The Birds of Lido Beach

An introduction to the birds which nest on and visit the beaches between Long Beach and Jones Inlet, with a special emphasis on the NYS endangered Piping Plover

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Ver. 1.1

Best if viewed in full screen mode

Featured Birds

Nest on the Beach

- Piping Plovers
- American Oystercatchers
- Common Terns
- Least Terns
- Black Skimmers

Migrants*

- Sanderlings
- Dunlins
- Semipalmated Plovers

** These three are just a few of the many migrants which use our beach as a layover*

The Migrants

- **Nest in the far north (Greenland , sub-arctic, etc.) – seen in Spring and mid/late Summer as they migrate to and from their nesting grounds**
- **Probe for food in the wet sand along the ocean's edge**

- **Sanderlings - most numerous of the three - can be seen in large groups in flight and running back and forth probing the wet sand left by a receding wave**
- **Dunlins – characterized by long drooping bill – can be found with Sanderlings**
- **Semipalmated Plovers– similar to Piping Plover in size and shape; and have distinctive black bands on the neck and forehead.**

Sanderlings

Dunlins

Semipalmated Plovers

Sanderlings

Note black legs and straight black bill

Acrobatic, precision fliers; seen in large flocks. The entire flock can turn on a dime; a required skill when evading a falcon.

Large groups chase receding waves to……

… probe the wet sand for food

Dunlins

Note droop in bill. Black belly is breeding plumage.

Probing the wet sand for food

Often found mixed in with Sanderlings

At ocean's edge

Semipalmated Plovers

Note black forehead and black neck band

Pictured here with its close cousin, the Piping Plover

Slurping a marine worm as one might a strand of spaghetti

Taking flight

The Lido Beach Nesting Birds

- All nest in scrapes in sand between high tide and dunes
- Two strategies – nest in colonies or nest in solitary pairs
  - **Colonial Nesting Birds**
    1. ***Least Terns*** ***(NYS Threatened) – dozens of pairs***
    2. ***Common Terns*** ***(NYS Threatened) – hundreds of pairs***
    3. ***Black Skimmers*** ***(NYS Species of Concern) – hundreds of pairs***
  - **Nest in Solitary Pairs**
    1. ***American Oystercatchers*** ***– 25 - 30 pairs***
    2. ***Piping Plovers*** ***(NYS Endangered – Federally Threatened) – only 10 – 15 pairs***

    (note that the vast majority of small birds on our beach are migrants – not Piping Plovers)

Scrape with 3 eggs

The Lido Beach Colonial Birds

- Share protected sanctuaries defined by string fencing and interpretive signage
- The **Black Skimmer** and **Common Tern** colonies can each have many hundreds of birds, and can nest in close proximity, found in areas where there are beach grasses
- The **Least Tern** colonies can have dozens of birds, preferring areas with less vegetation

What our Colonial Birds Have In Common

- Aggressively defend nesting areas by continually diving at intruders: gulls, people, balloons, kites, etc.
- 4 weeks incubating and 4 weeks to fledge (more or less)
- Chicks are fed small fish brought to the nesting area by the adults
- Intense, often violent, competition among siblings for food
- Young birds extremely well camouflaged - disappear into the sand when motionless
- Some young birds will wander outside the protection of the sanctuary and colony, exposing them to predation and human-caused dangers (vehicles, people, ball playing, etc.)

Advantages to Nesting in Colonies

- Safety in numbers – multiple birds will respond to drive off a threat
- Safety in the sanctuaries – chicks do not have to forage for food, so they can remain inside the protected area. This limits their exposure to human-caused dangers

Skimmers and common terns in close proximity

Least and Common Terns

Least Tern – note distinguishing white triangle on forehead

Common Terns posturing

Much smaller Least Tern next to Common Tern

Common Tern dinner date – note small fish offering

Common Terns mating

Least and Common Terns – Baby Pictures

Common Tern with two chicks

Least Tern with a single chick

Tern chick struggling to ingest a needlefish or pipefish

Tern chicks eagerly anticipating their next meal

Black Skimmers

Observe lower mandible longer than upper. This is suited to their method of fishing and is unique in the bird world.

Juvenile demonstrating the Skimmer's fishing technique.

Skimmers gather at edge of sanctuary prior to nesting. Note sparse vegetation. As the season progresses this will become much more dense, providing needed cover for the chicks to come. Growth will be aided by the guano produced by the birds.

Black Skimmers

Strong fliers. Large numbers will periodically rise and fly a short distance over the ocean in graceful formations before resettling on their nests.

Large juvenile

Chick struggling to ingest an eel fish. Adult gnawed on the fish to soften it and make it easier for the chick to swallow.

The Lido Beach Solitary Nesters

Piping Plovers and American Oystercatchers

- Will nest in the large tern and skimmer sanctuaries as well as other smaller protected areas chosen based on historical nesting patterns. New nesting areas are protected as evidence of nesting activity is found.
- Each nesting pair requires a large foraging area that will be vigorously defended from other nesting pairs of the same species

American Oystercatcher

- Large, noisy shorebird with distinctive orange beak and eyes (juveniles have black eyes)
- Numbers increasing in recent years
- Benefits from protections afforded the Piping Plover and has become a competitor for nesting habitat
- Can range far from nesting area and protection of the sanctuaries in search of food
- Local food of choice appears to be mole crabs found probing wet sands at ocean's edge
- Adults bring food to young, who will also forage for food
- After nesting is well underway, adults will gather in large, often loud, groups
- Adults provide protection by leading young away from threats or by direct confrontation, as with a gull
- Winters in the south: Florida, Gulf Coast, etc.

Oystercatcher with mole crab

American Oystercatcher

Adult on nest

Not a graceful flier; makes raucous group flights.

Young chicks foraging in dry sand for insects

Large juvenile waiting to snatch food dropped by adult

Plight of the Piping Plover

Status: Federally Threatened, NY State Endangered

Plovers prefer walking to flying. Stealthy on sand; difficult to spot unless moving. Extremely fast; walks with a stop and go gait. Does not fly to nesting area; will walk from some distance.

Adults do not feed chicks. Here days-old chicks are foraging for food, while adult broods two more chicks nestled beneath its body.

Piping Plovers at a Glance

Atlantic Coast Population: Less than 2,000 pairs

Size: 6 – 7 ½ inches, 1.5 – 1.7 oz.

Habitat: Sand beaches, tidal flats, shell areas

Range: Nests Southern Canada to Central US

Winters US Southern Coasts / Mexican Gulf Coast

History: Late 19th – early 20th century – hunted to near extinction for feathers for millinery trade

The Migratory Bird Treaty Act of 1918 reverses decline

Population again declines following post WWII development

Piping Plovers having a territorial dispute

When a nest with eggs is found, an exclosure is erected to keep predators at bay. The plovers are small enough to walk through the wire mesh barrier.

Piping Plover Lido Beach Timeline

Mid March	Begin arriving from southern wintering grounds.
	Males establish territories. Courting begins.
April /	Mating and nesting begins.
May	Shallow scrapes are dug in the sand.
	Typically four eggs are laid (one every other day).
	27 day Incubation, shared by males and females.
June	Piping Plover chicks hatch and must feed themselves.
	Favorite feeding grounds are the high tide line and wrack.
	Marine worms and insects among favorite foods.
July	Chicks fledge in 30 days.
Late Aug	Southern migration begins.

Piping Plover eggs in nest scraped in sand

Incubating inside exclosure

Slurping a marine worm, a favorite food

Piping Plover – From Chick to Fledgling

Adult preparing to brood days-old chicks. Adults do not feed young.

Foraging for food far from the protection of the sanctuaries brings chicks into frequent contact with human activity

Fledgling – note absence of black bands and red in beak. Late in the season the adult birds will lose their black bands, thus making it difficult to differentiate adults from juveniles.

Favorite foraging areas are the wet sands at ocean's edge and wrack (dried seaweeds and marsh grasses) left by receding tides

Piping Plover Threats

- Loss of habitat - Plovers and humans both share a fondness for sandy beaches
- Human activity - vehicles, dogs, kites, ball playing, etc.
- Predation – FERAL CATS!! *(even well fed cats hunt and kill)*, gulls, crows
- Storm driven flooding - abetted by rising sea levels (climate change)
- Competition for territory from other birds – esp. American Oystercatcher

Lifeguard, EMT, public safety, maintenance, and police vehicles all can and do drive on our beach

Storm driven flooding, exacerbated by rising sea levels, has caused the loss of plover and other nests

An Historical Perspective

Loss of Habitat – Local Highlights

1880	Long Beach founded with building of Long Beach Hotel
1882	Long Island Railroad arrives
1914	Long Beach boardwalk built
1929	Jones Beach park opened
1964	Robert Moses Causeway opened Fire Island National Seashore created

Human Pressure

Nassau + Suffolk Counties Population

1900	133,030
1920	236,366
1940	604,103
1960	1,966,955
1970	2,553,030
2010	2,832,882

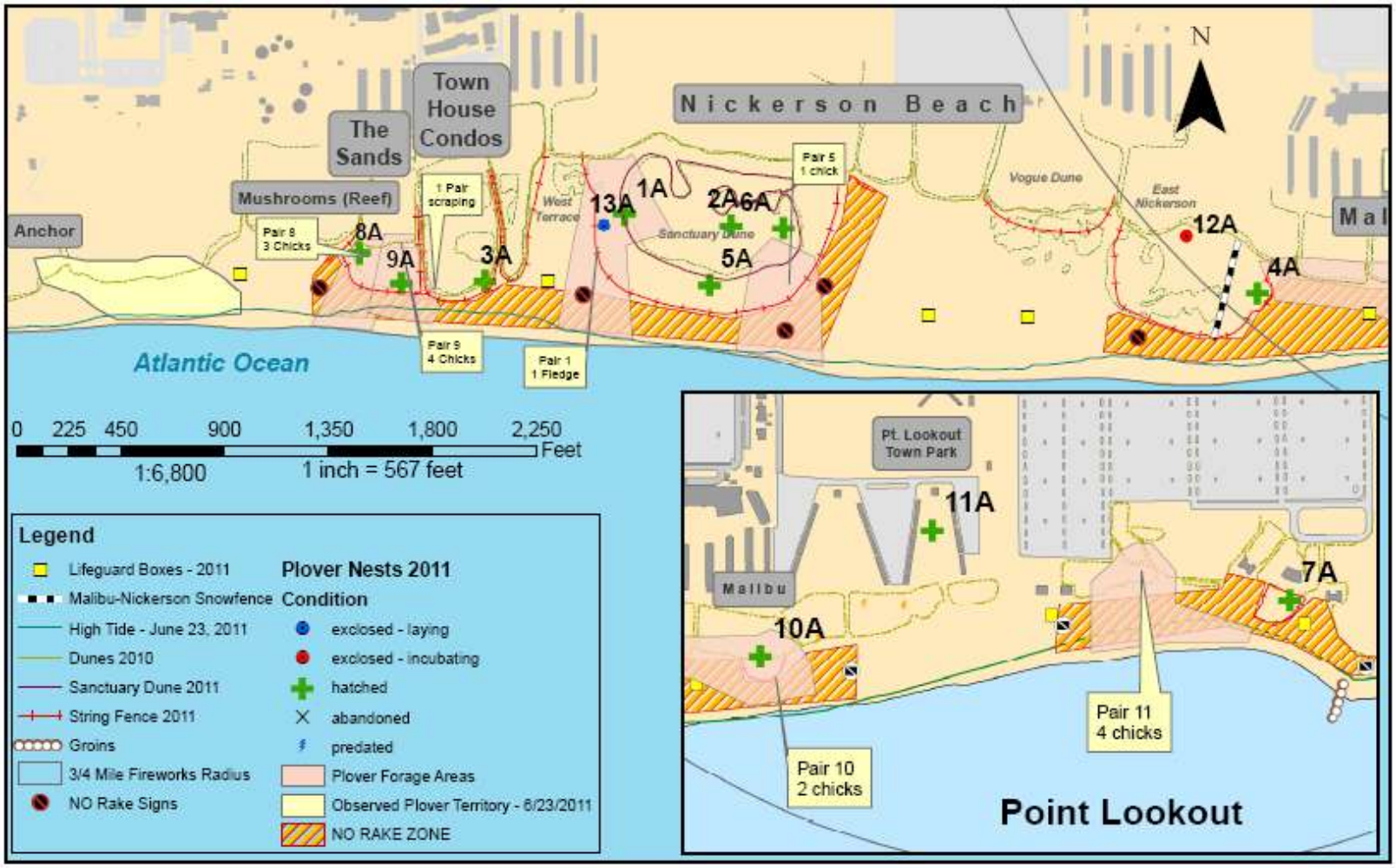
Conservation Efforts Overseen by Town of Hempstead Conservation and Waterways

- Protect Nesting Habitats and Sanctuaries– string fences and signage
- Protect Piping Plover Nests – exclosures
- Monitor Nests and Chicks – add signage and extend protected areas as needed
- Education
- Coordinate with Other Government Units (TOH, Federal and State)

Incubating plover temporarily abandons nest while exclosure is quickly put in place

Educational and Do Not Enter signs help define boundaries of sanctuaries and inform beachgoers

Regularly Issued Maps Help Track and Protect Birds by Informing Other Agencies of Active Areas



Town of Hempstead
Department of Conservation & Waterways

24 June 2011
For more information call 516.431.9200

How are the Piping Plovers Doing?

Lido Beach Production

- **Averages show 13.9 pairs producing 1.2 fledges per pair (*productivity*) - big fluctuations by year**
- **On average only 39% of the eggs hatched survived to fledge – survival rate down vs earlier years**
- **Latest years show a decline in production**
- **1.25 fledges per pair is threshold to maintain breeding population**

	PIPL	Eggs Hatched		Fledges		Productivity
Year	Pairs	#	per Pair	#	% Hatched*	Fledges per Pair
2003	9	57	6.3	12	21%	1.3
2004	15	51	3.4	28	55%	1.9
2005	17	57	3.4	33	58%	1.9
2006	19	58	3.1	31	53%	1.6
2007	16	40	2.5	25	63%	1.6
2008	14	33	2.4	10	30%	0.7
2009	14	43	3.1	18	42%	1.3
2010	14	38	2.7	13	34%	0.9
2011	12	49	4.1	13	27%	1.1
2012	15	44	2.9	17	39%	1.1
2013	15	42	2.8	3	7%	0.2
2014	12	37	3.1	17	46%	1.4
2015	11	31	2.8	7	23%	0.6
2016	12	32	2.7	12	38%	1.0
Average	13.9	43.7	3.1	17.1	39%	1.2

* survival rate

Atlantic Coast Population: 1986 - 790 pairs

2009 - 1,849 pairs

Data Provided by the Town of Hempstead Dept. of Conservation and Waterways - 2016

Why Should We Care?

- As the current stewards of the planet, we owe it to the future to at least not let things get worse
- Extinction is forever
- Protecting the Piping Plover's habitat gives protection to other threatened species – terns, American Oystercatchers, Black Skimmers and seabeach amaranth; and our dunes and beach
- The Piping Plover is a game little bird, and a protective and devoted parent, who survives against incredible odds

A handsome couple

Chick foraging in wrack; an extremely vulnerable place to be

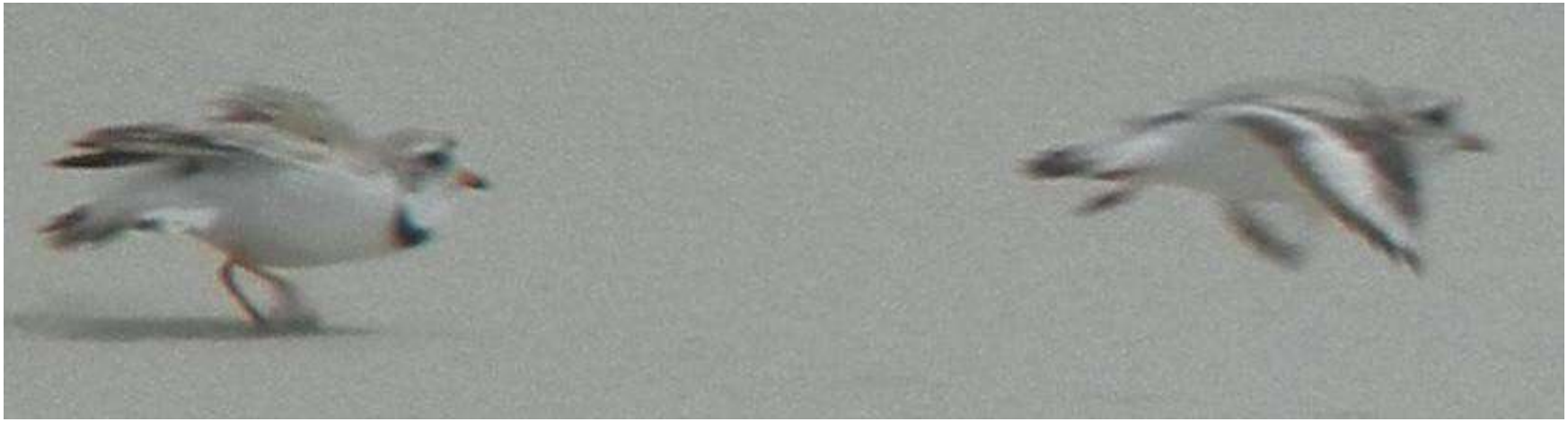
Some of the Many Other Lido Beach Birds

Gulls- prime predator of tern and skimmer colonies (esp. the Great Black-backed and Laughing Gulls)

Willets- large shorebird that nests deep in our dunes

Ruddy Turnstones, Red Knots, Least Sandpipers among others seen

Ospreys often seen fishing close to beach and returning to bayside nesting platforms clutching fish



That's All - Got to Go