



Piping Plover and Least Tern Newsletter

2005 a Hard Year for Piping Plovers in Maine

By Jody Jones and Joy Felio

Maine’s piping plovers had a difficult nesting season this year. Preliminary numbers show that only about 49 pairs returned to nest on the state’s beaches, 15 percent fewer than last year and 29 percent fewer than the 2002 peak of 66 nesting pairs. Fewer pairs often means fewer fledglings, but 2005 was worse than expected with only 26 fledglings produced so far. It’s been 15 years since we dipped below 45 fledglings. Here’s what happened:

Storms, Storms, Storms

This spring, high tides and storm waves pummeled Maine’s beaches, eroding dunes, washing debris into streets, and destroying piping plover nesting habitat (see photo, page 2). The most spectacular series of storms occurred at the end of May when three nor’easters hit the coast one after another. High surf scoured away sand from Ogunquit to Georgetown, leaving sharply eroded dunes, some with steep, cliff-like drops of five feet or more down onto the beach. Newly built boardwalks and fences were carried away; homeowners had to clean seaweed and sand from patios and driveways. The sand spit near the Sprague River at **Seawall Beach** in Phippsburg looked more like a clear-cut site than a beach, with large driftwood logs and debris piled everywhere. Ninety-five piping plovers were nesting in Maine at that time and all but five nests were lost.

Predators and People

Well adapted to the changing beach environment, piping plovers began renesting by June 1. Unfortunately, eggs laid in early June were hatching in early July, when crowds and predator activity were at their peak along with “unauthorized” and private Fourth of July fireworks displays.

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Preliminary Piping Plover Nesting Data (as of August 30th)

Town	Beach	Pairs	Nesting Attempts	Fledglings
Ogunquit	Ogunquit	4	5	0
Wells	Moody	0	0	0
	Wells	6	13	6
	Drakes Island	1	1	0
Kennebunk	Laudholm Farm	1	2	1
	Crescent Surf	6	7	5
	Parsons	1	2	0
Kennebunkport	Marshall Point	0	0	0
	Goose Rocks	1	2	1
Biddeford	Fortunes Rocks	1	1	0
	Hattie’s	0	0	0
	Hills	2	2	1
Saco	Ferry	0	0	0
	Goosefare Brook	1	2	2
Old Orchard Beach	Old Orchard	1	2	0
Scarborough	Pine Point	0	0	0
	Ferry/Western	2	2	1
	Scarborough	2	3	6
Cape Elizabeth	Higgins	6	12	0
	Ram Island	4	4	1
	Crescent Beach	0	0	0
Phippsburg	Hermit Island (Head Beach)	0	0	0
	Seawall	4	10	0
	Popham	1	2	0
	Hunnellwell	0	0	0
Georgetown	Reid State Park	6	10	2
	Indian Point	0	0	0
Total		50¹	82	26

¹Preliminary results—includes some renesting pairs

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About the Project

Maine Audubon has worked for nearly 25 years to restore Maine's piping plover population, which has risen from 10 pairs when recovery efforts began in 1981 to 55 pairs in 2004. The organization brings together towns, private landowners, volunteers, wildlife agencies and others to locate, monitor and erect fencing to protect plover nests as well as conduct outreach about the birds, which are threatened primarily by habitat loss but also by dogs and predators such as gulls and crows.

About Maine Audubon

Maine Audubon works to conserve Maine's wildlife and wildlife habitat by engaging people of all ages in education, conservation, and action.

Support for Maine Audubon comes from its 11,000 members and supporters, including individuals, foundations, and corporations. Members are automatically members of their local Maine Audubon chapter and National Audubon Society, Inc., of which Maine Audubon is an affiliate. Contributions to Maine Audubon are used only in Maine.

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U.S. Fish & Wildlife Service
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Many historically productive sites such as **Higgins Beach** in Scarborough were plagued by crow, gull, and fox predation. Others, like **Fortunes Rocks** in Biddeford and **Ogunquit Beach**, were severely eroded by the spring storms and unavailable for nesting. The biggest blow to the population was losing four adults to predation (see page 6).

The combination of spring storms, competition for space to nest, and predation all took a toll on productivity: preliminary results indicate that only 26 chicks fledged this season, the worst number since we began keeping records 25 years ago (see table right).



Photo by Jess Costa

The combination of spring storms, competition for space to nest, and predator activity all took a toll on productivity in 2005: preliminary results indicate that only 26 piping plover and 20 least tern chicks fledged.

Trends in Productivity for Piping Plovers

	Year	Chicks fledged per pair	Total fledglings	Total pairs
	2005	0.53	26	49
	2004	1.45	80	55
	2003	1.28	78	61
	2002	1.38	91	66
	2001	1.98	109	55
Low	2005	0.53	26	49
High	1995	2.38	95	40

A Hard Year for Least Terns, Too

The 2005 breeding season was a challenge for Maine’s least terns, as well. Crows, foxes, and possibly coyotes destroyed two of five colonies, forcing birds to join other colonies, including a new one this year on **Stratton Island** off Scarborough (see page 10). Overall productivity was low due to predation of nests and chicks by crows and foxes.

At 109 breeding pairs, Maine’s least tern population is estimated to be lower than last season; at 20, the number of fledglings is the lowest it’s been since 1998 when 12 chicks fledged.

More Predators

Heavy predation presented the biggest challenge to Maine’s least terns this season, occurring at all sites and contributing to the low productivity.

The first birds to arrive in Maine colonized **Higgins Beach** in Scarborough, **Crescent Surf Beach** in Kennebunk, and **Seawall Beach** in Phippsburg, but crows destroyed the colony at Higgins and a combination of crows, foxes, and possibly coyotes predated all of the nests at Seawall. The birds from these failed colonies most likely joined the birds at Crescent Surf (51 nests), formed new colonies at **Western Beach** in Scarborough (40 nests), and even ventured out to **Stratton Island** off of Scarborough (18 nests).

Predators have influenced the success of least terns ever since Maine Audubon began monitoring them in 1977.

“When a colony is predated, terns typically move to alternate sites and try again, making conservation of all remaining sites extremely important,” said Jody Jones, coordinator of Maine Audubon’s project to protect piping plovers and least terns. “Various types of predator management techniques have been tested and we continue to work to improve these techniques in order to increase Maine’s least tern productivity.”

Available habitat is always a limiting factor too: Maine is the northern edge of the least tern’s breeding range and does not have many sand spits at the mouth of estuaries, which the terns prefer for nesting.

Looking Ahead

The 2005 season is a grim reminder of how important Maine Audubon’s Piping Plover and Least Tern Recovery Project is, as is the Endangered Species Act without which these species would have likely disappeared long ago.

Maine Audubon and its partners have been successful in keeping these birds from local extinction; even so, we wish projects like these weren’t needed. Maine Audubon is working hard to protect the important habitats remaining today, and teaching future generations to care for wildlife so species won’t need this type of intensive management to keep them from the brink of extinction.

In the meantime, we can take comfort in the fact that plovers and terns are well adapted to storm activity and actually rely on washed-over areas to help create optimal nesting habitat in future years. As Maine’s beaches gradually recover, let’s hope the storms of 2005 end up creating more productive habitat for both piping plovers and least terns.



Photo by Steve Pinker

Piping plover chick

Mariene and Henry Benoit, Rookies of the Year

By Joy Felio

When newlyweds Mariene and Henry Benoit of Ogunquit signed up as volunteer piping plover monitors this spring, they expected their first year would be one for learning—it would take some time to become skilled at locating nests and keeping track of chicks. Imagine the Benoit's surprise and delight when they discovered not one, not two, not three, but *all four* piping plover nests on **Ogunquit Beach** this season.

Mariene and Henry Benoit of Ogunquit may be plover monitoring rookies, but the couple found all four piping plover nests on Ogunquit Beach this year.



Photo by Paula Mamone

How did the rookie couple find so many nests? By combining their strengths, Mariene said. “Henry is good at watching the birds’ behavior, and I’m the one that actually finds the eggs.”

Mariene and Henry don’t consider themselves birders per se, but they’ve always enjoyed watching birds at their backyard feeders. After seeing a story on piping plovers on the local news and the signs on Ogunquit Beach alerting visitors of nearby plover nests, they decided to get involved in Maine Audubon’s project to protect the birds. The couple already enjoyed walking the beach, so monitoring fit in easily with their daily routine and environmental philosophy.

What they didn’t know was how easy it is to become plover-watching zealots. With their clear, bell-like calls and zipping runs across the sand, piping plovers quickly find a place in the hearts of many beachgoers.

Now Mariene and Harry are not only zealots, but well on their way to becoming experts like many of the volunteer monitors at Ogunquit and Wells. Local monitoring is a crucial part of managing these endangered birds—without volunteers’ dedication and enthusiasm,

Without volunteers’ dedication and enthusiasm, recovery efforts would not be nearly as successful.

recovery efforts would not be nearly as successful. Special thanks to the Benois and other first-time volunteer monitors who are helping to expand the project.

Volunteers Prove Essential

By Jody Jones and Jess Costa

Piping plovers and least terns benefit greatly from the many volunteers who give their time each year to help with recovery efforts. The following new volunteers represent the extraordinary dedication of the volunteer network that has built up over the years.



Volunteer Margie Gribbell erects a piping plover nest enclosure on Seawall Beach in Phippsburg.

This season we were very lucky to have **Bria Stump** of Smith College volunteer for one week and **Margie Gribbell** from North Yarmouth Academy volunteer for two weeks. Margie was involved through her school’s Senior Social Service Program, and balanced long hours in the field with a busy athletic schedule. She quickly became part of the piping plover team, finding a nest on one of her first days. Margie has taken her many talents to Colby College where she is now

a freshman. We wish Bria and Margie all the best and thank them for their hard work on the beaches this spring!

Thanks also to **Elliot and Winslow Robbins** from Waldoboro, who regularly removed predator-attracting trash at **Reid State Park** in Georgetown, and to **Don Bruce** of West Bath who regularly repaired stake and twine damaged by spring storms. Don also helped Maine Audubon staff capture two injured gulls on the beach so they wouldn’t interfere with the nesting activity there and could be rehabilitated.

Two Orphaned Piping Plover Chicks from New Hampshire Start New Life in Scarborough

By Marie Malin, Jess Costa, and Joy Felio



Two piping plover chicks— orphaned in Hampton Beach, New Hampshire when feral cats killed their parents—were released at Scarborough Beach in August.

In August, Maine Audubon, Maine Inland Fisheries and Wildlife, and New Hampshire Fish and Game released at **Scarborough Beach** two piping plover chicks that were orphaned in Hampton Beach, New Hampshire.

The chicks were orphaned the day after they hatched in mid July when their male parent was killed by a feral cat and their female parent died shortly afterwards, presumably from injuries inflicted by a cat. There is a feral cat feeding station near the beach where the birds were injured.

The three orphaned chicks and their injured mother were brought by New Hampshire Fish and Game piping plover monitor Brendan Clifford to the Center for Wildlife in York, Maine, the rehabilitation facility closest to the nesting site. The female and one chick died overnight; the two surviving chicks were taken the next day to a rehabilitation specialist in Bridgton, Maine, where they stayed until the release.

“Biologists usually avoid keeping piping plover chicks in captivity because their best chance for survival is when they're reared by other piping plovers, but this was a unique situation and we all felt the chicks deserved a second chance after losing both their parents to feral cats.”

"Biologists usually avoid keeping piping plover chicks in captivity because their best chance for survival is when they're reared by other piping plovers," said Jody Jones, coordinator of Maine Audubon's project to protect piping plovers and least terns, "but this was a unique situation and we all felt the chicks deserved a second chance after losing both their parents."

Biologists chose Scarborough Beach as the release site since it is less crowded than New Hampshire sites and had several fledglings that could serve as "role models" for the orphaned chicks.

When released, the two orphaned chicks were immediately joined by a Scarborough Beach chick and began feeding, preening and flying.



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Ocean Park's Plover Protectors

By Joy Felio

On the morning of June 13, Maine Audubon piping plover biologists got an urgent call from the Vigeant family. **Connor Vigeant**, age 10, had found a piping plover nest in the **Ocean Park** neighborhood of Old Orchard Beach—just as Maine's beaches were about to be overtaken by summer crowds.



Connor came across the four speckled eggs while exploring in the dune grass near busy Ocean Avenue. He left to get his mom, but when they returned they had trouble locating the camouflaged eggs. Finally they spotted a small, sand-colored bird pretending to have a broken wing and followed it to where the nest was.

Connor had seen at other beaches "restricted area" signs depicting piping plovers, and a family member confirmed that they were rare birds. Realizing they had some very special birds nesting right near their house, the Vigeants called Maine Audubon. Connor and his brothers Sean, 8, and Ryan, 6, watched the nest until Maine Audubon biologists could come protect it with stake and twine and an enclosure.

The whole Vigeant family, who was vacationing from New Hampshire, became eager to learn more about the birds and what to watch for as they waited for the eggs



Photo by Joy Felio

Ten-year-old Connor Vigeant of New Hampshire (right) and his brothers Ryan (left) and Sean (center) looked after Ocean Park's first piping plover nest this summer after Connor found it in June.

to hatch. They looked after the nest and educated their neighbors about the new addition to the beach.

The nest hatched on June 30, and Connor helped protect the newly hatched chicks during the Fourth of July fireworks display a few days later. Two of the chicks survived for three weeks on the very busy beach, dodging beach-cleaning equipment, ATVs, and sunbathers. The plover family was seen moving between the nest site and **Goosefare Brook**, a quarter mile south, seeking out food and shelter. The residents at Ocean Park were extremely interested and supportive of the new additions to their beach.

Although this first-ever nesting attempt at Ocean Park didn't result in any fledglings, biologists are confident that the community support initiated by Connor and his family is in place for future nesting attempts.

Maine Loses Four Piping Plover Adults

By Jess Costa and Jody Jones

The biggest blow to Maine's piping plover population in 2005 was losing four adults to predation.

"Losing a clutch of eggs to a high tide or a chick to predation is heartbreaking, but plovers have adapted the ability to reneest multiple times in a season," said Jess Costa, a seasonal biologist for the project to protect piping plovers. "Even one adult fatality, however, is a major loss to the population."

Two fatalities took place while the birds were inside nest enclosures; both times the adults were found with talon punctures. On **Higgins Beach** in Scarborough, the adult was startled off its nest, flew up to the net top of the enclosure, and was grabbed through the net by a raptor. Soon after the predation occurred, a resident northern harrier was spotted hunting low over the dunes above the nesting area, which led biologists to remove all other enclosures on Higgins Beach to prevent putting other adults at risk. Biologists believe something similar happened to the adult on **Seawall Beach** in Phippsburg, the second fatality of the season.

"Managers are keenly aware of the risks associated with enclosures. In certain situations, they may prevent an

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Piping plover

Photo by Steve Pinker

(Continued from page 6)

adult from making a quick escape from a predator, so we always carefully consider predator activity and assess the habitat before erecting each enclosure,” said Jody Jones, coordinator of the plover and tern recovery project. For example, plovers that nest in more densely vegetated areas are more likely to be startled and fly up as a predator approaches, risking collision with the enclosure. Birds nesting in more open areas are more apt to see a predator approaching and have more time to lure the predator away by walking off the nest and feigning a broken wing.

“The two plovers found dead in enclosures were a great loss but could not have been predicted,” said Jones.

The third and fourth fatalities came from other sites. Feathers from an adult were found just outside of an enclosure on **Crescent Surf** in Kennebunk, but since no tracks were found and the enclosure was not dug under or bent, biologists could not determine the predator. On Basket Island off **Hills Beach** in Biddeford, an enclosure may have been able to prevent a fatality of one of the adults, but the site precluded erecting one (see below).

“The plover adult fatalities associated with the enclosures this season are a reminder of how important it is to constantly review and change management techniques,” said Costa. “Enclosures have greatly increased the hatching success and productivity of piping plovers, but their use always depends on the individual situation.”

Lobster Trapped

By Jess Costa

This summer, for the first time in documented history, a pair of piping plovers built their nest inside a half-buried lobster trap on the beach on **Basket Island** in Biddeford.

The pair sought refuge in the trap after abandoning their nest on nearby **Hills Beach** because domestic cats were prowling the area. Island resident **Linda Eastman** discovered the nest.

“Plover nests have been protected using fencing or enclosures since 1989, but we never thought the birds recognize the fencing as protection,” said Jody Jones, coordinator of Maine Audubon’s project to protect piping plovers. “That this pair actually *chose* the half-buried trap to nest in may mean they perceived the trap as providing more protection after being threatened by cats.”

The birds accessed the nest through an opening in the trap facing away from the water. Unfortunately, a rocky ledge under the sand made it impossible to add a traditional enclosure around the trap to keep predators away, and the location of the nest proved to be fatal. On June 28, biologists found fresh skunk tracks leading up to the trap, remnants of egg yolk, and a pile of feathers from a predated plover adult. Most likely the skunk cornered the birds inside the trap, which only has one opening and mesh too small for the birds to have escaped through.



That the nest was predated was disappointment enough, but the adult fatality is an even greater tragedy. To breed, each adult had to survive at least two years and four migrations.

“Plover nests have been protected using fencing or enclosures since 1989, but we never thought the birds recognize the fencing as protection.”



Photo by Jess Costa

The first-ever piping plover nest inside a lobster trap, on Basket Island in Biddeford.

New Ogunquit Beach Management Accommodates Birds as Well as Beachgoers

By Jess Costa and Jody Jones

Because **Ogunquit Beach** is a popular summer destination for both people and piping plovers, Maine Audubon, the Town of Ogunquit, and Maine's Department Inland Fisheries and Wildlife worked together for several months this winter to create a flexible management agreement for the beach.

The written agreement, which went into effect in April 2005, includes many actions the town already incorporates into its management of the beach. To be reviewed each year, it allows for beach cleaning and recreational activities to take place in a way that is safe for nesting piping plovers. Included in the terms:

- In April, broad areas of the beach will be staked off to restrict access where the birds are beginning their courtship behavior. The protected areas may become more localized once nests are located.
- Once nesting has begun, restricted areas will consist of a minimum of 200 feet around each nest, or more if the birds' behavior requires it.
- Trash receptacles will be covered to minimize scavenging or attracting potential predators to nest sites.
- Seaweed removal or raking is restricted in or in front of nesting areas.
- Trained "spotters" will accompany any vehicle on the beach during the nesting season to assure piping plovers are not inadvertently crushed under the tires.
- Volleyball is not permitted within 200 feet of a nest and placement of nets requires prior permission from the town.
- Dogs are not allowed on the beach from April 1-September 30.
- Bikes are allowed in the intertidal zone but not in the dune or soft sand.
- Fireworks displays require prior approval from state authorities, additional monitoring of plover nests, and



Maine Audubon, the Town of Ogunquit, and Maine's Department Inland Fisheries and Wildlife have developed a beach management agreement for Ogunquit Beach, a popular summer destination for both people and piping plovers.

Ogunquit's 35th annual Fourth of July firework display was canceled this year when the town's Chamber of Commerce, which had raised money for and was planning on the display, was not able to obtain a permit from Maine's Department of Inland Fisheries and Wildlife in time. The permit was denied because Ogunquit did not have the resources to adequately protect the public or endangered piping plovers, which it was obligated to do under the beach management agreement developed with the U.S. Fish and Wildlife Service, Maine DIFW, and Maine Audubon this winter (see left). Past displays had rained down burning ashes, injuring several people, and negatively impacted piping plovers by drawing large, unsupervised crowds to the nesting area.



After Many Years, Piping Plovers and Least Terns Return to Scarborough's Western Beach

By Jess Costa



Photo by Steve Shane

Western Beach volunteer
Graham Hallward

Thanks to a unique collaboration between Maine Audubon and the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and **Prouts Neck** community, piping plovers and least terns returned this year to a historically important nesting site at **Western Beach** in Scarborough.

Piping plovers had not nested at the site since 1998; least terns had been absent for 25 years. "How

this came to be is an example of what can be accomplished when all parties are willing to work together," said Jody Jones, coordinator of Maine Audubon's project to protect piping plovers and least terns.

In 1996, the Scarborough River adjacent to the beaches was dredged and the sand was dumped offshore. This ended up contributing to severe erosion of Western Beach where both plovers and terns had nested. During the planning for the 2004 dredge, Maine Audubon and others encouraged state and federal officials early on to use the sand to renourish Western Beach, creating approximately 267,000 square feet of new habitat.

The Prouts Neck Country Club, which owns Western Beach, agreed to fund and hire long-time bird enthusiast and Maine Audubon board member **Lucy LaCasse** of Scarborough to coordinate monitoring the birds. La Casse helped protect the first recorded least tern colony on Western Beach in 1977.

In April, a long stretch of the newly nourished Western Beach was staked off with twine and LaCasse began checking the site multiple times a week. By the beginning of June, she was rewarded with the first sighting of a pair of plovers, soon followed by a few single plovers. By the middle of June she had found two plover nests and over 20 least tern nests; by late July, 40 least tern nests.

"Western Beach was a very active, noisy place for stretch of weeks," said LaCasse. "But people really were excited and proud to host these endangered birds."

Throughout the summer LaCasse and a group of volunteers walked the beach daily, sometimes twice a day, to monitor the progress of the birds. The Maine Geological Survey determined that the birds were using 40 percent of the dry beach on Western as nesting habitat. The least terns had found much of the beach to be suitable habitat. Next year, as dune grass begins to grow further onto the beach, there could be more places for tern and plover chicks to hide.

Thanks to public cooperation, Western Beach managed to produce its first plover fledgling in six years and three of the state's 20 least tern fledglings.

Dog owners respected new rules that required dogs be leashed at all times, and Prouts Neck Country Club members agreed not to retrieve golf balls that strayed into the nesting site.

"It was great to see people notice the chicks and how vulnerable they are," said LaCasse. "They got it—they understood why we were doing what we were."

Thanks to such public cooperation, Western Beach managed to produce its first plover fledgling in six years and three of the state's 20 least tern fledglings, even as productivity was low elsewhere in the state. Biologists are hopeful that the terns and plovers will return to Western Beach next season to try again.



Photo by Steve Shane

Western Beach volunteers, from left: Nancy Schwarzel, Mary Murray Coleman, and Sue Shane

Seabirds Try Island Life as Alternate Nesting Habitat

By Jess Costa

For the first time since least terns returned to Maine's beaches 28 years ago, least terns nested on a Maine island along with their larger relations, common and the endangered roseate terns.

Least terns usually nest near small, fish-filled estuaries, often on sand spits along sandy coastlines like the one at **Higgins Beach** in Scarborough. Two weeks after a colony of 50 terns attempted to nest at Higgins, their nests were destroyed by crows, one of the most threatening adversaries of Maine's least terns.

A few days after the colony completely disappeared from Higgins Beach, Project Puffin researchers on Audubon-owned **Stratton Island** off Prouts Neck in Scarborough began to see least terns resting on the island's beach and then spending the night. Soon, close to 20 pairs of least terns made their nests on the rocky island beach not far from common and roseate tern nests.

The larger terns couldn't completely adjust to the arrival of their new neighbors. Through an observation blind, researchers saw a common tern diving at an incubating least tern. The larger tern had returned with a fish to feed its chick and defended the area. The smaller tern would anxiously wait for the common tern to leave before re-

turning to its eggs. Researchers also observed common tern adults bullying least tern chicks before they found refuge in beach vegetation.

Least terns were seen flying back and forth between the island and the Scarborough River, a three-mile round trip, in order to find small fish to feed themselves, their incubating mates, and their chicks.

Despite some animosity from the larger terns, the least terns were able to produce nine fledglings on Stratton Island this year, 45 percent of Maine's total. Though occasional owls or other birds of prey have been observed in other years on Stratton, predators such as crows and foxes aren't present on the island, and gulls tend to be less of a problem because their nests are discouraged by island researchers.

An especially high tide in July claimed only a few nests on the narrow island beach. An egg from one such nest was recovered twice by researchers and placed in a higher, man-made nesting scrape. The parent resumed incubation and the egg hatched.

Islands present a new opportunity for least tern nesting habitat. Researchers will be watching closely to see how important islands will become in the future.



For the first time since least terns returned to Maine's beaches 28 years ago, least terns nested on a Maine island, Audubon-owned Stratton Island off Prout's Neck in Scarborough.

Electric Fence Protects Least Terns at Crescent Surf Beach in Kennebunk

By Christine Hansen

This year approximately 60 least tern pairs settled at the mouth of the Little River on **Crescent Surf Beach** in Kennebunk. In June, staff from Rachel Carson National Wildlife Refuge erected a closed-circuit solar electric net fence around most of the least tern colony. The new technique, which was used last year at this site, was intended to protect the nesting terns from mammalian predators such as coyotes, foxes, and skunks, which prey on least tern eggs and chicks.

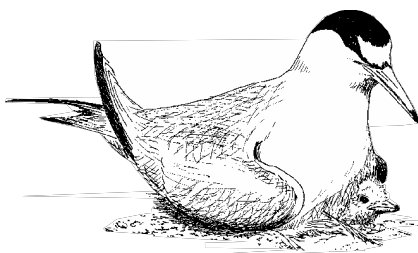
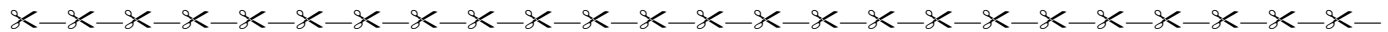
By late June, nests in the unprotected area where the sand flat was too narrow to erect the electric fencing had all been predated, and the adult terns re-nested within the protective fencing.

The electric fence was successful in preventing mammalian predation of the majority of least tern eggs and chicks. A survey of least terns in the week of July 25 yielded counts of 43 active nests and 23 chicks on Crescent Surf Beach. In 2003 and 2004, the least tern colony at this site was plagued by crow and mammal predation and only seven chicks survived to fledging.

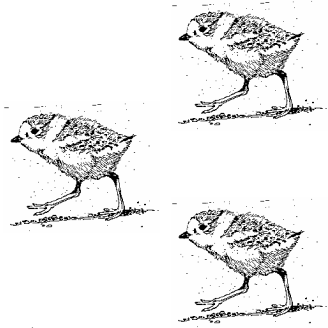


Photo by Kate O'Brien

This summer staff from Rachel Carson National Wildlife Refuge erected for the second season a closed-circuit solar electric net fence around a stretch of least tern nests at the southern end of Crescent Surf Beach in Kennebunk to protect the birds from mammalian predators.



YES! I would like to help protect rare and endangered least terns and piping plovers that nest in Maine, and receive a copy of Maine Audubon's *Piping Plover and Least Tern Newsletter*.
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Thank you for your support!



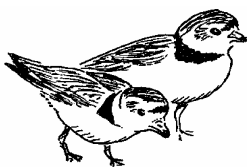
Piping plover chick

Photo by Steve Pinker

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