Frequently Asked Questions about Shorebird Management Activities

Cape Cod National Seashore (Seashore) is home to several species of shorebirds that use beaches for breeding, nesting, feeding, and resting during migrations. They are a key component of the Cape Cod ecosystem and contribute to the beach experience enjoyed by millions of visitors. Some of them (piping plover, least tern, American oystercatcher, roseate tern and red knot) are considered endangered, threatened or species of special concern by federal and state governments. The Seashore works with other federal agencies (especially US Fish and Wildlife Service (USFWS) and United States Geological Survey) and local partners to conserve the birds under the requirements of the Endangered Species Act (ESA) and other laws, policies, and regulations.

Cape Cod National Seashore has a new (2018) Shorebird Management Plan that enables it to conserve these birds while providing public enjoyment of beaches. The plan, developed through a formal Environmental Assessment resulted from a complex 8-year process that involved other agencies and the public -- including local residents, recreation community, visitors, wildlife organizations, and many other stakeholders. The previous plan was out of date and did not reflect current scientific information about shorebirds and the effectiveness of management practices. The new plan informs the daily activities of the Seashore's shorebird team. The team's activities include scientific monitoring of birds during the breeding season, the placement of physical barriers to separate nesting birds from people and pets, steps to reduce predation on birds and eggs through lethal and non-lethal methods, and providing current information to visitors. NPS staff, local residents, partners, and visitors regularly see signs of shorebird management activities during the spring and summer season.

Why is the park conserving shorebirds?
The shorebirds are essential parts of the Cape Cod ecosystem that the NPS manages. For many complex reasons -- including unregulated hunting, millinery fashions, habitat loss, and unregulated recreation in breeding areas -- their populations declined over decades to the point they are now designated threatened or endangered. With that designation, the Seashore is legally required under the ESA to work to increase their population sizes. In pursuit of that goal, staff conduct and apply science to understand these birds and make management decisions.

How have the birds been doing the last few years at Cape Cod?

**Piping Plover**
In 2018, the number of piping plover nesting pairs (98) and number of chicks fledged (139) was higher than the past several years. However, the percentage of eggs that successfully hatch and fledge has been decreasing. Furthermore, the average productivity (number of chicks successfully fledged per nesting pair) was below the target value (1.5) called for in the Piping Plover Recovery Plan. Productivity has been below that level for 11 of the past 20 years.

**Least Tern**
Least terns are relatively long-lived, meaning the effect of poor productivity on population status is delayed. Thus, annual reproductive success is as critical an indicator of least tern's population stability as annual numbers of individuals counted. The number of breeding pairs and chicks fledged decreased from 2017 to 2018 with productivity over the past five years remaining low (average 0.36 chicks fledged/breeding pair). The total number of breeding pairs of least terns observed in 2018 was slightly lower than 2017 (142 pairs) yet the second highest since 2012. The five-year running average number of pairs for 2014-2018 was 107. The number of fledged chicks had been trending upward from 2013 (2 fledges) to 2017 (69 fledges). A 68% decrease in the number of chicks fledged occurred from 2017 to 2018.

**American Oystercatcher**
American oystercatchers are a long-lived species that benefits from high annual adult survival and variable annual productivity. American oystercatchers were first recorded nesting on Seashore beaches in 2002. Since then, 1-5 pairs have nested in the southern beaches each year. Between 2007-2018, productivity fluctuated from zero to 1.5 chicks fledged per breeding pair.

The recovery of a species is accomplished by eliminating, reducing or mitigating those factors that have caused its decline. In the case of piping plovers and other shorebird species, these impacts and pressures include increased predation (mostly by coyotes and crows), habitat loss and human disturbance. Climate change, sea-level rise, increased storm frequency and intensity are also changing the beach ecosystem and have left humans and wildlife sharing a shrinking coastline, increasing conflict with people and pets who use the beaches for recreation.
What is the park doing to conserve shorebirds?
Shorebird protection in the Seashore uses three primary activities: research and monitoring, fencing and signage, and non-lethal and lethal predator management. 1) Staff conduct regular scientific studies to measure and monitor population sizes, reproductive behaviors, and habitat use during the breeding season every year. 2) On most beaches the park uses fences, nest enclosures, and beach usage restrictions to protect birds and their nests from people who walk, drive, explore, or bring their pets to the beaches. At the six lifeguarded beaches, main pedestrian paths and parking lots there will be a reduction in the protection of birds to increase the area of lifeguarded beach available to visitors. In these places, reducing protection means shrinking the areas that exclude people, with the expectation that birds in those places may fall to reproduce or may nest elsewhere. 3) Finally, the park has the option to use non-lethal methods (e.g. electrified perimeter around nest enclosures) and lethal methods (hunting, poisoning) to reduce predation.

What are all these fences and signs for?
Beachgoers are important partners in our conservation effort. The fences and signs help them know which areas to avoid because there are nesting birds within them, and the four-foot-high wire enclosures that surround individual nests reinforce that important message. They also help protect the nests from pets and from predators like coyotes and crows. The enclosures are impressively effective. In 2018, 59% of piping plover nests not surrounded by enclosures were taken by predators (mostly crows). Less than 9% of nests surrounded by enclosures were affected by predators (and none by crows).

What are Seashore staff on ATVs doing?
Those are our scientists! Natural Resource staff and interns are out on the beaches every day collecting data on birds and nests - breeding behaviors, egg counts, chick movement, hatching and fledging successes and failures, predation, etc. They also work with law enforcement rangers to set up, maintain, and move fences, signs, and enclosures in order to protect birds and to provide visitors with access to the beaches. Fencing and signage may be moved often to allow additional access if birds are no longer in the immediate area. The shorebird staff will talk with visitors and park staff (including lifeguards and fee collectors) to answer questions about shorebirds, nest sites, and closures or other restrictions. With over 20 miles of beach to patrol from Wood End/Long Point in Provincetown to Coast Guard Beach in Eastham, their focus is on the birds.

What specifically is new this year, compared to previous years' management actions?
On January 30, 2019 the NPS Northeast Regional Director signed the Finding of No Significant Impact for the Cape Cod National Seashore Shorebird Management Plan. Under the plan, shorebird populations will be managed to improve productivity to meet recovery goals through a combination of increased protection by implementing additional closures paired with flexible management at specific high visitation areas to maintain visitor access. The Superintendent has determined that the Seashore will implement certain elements of the plan in the 2019 shorebird season. Additional elements will be phased in as the Seashore completes the required consultation process with US Fish & Wildlife Service.

The specific elements of the plan that will be implemented in 2019 and the new changes that will affect visitors are outlined here:

Symbolic Fencing
Symbolic fencing will not be installed on portions of all six lifeguarded beaches. The beaches include, Coast Guard Beach in Eastham, Nauset Light Beach, Marconi Beach, Head of the Meadow, Race Point and Herring Cove. This change will increase the area on life-guarded beaches available to visitors.

Flexible Management
All six lifeguarded beaches, the ORV corridor, the Pole Line Road, and the Inner Dune Route will all be considered for flexible management (described below) of up to three pairs of piping plovers at the discretion of park management.

New Closures and Restrictions
Additional closures and use restrictions (pedestrian, pets, boats) will be implemented to provide enhanced protection for courting, scraping, nesting, staging and migratory shorebirds. This change will result in substantial pet closures/restrictions throughout the park starting April 1. Leashed pets will be allowed in areas where no birds are present. These areas will be opened and closed often to protect birds and allow for visitor access when possible. Visitors, particularly those accessing the ORV Corridor, should be aware that pet restrictions are increasing and they should plan carefully before arriving with pets.

Pedestrian Restrictions
“Area Closed” signs will be installed throughout the marsh at Hatches Harbor spit and northern tip of Herring Cove closing the areas to pedestrian access from July through October 15 to protect staging/migrating shorebirds.

Pet Restrictions
The following areas will be closed to pets from April 1 through October 15:
- Coast Guard Beach (south of pedestrian access), Nauset Marsh in Eastham, Jeremy Point, Hatches Harbor (marsh and spit), and Herring Cove (northwest) in Provincetown.
Boat Restrictions
A portion of the tip of Coast Guard Spit in Eastham will remain open for boat landings, unless future information indicates that a total closure is warranted.

Boat closures will be established once staging and migratory shorebird species begin to arrive on beaches. Historically important staging and feeding areas (portions of Coast Guard Spit, Eastham, channels in Nauset, Jeremy Point, tidal flats along the east side of Hatches Harbor and the northeast corner of Herring Cove) will be closed to motorized and non-motorized boats from July 15 through October 15. Signs will be installed indicating closures.

Additional areas may be restricted to pedestrians, pets, and boats based on the presence of shorebirds. Dates may be adjusted based on the arrival and departure of birds each year. Beaches that do not have nesting shorebirds or concentrations of staging/migratory shorebirds may remain open to leashed pets.

Predator Control
Non-lethal management methods, including predator exclosures, garbage management, and education will continue to be used. Data on predator presence and abundance is being gathered this summer. Lethal measures will not be implemented in 2019.

What is flexible management?
Flexible management supports visitor use by reducing or eliminating protective measures like symbolic fencing, in specific high-visititation areas. Flexible management means removing standard protection measures around piping plover nests. For instance, if piping plovers nest off of Pole Line Road, including the cobble field, and flexible management is implemented, the road would remain open as a 5 mph drive-through section with no pedestrian access until hatching. Only after the eggs hatch would the road be closed. The new Shorebird Management Plan allows flexible management on all six lifeguarded beaches, the Oversand Corridor, the Pole Line Road, and the Inner Dune Route. At the discretion of park management all of these high use areas may be considered for flexible management.

What does “take” mean?
A primary goal in the management of threatened or endangered species is to minimize the occurrence of “take”. From Section 3(18) of the Federal Endangered Species Act, the term ‘take’ means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”

Harm may include significant habitat modification where it actually kills or injures a listed species through impairment of essential behavior (e.g., nesting or reproduction). So any time flexible management is implemented, it will be considered “take” under the new Shorebird Management Plan.

How many pairs can be flexibly managed at Cape Cod National Seashore?
Under the current Biological Opinion provided by USFWS, Cape Cod National Seashore can flexibly manage or “take” up to three pairs of piping plovers. The amount of flexible management may increase in the future dependent on formal consultation with USFWS. Flexible Management of shorebird nests was approved for use in the Seashore beginning in 2010. To date, flexible management has only been used once, in 2010, since the permit was granted.

What to do if a shorebird appears injured?
You should leave all shorebirds alone even if they appear to be injured. Shorebirds are wild animals and respond poorly to direct human contact and this often results in further injuring the shorebird.

Where can I find accurate information about which beaches are open to different activities?
The shorebird team constantly adjusts fencing and signage throughout the Seashore based on the movement of shorebirds to protect birds and to allow for the greatest visitor access. The latest information is provided weekly to staff at Visitor Centers and Fee Booths. Check for updated information posted on beaches.

How and why is the park managing predators?
For the birds to thrive, reducing predation risks is just as important as reducing disturbance by human activities. The Shorebird Management Plan and its associated Environmental Assessment includes both non-lethal and lethal methods. This year (2019) the park will rely on non-lethal methods like managing food waste, communicating with the public about not attracting predators and about keeping pets on leashes, and installing exclosures without nests so predators learn not to associate them with prey. The park will not implement lethal methods in 2019.

Lethal methods in the future will be used only on targeted individual animals known to pose threats to nesting birds and eggs. Approved methods are outlined in the Environmental Assessment and will only be employed in coordination with professionals from the United States Department of Agriculture, Animal and Plant Health Inspection Services, Wildlife Service division.

Why is kite-flying and kite-boarding prohibited in some areas?
For the protection of shorebirds. Foreign objects (which can resemble predatory birds) can be very disruptive and stressful to breeding birds and chicks. The Seashore has designated an area of the outer beach for use by kitesurfers. This area of the outer beach between Nauset Beach and Coastguard Beach has little shorebird activity.
Why are leashed pets prohibited in some areas? If they are under the control of the owner, why is there a problem?
Shorebirds perceive dogs as predators and are more readily disturbed when a dog is approaching than when only people are approaching. This instinctive reaction causes the birds to leave their nest, interrupting incubation and exposing eggs to either extreme hot or cold temperatures. Research has determined that the mere presence of pets disturbs piping plovers far more than human presence. Even when they are on leashes, dogs can frighten, harm, or even kill birds.

Why are there restrictions on beach use even in the fall, after the breeding season?
Some shorebird species -- including endangered ones like roseate terns -- do not breed on Cape Cod beaches. They stopover here in the fall during their migration to southern wintering grounds in the Southern Caribbean and South America. The time they spend on Seashore beaches is critically important to their survival because they must forage and build up energy reserves for long flights (thousands of miles in some cases). They need protection in the fall because recreational activities, pets, vehicles, and other disturbances that cause stress, reduce foraging activity, or unnecessary escape flights ultimately reduce their energy stores.

For additional information about the shorebird management plan go to:
www.nps.gov/caco/learn/management/lawsandpolicies.htm