



Explore Cape Cod National Seashore

What's Inside:

2 & 3 The Basics

General park orientation, brief descriptions of park features, and other useful information.

4 & 5 Watching for Wildlife

Turn to these pages and learn about some of the seashore's resident wildlife.

6 & 7 *Semper Paratus* - Always Ready: The U. S. Coast Guard on Cape Cod

Park Historian William Burke relates the history and significance of the USCG on Cape Cod. PLUS A Guide to Cape Cod National Seashore's Historic Buildings

8 Family Foray: Be a Seashore Scientist

Take the challenge and complete the tasks. Don't just swim and play in the sand. Look at the beach like a scientist does!

9 - 13 Guided Activities for July and August

Choose from canoe trips, nature and history walks, evening campfires, special presentations, and more.

14 & 15 To Preserve Unimpaired: An Introduction to the Division of Natural Resource Management at Cape Cod National Seashore

Jason J. Taylor, Ph.D., Chief of Natural Resource Management and Science at the seashore, provides a look behind the scenes.

16 Health Parks, Healthy People

A special message from Park Superintendent George Price

How *Friends* Supports Cape Cod National Seashore

A message from Friends of the Cape Cod National Seashore President Richard G. Ryder.

Making Climate-Friendly Choices Here and at Home

A recycling message from AmeriCorps Cape Cod Planning Assistant Lauren Markram.

17 Self-Guiding Trails

Details and tips about the seashore's 12 self-guiding trails.

18 Scenic Routes and Overlooks PLUS A Guide to the Lighthouses of Cape Cod National Seashore and Beyond

19 Area Information

Contact information for chambers of commerce, bicycle rental shops, Outer Cape campgrounds, and more.

20 Park Map and Public Transportation

Follow us: www.nps.gov/caco



Welcome

Superintendent's Message

Welcome to Cape Cod National Seashore! We are one of over 400 units of our country's National Park System.

The National Park Service was created by an Act of Congress on August 25, 1916, to protect our natural and cultural heritage and to provide services to visitors. The Organic Act brought together the 35 individual national parks and monuments that had been created since Yellowstone, and established an agency within the Department of the Interior to manage these special places. As we approach the centennial of the 1916 legislation, it is time to celebrate, review, and plan for the future of our national parks.

The 1916 Organic Act mandate is "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Park managers face challenges every day, trying to address preservation requirements and to provide visitor access that allows for enjoyment and recreational activity while minimizing damaging impacts to the resources. The National Park System has expanded dramatically from the first 35 units that preserved traditional large western open spaces, to over 400 units that include urban centers exploring immigrants' stories, women's rights, industrialization, and struggles of freedom and consciousness.



GEORGE PRICE, SUPERINTENDENT

We have also moved from single federal ownership of park property to partnerships with states and communities to meet the preservation mission.

The National Park Service has partnered with the National Park Foundation to seek funding to support parks and advance the agency's mission.

Here at Cape Cod National Seashore, we are funding facelifts to many of our cultural resources and facilities, and adding new programming for younger audiences. We have a great partner in this effort: the Friends of the Cape Cod National Seashore, which has pledged \$100,000 to paint the historic 1868 Captain Penniman House, a cultural icon.

The goal of the National Park Service Centennial is to connect with and create the next generation of park visitors, supporters, and advocates.

continued page 2

Superintendent's Message *continued*

Together, we can all contribute to the future of the national seashore and help new audiences find their park at Cape Cod and enjoy all the special benefits it has to offer.

George E. Price, Jr.
Superintendent

2016 National Park Service CENTENNIAL

Interested in learning more about the National Park Service (NPS) Centennial? For news and updates about NPS partners and programs, visit www.nps.gov/centennial. Check out the Find Your Park campaign at www.findyourpark.com. Learn how to find your park, share your story, and support your park. Social media? Use the hashtags #FindYourPark and #CapeCodNationalSeashore during your visit.

On the cover: *Race Point Light, Provincetown*, 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.

E-mail: Superintendent_CACO@nps.gov

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 19). 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: 50 Nauset Road, 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: 171 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 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 lifesaving 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 trans-Atlantic 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

In the future, Cape Cod National Seashore may use an online reservation system for fire permits. Check back in spring 2016 for details as available.

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

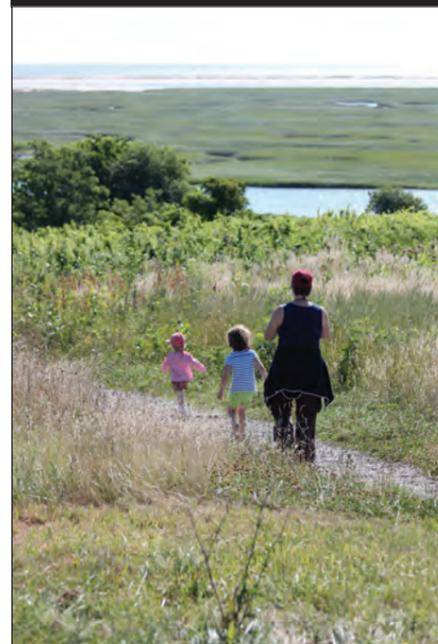


NPS photo

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). 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/McQueeney

Self-guiding trails at the seashore that are open year round: in Eastham - the Fort Hill, 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 17 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.

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.

Entrance Fees	
Private Vehicle	\$20
Motorcycle	\$10
Per Person (<i>Walk-in, Bicycle</i>)	\$ 3
Groups	Inquire
Annual Passes	
Cape Cod National Seashore	\$60
Interagency (<i>Multiple Federal Fee areas</i>) *	\$80
Lifetime Passes	
Interagency Senior (<i>Age 62+</i>) *	\$10
Interagency Access Pass (<i>Permanently Disabled</i>) *	FREE
Other	
Annual Pass for U.S. Military Available to active 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].)	FREE
* Photo ID required for pass use.	

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.
- Surfing, windsurfing, and stand-up paddle boarding 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/learn/management

BEACH SAFETY



NPS photo

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

During the rare occasion of a shark sighting, lifeguards may close the beach to all water activities.

A closure may also occur if a school of bluefish are in a "feeding frenzy" in the lifeguarded beach area. Lifeguards will fly a PURPLE "dangerous marine life present" flag.

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 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)

PETS

The 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 portions of the Great Island Trail in Wellfleet, and the Highlands Woods Walk in Truro.

HUNTING AND FISHING

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: <http://www.nps.gov/caco/learn/management/hunting-information.htm> for more information and maps of open and closed areas.

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

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. Brown-tail 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: <http://www.nps.gov/caco/cape-cod-national-seashore-oversand-beach-driving.htm>

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

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 at 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.

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 pro-pelling 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.

Commonly Observed Birds at Cape Cod National Seashore

excerpts from an article by Robert P. Cook, Ph.D., 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.

Marathon Migrations

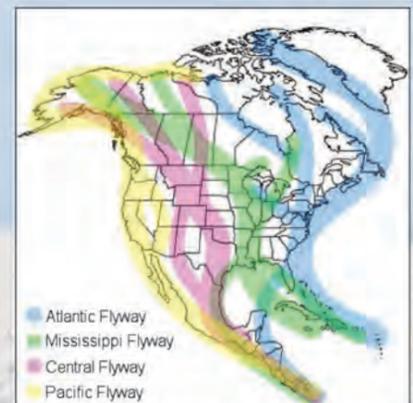
Each fall, thousands of migrating shorebirds rest and feed on national seashore beaches for several weeks. This process, called staging, is critical to birds traveling along the Atlantic Flyway between breeding grounds as far north as the Arctic, and wintering grounds as far south as the Antarctic. Roseate 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.

Semper Paratus - Always Ready: The United States Coast Guard on Cape Cod

by William Burke, Historian, Cape Cod National Seashore



Henry Beston, author of *The Outermost House*, befriended the men of the neighboring Nauset Coast Guard Station. Providing them with steaming coffee to take off the wintry chill as they patrolled the beach, Beston witnessed firsthand their dangerous profession. After a storm, shipwreck wreckage often littered the beach around his 20-by-16-foot hut. NPS photo

Life and Death

4:50 AM. The height of a terrifying blizzard. One hundred and ninety miles off Cape Cod, a boat is in distress with no power and shredded sails. The Coast Guard gets the call to rescue the crew of the vessel. Fifty-five knot winds, 25-foot seas, with heavy snow, almost zero visibility, thunder and lightning in the area and 43-degree water.

No, this isn't a vintage story of heroic surfmen dressed in oilskins coming to the rescue of a leaky schooner. This was February 2015, and the hardy crew from Air Station Cape Cod, located at the Otis Air National Guard Base, answered the call. They were ready. They are always ready, as their motto reminds us.

Flying a MH-60 Tango helicopter, they flew over two hours and located the boat in distress. A Coast Guard rescue swimmer then plucked four sailors from frothy water and hoisted them to safety one by one in a basket up to the helicopter above. Six hours later, all landed back on dry ground unhurt and very lucky to be alive.

Origins and Evolution

The Coast Guard's history began on August 4, 1790, when President George Washington signed the Tariff Act that authorized the construction of 10 vessels

Did You Know?

The Coast Guard is a branch of the United States Armed Forces, and during peacetime operates under the U.S. Department of Homeland Security. Upon the declaration of war or when the president directs, the Coast Guard operates under the authority of the Department of the Navy. That has happened twice – at the outbreak of both world wars.

to enforce tariff and trade laws and to combat smuggling.

Known through time as the "revenue cutters," the "system of cutters," the Revenue Marine and finally the Revenue Cutter Service, it expanded in size and responsibilities as the nation grew.

This year, the Coast Guard celebrates the 100th anniversary of its official name, a result of the merger of the Revenue Cutter Service with the United States Lifesaving Service. Later, in 1939, it officially took on the duties of the U.S. Lighthouse Service.

Members of the Coast Guard on Cape Cod are keenly aware that they are carrying out their mission in a very dangerous place for mariners. Thousands of wrecks have occurred off the coast, the first being the *Sparrowhawk* in 1626.

Congress approved the first lighthouse on Cape Cod in 1796. Five years later, the Massachusetts Humane Society built six small primitive huts, or "houses of refuge," to shelter shipwreck survivors, who might make their way onto the beaches of the Outer Cape.



The Peaked Hill Bars Coast Guard Station had a short but intriguing life. It was built in 1918 in Provincetown; relocated back from the eroding beach in 1931; decommissioned in the late 1930s; recommissioned as a lookout station during World War II; used by a private family for a time; and then, after years of being abandoned, mysteriously burned in 1958. Its concrete foundation still stands watch over the dunes. NPS photo

The first lifesaving station was built on the Cape in 1872 and provided paid crews. With the 1915 establishment of the Coast Guard, the lifesavers were now part of the military service with new ranks, rates and pay scales. Surfmen became enlisted Coast Guardsmen and keepers became warrant officers. Surfmen of the old Lifesaving Service were now eligible for retirement after 30 years. Many, like Hezekiah Doane, the longtime keeper of Old Harbor Life-Saving Station, retired.

Today's Coast Guard

The Coast Guard adapted to new technology throughout the 20th century, most notably the development of reliable marine engines, the Cape Cod Canal, motorized surfboats, radio communication, and coastal aviation. Lifesavers had patrolled the beaches each night on foot for over a half a century, but now the new Coast Guard could cruise the coast and dispatch search-and-rescue teams at a moment's notice.

Through it all – world wars, Prohibition and rum runners, ferry and cruise ship disasters, drug interdictions and oil spills – the Coast Guard has evolved into a cutting-edge strike force based today out of heavy-weather small-boat stations at Provincetown, Chatham, the Cape Cod Canal, Nantucket and Martha's Vineyard. They maintain impressive 87-foot and 110-foot cutters at the ready at Station Woods Hole.

Coast Guard pilots scramble helicopters and jets from Air Station Cape Cod to patrol a massive area from Long Island to the Canadian border. The air station is the only airfield of its kind in the nation solely operated and maintained by the Coast Guard.

63 Years Ago, Another Dramatic Rescue

Every so often, Coast Guard crews are put to the ultimate test with extreme weather conditions and foundering vessels.

In February 1952, off the coast of Chatham, the service pulled off one of the greatest small-boat rescues in its history. A fierce nor'easter with 60-knot winds, mountainous seas and snow snapped in half two 520-foot oil tankers, the *Pendleton* and the *Fort Mercer*.



Eight officers and crew were trapped on the bow of *Fort Mercer*. Four were rescued in a risky operation using rafts and a motor lifeboat. NPS photo

The Coast Guard responded with every resource available, including the cutters *Eastwind*, *Unimak*, *Yakutat*, *Acushnet* and *McCulloch*, two 36-foot motor lifeboats and numerous aircraft. Ironically, the smallest boats proved to be the most effective.

Four young Coast Guardsmen aboard the 36-foot motor lifeboat CG36500 rescued 32 merchant mariners from the

*We're always ready for the call,
We place our trust in Thee.
Through surf and storm and
howling gale,
High shall our purpose be.
"Semper Paratus"
is our guide,
Our fame, our glory, too.
To fight to save
or fight and die!
Aye!
Coast Guard, we are for you.*

Chorus from *Semper Paratus*,
the official march of the United
States Coast Guard

sinking *Pendleton*. The crew of another lifeboat rescued four men from the bow of the *Fort Mercer* just before it sank – a rescue just as spectacular as the *Pendleton*'s. These rescues have been captured in numerous articles and books, and soon will be portrayed in a motion picture called *The Finest Hours*.

continued next page

"The 36-foot motor lifeboat was the primary rough water rescue boat. It was self bailing and self-righting, with a small cabin forward in which to put those who might be rescued. It was slow, with top speed eight knots, but in rough seas, that was usually as fast as one could go anyway."

From the book, *From Highland to Hammerhead*, by Charles B. Hathaway
NPS photo



*Semper Paratus -
Always Ready, continued*

Lost but Not Forgotten

Over the years, the Coast Guard built, operated, decommissioned, and removed stations on Cape Cod as technology improved and priorities changed. Fewer stations were needed with the coming of motor lifeboats, cutters, and air support.

Of the 13 original lifesaving stations, only two remain today – Old Harbor Station was relocated from Chatham to Race Point Beach and is now a furnished museum, and the altered Cahoon Hollow Station in Wellfleet is the Beachcomber nightclub. Although the Coast Guard decommissioned many of its stations after World War II, the national seashore has reused some them, including Race Point (1931), which is now a ranger station; and Nauset (1936) and Pamet River (1933) stations, which have hosted education groups and served as a hostel.

Today you can visit a modern Coast Guard station or tour a vintage one to experience *Semper Paratus* – crews that were, and continue today to be, “always ready.”



In November 2014, Coast Guard pilots used a HC-144A twin-engine plane, normally used for surveillance, to transport 200 endangered Kemp's Ridley sea turtles to Florida for rehabilitation. The turtles had been cold-stunned and trapped in frigid Cape Cod waters. This dramatic mission highlights the maritime stewardship mission of the service. Photo courtesy of Steve Heaslip/Cape Cod Times

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 1 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, it 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, originally a hotel built in 1907. A visit provides insight into 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 AM to 4:30 PM, Sundays 1 to 4:30 PM. \$5 adults, \$4 students, 12 and under/members free. \$1 discount with same-day ticket to Highland Light. 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, the first lighthouse on Cape Cod was erected in 1797. Also known as Cape Cod Light, it has warned seafarers for over 200 years. Operated by Eastern National, mid-May through mid-October. Tours daily 10 AM to 5:30 PM, \$4 adults, \$3 youth (under 18) and seniors (65+), \$1 discount with same-day ticket to Highland House. 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, re-enactments 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!

by Barbara Dougan, Education Specialist

What is a salt marsh?

A salt marsh is a place that has salt water, tides, and unique plants that are food for animals that live in the marsh, the oceans, and even land animals, like you!

Salt marshes produce so much plant material that scientists consider them to be one of the most productive ecosystems on earth.

Salt marshes are also important for other reasons. They serve as a nursery habitat for many species of marine life and provide a refuge for birds. They act as a big sponge that soaks up storm-water surges, and they take up nutrients in runoff from the surrounding land before they go into the ocean.

Seashore scientists are researching the responses of salt-marsh plants and animals to changes in salinity (the amount of salt dissolved in the water), the reach of the high tides, and how long plants are flooded by salt water.

In some locations, scientists found that the plant species and their positions are shifting as a result of accelerated sea-level rise related to global climate change. However, in some other salt marshes, scientists found changes because the opposite situation has occurred — not enough salt water and tidal flooding. Tidal flow into these marshes was blocked after dikes and roads were built.

Some of the optional equipment can be purchased at the Eastern National store located in park visitor centers.

Be a seashore scientist

Visit a salt marsh to investigate the tide and the level of salinity. Look for evidence of the high-tide line, and saltwater-adapted plants and animals. *Hint:* only certain plants and animals are adapted to living in saltwater, and each species can only tolerate a certain amount of tidal flooding and salinity or they won't survive.

Where to go:

One of the best places to explore is the marsh by Great Island, Wellfleet. Here you can compare an unrestricted salt marsh on one side of the dike with a restricted marsh on the other side. Check a park map, or ask for directions at one of the seashore's visitor centers.

Before you go:

Check the tides. There are two low tides and two high tides every day. The times of these tides change every day. Some marsh tides vary an hour or more from the nearby beach tide. If you go at low tide, you may see more animals like crabs and shellfish. Rangers at the visitor center can help you determine low tide.

What you need to bring:

Curiosity and investigative skills. If you want to record your observations, bring the checklist below, paper, and a pencil. Optional items include: a camera, bucket, fish net, salinity tester, and a field guide like *Mudflat Mania*. You can download a common salt-marsh plant identification guide by visiting <http://www.nps.gov/caco/learn/nature/plants.htm>.

Download before you go as there may not be wireless service at the salt marsh.

A Salt Marsh Restoration Project

In 1909, a dike was built across the mouth of the Herring River Estuary within Wellfleet and Truro. The dike blocked the most important requirement to the estuary's health — the natural flow of salty tidal water. A project is underway to replace the current dike with a new one that will let in enough seawater to flow up the river and restore much of the area back to a healthy salt marsh. This is the largest salt marsh restoration project in New England.



Current Herring River dike, Chequessett Neck Road, Wellfleet. For more information visit: <http://www.friendsofherringriver.org> NPS photo

What kinds of plants and animals do you think will benefit from the restoration?

Staying safe:

Please stay on pathways and keep off dunes and cliffs. Wear sunscreen and a hat so you don't get sunburned. Wear footwear so you do not cut your feet on sharp shells. Footwear should be able to get wet and muddy. Bug spray is recommended June through August.

Getting started:

After you arrive at the marsh edge, locate the water line to know its location. Look back in 30 minutes to determine if the tide is incoming (flooding) or outgoing (ebbing), then start researching! Use the chart below to guide you in making observations. Investigate animals that live in the grasses.

If you have a net, try to catch and release animals living in the water. Record and map your observations, take digital pictures!

Before leaving, be sure to enjoy the beautiful view. It may look different next time you visit.



A hygrometer tests water for salinity. NPS photo

You could be a future seashore scientist!

Learn more by joining a program that explores a salt marsh or other seashore environments. Be sure to ask the ranger or a scientist how climate change may affect the ecosystems you are visiting — the answer may surprise you! Be sure to research how climate change will change ecosystems where you live, too.

"Salt marshes are extremely complex ecosystems because the bacteria, plants, and many kinds of wildlife are all interacting with each other and with their physical environment. Seashore scientists are studying salt marshes on Cape Cod so that they can better understand these relationships and how healthy vs. unhealthy marshes differ so that they can be restored, preserved, and managed properly." Stephen M. Smith, Ph.D., Plant Ecologist, Cape Cod National Seashore

Observation Checklist - High Tide/Tidal Range

- Find evidence of an extreme high tide event from a recent full moon or storm. Look for the wrackline closest to the upland. A wrackline is a deposit of debris — dead plants, shells washed up by tides.
- Find the average high-tide line. Look for where plants change from *Spartina alterniflora* that stand up to *Spartina patens* that lie down by end of summer/fall/winter. *Spartina alterniflora* grows in the low marsh zone that is flooded by daily tides; *Spartina patens* grows in the high marsh zone which is flooded less often.
- Look for dark stains on rocks that border the salt marsh and on docks. Stains are evidence of tidal flooding.

Observation Checklist for Salinity - Saltwater Plants and Animals

- Identify at least three species of saltwater plants and the zones where they live (low and/or high marsh). How are they adapted to survive in salt water? For a salt marsh plant identification guide visit <http://www.nps.gov/caco/>
- Observe if the plants have salt crystals deposited on them. How did the salt get there?
- Look for where the upper edge of the marsh ends — where barnacles, snails, or crab burrows are no longer found.
- Measure the salinity of the water, which is the amount of salt dissolved in the water. Scientists commonly use a tool called a refractometer or hydrometer. A saltwater aquarium seawater tester can also give an estimate.



Photos: (Left) Wrackline (dead plant and marsh debris) deposited at a storm or full moon tide line. (Center) Smooth cordgrass (*Spartina alterniflora* on the left side of the photo) stands erect and dominates the low marsh zone closest to the water. Compare it to the high marsh plant salt meadow hay (*Spartina patens* on the right side of the photo), which falls over after summer growth. (Right) Dark staining on rocks; the top of the stain marks the high tide rise. NPS photos



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!

RANGER-LED ACTIVITIES, JULY 1 through AUGUST 31, 2015



Activities that are accessible with minor assistance. Contact park staff if you have questions about accessibility.



National Park Service Healthy Parks, Healthy People programs featuring parks as cornerstones of mental, physical, and spiritual health.



Activities especially suited for families with children. Adults must accompany children during programs.



Long pants (shorts for canoe trips and salt marsh explorations), appropriate footwear, hats, sunscreen, bug spray, and water are recommended for outdoor activities. Pets are not permitted on ranger programs.

Some programs require reservations through recreation.gov, while others can be reserved in person or by telephone at a seashore visitor center. See individual program listings for specific information. Programs that charge a fee require advance payment with a credit card.

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

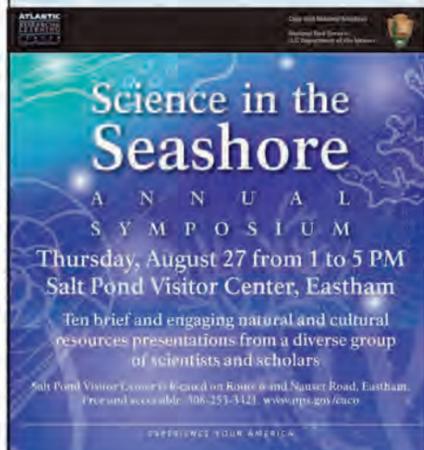
Sun	Mon	Tues	Wed	Thur	Fri	Sat	Eastham and Wellfleet Program Descriptions and Meeting Locations
				7 AM <i>Listed dates only</i>			<p>HIKE: WAKE UP AT THE SEASHORE - 1 mile, 1 hour. Free. Join a ranger for a morning walk along a seashore beach. Beat the crowds and enjoy the rising sun and ocean breezes. Bring water, sunscreen, and bug spray. Location varies each week. Meet at the main bathhouse at each beach. Nauset Light Beach, Eastham - July 2, July 30, and August 27 Marconi Beach, Wellfleet - July 9 and August 6 <i>Look under programs in Truro and Provincetown for additional dates and locations.</i></p>
				7:30 AM			<p>SURFCASTING 101 - 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, Eastham. 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE.</p>
				7:30 AM <i>No program July 31</i>			<p>WALK: SEARCHING FOR BIRDS - 2 hours, distance varies. Free. Join a skilled birdwatcher to travel to various sites in the park for bird identification and observations. Bring binoculars if you have them. Meet at the Salt Pond Visitor Center, 50 Nauset Road, Eastham, to caravan to selected sites.</p>
						7:30 AM <i>No program August 22</i>	<p>YOGA ON THE BEACH - 1¼ hours. \$11. Stretch the body and the spirit in the most serene of settings. Cape Cod National Seashore's <i>Yoga on the Beach</i> programs are a unique opportunity to join a ranger and certified yoga instructor for an interdisciplinary class geared to all levels. Held in the cool morning air at the edge of the sea, it's sure to deepen your experience in multiple ways. Meet in the parking lot at Nauset Light Beach, at the intersection of Ocean View Drive and Cable Road, Eastham. <i>Also offered Tuesdays at 8:30 AM at Herring Cove Beach, Provincetown.</i> 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE.</p>
				9:30 AM <i>no program July 30</i>			<p>HIKE: ROADS LESS TRAVELED - 3 hours, 3 to 6 miles. \$6. 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 bug spray. <i>See page 13 for locations by date and brief descriptions.</i> 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE. DESTINATIONS VARY WEEKLY AND ARE LISTED AT WWW.RECREATION.GOV.</p>
				9:30 AM to 11:30 AM <i>no program July 3</i>			<p>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. 50 Nauset Road, Eastham.</p>
			10 AM				<p>WALK: SHARKS AND SEALS: CAPE COD'S DYNAMIC DUO - 1 hour, up to 1 mile. Free. Examine the relationship between sharks and seals and the role they play in the balance of a healthy marine environment. Bring a pair of binoculars for seal viewing. Meets at Coast Guard Beach, at the end of Doane Road, Eastham. RESERVED PARKING. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 0, NO MORE THAN ONE WEEK IN ADVANCE TO RESERVE A PARKING SPACE.</p>
						10 AM	<p>WALK: SEASIDE STROLL - 1 hour, up to 1 mile. Free. Walk and discover the ever-changing world of barrier beaches. These slender strips of sandy shoreline are a key to the Cape's past and a stunning vantage point from which to ponder its future. Meets at Coast Guard Beach, at the end of Doane Road, Eastham. RESERVED PARKING. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 0, NO MORE THAN ONE WEEK IN ADVANCE TO RESERVE A PARKING SPACE.</p>
10:30 AM		10:30 AM					<p>WALK: DISCOVER NAUSET MARSH - 1 hour, up to 1 mile. Free. Take this easy one-hour walk to discover some of the intriguing stories and features of this scenic and naturally and culturally significant area. Meet on the terrace of the Salt Pond Visitor Center, 50 Nauset Road, Eastham.</p>
				10:30 AM			<p>WALK: CHRONICLES FROM A CAPE CODDER - 1 hour, up to ½ mile. Free. Today's Cape Cod is built upon the stories from its past. Join Ranger Dana Eldridge as he shares some of those stories. Meet on the terrace at Salt Pond Visitor Center, 50 Nauset Road, Eastham. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT 0, TO REGISTER.</p>
				10:30 AM <i>No program July 30</i>			<p>ACTIVITY: SMALL FRY SPECIAL - ¾ hour. Free. Children, bring your parents to the Salt Pond Visitor Center for seashore crafts and stories. Geared for ages 2 to 5. 50 Nauset Road, Eastham.</p>
		10:30 AM <i>No program July 28</i>					<p>ACTIVITY: TAKE THE CAPE HISTORY CHALLENGE! - 20 minutes. Free. Join Park Historian Bill Burke for a 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! Meet in the activity room at Salt Pond Visitor Center, 50 Nauset Road, Eastham.</p>
	T 11 AM		OH 1 to 3 PM			T 11 AM	<p>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 lifestyles of a whaling family. T= TOUR, BY RESERVATION ONLY NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 0, TO REGISTER. OH = OPEN HOUSE, BROWSE THROUGH. Meet at the Penniman House at Fort Hill, 70 Fort Hill Road, Eastham. Limited parking.</p>
			11 AM	11 AM <i>No program August 20</i>			<p>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. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 0, TO REGISTER. 269 Bound Brook Island Road, Wellfleet. <i>Directions:</i> Take Route 6. Turn onto Pamet Point Road, at the Truro town line, follow signs.</p>

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Eastham and Wellfleet Program Descriptions and Meeting Locations
	11 AM No program July 27, August 24 and 31						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. Meet in the activity room at Salt Pond Visitor Center, 50 Nauset Road, Eastham. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 0, TO REGISTER. 
			2 PM				WALK: BOMBS AND BLACKOUTS - up to ¾ hour. Free. Join Ranger Dana Eldridge to examine the impact WWII had on the region. Hear his personal stories of the remnants of war washed up on the beaches, Coast Guard patrols, target practice, and torpedoed ships. Meet on the observation deck at the Marconi Site, 195 Marconi Station Road, Wellfleet. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT 0, TO REGISTER.
		2:30 PM					WALK: DISCOVER THE MARCONI AREA - 1 hour, up to 1 mile. Free. The Marconi area is home to breathtaking ocean vistas, unique habitats such as an Atlantic white cedar swamp and heathlands, and an important piece of communication history. Learn about what makes this place so special. Meet at the Marconi Station Site, 195 Marconi Station Road, Wellfleet.
				2:30 PM No program July 30 and August 20			WALK: BAYSIDE STROLL - Thursdays, 2:30 PM, 1 hour, 1 mile. Free. Discover the fascinating cultural and natural history of the secluded, dynamic coastal barrier system known as the Great Island "gut." Meet at the Great Island parking area where Chequessett Neck and Griffin Island roads meet, Wellfleet.
					2:30 PM		WALK: UNTOLD STORIES OF CAPE COD NATIONAL SEASHORE - 1 hour, 1 mile. Free. Hear forgotten tales from this shoreline's past. From shipwrecks to battles and beyond, you're bound to discover something new about this special place. Meet at the Marconi Station Site, 195 Marconi Station Road, Wellfleet.
	3:30 PM		3:30 PM				WALK: DISCOVER FORT HILL - 1 hour, up to 1 mile. Free. The Fort Hill area is home to fascinating natural and cultural history and stunning views. Explore what makes this place an important part of the national seashore. Meet at the lower parking lot at Fort Hill, 70 Fort Hill Road, Eastham.
			3:30 PM No program July 29		3:30 PM		ACTIVITY: CREATURE FEATURE - ¾ hour. Free. Learn about the animals that call the park home, and maybe even see a live example. Participate in fun activities to discover what makes these creatures unique. Takes place at Salt Pond Visitor Center, 50 Nauset Road, Eastham. 
4:30 PM to 7:30 PM			4:30 PM 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, Eastham. <i>Conducted by Nauset Light Preservation Society. www.nausetlight.org. Donations accepted.</i>
	2 PM	10 AM and 2 PM	10 AM		10 AM	2 PM	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. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 0, TO REGISTER. NO PRIOR CANOE EXPERIENCE REQUIRED. ALL EQUIPMENT IS PROVIDED. YOU MAY HAVE TO WADE AND ASSIST WITH MOVING EQUIPMENT. WEAR FOOTWEAR (REQUIRED) THAT CAN GET WET. 
				9:30 AM no program July 30	Times vary No program July 31		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. CANOEING EXPERIENCE, INCLUDING THE ABILITY TO PADDLE IN STRONG WINDS, MANDATORY. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL SALT POND VISITOR CENTER, 508-255-3421, EXT. 0, FOR A LIST OF PROGRAM TOPICS, DETAILS, AND TO REGISTER. ALL EQUIPMENT IS PROVIDED. YOU MAY HAVE TO WADE AND ASSIST WITH MOVING EQUIPMENT. WEAR FOOTWEAR (REQUIRED) THAT CAN GET WET. 
Times vary			Times vary				ACTIVITY: FISH, SNAILS, AND HORSESHOE CRAB TALES: WELLFLEET - 1½ hours, 1 mile. \$6 per adult, \$4 per child 16 and under. 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. Meet at the Great Island parking area where Chequessett Neck and Griffin Island roads meet, Wellfleet. 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE. WEAR FOOTWEAR (REQUIRED) THAT CAN GET WET. Sundays: July 5 - 8:30 AM; July 12 - 3 PM; July 19 - 8:30 AM; July 26 - 1:30 PM; August 2 - no program; August 9 - 1:30 PM; August 16 - no program; August 23 - 12 noon; August 30 - no program. Wednesdays: July 1 - no program; July 8 - 10:30 AM; July 15 - no program; July 22 - 10 AM; July 29 - 4 PM; August 5 - 9:30 AM; August 12 - 4 PM; August 19 - 9 AM; August 26 - 3 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, Eastham. 
						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. <i>Details on page 13.</i> 
			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, Eastham. Bring a blanket and bug spray. 

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Truro and Provincetown Program Descriptions and Meeting Locations
				7 AM Listed dates only			HIKE: WAKE UP AT THE SEASHORE - 1 mile, 1 hour. Free. Join a ranger for a morning walk along a seashore beach. Beat the crowds and enjoy the rising sun and ocean breezes. Bring water, sunscreen, and bug spray. Location varies each week. Meet at the main bathhouse at each beach. Head of the Meadow Beach, Truro - July 16 and August 13 Race Point Beach, Provincetown - July 23 and August 20 <i>Look under programs in Eastham and Wellfleet for additional dates and locations.</i> 
			8 AM No program July 22			8 AM	HIKE: ROADS LESS TRAVELED - 2 to 4 hours, 4 to 6 miles, strenuous. \$6. 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. <i>See page 13 for locations by date and brief descriptions.</i> 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE. DESTINATIONS VARY WEEKLY AND ARE LISTED AT WWW.RECREATION.GOV. 

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Truro and Provincetown Program Descriptions and Meeting Locations
		8:30 AM					YOGA ON THE BEACH - HERRING COVE, PROVINCETOWN - 1¼ hours. \$11. Stretch the body and the spirit in the most serene of settings. Cape Cod National Seashore's <i>Yoga on the Beach</i> programs are a unique opportunity to join a ranger and certified yoga instructor for an interdisciplinary class geared to all levels. Held in the cool morning air at the edge of the sea, it's sure to deepen your experience in multiple ways. Also offered Saturdays at 7:30 AM at Nauset Light Beach, Eastham. 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE. 
	9 AM No program July 6						BIKE TOUR: THE HISTORIC PROVINCE LANDS BICYCLE TRAIL - 2 hours, 5½ miles. Free. Join a ranger for a group ride along the challenging Province Lands Bicycle Trail, the first bike trail created in a national park. Learn about bicycling safety, enjoy dune and ocean views, and discover the fascinating history of the area. Bring your own bike and helmet (required). Meet at the bike rack in the parking lot at the Province Lands Visitor Center, 171 Race Point Road, Provincetown. 
9 AM							WALK: DUNE VIEWS OVER EAST HARBOR - 1½ hours, 1½ miles in loose sand. Free. Climb atop a parabolic dune to gain 360° 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 loose sand and ascending steep dunes. Bring sunscreen, water, bug spray, and appropriate footwear.
		9 AM					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. Terrain includes steep hills and loose sand. Wear or bring long pants, sunscreen, bug spray, and water. Directions: 11 North Pamet Road, Truro. Take Truro Center/Pamet Road exit off Route 6. Proceed 1½ miles on North Pamet Road to the end. Meet at the trailhead parking area below the youth hostel.
	9 AM						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 may see migratory and staging shorebirds concentrating in great numbers. Moderate difficulty. Terrain includes steep hills and loose sand. Wear or bring long pants, sunscreen, bug spray, and water. Meet at Province Lands Visitor Center, 171 Race Point Road, to caravan to the walk location.
			9 AM				PHOTOGRAPHY WALK: EXPLORING NATURE WITH YOUR CAMERA - 2 to 2½ hours, 2 to 3 miles. Free. Join a ranger to discover remote and visually stunning areas of Cape Cod National Seashore with your camera. Walk includes walking in loose sand, steep climbs and descents, as well as hot temperatures in open sun. Walking shoes (no sandals) and water are required to participate. Wear or bring long pants, sunscreen, and bug spray. Dates and locations, including Wellfleet, as listed below. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, TO REGISTER. Sea Cliffs of Truro - July 1, 29, and August 26 - Climb to the top of one of the highest points along the Cape Cod National Seashore, experience spectacular panoramic views, and explore the grasslands and heathlands. Marconi Heathlands of Wellfleet - July 8, August 5 - Walk into the rare and dwindling environment of the heathlands with expansive views of the ocean. Snake Hills - July 22, August 19 - Walk the dunes between Herring Cove Beach and Hatches Harbor in Provincetown. The Province Lands - July 15, August 12 - Explore the sand dunes, grasslands, heathlands, and forest between Province Lands Visitor Center and Race Point Beach in Provincetown. 
		10 AM	10 AM		10 AM		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, Provincetown; Wednesday, at Herring Cove Beach, Provincetown; Friday, at Head of the Meadow Beach, Truro. All ages. Beach fee applies. 
					10 AM		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. As you race against time to win the grand prize, experience the town's unique treasures and best-kept secrets. Wear comfortable shoes. Meet at the Provincetown Town Green, Bas Relief Park on Bradford Street, across from the town hall. Use public parking in town. RESERVATIONS ACCEPTED AND REQUIRED NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, TO REGISTER.
			10 AM				OBSTACLE COURSE: CAPE COD NINJA WARRIOR - 1 hour. Free. In the spirit of the popular television show "American Ninja Warrior," tackle our Race Point Beach "course." Run, jump, carry, and problem-solve to best your time. Compare your athletic abilities to those of the U.S. Lifesaving Service (predecessor to the U.S. Coast Guard) and the skills of animals that live at the beach. Meet at the Province Lands Visitor Center, 171 Race Point Road, Provincetown, to caravan to the program location. 
						10 AM to 1 PM	WALK: HISTORIC HIGHLAND DISTRICT - 1 hour walks on the 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, 6 Highland Light Road, Truro. 
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 mid-May through mid-October. \$4 adults, \$3 youth (under 18) and seniors (65+). \$1 discount with same-day admission to the Highland House Museum. Museum and store, open 10 AM to 6 PM. Operated by Eastern National. Children must be 48 inches tall. 508-487-1121. www.highlandlighthouse.org . 27 Highland Light Road, North Truro.
1 PM to 4:30 PM	10 AM to 4:30 PM	10 AM to 4:30 PM	10 AM to 4:30 PM	10 AM to 4:30 PM	10 AM to 4:30 PM	10 AM to 4:30 PM	MUSEUM: HIGHLAND HOUSE MUSEUM - Browse through an amazing array of objects from the Truro Historical Society's collection. \$5 adults, \$4 students. \$1 discount with same-day ticket to Highland Light. 12 and under, and individual members and their family members free. Hosted by volunteers of the Truro Historical Society. www.trurohistorical.org . 27 Highland Light Road, North Truro.
	4 PM	10 AM			10 AM		WALK: DUNES OF THE PROVINCE LANDS - 1½ hours, 1½ miles in loose 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. Wear shoes appropriate for walking in loose sand, and bring water. Check in at the desk inside Province Lands Visitor Center, 171 Race Point Road, Provincetown.
				11 AM			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, 171 Race Point Road, Provincetown. July 2 - <i>Whales of Cape Cod</i> ; July 9 - <i>Centuries of Slaughter: Historic Whaling and Modern Whaling in the 20th Century</i> ; July 16 - <i>Marine Animal Strandings</i> ; July 23 - <i>Seals of Cape Cod, A Success Story</i> ; July 30 - <i>Whales of Cape Cod</i> ; August 6 - <i>Trashing our Seas, Plastic Pollution in the 21st Century</i> ; August 13 - <i>Our Ocean World and the Specter of Climate Change</i> ; August 20 - <i>Marine Animal Disentanglement</i> ; August 27 - <i>Cape Cod Marine Environment: Past, Present, and Future, from Cape Cod to Cape Croaker</i> . 
			11:30 AM			2:30 PM	SNORKEL ADVENTURE - 2 hours. \$11. Explore the amazing underwater world of Cape Cod and experience a freshwater kettle pond in Truro, or a saltwater tidal flat in Provincetown firsthand. ALL EQUIPMENT PROVIDED. EXPERIENCED SWIMMERS ONLY. MINIMUM AGE 10. AT LEAST ONE ADULT MUST ACCOMPANY CHILDREN IN THE WATER. LOCATIONS VARY. 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE.

Sun	Mon	Tues	Wed	Thur	Fri	Sat	Truro and Provincetown Program Descriptions and Meeting Locations
			2 PM				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 lighthouses 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, North Truro.
2 PM to 4 PM	2 PM to 4 PM	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. A visit feels like stepping into a turn-of-the-century working station while the crew is out on patrol. Park at Race Point Beach, 191 Race Point Road, and take the short walk to Old Harbor. <i>Beach fee applies.</i>					
		2 PM					ACTIVITY: SEASHORE CRAFTS - 1 hour. Free. Join a ranger to learn about some of the fascinating things you may find at the seashore, like horseshoe crabs, seals, lighthouses, and lifesavers! Make a craft to take home and remember your visit. Geared for ages 5 to 12. Meet at Province Lands Visitor Center, 171 Race Point Road, Provincetown. 
						2:30 PM	WALK: EVER-CHANGING PAMET VALLEY - 2 hours, 2 miles. Free. In a location named after a branch of the Wampanoag as well as a geological feature; a cranberry business, lifesaving station, and vacation resort have sprung up over time. Even roads have come and gone. Learn about the history of the Pamet area and how the ocean continues to shape it. <i>Directions:</i> 11 North Pamet Road, Truro. Take Truro Center/Pamet Road exit off Route 6 in Truro. Proceed 1½ miles on North Pamet Road to the end. Meet at the trailhead parking area below the youth hostel.
3 PM							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, Truro. <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. 
			3 PM				ACCESSIBLE WALK: PROVINCE LANDS VIEWS - 45 minutes, ¼ mile. Free. Enjoy the spectacular views and history of the Province Lands on this ranger-guided, accessible program. An easy path on even pavement, suitable for wheelchairs and strollers, reveals views of Old Harbor Life-Saving Station, Race Point Light, dunes, and Provincetown's Pilgrim Monument. Meet on the sidewalk at the base of the stairs to the Province Lands Visitor Center, 171 Race Point Road, Provincetown. 
	Times vary			Times vary			ACTIVITY: FISH, SNAILS, AND HORSESHOE CRAB TALES: PROVINCETOWN - 1½ hours, ½ mile. \$6 per adult, \$4 per child 16 and under. 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. 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE. MEETS NEAR THE BREAKWATER IN PROVINCETOWN. LOOK FOR DIRECTIONS WHEN YOU REGISTER. WEAR FOOTWEAR (REQUIRED) THAT CAN GET WET. Mondays: July 6 - 8:30 AM; July 13 - 3 PM; July 20 - 8:30 AM; July 27 - 2 PM; August 3 - no program; August 10 - 2 PM; August 17 - no program; August 24 - 12 noon; August 31 - no program. Thursdays: July 2 - no program; July 9 - 11 AM; July 16 - no program; July 23 - 10 AM; July 30 - no program; August 6 - 10 AM; August 13 - 4:30 PM; August 20 - no program; August 27 - 3 PM. 
Times vary			Times vary				WALK: SEALS OF CAPE COD - 1 to 2 hours, 1 to 2 miles in loose 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. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN 7 DAYS IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR MEETING LOCATION AND TO REGISTER. Sundays: July 5 - 8 AM; July 12 - 2:30 PM; July 19 - 8 AM; July 26 - 1 PM; August 2 - no program; August 9 - 1 PM; August 16 - no program; August 23 - 11:30 AM; August 30 - no program. Wednesdays: July 1 - 4:30 PM; July 8 - 10:30 AM; July 15 - 4 PM; July 22 - 10 AM; July 29 - 3 PM; August 5 - 9 AM; August 12 - 4 PM; August 19 - 8:30 AM; August 26 - 2 PM. 
					Times vary		CANOEING: CANOE ADVENTURE - up to 3 hours, 3 miles. \$25 per adult, \$18 per child 16 and under (minimum age 6). Paddle the far west end of Provincetown Harbor, a series of Wellfleet kettle ponds, picturesque East Harbor, or the meandering Pamet River. If conditions permit, swimming and snorkeling may also be possible. CANOEING EXPERIENCE, INCLUDING THE ABILITY TO PADDLE IN STRONG WINDS, MANDATORY. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR PROGRAM TIME, MEETING LOCATION, AND TO REGISTER. ALL EQUIPMENT IS PROVIDED. YOU MAY HAVE TO WADE AND ASSIST WITH MOVING EQUIPMENT. WEAR FOOTWEAR (REQUIRED) THAT CAN GET WET. 
			4 PM				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. RESERVATIONS REQUIRED AND ACCEPTED NO MORE THAN ONE WEEK IN ADVANCE. CALL PROVINCE LANDS VISITOR CENTER, 508-487-1256, FOR MEETING LOCATION AND TO REGISTER. SPACE IS LIMITED. 
				6 PM			HISTORICAL REENACTMENT: BEACH APPARATUS DRILL - 1 hour. \$5 for adults; \$2 for seniors over 62, and children 7 to 16; children 6 and under, free. Celebrate the 100th anniversary of the U.S. Coast Guard by discovering its origins in the U.S. Lifesaving Service. 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. Children attending will have the opportunity to perform activities and earn a Junior Lifesaver patch. Takes place at Old Harbor Life-Saving Station, Race Point Beach, 191 Race Point Road, Provincetown. 
					7:30 PM July; 7 PM August		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 bathhouse and concessions stand, just south of the Herring Cove Beach entrance. 6 Province Lands Road, Provincetown. * Accessible with assistance if Province Lands Visitor Center is notified in advance, 508-487-1256. 



Science in the Seashore
ANNUAL SYMPOSIUM
Thursday, August 27 from 1 to 5 PM
Salt Pond Visitor Center, Eastham
Ten brief and engaging natural and cultural resources presentations from a diverse group of scientists and scholars
Salt Pond Visitor Center is located on Route 6 and Nauset Road, Eastham. Free and accessible. 508-251-3421. www.nps.gov/caco
PREFERENCE YOUR AMERICA

FIFTH ANNUAL SCIENCE SYMPOSIUM

Thursday, August 27, 1 to 5 PM.
Salt Pond Visitor Center, Eastham

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

PROVINCE LANDS MINI-FEST

171 Race Point Road, Provincetown
Wednesday, July 29, 3 to 5 PM. Free! 

As part of Provincetown's Family Week, join us at Cape Cod National Seashore's picturesque outdoor Province Lands amphitheater for games and crafts. **Wampanoag educator Kitty Hendricks Miller** will share native games and songs. **Zoë Lewis and Peter Donnelly** perform at 4 PM. These popular local musicians, with songs that appeal to kids and grown-ups, will quickly have us all dancing and singing along!
Sponsored by Friends of the Cape Cod National Seashore



Zoë Lewis

Program Details Summer 2015

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.



Penniman House

JULY 7 - KEEPING TIME: A FEW OF THE PARK

HISTORIAN'S FAVORITE THINGS! View some awesome artifacts from the Cape's past, including a shipwreck surprise. Park Historian Bill Burke has scoured the corners of the archives for his "Top 10 Moments" in working with the park's historic houses, personalities, archeology sites, and obscure and out-of-the-way historic places.

JULY 14 - ATTACK ON ORLEANS - In 1918, a German submarine surfaced off the coast of Cape Cod and attacked an unarmed towboat and her four barges, giving the town of Orleans the distinction of being the first, and only, spot in the United States to receive enemy fire during WWI. Join author and historian Jake Klim for a presentation on this historic event followed by a signing of his book *Attack on Orleans*.

JULY 21 - JOBI POTTERY: THE HISTORY OF A CAPE COD COTTAGE INDUSTRY Jobi™ Pottery is a Truro cottage industry begun in 1953. Current owner and designer Susan Kurtzman will talk about the history and techniques behind Jobi Pottery. Items will be available for purchase following her presentation at the visitor center.

JULY 28 - EARTH CELEBRATIONS - Join acclaimed storyteller Rona Leventhal as she shares stories and songs about environmental awareness, personal action and responsibility, conservation, interdependence, and our animal friends.

AUGUST 4 - ONCE UPON A TIDE - Stand-up "chameleon" Jackson Gillman shares a rollicking mix of interactive songs, movement, and stories guaranteed to delight you and your family.

AUGUST 11 - SEA TURTLES ON CAPE COD - Join Mass Audubon's Wellfleet Bay Wildlife Sanctuary Director Bob Prescott for a look at the sea turtles found here and the challenges they face, including the record-breaking cold-stunned turtle stranding of last winter.

AUGUST 18 - WILD ABOUT WEATHER - Join Keith Michael Johnson for a fun, interactive, family-friendly program that takes a creative and quirky look at clouds, air pressure, the water cycle, weather instruments, and forecasts.

AUGUST 25 - GEOGRAPHY GAMESHOW - Explore the world through this innovative and interactive program by local artist, geography expert, and world traveler Neal Nichols. Participate in the rendering of a world map from memory.

HIKE: ROADS LESS TRAVELED - Destinations and Descriptions: \$6. 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 REQUIRED AND ACCEPTED BEGINNING AT 10 AM ONE WEEK IN ADVANCE OF THE PROGRAM DATE. SEE RECREATION.GOV FOR DIRECTIONS TO LOCATIONS AND MORE DETAILS. SEE GENERAL PROGRAM DESCRIPTIONS ON PAGE 9 AND 10.

Wednesdays at 8 AM

July 1 - Tin Pan Alley, Provincetown: Walk the paths traveled by fishermen from the past, through regrowth forest, dunes, and finally reach the ocean.

July 8 - Ballston Heights: Enjoy heathlands, pine forest, and sea cliff views in the area surrounding a historic vacation resort in Truro.

July 15 - High Head Seal Walk: Traverse open dunes and oceanside in North Truro, and find gray seals hauled out at low tide.

July 22 - no program

July 29 - Beech Forest Dunes, Provincetown: Start in the beech forest, a remnant of the type of landscape that would have existed here pre-Contact, then meander into the dunes that followed.

August 5 - Bound Brook Island, Wellfleet: Secluded paths abound in one of the oldest Cape communities.

August 12 - Dyer to Spectacle Pond: Explore the areas around the Wellfleet/Truro glacially formed kettle ponds.

August 19 - Griffin Island, Wellfleet: Heathlands and a spectacular cliff walk await on this rewarding hike.

August 26 - Kettle Ponds: Discover the hidden areas around the Wellfleet/Truro glacially formed kettle ponds.

Thursdays at 9:30 AM

July 2 - Bound Brook Island: Explore the history of this stretch of land along Cape Cod Bay in Wellfleet.

July 9 - Sand, Seals, and Shipwrecks on Coast Guard Beach: Learn about this geologic formation in Eastham and its connection to the Lifesaving Service and author Henry Beston. Watch for seals and learn of their amazing recovery.

July 16 - The Remnants of Fresh Brook Village: Follow ancient paths into the remains of a once vibrant village in Wellfleet. Learn about its history and decay.

July 23 - The Sandy Shores of Great Island: Hike the Great Island "gut" in Wellfleet along Cape Cod Bay. Learn about a lost settlement and current salt-marsh restoration efforts.

July 30 - No program

August 6 - Marconi Area Revealed: Explore this area's history in Wellfleet and its connection to WWII and Guglielmo Marconi, as you traverse a unique coastal heathland habitat.

August 13 - Salt Pond to Coast Guard Beach: Hike through a former golf course to Nauset Marsh and the Great Beach in Eastham and hear the history of this landscape.

August 20 - Sand, Seals, and Shipwrecks on Coast Guard Beach: See July 9 description.

August 27 - Explore Great Island: Walking along the "gut" in Wellfleet to the tavern site, learn about the many uses of this land in the past and how it will continue to change.

Saturdays at 8 AM

July 4 - Tin Pan Alley, Provincetown: Walk the paths traveled by fishermen from the past, through regrowth forest, dunes, and finally reach the ocean.

July 11 - Ballston Heights: Enjoy heathlands, pine forest, and sea cliff views in the area surrounding a historic vacation resort in Truro.

July 18 - High Head Seal Walk: Traverse open dunes and oceanside in North Truro, and find gray seals hauled out at low tide.

July 25 - North Pamet Hills: Climb atop some of the best views in Truro, and learn about the ever-changing Pamet Valley.

August 1 - Beech Forest Dunes, Provincetown: Start in the beech forest, a remnant of the type of landscape that would have existed here pre-Contact, then meander into the dunes that followed.

August 8 - Bound Brook Island, Wellfleet: Secluded paths abound in one of the oldest Cape communities.

August 15 - Dyer to Spectacle Pond: Explore the areas around the Wellfleet/Truro glacially-formed kettle ponds.

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August 29 - Kettle Ponds: Discover the hidden areas around the Wellfleet/Truro glacially-formed kettle ponds.

Partner Programs



Friends of the Cape Cod National Seashore sponsors FREE concerts and events each year for Cape Cod residents and visitors to the national seashore. It supports the popular "Tuesday Evenings at Salt Pond," as well as events at the Province Lands Visitor Center and Herring Cove Beach in Provincetown.

Free events at Salt Pond Visitor Center, 50 Nauset Road, Eastham:

Toast and Jam - Friday, July 10, 7 PM. Lively original bluegrass, classic swing, Americana music, and jazz, using a wide array of instruments.

The Coast Guard on the Outer Cape - Then and Now

Wednesday, July 15, 7:30 PM. In celebration of the 100th anniversary of the U.S. Coast Guard, outgoing Officer in Charge of the Chatham Coast Guard Station, Senior Chief Boatswain Robert Goley, will talk about the lively history of the U.S. Coast Guard on Cape Cod. The lecture follows the annual meeting of Friends of the Cape Cod National Seashore, which begins at 6:30 PM. All are welcome.

Outer Cape Chorale Chamber Singers - Thursday, August 13, 7 PM.

Enjoy an evening of song with this esteemed Outer Cape chorale ensemble.

An Evening of Celtic Music - Saturday, August 29, 7 PM. Join Billy Hardy and Beth Sweeney, a dynamic Celtic fiddle and instrumental duo, for an evening of Irish and other Celtic music.

Summer Concert Series at Herring Cove Beach

Wednesday Evenings, June 24 to September 2, 6 PM until sunset.

Herring Cove Beach, Provincetown.

Co-sponsored by Friends of the Cape Cod National Seashore and Far Land on the Beach, these free "Sunset Concerts on the Beach" will feature favorite Cape musicians. Bring your own chairs. For a complete listing of performers and starting times, go to the website or Facebook page of the co-sponsors - www.farlandprovisions.com or www.fccns.org.

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

Healthy Parks, Healthy People



CAPE COD HEALTHCARE



Cape Cod National Seashore is excited to partner with Cape Cod Healthcare to offer additional Healthy Parks, Healthy People programs. Weekday mornings this summer, meet with healthcare professionals and rangers in the seashore to learn more about how to improve your health by recreating in the seashore!

For complete program information, please visit: www.capecodhealth.org/healthyparks or <http://www.nps.gov/caco/playourvisit/healthy-parks-healthy-people.htm>

Payomet Performing Arts Center &

"Small Tent, Big Shows." Music headliners: C.J. Chenier and the Red Hot Louisiana Band, Dave Mason's Traffic Jam, Marcia Ball, Buckwheat Zydeco, Jefferson Starship, and more! Plus: Journalist and documentarian Sebastian Junger screens his latest film *The Last Patrol*, audience Q&A to follow. Fundraiser for the Truro Historical Society, Payomet Theater, and charitable organizations for veterans and war correspondents supported by Junger. For tickets or more details, call the Payomet at 508-487-5400 or check their website at payomet.org.

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.



Dial and Discover.

Use Your Cell Phone to Learn About Cape Cod National Seashore!

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.

To Preserve Unimpaired: An Introduction to the Division of Natural Resource Management and Science at Cape Cod National Seashore

By Jason J. Taylor, Ph.D., Chief of Natural Resource Management and Science



An early springtime aerial photograph looking toward the north district of the national seashore. Photo/M. Borrelli

Natural Resources and Mission

Cape Cod National Seashore is located on a large glacial peninsula that extends 60 miles into the Atlantic Ocean from the coast of Massachusetts. It includes one of the largest stretches of uninterrupted beach in the United States and is the largest protected area on the northeastern coastal sandplain.

The park comprises many ecosystems, some of which are globally uncommon or of conservation concern, including estuaries, salt marshes, sandy beaches, barrier spits, nearshore marine, coastal forests, heathlands, ponds, and freshwater wetlands. These systems support a tremendous diversity of plant and animal species, and reflect the Cape's glacial origins, dynamic natural processes, and at least 9,000 years of human activity.

Over 570 species of amphibians, reptiles, fish, birds, and mammals, and many invertebrates, depend on the diversity of ecosystems found at Cape Cod National Seashore. Depending on the species, the park may provide for year-round needs, or serve as critical habitat during the nesting season, for migration, or during the winter.

Over 30 wildlife species that occur in the park are federally protected, and 37 are considered rare or endangered in the state of Massachusetts. The seashore is also home to a diverse array of more than 800 species of terrestrial, wetland, aquatic, and marine plants that are uniquely adapted to life in the coastal environment.

Past human activities on Cape Cod have played a major role in shaping the national seashore's ecosystems. For example, land-clearing practices by early European settlers expanded the extent of naturally occurring heathlands — a habitat that is globally rare; and damming and dredging many coastal marshes for mosquito control have left many of them ecologically impaired.

More recent human pressures are also having an impact on the national sea-

shore's environment. Atmospheric deposition (for example, "acid rain"); withdrawal of groundwater for human use; septic discharges that impact water quality; the spread of non-native, invasive species; and an overabundance of human-subsidized predator species, are just a few of the threats that pose serious risks to national seashore native species, habitats, and ecological functions. Nearby development and road mortality can also take their toll on park wildlife.

In addition, naturally occurring and climate change-induced sea-level rise, rising temperatures, increased storm frequency and intensity, and shoreline change are among the many physical processes that continue to shape national seashore ecosystems.

Working to understand and detect changes to the many species, ecosystems, and stressors that occur within the park, and successfully integrating what is learned into effective resource stewardship and an array of visitor experiences are complex and challenging but critically important and rewarding endeavors.



Park Hydrologist, Kelly Medeiros, measures marsh relative elevation near Great Island. Repeated measures through time help park scientists understand the rate of sediment accumulation or erosion in national seashore salt marshes. NPS photo

The Natural Resources Management and Science Division at Cape Cod National Seashore, consisting of 16 scientists and resource specialists, contributes to the park service mission (preserving unimpaired resources and values, and serving visitors) in three primary areas: detecting and understanding park species, ecosystems, and drivers, and changes to the condition of these natural resources; communicating information gained to park managers, partners, and the visiting public; and hands-on resource stewardship (protection and restoration) activities.

Inventory and Monitoring

Effective resource management decisions are based on knowing what resources exist, the condition of those resources, and how resources are changing over time. The National Park Service (NPS) Inventory and Monitoring (I&M) Program was developed with this need in mind.

barrier islands, and coastal marshes. Working as a network of parks with similar natural resources and stressors allows for each park to better understand status and trends of its own resources. That is, having a regional perspective can provide a broader context to determine if documented resource conditions or trends are local and require a specific local mitigation, or regional and driven by factors beyond the boundary of an individual park.

Seashore and NCBN staffs collaborate to collect data within the national seashore following rigorous monitoring protocols adapted to the ecological region. Some protocols are used each year; others are on a cycle of three to five years. Data for more than 30 vital signs are collected. Examples include ozone level; salt-marsh vegetation, sea grass, and special status species (e.g., piping plovers) condition; coastal topography and landscape change; and estuarine water quality.



A visiting-researcher team from the U.S. Fish and Wildlife Service fires a cannon net at Coast Guard Beach to capture red knots and other migrating shorebirds. These birds were then outfitted with electronic tags that allow researchers to map migration paths and resting and feeding sites. Photo/K. Titherington.

The I&M Program provides a structure for conducting 12 baseline natural resource inventories and long-term monitoring of indicators of ecosystem condition, known as "vital signs." Analogous to health monitoring in humans (for example, heart rate and blood pressure), inventory and monitoring of natural systems provide basic, critical information needed to track the overall condition of park natural resources and to provide early warning of situations that require intervention.

The concept of monitoring resources is not new; staff at the national seashore have been monitoring freshwater kettle pond water quality since the 1970s and air quality since 1981.

The *Cape Cod Ecosystem Monitoring* program is a part of the Northeast Coastal and Barrier I&M Network (NCBN). The NCBN consists of eight NPS units along the Atlantic seaboard similar in composition with open ocean, extensive coastlines, estuaries, and shifting-sand ecosystems that consist of beaches, dunes,

Monitoring data are evaluated against standards, with the result being a vital signs report card indicating the condition of park ecosystems and species. Vital signs information can also be used to define future research needs or to develop appropriate management actions to correct resource impairments.

An example of this information-to-management-action scenario is the Herring River restoration project. Monitoring data, for some time, have suggested that Herring River ecosystem is impaired and in need of restoration. Park management and a number of park partners have responded to this restoration need.

Research

Monitoring data help us understand what is changing, but they don't tell us why things are changing; research is required to answer the "why" question. The majority of research in the park is conducted by visiting researchers, working independently or in cooperation with park scientists.

continued on next page

To Preserve Unimpaired: An Introduction to the Division of Natural Resource Management and Science at Cape Cod National Seashore *continued*



The Chequessett Neck Road dike, constructed in 1909 across the mouth of the Herring River, has reduced the width of the river's ecological connectivity to Wellfleet Bay and daily tidal influence from its original 700 feet (red lines) to less than 18 feet (white lines). As part of the Herring River ecosystem restoration, and following an adaptive management approach, the goal is to restore tidal flow back to its original extent. NPS photo

The national seashore's *Atlantic Research and Learning Center* (ARLC), one of 19 NPS research learning centers in the United States, facilitates this research. The premise of the ARLC is that the park can serve as a science laboratory, and research should be integrated into park management, visitor experiences, and educational outreach.

Research partners are typically from national and international academic institutions, state and federal agencies, and nonprofit conservation and science organizations. Over the last few years, more than 30 institutions and organizations have conducted research in the park.

migration movements and describe impediments to herring migration success in the Herring River. An ecosystem baseline study will describe a number of physical, chemical, and biological characteristics of the Herring River ecosystem prior to restoration and serve as a basis for understanding restoration effectiveness. An uplands restoration study will help determine the most effective techniques to restore heathland ecosystems in the absence of historic and naturally occurring fires.

A bat population study will determine if white-nose syndrome (an emerging disease that is fatal to bats) is present in the



Park Wildlife Ecologist, Bob Cook, shares the marvels of box turtles — a species of "special concern" in Massachusetts that remains relatively abundant in the national seashore — with local elementary school students. NPS photo

This research is conducted by senior principal investigators to post-doctoral fellows and graduate and undergraduate students. In a typical year, over 50 research projects are conducted; the questions pursued are wide-ranging and span a number of physical, chemical, and biological disciplines.

Many notable research projects are underway in 2015 and will inform stewardship of park natural resources. A study of Northwest Atlantic endangered roseate terns (of which an estimated 75-85% use the seashore during migration) will determine regional migration patterns, habitat use at the national seashore, and the effects of disturbance on survivability. A fish-passage study will map river herring

park, and reveal species occurrence by season, timing of fall migration, and locations and habitats used for foraging and for summer and winter roosts. A predator enclosure study will help to determine the effectiveness of this nest-protection tool on piping plover nesting success and productivity at the national seashore.

Lastly, several coastal-change studies will help refine how sand moves around the Outer Cape and the effect sea-level rise may have on this process; determine the vulnerability of park coastal marshes to climate-change effects, and map near-shore marine sediments, underwater topography, habitats, and archeology. These maps will be used, in part, to determine how submerged environments may

impact the resilience of national seashore coastlines to future storms.

Science Communication

Interpreting research results and sharing this information is a priority goal of the ARLC (and more broadly, the national seashore's interpretation and education and natural resource divisions). This goal has three primary objectives: to ensure that sound science is available to inform natural resource management decision-making; that interpretation reflects current science and resource conditions; and to help the public understand park resources, conditions, and need for stewardship.

Staff accomplish science communication in a variety of ways: field-based education programs with visitors, teachers, and students; meetings with townspeople and town managers; citizen science projects; guided ranger tours; impromptu field interactions with visitors; technical assistance; videos and webpages; newsletters; resource briefs; media interviews; social media; and publications.

The ARLC's capstone science communication event, which has grown in interest and attendance each year, is the annual *Science in the Seashore Symposium*. The fifth annual symposium will be held Thursday, August 27, 2015, from 1 to 5 PM, at Salt Pond Visitor Center in Eastham. The science symposium typically features 10 presentations by researchers covering a range of applied natural resources and social science studies being conducted at the national seashore.

Stewardship

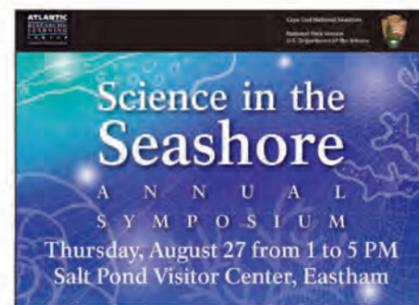
To effectively steward park natural resources, consistent long-term monitoring, sound research, and good science communication are critical. Stewardship of natural resources means caring for the many species and ecosystems that exist within the national seashore. Resource protection and restoration are two examples of stewardship.

While we work to ensure that common species remain common, we must also protect species that are most imperiled. For example, park staff protect species listed as threatened or endangered under the U.S. Endangered Species Act. Three focal shorebird species include endangered roseate terns and threatened piping plovers and red knots. Shorebird management specialists and volunteers spend countless hours working in the beach ecosystem to ensure that breeding, feeding, and sheltering habitats for these

beach-dependent species are protected, while also providing for as much public access and recreation opportunity as possible.

In addition to protecting to save natural resources that are still viable but on the edge of disappearance, park staffs also work to restore ecosystems that were once thriving, but due to human actions are now impaired. For example, many estuaries and salt marshes, which are critical to coastal plants, wildlife, and way of life, have been damaged by direct, though well-intentioned, human actions.

To correct these damages that pre-date establishment of the national seashore, several estuary/salt marsh systems in the park are in various stages of restoration. Two — Hatches Harbor (140 acres) and East Harbor (710 acres) — have been partially restored.



The Herring River ecosystem restoration is an ambitious 1,100-acre project, the largest of its kind in New England, and following several years of planning and data collection is moving toward implementation. National seashore staff are working with community partners on other restoration efforts including estuaries (in addition to those listed above), heathlands, and freshwater pond shorelines. Partner and public engagement are critical to restoring the ecological integrity of these once thriving ecosystems.

Cape Cod National Seashore's natural resource management and science staff are dedicated to the National Park Service mission, and we are passionate about park natural resources. We work tirelessly to document resources, to detect and understand changes and impacts to resource conditions, and to effectively manage and communicate knowledge and lessons learned to support resource stewardship and educational outreach.

If you see us in the field, ask what we are doing and why. We are more than happy to share with you our work to preserve unimpaired the natural resources in your national park.

For more information about Cape Cod National Seashore, its natural resources, or the Division of Natural Resource Management and Science, visit: <http://www.nps.gov/cacolearn/nature/index.htm>.



Former park Shorebird Biologist, Nuray Bent, monitors a pair of piping plovers feeding near the water's edge. NPS photo

Healthy Parks, Healthy People

a special message from Superintendent George Price

Taking a walk has been identified as one of the best ways all of us can improve our health and outlook. Regular walks have been shown to contribute to weight loss, reduce blood pressure, improve digestion, and have a positive effect on those suffering from depression. It sounds to me like a miracle drug offered on TV commercials, and it's free!

What better place to start a walking, bicycling, or other fitness program than Cape Cod National Seashore or at one of the hundreds of parks and open spaces offered by the towns, state, and conservation trusts?

The National Park Service developed a Healthy Parks, Healthy People campaign, joining a global movement that harnesses the power of parks and public lands to support a healthy society. Parks across the country have teamed up with local physicians and other healthcare providers to spread the word. Unfortunately, the obesity rate among Americans is over one third of all adults. We're all aware that the negative long-term health effects of obesity are damaging to our bodies from excessive blood pressure, to diabetes, to insufficient muscle tone. Many young people are facing health issues and significant healthcare costs in their adult years.

Personally, I had to confront frightening health issues recently, a result of my weight gain and lack of physical activity. Fortunately, with the help of my physician, a nutritionist, and my family, I have experienced great success, improved test results, and substantial weight loss through diet and exercise.

As part of the 2016 centennial celebration of the establishment of the National Park Service, the staff of Cape Cod National Seashore is pleased to join with Cape Cod Healthcare to foster the benefits of outdoor activities as part of our daily lives.

To that end, we have identified dozens of wonderful walks, hikes, and programs for you. Each walk is identified with mileage information for you to track your progress. Some of our ranger-led programs include walks among the dunes in the Province Lands and the wonders of Fort Hill in Eastham. A special treat offered by NPS staff is the *Yoga on the Beach* program for those interested in the benefits of stretching and experiencing the soothing beach environment.

I invite you to rediscover your national parks – or as our centennial campaign with the National Park Foundation states, “Find Your Park” – and use it as an opportunity to take walks and explore places off the beaten path. You will observe unexpected wonders, give yourself a break, exercise your body in an enjoyable and safe environment, and enjoy the rejuvenating effects of walking outdoors, spending time in nature.

Making Climate-Friendly Choices Here and at Home

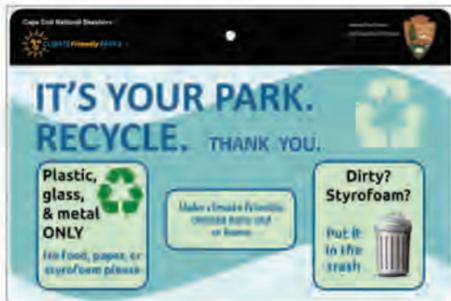
by Lauren Markram, AmeriCorps Cape Cod 2015 CCNS Planning Assistant

Let's face it, we all know that use and consumption of plastics is not the best choice for the environment. We see constant images of gulls with bellies full of plastic, of turtles swallowing plastic bags, and seals with fishing line around their necks. While we are aware of the consequences of our actions, the real question is what are we going to do about it.

Cape Cod National Seashore (CCNS) has made great strides in targeting plastic pollution – both in providing recycling opportunities to the public and employees at beaches and visitor centers, and through reducing the use of plastic to the greatest extent practical. In 2011, an independent consultant determined that 35% of waste at the seashore could be recycled. To further target this figure, CCNS focused on eliminating the need for disposable water bottles on site through an initiative to get water bottle filling stations in key destinations throughout the park.

While CCNS will continue to educate visitors, encourage recycling, and get involved in regular beach cleanups to tackle existing pollution issues, the green team's ultimate goal is to eliminate the need for plastic bottles on park land all together. Currently we have three water bottle filling stations available at areas of high demand. As an example of their impact, two of the stations that were installed at our visitor centers last spring fulfilled the equivalent of saving 23,325 water bottles in just their six months of use. Thanks to funding and sponsorship provided by the Friends of the Cape Cod National Seashore and CARE for Cape and Islands, two new stations outdoors will be installed in 2015. These organizations also sponsored the production of a “green practices” film to both inspire and educate visitors.

Through these initiatives, visitors can play a part in making CCNS a Climate Friendly Park, and in doing so will bring sustainable practices into their own daily lives.



Atlantic White Cedar Swamp Trail, Wellfleet NPS photo

How Friends Supports Cape Cod National Seashore



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

Welcome to Cape Cod National Seashore, one of America's most spectacular national parks! For more than 27 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 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 shore areas wherever 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-change effects.



On the fundraising side, we have obligated \$100,000 to help with the cost of repairing and repainting the Penniman House near Fort Hill this year. Seashore officials are always working to find government funding sources, and the Friends board of directors is confident that our commitment will help them get this project underway in a timely manner. Maintenance of historic structures in the Cape Cod National Seashore is particularly challenging due to their proximity to the ocean.

This winter we once again 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 six episodes of Ken Burns' PBS documentary describing in beautiful film scenes and interviews how the National Park System evolved. 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. Also, through our support, concerts at Herring Cove Beach on summer evenings will be co-sponsored by the Friends.

Our efforts would not be nearly as effective without our volunteers and dues-paying 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.

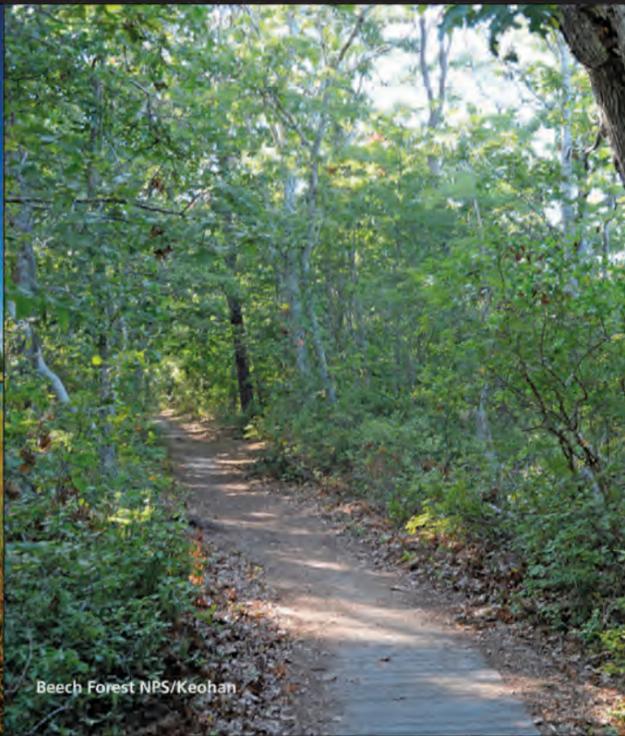
Join a dedicated team of volunteers and make Cape Cod National Seashore a better place.



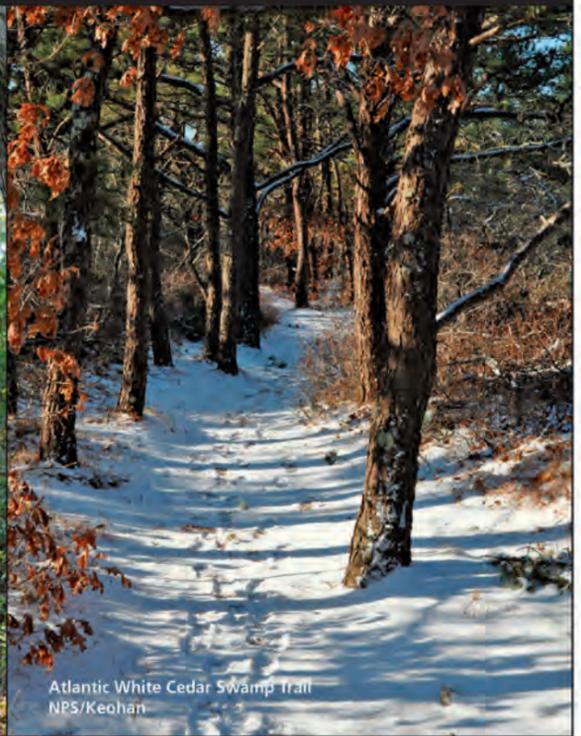
Self-Guiding Trails



Nauset Marsh NPS/Mechling



Beech Forest NPS/Keohan



Atlantic White Cedar Swamp Trail NPS/Keohan

- 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 except as noted.
- 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 Prence Road. Continue to the parking area on the left across from the 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 summer 2015, 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. *Ask at the Salt Pond Visitor Center for a fun activity guide to take along.* **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

Nauset Marsh Trail, continued

fields and returns to the visitor center through a recovering forest. There are several spectacular vistas along the way. **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. *2-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 punctuate spectacular vistas, which emerge from an even-aged, pitch-pine forest. Part of this trail leads to a colonial-era tavern site (no

Great Island Trail, continued

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.
- Leashed dogs are permitted along portions of the trail as indicated by signs.
- 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:** Winding 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 brown Head of the Meadow Beach sign 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 now hides most, but not all, of the former land uses. **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 brown Head of the Meadow Beach sign 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 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.

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 2 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 2 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 ½ 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 1½ 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 1 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.

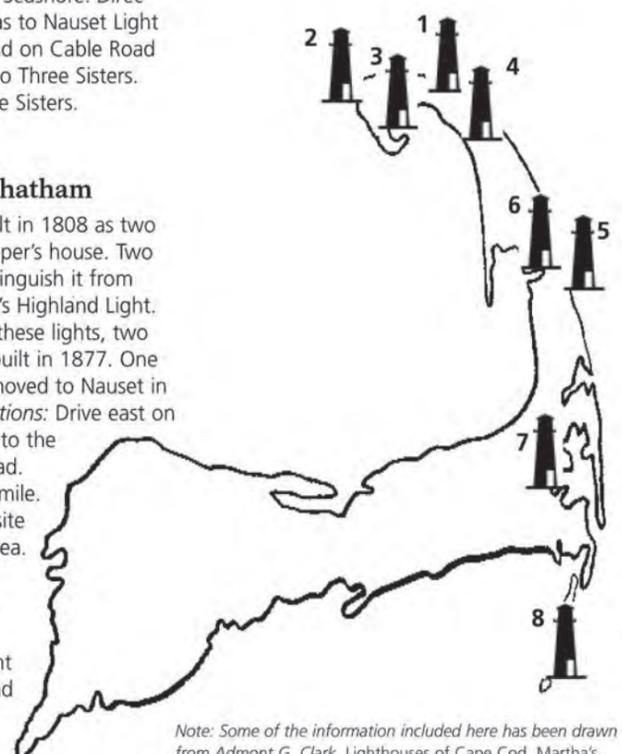
7. Chatham Light, 70 Main Street, Chatham

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 ½ 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).

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

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

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

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

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

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 Route 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, 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, Orleans	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: North Truro Campground, 46 Highland Road, and Horton's Campground, 71 Highland Road, North Truro	508-487-1191
North of Highland, 52 Head of the Meadow Road, North Truro	508-487-1191
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



**FRIENDS
OF THE CAPE COD
NATIONAL SEASHORE**

**BECOME A FRIEND
OF THE SEASHORE**

Friends of the Cape Cod National Seashore, the not-for-profit fund-raising partner of the seashore, is committed to the conservation and preservation of the park through volunteerism and philanthropic support. Friends lends a hand by:

- ✧ Supporting a summer season of free, fun, and educational events for the entire family;
- ✧ Promoting the interpretive, environmental, historical mission of the seashore;
- ✧ Encouraging much-needed private donations to support seashore projects and programs;
- ✧ Providing volunteers for important seashore projects such as seal education training, dune restoration, and trail maintenance.

Love the Seashore? Join the Friends!
Visit us at www.fccns.org and find us on Facebook



The Museum Stores at
**Cape Cod
National Seashore**

Remember your stay
after you're home.

Visit the stores at
Salt Pond Visitor Center
Highland Lighthouse
Province Lands Visitor Center



Eastern National
Serving Visitors to America's National
Parks and other Public Trusts

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.

Park and Local Area Map

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 3/4 of a mile by reservation.

The *Flex* bus travels from Brewster on Route 6A, down Route 6 through the towns of Orleans, Eastham, Wellfleet, and Truro to Provincetown. It connects to the *H2O Line* at Stop & Shop, Orleans, and in the summer, to the Provincetown/North Truro Shuttle at Highland Road, Truro and Stop & Shop in Provincetown, with Hyannis as its destination.

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.)

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

Website for schedules:
www.capecodtransit.org

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

Ferry information:

Martha's Vineyard and Nantucket Steamship Authority
<https://www.steamshipauthority.com>
Hyline Cruises
<https://www.hylinecruises.com/>
Freedom Cruise Lines
<http://www.nantucketislandferry.com>

Provincetown Bay State Cruises
<http://www.baystatecruisecompany.com>
Boston Harbor Cruises
<http://www.bostonharborcruises.com/provincetown-ferry>

