal flows and the return of natural water-salinity levels, *Phragmites* has diminished substantially, making way for the expansion of native salt-marsh taxa such as smooth cordgrass (*Spartina alterniflora*) over many acres of once degraded marsh (Figure 2).



Figure 2. Native salt-marsh cordgrass (green vegetation, lower left side of photo) replacing salt-killed *Phragmites* (upper right side of photo) as a result of tidal restoration at Hatches Harbor, Provincetown. NPS photo

Chemical and Integrated Control

The last option for *Phragmites* control involves the use of herbicide. Many people feel strongly about herbicides; however, their limited, judicious, and informed use by licensed professionals has proven a safe and effective means to control exotic, invasive species.

Herbicide application techniques are quite varied, ranging from broadcast spraying to the preferred “clip and drip” method. The following examples demonstrate both of these approaches used at the seashore.

Phragmites first became established in Herring Pond, Wellfleet, sometime in the 1990s and rapidly proliferated along the shoreline. It appeared likely that this exotic, invasive species could displace the vast majority of aquatic vegetation along the pond perimeter. Because of the size, density, and vigor of *Phragmites* in this area, the only feasible method of control was herbicide.

In September 2011, an NPS contractor first applied herbicide to *Phragmites* foliage at Herring Pond using backpack sprayers. In 2012, the NPS Northeast Exotic Plant Management Team (NE-EPMT) treated several additional small stands that could not be treated in 2011.

The results have been no less than spectacular, with total eradication in the treated areas (Figure 3). Additionally, no mortality of non-target vegetation was observed.



Figure 3. Dead *Phragmites* along the shoreline of Herring Pond. No re-sprouts were observed after the 2001 treatment, while native species have begun to fill in the area. NPS photo

In 2004, *Phragmites* at the Pamet Bog, Truro, was treated by the NE-EPMT using an integrated mechanical-chemical approach. A “clip and drip” method was used in which individual stems are cut at waist height and herbicide is injected into the stem using a squeeze bottle (Figure 4). A purple dye is added to the herbicide mixture so that applicators know exactly where the liquid has been applied and which stems have been treated. The method is laborious and slow but is extremely protective of all other vegetation.



Figure 4. Betsy Lyman (NE-EPMT, NPS) conducting a “clip and drip” treatment at the Pamet Bog, Truro. NPS photo

A second visit by the team, in June 2011, was necessary to eliminate re-sprouts. The results were excellent, and, as of June 2012, there were no live *Phragmites* stems the bog.

Exotic plant management at Cape Cod National Seashore is part of a larger, nationwide (and worldwide) effort to preserve ecosystems in their natural state. Invasive plants can have major detrimental impacts on the structure and functioning of natural resources.

Continued efforts by the seashore to reverse or limit exotic, invasive species helps to maintain or restore ecological integrity of these fragile places and also helps to preserve “unimpaired the natural and cultural resources and values of the National Park system for the enjoyment, education, and inspiration of this and future generations.”



How Friends Support Cape Cod National Seashore



by Richard G. Ryder,
President
(info@fccns.org)



Be Green and Help Keep Our Beaches Clean!

by Elizabeth Migliore,
AmeriCorps Planning Assistant

Since the implementation of the Climate Friendly Parks Action Plan, Cape Cod National Seashore has stepped up its recycling efforts throughout the park. This year, we are furthering this initiative by reminding visitors to recycle what they bring to the beach. Visitor trash accounts for 95 percent of the park's solid waste, and it is estimated that 40 percent of this waste can be recycled. This year's effort will increase visitor recycling at beaches and divert a large amount of plastic, metal, and paper from the waste stream.

Waste in landfills is actually a significant climate polluter as it releases methane; both recycling and composting help to reduce these greenhouse gas emissions. In its Climate Friendly Parks Action Plan, the Cape Cod National Seashore set the target to reduce park operations' waste emissions to 35 percent below 2007 levels by 2020. Thus far, much of the action toward this has been through increased recycling by employees and at visitor centers.

As a climate-friendly park, the national seashore should make recycling easy for beach visitors. This summer, recycling bins will be placed within clear view of beach and bathhouse entrances, and signs will simply specify what can be recycled. Fortunately, the number of plastic water bottles at beaches will already be reduced due to the construction of water bottle filling stations at Herring Cove Beach bathhouse and Salt Pond Visitor Center. Next time you visit a national seashore beach, remember the positive impact you can make by recycling.



This summer, signs will be placed at beaches reminding visitors to use the recycling bins at beach and bathhouse entrances. NPS photo

Learn more about the National Park Service's sustainability initiatives at www.nps.gov/sustainability.

More information about the Climate Friendly Parks program at the Cape Cod National Seashore is available at <http://www.nps.gov/caco/parkmgmt/sustainability.htm>.



Welcome to Cape Cod National Seashore, one of America's most spectacular national parks! For more than 25 years, Friends of the Cape Cod National Seashore (FCCNS) has been the not-for-profit support and fundraising partner of the seashore. The partnership was established to help preserve, protect, and enhance the fragile environment and unique cultural heritage of the park.

How do we do this? We engage and encourage visitors and residents, like you, to volunteer their time or support us financially. Through our Adopt-A-Trail program, we clear and prune trails when they get overgrown, we report trail needs to park staff, and we carry out group maintenance projects. Our trail volunteers are proud of their contributions of time and effort that help keep trails safe and provide for enjoyable hiking experiences.

Other Friends volunteers are active members of the Seal Education Team. No, we aren't educating seals; instead, we staff a sandbar where several hundred seals haul out to rest, and we educate the public about the biology and natural history of the seals and how to view them in a resource-sensitive and safe manner.

We also assist with the park's phenology program, which aims to build a record over time of when certain natural events occur, such as when ice forms on ponds, when it melts, when shrubs produce leaves and buds, and when bird species are first observed each year. This data set, which will be developed over years and decades, will inform the park on climate changes.

On the fundraising side, we raised over \$125,000 to help the park furnish the historic Old Harbor Life-Saving Station to its circa 1900 appearance. The station is the last of the original 13 on Cape Cod at the turn of the 20th century, and is one of the best preserved and furnished stations in the country. Visitors to the station this summer (whether for the daily open house



There are many opportunities for hands-on, rewarding work sponsored by the Friends and the seashore. NPS photo

or the Thursday evening historical reenactment of a breeches-buoy drill) will see new bleachers, funded by Friends to replace older bleachers that had become unsafe.

In 2013, Friends donated \$25,000 to the park to enable the Province Lands Visitor Center to open. And this winter we funded the licensing fees and purchase of films for the annual Winter Film Festival that many residents enjoyed during this sun-starved and cold winter. Plus, cookies and hot cider were offered! This year's festival subject was landscapes, both real and imagined, and featured such memorable films as *Avatar*, *Dances with Wolves*, *Never Cry Wolf*, and *An Inconvenient Truth*. Each year the film library grows, as does the level of participation. In the summer season, we sponsor free concerts at Salt Pond and the "Tuesday Evenings at Salt Pond" lectures and performances.

Our efforts would not be nearly as effective without our volunteers and members. I encourage everyone who enjoys Cape Cod National Seashore to find a way to support it. And I certainly hope you enjoy your visit to this special place.

How can you help Cape Cod National Seashore as a Volunteer-in-Park (VIP)?



For More Information

Check the park's website at www.nps.gov/caco and click on "Support Your Park" to see a list of current volunteer opportunities.

- Staff information desks at Salt Pond and Province Lands visitor centers.
- "Adopt a trail" and prune brush along trails.
- Assist field staff in monitoring and protecting nesting shorebirds.
- "Adopt a beach" and assist biologists in monitoring piping plover nests or sections of remote beach.
- Communicate with the public at shorebird nest sites and beach access points from Eastham to Provincetown.
- Provide information to visitors who are viewing seals resting at low tide on a sandbar in Truro.
- Orient visitors to the 1898 Old Harbor Life-Saving Station in Provincetown.
- Assist research about precipitation in the seashore by visiting a salt-marsh field research site in Provincetown.
- Assist researchers in development of a long-term monitoring program for marsh birds.

Join a dedicated team of volunteers and make Cape Cod National Seashore a better place.





FRIENDS OF THE CAPE COD NATIONAL SEASHORE WILL BE HOSTING

A GALA FUNDRAISER FEATURING COMEDIAN JIMMY TINGLE WEDNESDAY, JULY 23 7-9PM PAYOMET PERFORMING ARTS CENTER, TRURO



A festive evening of comedy, music, hors d'oeuvres, and beverages to benefit CAPE COD NATIONAL SEASHORE. For tickets (\$50 per person) and more information, visit www.fcns.org

Cape Cod National Seashore Bookstores



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T-Shirts
Fleece Jackets
Kids' Tees
Tote Bags & More



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Prints
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Maps & Fieldguides



Eastern National is a private, nonprofit organization that provides quality educational products and services to park visitors. Proceeds are donated directly to Cape Cod National Seashore to support interpretive and educational programs, including the printing of this publication.

Thank you for your purchases.



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Handblown Glass
Pottery

Visit our new location at
Highland Light
and our other stores at
Salt Pond
AND
Province Lands
VISITOR CENTERS

Local Area Information

Chambers of Commerce:

Cape Cod Chamber of Commerce: 5 Patti Page Way, Centerville
Website: www.capecodchamber.org Email: info@capecodchamber.org
Phone: 508-362-3225

Chatham:

2377 Main Street, Chatham
www.chathaminfo.com
Email: chamber@chathaminfo.com
Phone: 800-715-5567
Info Booth: 508-945-5199

Orleans:

Eldridge Parkway at Route 6A,
and 44 Main Street, Orleans
www.capecod-orleans.com
Email: info@capecod-orleans.com
Phone: 800-865-1386
Info Booth: 508-255-1386

Eastham:

4730 State Highway, Eastham
www.easthamchamber.com
Email: info@easthamchamber.com
Phone: 508-240-7211
Info Booth: 508-255-3444

Wellfleet:

1426 State Highway, Wellfleet
www.wellfleetchamber.com
Email: info@wellfleetchamber.com
Phone: 508-349-2510

Truro:

State Highway at Head of the Meadow Road,
North Truro
www.trurochamberofcommerce.com
Email: info@trurochamberofcommerce.com
Phone: 508-487-1288

Provincetown:

307 Commercial Street, Provincetown
www.ptownchamber.com
Email: info@ptownchamber.com
Phone: 508-487-3424

Outer Cape Bicycle Rentals:

Arnold's, 329 Commercial Street, Provincetown	508-487-0844
Gale Force, 144 Bradford Street Ext., Provincetown	508-487-4849
Idle Times, 4550 State Highway, Eastham	508-255-8281
Idle Times, 2616 State Highway, Wellfleet	508-349-9161
Little Capistrano, 30 Salt Pond Road Eastham	508-255-6515
Little Capistrano, 1446 State Highway, Wellfleet	508-349-2363
The Bike Shack, 63 Shank Painter Road, Provincetown	508-487-0232
Provincetown Bikes, 42 Bradford Street, Provincetown	508-487-8735

Shellfishing in Eastham:

Eastham Natural Resources Office (permits) 555 Old Orchard Road	508-240-5972
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Whale Watching in Provincetown:

Dolphin Fleet, 307 Commercial Street #1	800-826-9300
Provincetown Whale Watches, 309 Commercial Street	800-225-4000

Dune Tours in Provincetown:

Art's Dune Tours, 4 Standish Street, Provincetown	508-487-1950
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Kayak and Boat Rentals:

Goose Hummock, 15 Massachusetts 6A, Orleans	508-255-0455
Nauset Marine East, 235 Main Street, Orleans	508-255-3045
Castaways Marine, 4655 State Highway, North Eastham	508-255-7751
Jack's Boat Rental, 2616 State Highway, Wellfleet	508-349-9808
Wellfleet Marine Corp., 25 Holbrook Avenue, Wellfleet	508-349-6417
Flyer's Boat Rental, 131 Commercial Street, Provincetown	508-487-0898

Eco Tours:

Dick Hilmer's Explore Cape Cod Kayak Tours and Educational Adventures on the Outer Cape	508-240-1211
Cape Kayaking, Orleans	508-247-7402
Blue Claw Boat Tours, Orleans	508-240-5783
Great Marsh Kayak Tours, Mashpee	508-328-7064
Wellfleet Bay Wildlife Sanctuary, Wellfleet	508-349-2615
Center for Coastal Studies, MacMillan Wharf, Provincetown	508-487-3622
Viking Princess Cruises of Provincetown MacMillan Wharf	508-487-7323

Outer Cape Campgrounds, RV Parks, State Parks:

Atlantic Oaks, 3700 State Highway, Eastham	508-255-1437
Maurice's, 80 State Highway, Unit 1, Wellfleet	508-349-2029
Paine's, 180 Old Kings Highway, Wellfleet	508-349-3007
Adventure Bound Camping Resorts, 46 Highland Road, North Truro and 52 Head of the Meadow Road, North Truro	508-487-1847
Coastal Acres, 76R Bayberry Avenue, Provincetown	508-487-1700
Dune's Edge, 386 State Highway, Provincetown	508-487-9815
Nickerson State Park, Brewster	508-896-3491
Hostelling International	http://capecod.hiusa.org

Scenic Routes and Overlooks



View of Nauset Marsh from Fort Hill area, Eastham. NPS photo

At Cape Cod National Seashore, opportunities for inspiration, reflection, and renewal abound. Use this information, in conjunction with the park map, to discover the drama of the ocean surf, or the subtle beauty of a cultural landscape. Allow 15 to 30 minutes at each site to take in the view, or walk to a scenic overlook.

Eastham

Fort Hill Area - Fort Hill Road, off Route 6. Open fields, views of Nauset Marsh, historic Penniman House (occasional, scheduled tours and open houses). Access to Red Maple Swamp Trail. Limited parking. Seasonal restrooms.

Coast Guard and Nauset Light beaches, Nauset and Three Sisters lighthouses - off Route 6 at the traffic light at Nauset Road, near Salt Pond Visitor Center. Ocean View Drive affords ocean and marsh views and an opportunity to see historic lighthouses. Seasonal restrooms at beaches. Seasonal beach fee may apply. Highly congested in summer; spring and fall use recommended.

Wellfleet

Atwood-Higgins House - 269 Bound Brook Island Road. Inquire at visitor centers for directions. 18th-century Cape house (occasional, scheduled tours) accessed from true "back roads" to Bound Brook Island. *Caution:* Circuitous, narrow roads. Limited parking.

Marconi Station Site - 195 Marconi Station Road, off Route 6 at the traffic light at Marconi Station area. High sand cliffs above the ocean, and the history of Marconi and his wireless radio station. Overlook platform. Access to Atlantic White Cedar Swamp Trail. Seasonal restrooms.

Truro

Highland Lighthouse (Cape Cod Light) and Highland House - 27 Highland Light Road, off Route 6 at the North Highland Road exit, North Truro. The oldest lighthouse on Cape Cod, and adjacent museum (open seasonally, fees). Overlook platform. Seasonal restrooms.

Pilgrim Heights - look for National Park Service sign off Route 6, North Truro. Viewpoint overlooks kettle hole, with distant views of the sand dunes of the Province Lands. Access to Pilgrim Spring Trail. Picnic area. Seasonal restrooms.

Provincetown

Old Harbor Life-Saving Station - at Race Point Beach, 191 Race Point Road. Historic structure at Race Point Beach (occasional, scheduled open houses), with dune and ocean views. Seasonal beach fee may apply.

Race Point Road - off Route 6 at Race Point Road traffic light. Scenic, 2-mile road through beech and oak forest and the Province Lands dunes. Connects Race Point Beach to Province Lands Road. Herring Cove Beach loop (additional two miles). Access to Beech Forest Trail, Province Lands Bicycle Trail, and Province Lands Visitor Center (seasonal).

The Lighthouses of Cape Cod National Seashore and Beyond

1. Race Point Light, Provincetown

The first Race Point Light was erected in 1816. The current lighthouse and keeper's house date from 1876. Over 100 ships wrecked on the treacherous shoals here between 1816 and 1946. *Directions:* Inaccessible by road. From Route 6, turn at the lights onto Race Point Road and follow to its end. Park in the Race Point Beach parking area. Walk along the beach about two miles to Race Point Light. *Beach fees apply during summer months and on weekends in late spring and early fall.*

2. Wood End Light, Provincetown

A twin to Long Point Light guarding the entrance to Provincetown Harbor, Wood End Light is located toward the end of the breakwater. Built in 1873, the lighthouse is now solar-powered. *Directions:* Inaccessible by road. Park at the rotary at the west end of Commercial Street. Walk across the breakwater, then bear straight across the neck about one-half mile to Wood End Light. Summer boat service from MacMillan Wharf.

3. Long Point Light, Provincetown

This light at the entrance to Provincetown Harbor was first lit in 1827. The lighthouse and keeper's cottage were rebuilt in 1875. In 1952, the light was automated. Solar panels were installed in 1982. *Directions:* Walk across Provincetown breakwater. Turn left and follow Long Point approximately one and one-half miles to the end. Summer boat service from MacMillan Wharf.

4. Highland Light (Cape Cod Light), 27 Highland Light Road, North Truro

Traditionally, Highland Light was the first light seen on a voyage from Europe to Boston. In 1798, Highland was the first Cape Cod lighthouse built. The present brick lighthouse was erected in 1857 on the 100-foot-high cliffs above the ocean. It was moved inland in 1996. *Directions:* From Route 6 in North Truro, turn onto Highland Road, which is over 3 miles north of Truro Center. At the end of Highland Road, go right onto Lighthouse Road and into the parking area. *Open seasonally and operated by Eastern National, Inc. www.highlandlighthouse.org*

5. Nauset Light, intersection of Oceanview Drive and Cable Road, Eastham

Nauset Light was built as three brick towers in 1838 to differentiate the location from Highland and Chatham lights. When erosion claimed the originals in 1892, they were replaced by three wooden towers called the Three Sisters. The current tower, moved here from Chatham in 1923, succeeded them. *Directions:* Turn right off Route 6 at the lights at Salt Pond Visitor Center, Cape Cod National Seashore. Continue to Coast Guard Beach, then turn left onto Ocean View Drive. Drive one mile to the Nauset Light Beach parking area. *Operated seasonally for public access by agreement with the Nauset Light Preservation Society. www.nausetlight.org*

6. Three Sisters lighthouses, Cable Road, Eastham

Built at Nauset in 1892. Two of the three lights were sold to become a summer cottage in 1911. The third one was replaced in 1923 by one of the two Chatham lights. The Three Sisters are now located safely back from shore-front erosion in the Cape Cod National Seashore. *Directions:* Same directions as to Nauset Light Beach. Short walk inland on Cable Road from the parking area to Three Sisters. Limited parking at Three Sisters.

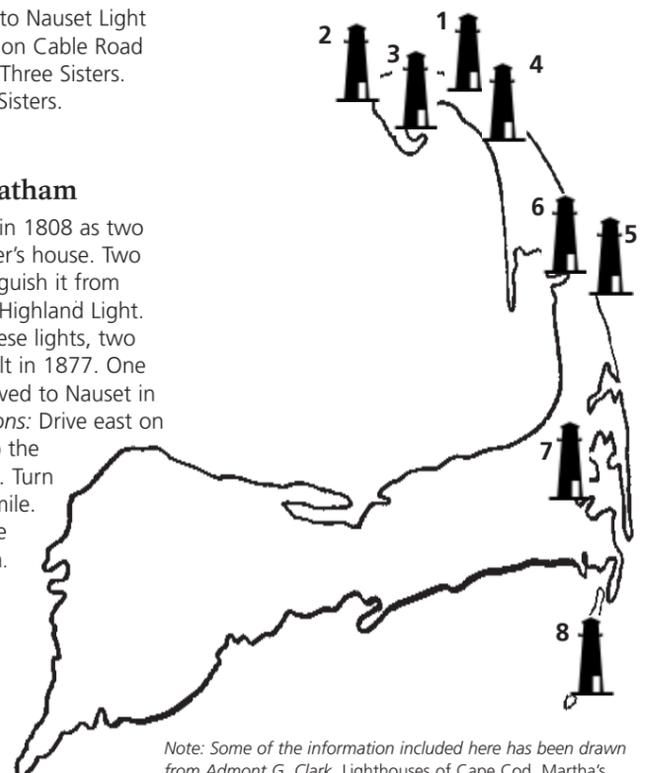
7. Chatham Light, 70 Main Street, Chatham

Chatham Light was built in 1808 as two brick towers with a keeper's house. Two lights were used to distinguish it from the single light at Truro's Highland Light. When erosion claimed these lights, two new metal ones were built in 1877. One of the two lights was moved to Nauset in Eastham in 1923. *Directions:* Drive east on Main Street, Chatham, to the junction with Shore Road. Turn right and drive one-half mile. The lighthouse is opposite the overlook parking area.

8. Monomoy Point Light, Chatham

The first Monomoy Light was erected in 1823 and rebuilt in 1849 with cast-iron plates lined with brick.

The Monomoy Point Light was decommissioned in 1923 because the Chatham Light covered the area. Monomoy is now part of the Monomoy National Wildlife Refuge of the U.S. Fish & Wildlife Service. *Directions:* The island is accessible only by boat. The light is at the end of 5-mile-long South Monomoy Island.



Note: Some of the information included here has been drawn from Admont G. Clark, Lighthouses of Cape Cod, Martha's Vineyard, and Nantucket: Their History and Lore (1992); and Laurel Guadagno, Cape Cod Lighthouses (1994).

Self-Guiding Trails



Great Island Trail, Wellfleet
NPS photo

❖ Self-guiding trail folders with information on specific features are available at some trailheads. ❖ Pets and bicycles are prohibited on self-guiding trails year-round. ❖ Natural and archeological features are protected by federal law and must remain undisturbed. ❖ Taking, feeding, or harassing wildlife is prohibited.

Fort Hill Trail, Eastham

Length: 1.0 mile loop, one hour. **Location:** 70 Fort Hill Road. Turn off Route 6 at the brown Fort Hill sign on Governor Prentice Road. Continue to the parking area on the left across from the Captain Penniman House. The trail may also be accessed from Hemenway Landing, just north of Fort Hill on Route 6. **Features:** This loop trail crosses open fields, connects with the Red Maple Swamp Trail, and offers vistas of the Nauset Marsh area. **Conditions:** Easy; some log steps on slopes; seasonal restrooms near Hemenway Landing.

Red Maple Swamp Trail, Eastham

Length: .8 miles round trip, 30 minutes. **Location:** 70 Fort Hill Road. Enter this trail from the Fort Hill Trail or Hemenway Landing, just north of Fort Hill on Route 6. **Features:** Boardwalk sections of this trail meander through the heart of the Red Maple Swamp. *As of spring 2014, some of the boardwalk is closed due to damage. A small section of boardwalk through a fine example of red maple swamp is open from the junction with the Fort Hill Trail.* **Conditions:** Moderate difficulty; seasonal restrooms near Hemenway Landing.

Buttonbush Trail, Eastham

Length: .3 mile loop, 15 minutes. **Location:** 50 Nauset Road, adjacent to Salt Pond Visitor Center amphitheater, off Route 6. **Features:** This trail, which includes guide rope, text in braille, and large print, involves all the senses as it winds through forest, crosses over the Buttonbush Pond on a boardwalk bridge, and traverses formerly cultivated areas. **Conditions:** Easy; some log steps on the second half of trail; moderate grade; restrooms at visitor center.

Nauset Marsh Trail, Eastham

Length: 1.3 mile loop, plus spur to Coast Guard Beach, one hour. **Location:** 50 Nauset Road, adjacent to Salt Pond Visitor Center amphitheater, off Route 6. **Features:** This trail winds along the edge of Salt Pond and Nauset Marsh, crosses fields, and returns to the visitor center through a recovering forest. There are several spectacular vistas along the way.

Nauset Marsh Trail, continued

As of spring 2014, the footbridge on the Nauset Marsh Trail has been removed due to damage. The rest of the trail is open and may be accessed from the Buttonbush Trail. Ask at Salt Pond Visitor Center for hiking options. **Conditions:** Easy; some log steps; moderate grade; use caution when crossing the bike trail; restrooms at visitor center parking area. *Sections may be submerged at highest tides. Check at visitor center for conditions.*

Doane Trail, Eastham

Length: .6 mile loop, 30 minutes. **Location:** Doane picnic area, on Nauset Road, one mile east of Salt Pond Visitor Center (leading to Coast Guard Beach). **Features:** This paved, wheelchair-accessible trail with interpretive text winds through an emerging pine and oak forest, and offers vistas of Nauset Marsh. A picnic area is adjacent to the parking area. **Conditions:** Easy; wheelchair-accessible grade (also good for strollers); seasonal restrooms. *Two-hour-parking limit.*

Atlantic White Cedar Swamp Trail, Wellfleet

Length: 1.2 mile loop, one hour. **Location:** 195 Marconi Station Road. At stop light, turn east off Route 6 into the Marconi Station Area, South Wellfleet. Follow brown signs to the Marconi Site and White Cedar Swamp. **Features:** This trail descends through a stunted oak and pine forest into a mature woodland, leads to a boardwalk that winds through the picturesque Atlantic White Cedar Swamp, and returns via the historic “Wireless Road” (a sand road) to the starting location. **Conditions:** Moderate difficulty; some steep stairs; return route is ½ mile in soft sand; swamp portion of this trail is boardwalk; seasonal restrooms.

Great Island Trail, Wellfleet

Length: 3.9 to 8.8 miles round trip (3.9 for tavern loop round trip to parking area; 8.8 for round trip to Jeremy Point overlook and including tavern loop). Allow three to five hours to explore Great Island. **Location:** Corner of Chequessett Neck and Griffin Island roads. From Route 6, follow green signs to Wellfleet Center; turn left onto East Commercial Street (follow signs to Wellfleet Harbor); continue along the shoreline from the town pier via Chequessett Neck Road to the Great Island parking area. (Keep the water view on your left after leaving Route 6.) **Features:** This trail follows sandy stretches between the elevated heights of Great Island and Great Beach Hill. Its higher elevations

Great Island Trail, continued

punctuate spectacular vistas, which emerge from an even-aged, pitch-pine forest. Part of this trail leads to a colonial-era tavern site (no remains visible). Other sections skirt salt marsh embayments. A picnic area is adjacent to parking area. **Conditions:** Difficult; mostly soft sand; some log steps; portions are submerged at high tide; hats, sturdy footwear, and drinking water are advisable; seasonal restrooms. **CAUTION:** Trail options can be confusing. Check tide table. Do not attempt to walk to Jeremy Point if the tide is rising. * This trail does not provide direct access to the beach. * Do not traverse dune to reach beach (enforced). * Stay on designated trails to protect fragile resources. **Temporary detours and closures may be in effect during shorebird nesting periods**

Pamet Area Trails, North Truro

Length: .6 miles each way, plus extensions, 45 minutes. Adjacent fire roads offer additional miles for walking. **Location:** 111 North Pamet Road. Take Truro Center/Pamet Road exit off Route 6 in Truro. Proceed 1½ miles on North Pamet Road to the end. Trail begins at the parking area adjacent to the Environmental Education Center (a hostel in summer). **Features:** Spectacular views of the Pamet landscape, the Atlantic, the glacial terrain of the Pamet valley, and a former bog house. Outdoor exhibits and a folder keyed to trail markers describe the area. **Conditions:** Moderate difficulty; log steps; steep grade to overlook. No restrooms.

Woods Walk at Highlands Center, North Truro

Length: 1 mile, 30 minutes. **Location:** 43 Old Dewline Road. Take Route 6 to the Highland Light exit in North Truro. Go east on Highland Road. Turn right onto South Highland Road. After 0.6 miles, turn left onto Old Dewline Road and go to the end. **Features:** Winds through the back woods of the emerging Highlands Center for arts, science, and education. It offers a glimpse of the Cold War past amidst forest, heathlands, and ocean bluffs. **Conditions:** Moderate difficulty; a mix of paved and unpaved roads; sections with fairly steep terrain. No restrooms. Leashed dogs permitted.

Small's Swamp Trail, North Truro

Length: .6 mile loop, 30 minutes. **Location:** In North Truro, turn right off Route 6, 1.2 miles past the Citgo gas station on the right, at the Pilgrim Heights sign. Walk begins and ends at the covered picnic shelter. **Features:** Chosen by Native people for living sites for thousands of years for water, protection, and food sources, early-European settlers sought to make a living on this landscape. Gradually, the soil gave out, and farms were abandoned. The forest here now hides most, but not all, of the former land uses in this area. **Conditions:** Easy; some log steps; moderate grade; short boardwalk surface; picnic area and seasonal restrooms in adjacent parking area.

Pilgrim Spring Trail, North Truro

Length: .7 mile loop, 30 minutes. **Location:** In North Truro, turn right off Route 6, 1.2 miles past the Citgo gas station on the right, at the Pilgrim Heights area sign. Walk begins at the covered shelter. Upon exiting the trail near the restrooms, proceed ahead across the parking area to your vehicle. **Features:** Path leads to a site representative of where the Pilgrims drank their first fresh water in New England. This short loop trail winds through recovering pine and oak forest and passes a marker that commemorates the Pilgrims' initial exploration of the area. **Conditions:** Easy; some log steps; moderate grade; picnic area and seasonal restrooms in parking area at end of trail.

Beech Forest Trail, Provincetown

Length: 1 mile loop, (pond loop ¾ mile, extension loop ¼ mile), one hour. **Location:** 36 Race Point Road. Turn right (north) at the traffic light on Route 6 onto Race Point Road. Proceed approximately ½ mile to the Beech Forest parking area on the left. **Features:** This trail provides a journey into the heart of a picturesque beech forest and offers great bird-watching opportunities. It skirts the shallow Beech Forest Pond. **Conditions:** Easy; extension loop has steep log steps; some soft sand; picnic area and seasonal restrooms at trailhead; access to Province Lands Bicycle Trail and designated pet trail from parking area.

Remain on designated trails to prevent damage and reduce exposure to disease-carrying insects, poison ivy, and other natural risks. Observe trail conditions and be aware of naturally occurring hazards.

Rules of the Road

MOTORIST WARNING

Wear your seat belt. It's the LAW.

Massachusetts state law provides pedestrians the right of way in a cross-walk.

Be aware of pedestrians, bicyclists, and other park users, and share the road.

Public Transportation

Cape Cod Regional Transit Authority (CCRTA)

The *Flex* bus picks up and drops off passengers at designated stops and also “flexes” off its route up to ¼ of a mile. (Reservations are required for the off route stops.)

The *Flex* bus travels from Brewster on Route 6A, down Route 6 through the towns of Orleans, Eastham, Wellfleet, and Truro to Provincetown. Passengers may board the *Flex* at any of the scheduled bus stops, or they may flag the bus down anywhere along the bus route except along Route 6.

The *Flex* bus connects with the *H2O Line* at Stop & Shop Orleans, and in the summer the Provincetown/North Truro Shuttle at Highland Road, Truro and Stop & Shop in Provincetown to Hyannis.

Flex also connects with the Plymouth & Brockton bus service to Boston.

CCRTA runs an *Outer Cape Bike Shuttle* during July and August providing routine service seven days a week with room for 12 bicycles and riders. Bike beyond the Rail Trail to village centers in Wellfleet, Truro, and Provincetown, and to locations within Cape Cod National Seashore. (Riders are responsible for loading bicycles on the trailers.)

CCRTA fares are \$2 one way per person for adults and youth, \$1 for 62 and older. Day and monthly passes are available.

Check the CCRTA website for the most current information and schedules:

www.capecodtransit.org/

Weekends from Memorial Day through Labor Day, travel comfortably by train from Boston's South Station to Hyannis on the *Cape Flyer*. Bring your bike for FREE! See more at: <http://capeflyer.com>

