Maine Audubon

Coastal Birds 2023 Newsletter

Year in Summary: Record Highs and Lows

Maine Audubon's Coastal Birds Project has grown over the years since monitoring began in 1981. The Piping Plover population has reached numbers that have far exceeded what we once thought could be possible. The countless hours spent by all stakeholders working together to ensure that these birds and humans can share the beach is immeasurable. It takes hard work from state and federal biologists, volunteers, beach front landowners, town employees, town, state, and federal law enforcement, state park employees, lifeguards, and more!

For the sixth consecutive season, in 2023 we saw a record high number of breeding pairs of Piping Plovers. The state was home to 157 breeding pairs this nesting season, with some pairs nesting in places never before occupied or that had been vacant for many years. However, only a total of 201 chicks survived until fledge age. This resulted in our productivity being 1.28, our lowest productivity since 2007 and less than our recovery goals of 1.5 chicks fledged per pair.

Although our fledgling numbers were lower than we'd like, we had success stories from some unexpected nesting sites. Some of these successes can be attributed to countless hours spent by dedicated volunteers, increasing public awareness of beach-nesting birds through outreach efforts, as well as a little bit of luck. Drakes Island, Hills Beach, Pine Point, Chebeague Island, Crescent Beach State Park, and Hunnewell fledged more chicks than usual. Two of our southernmost beaches, Ogunquit and Wells, continue to wow with their numbers, although they were lower than last season. Ogunquit hosted 16 nesting pairs, which fledged 24 chicks, and Wells had a record high 16 pairs that fledged 29 chicks.

These incredible little birds never cease to amaze; when Piping Plovers arrive in March, the beach can be an extremely unfavorable place—sometimes it's even snowing! As their chicks start to hatch, it can be grueling hot with not a cloud in the sky to provide shade, not to mention the hordes of people the birds need to navigate through to forage. Piping Plovers continue to incubate their nests or brood their chicks in all conditions. Their adaptability to the harsh beach environment is quite impressive. These birds seem to get tougher and tougher every year.

When monitoring an endangered species population, it is always good to proceed with caution. Despite an increase in our breeding pairs, the low fledge rate could be a cause for concern. Piping Plovers migrate as far south as the Caribbean for the winter, then have to make the trek all the way back up to Maine for the breeding season. A lot of variables are at play that are in nature's hands during these long migrations.

We are optimistic that Maine's robust plover community can continue to help these birds thrive during their breeding season for many years to come.

Piping Plovers

Plovers in New Places

As breeding pairs of Piping Plovers increase each year, it has long been expected that nesting plovers would start to appear in unusual places. And summer 2023 was the season for that! Two islands in Casco Bay were used as nesting sites this year for the first time, as well as sites in Georgetown and Phippsburg that hadn't been utilized since 2001.

Mattie Welch, a homeowner in Georgetown, alerted us to a nest near her home on Indian Point across the way from Half Mile Beach, at Reid State Park. This pair successfully fledged one chick. Hunnewell in Phippsburg hosted a pair of nesting plovers that hatched and fledged all four chicks.

This spring, birder Tara Langford reached out to tell us she had seen two pairs of Piping Plovers engaging in nesting activity on Long Island in Casco Bay. We have long watched the island's South Beach as a possible nesting site and we try to visit once a summer. However we have only heard reports of plovers using the beach during migration in the fall. In June, during the annual plover census, a crew from Maine Department of Inland Fisheries & Wildlife went out to investigate. Sure enough, they discovered a Piping Plover pair with a nest on Long Island and also found a nest on Indian Point on Chebeague Island. These pairs are the first ever Casco Bay nesters since we began monitoring in 1981!

Thankfully, both island communities embraced their newest residents. The Chebeague and Cumberland Land Trust is the keeper of an easement at the nesting site; as engaged stewards, they enthusiastically helped with monitoring the nest and keeping the birds safe. The town and residents of Long Island went above and beyond as well, and even moved their Annual Lobster Bake to a different beach to give the birds space.

Both island nests successfully hatched all four chicks. Unfortunately, the chicks on Long were only observed for a couple of days before the brood began to disappear, likely due to predators. Chebeague saw incredible results, successfully fledging all four chicks that hatched. Thank you to the countless volunteers, landowners, and beachgoers who kept eyes out for these birds!

Long Island

Chebeague Island

Volunteers

Making a Difference at Crescent Beach

Wildlife at many of our public sandy beaches in Maine face the same challenge: the sheer volume of visitors during tourist season. Crescent Beach State Park in Cape Elizabeth is no different. In April, Maine Audubon and state park staff met with two plover lovers who felt that it was time for Crescent to have an official volunteer group. Thus, Peter Cohen and Dutch Walsh became the volunteer coordinators for Crescent Beach and made quick work of finding enough interested parties for us to run a volunteer training in May.

This small but passionate group of volunteers was a fantastic help to our conservation efforts at Crescent Beach this season. This year, Crescent was home to two nesting pairs which hatched and fledged a total of seven chicks. This broke last year's record of five fledgers! The impressive effort and organization of the newly created volunteer force contributed to the success of the birds. They did a wonderful job educating the public, raising awareness, and making sure interested beachgoers kept their distance from nesting and brooding Piping Plovers. It was extremely helpful having so many dedicated volunteers on the beach! A huge thank you to Peter, Dutch, Park Manager Kurt Shoener, and all of the volunteers and Crescent Beach State Park staff. May the Crescent Beach monitoring program continue to thrive in the coming years!

Drake's Island Success

Drakes Island, in Wells, is typically home to one nesting pair of Piping Plovers during the breeding season. It is a challenging site to manage for plovers because of its cobble beach which makes it almost impossible to build exclosures, and many domestic dogs, as well as other predators, are present. A small but dedicated volunteer group monitors the beach and the birds every day throughout the season.

Last year, volunteers were ecstatic that there were two nesting pairs—a first since we have been monitoring on Drakes Island! Sadly, zero chicks fledged last season. This season brought new hope, with three of four eggs hatching and all three chicks successfully fledging. Huge thanks to the Drakes Island volunteer team for remaining steadfast. We hope for more successes in the future!

Photo: Bud/Flickr

Least Terns & Shorebirds

Least Terns Struggle to Fledge Chicks

In 2023, seven sites in Maine hosted nesting Least Terns: Laudholm Beach, a beach in Kennebunk, Goose Rocks Beach, Stratton Island, Higgins Beach, Seawall Beach, and Reid State Park. Our coordinated surveys in June resulted in a count of 193 nesting pairs in Maine, which was 84 pairs fewer than last year's 277 pairs and was the second lowest pair count in the past ten years.

The continual loss of nests and subsequent renesting at various sites makes it impossible to accurately count and track numbers, so it is unclear if estimates reflect an actual decline in population. These 193 pairs produced a minimum of 13 fledglings for a statewide productivity of 0.07 fledglings per pair. This is the lowest number of fledglings and lowest productivity recorded since monitoring and management of Least Terns began in 1977.

The terns on mainland sites faced issues with tidal overwash, beach erosion, extended periods of rain and fog, and predation. Birds moved frequently between sites, making tracking challenging. Only beaches in Wells and Kennebunk produced any fledglings.

Stratton Island counted 76 pairs during the census window but recorded 91 nests overall for the season producing a minimum of four fledglings. Once again, Stratton Island struggled with Black-crowned Night Herons which predated the majority of the chicks. The Least Terns here also dealt with encroachment by nesting Common Terns, who steal food from Least Terns and attack Least Tern chicks.

Least Terns are a relatively long-lived bird with an average lifespan of 15 years. The oldest recorded individual lived at least 24 years. Least Terns, given the necessary space to nest and care for young, are a relatively resilient species. This resiliency along with continued cooperation and partnerships with biologists, landowners, and land managers provides opportunities for this state endangered bird to rebound.

It's Not All About the Plovers

Photo: Doug Hitchcox

Along with the wonderful Piping Plover, the Coastal Birds Crew monitors other species along the coast. Shorebirds, as a group, include sandpipers, plovers, avocets, oystercatchers, and phalaropes; they range from the size of a small sparrow to around 20 inches long, or about the size of a crow.

American Oystercatchers are a large shorebird characterized by their striking black, white, and orange coloring. While in other states, like New York, they are known to nest on the beach alongside Piping Plovers, the pair monitored by Maine Audubon was found nesting on Goose Rocks. The Oystercatchers laid three eggs on a rocky outcropping that also hosted a Common Tern colony and multiple Common Eider nests. We were able to confirm that the nest hatched, but weather and tide conditions prevented further monitoring. While there are other pairs that nest in Maine, this pair is only monitored by Maine Audubon due to its proximity to Goose Rocks Beach.

ANNOUNCING: SHOREBIRD AMBASSADORS

Maine beaches are important not just for birds that nest there, they are also essential to thousands of migratory shorebirds that are resting and refueling on epic journeys from the Arctic to as far south as Argentina. Species such as Semipalmated Sandpipers, Ruddy Turnstones, Black-bellied Plovers, Sanderlings, and the federally threatened Red Knot, can all be seen in large mixed flocks. Fall migration is the busiest time for these species in Maine, which actually begins around mid-July. Many of these shorebirds make a 2,000 mile nonstop transoceanic flight, with some flying up to 20,000 miles round trip in one year! In order to survive migration, the birds must have space to rest and feed extensively to build up fat reserves for long flights. Disturbance by people and pets can have dire consequences.

That's one of the reasons why Maine Audubon launched a new shorebird ambassador program this fall, with the goal of educating beachgoers about these incredible migrating shorebirds. Volunteers have been trained to provide others on the beach with educational materials, including postcards and stickers, all about shorebirds, including ways we can help them. To reduce disturbance, remember to walk far around the flock and leash dogs when nearby, as causing the flock to fly away takes precious energy that could be used for migrating instead. If you are interested in becoming a shorebird ambassador, please email **shorebird@maineaudubon.org** for more information.

Top to bottom: Semipalmated Sandpiper; Ruddy Turnstone; Black-bellied Plover; Sanderling

Photos: Doug Hitchcox

PETS FOR PLOVERS

This spring, we re-launched Maine Audubon's Pets for Plovers program.The intent of the project is to encourage people to leash dogs on beaches where dogs are allowed and provide an indoor-only lifestyle for cats. The endangered Piping Plover, along with other coastal birds, relies on Maine beaches to nest, feed, and recharge for migration. Human disturbance, roaming dogs, and outdoor cats are among the top threats to the survival of plover chicks and also adult birds.

Even a friendly dog is still viewed as a predator and can harm plovers. Not only are dogs able to predate both adults and eggs, but the mere act of disturbing a nest causes the adults to expend precious energy to defend their eggs or flee. Keeping dogs leashed and cats indoors isn't just good for the birds. Cats can be exposed to a number of threats when left to roam outside; these dangers may include predators, harsh weather, and disease.

In revamping this program, a pledge was introduced to encourage accountability among beachgoers. People who demonstrated respect for plovers on the beach, kept animals safely at home, or leashed pets were encouraged to sign the pledge and were rewarded with Pets for Plovers gear including bandanas, stickers, and leashes. Pet owners are integral to our conservation efforts. Thank you to the countless people that are doing the right thing.

Sign the pledge at: **petsforplovers.org**

2023: The Year of the Predator

Compared to past seasons recently, the 2023 breeding season witnessed a significant uptick in predators feeding on the Piping Plover population. Foxes, crows, and birds of prey, among others, all contributed to the loss of nests and chicks. Predators are a perennial challenge for beach-nesting birds, but this year marks Maine's lowest productivity since 2007.

Every year, foxes, crows, skunks, and other predators—adaptable and opportunistic scavengers—pose a threat to Piping Plovers eggs and chicks. Piping Plovers always have to grapple with nest and brood loss; however, in recent years, the plovers were still experiencing a high level of success in spite of predator presence.

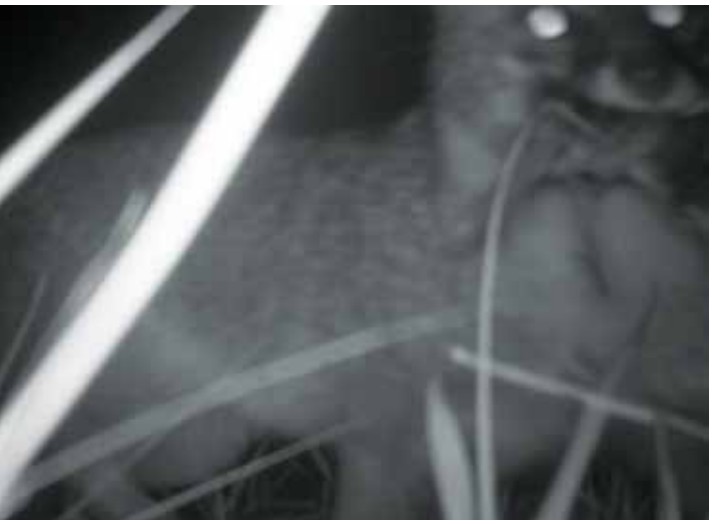
This year, a record number of breeding plover pairs created a more reliable source of food for predators. While exclosures and other predator mitigation strategies can help, many predators still find a way. Several nests were abandoned after fox tracks were seen circling or digging at the base of the exclosure; the photo above was taken from a game camera directly outside one such nesting site. The presence of birds of prey, such as hawks and falcons, further compounded the problem. These skilled hunters can take advantage of exclosures to find and capture even adult plovers.

How can we help? Here are some strategies we employ:

Nest Protection: Deploying protective exclosures around nesting areas to safeguard eggs and newly hatched chicks from predators while allowing the birds to access their nests

Habitat Restoration: Restoring and preserving natural nesting habitats, reducing human disturbances, and creating buffer zones around nesting sites to limit the impact of human activities

Public Awareness: Educating the public about the significance of protecting Piping Plovers and their habitats, urging responsible pet ownership, and promoting eco-friendly practices on beaches



A photo of a Gray Fox carrying a bird, taken by a game camera directly outside a Piping Plover nesting site at Goose Rocks Beach.

As we witness these tiny shorebirds facing such daunting challenges, it is imperative for humans to take responsibility and work collectively to conserve and protect these species and the coastal ecosystem they call home.

Banded Beauties

Photo: Rachel Parent

One method used by ornithologists to study birds is banding: placing uniquely numbered leg bands on individual birds. This allows researchers to track their movements, monitor their survival rates, and gain insights into their behavior and migration patterns.While there are currently no banding efforts for plovers here in Maine, other states band migrating and wintering Piping Plovers, and in 2023 four banded Piping Plovers called our beaches home.

To read more about banding and Piping Plovers, visit: **maineaudubon.org/piplbanding**

2023 Piping Plover

NESTING DATA

Town	Beach	Pairs	Nest Attempts	Fledglings
Ogunquit	Ogunquit	16	23	24
Wells	Moody	4	5	2
	Wells	16	19	29
	Drakes Island	1	1	3
	Laudholm Farm	3	5	5
Kennebunk	All Beaches	13	16	25
Kennebunkpt.	Marshall Point	1	1	0
	Goose Rocks	15	21	17
Biddeford	Fortunes Rock	8	11	12
	Hills	3	4	10
Saco	Ferry	2	5	0
	Goosefare Brk	1	1	2
Old Orchard Beach	Ocean Park	2	2	0
	Old Orchard	13	18	8
Scarborough	Pine Point	2	3	7
	Western/Ferry	6	9	10
	Scarb. SP	5	8	8
	Higgins	7	10	7
Cape Eliz.	Ram Island	2	2	0
	Crescent SP	2	2	7
Phippsburg	Seawall	17	24	9
	Popham SP	10	14	4
	Hunnewell	1	1	4
Georgetown	Indian Point	1	1	1
	Reid SP-Mile	2	2	1
	Reid SP-Half Mile	2	2	2
Totals		**157**	**212**	**201**

SP = State Park

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2023 Coastal Birds Project

The Coastal Birds newsletter is published annually by Maine Audubon in partnership with the Maine Department of Inland Fisheries & Wildlife and Rachel Carson National Wildlife Refuge. Maine Audubon has worked for more than 40 years to restore Maine's Piping Plover and Least Tern populations with help from our partners, Maine Department of Inland Fisheries and Wildlife (MDIFW) and the U.S. Fish and Wildlife Service (USFWS); populations have increased substantially in that time. The project is funded by MDIFW, USFWS, with additional funding from the Phineas W. Sprague Memorial Foundation.