



Shorebird Management at Rockaway Beach

NYC Parks' Effort to Protect Endangered and
Threatened Species



Parks

Introduction

- The Rockaway Beach Endangered Species Nesting Area (RBESNA) was established in 1996 as a response to the discovery of federal and state-listed piping plovers and other protected shorebirds nesting on Rockaway Beach, Queens
- Since 2017, the piping plover monitoring program has been managed by NYC Parks' Wildlife Unit



Map of RBESNA



Rockaway Beach Endangered Species Nesting Area

Federally Threatened and NYS Endangered Species

- Piping Plover

NYS Threatened Species

- Least Tern
- Common Tern

Species of Greatest Conservation Need

- American Oystercatcher

Species of Special Concern

- Black Skimmer

Federally and NYS Threatened Plant Species

- Seabeach Amaranth



Protection Guidelines

Symbolic fencing is installed to prevent accidental destruction of nests and repeated flushing of incubating adults, and to provide an area where chicks can seek shelter when large numbers of people are on the beach

- Fence off main breeding area(s) with a minimum buffer of 50 meters
- Expand fencing in cases where the standard 50 meter buffer is inadequate to protect incubating adults or unfledged chicks
- Fence off any individual nests with a minimum buffer of 50 meters
- Maintain fencing until all piping plover chicks have fledged or perished and no further nesting is observed



Rockaway Beach Endangered Species Nesting Area

- Symbolic fencing is erected in late March through early April in anticipation of arriving piping plovers
 - Beach 38 St. to Beach 57 St. is pre-fenced
- Monitor all suitable nesting locations
- Detection of piping plovers in courtship led to the addition of two fenced sites in Arverne and three fenced sites in Far Rockaway
 - Beach 20 St. to Beach 23.5 St.
 - Beach 23.5 St. to Beach 25.5 St.
 - Beach 31.5 St. to Beach 32.5 St.
 - Beach 61 St. to Beach 62 St.
 - Beach 62 St. to Beach 64.5 St.



Nest Locations at RBESNA, 2018



Arverne Nest Locations



RBESNA 2018
Arverne Nests and Colonies

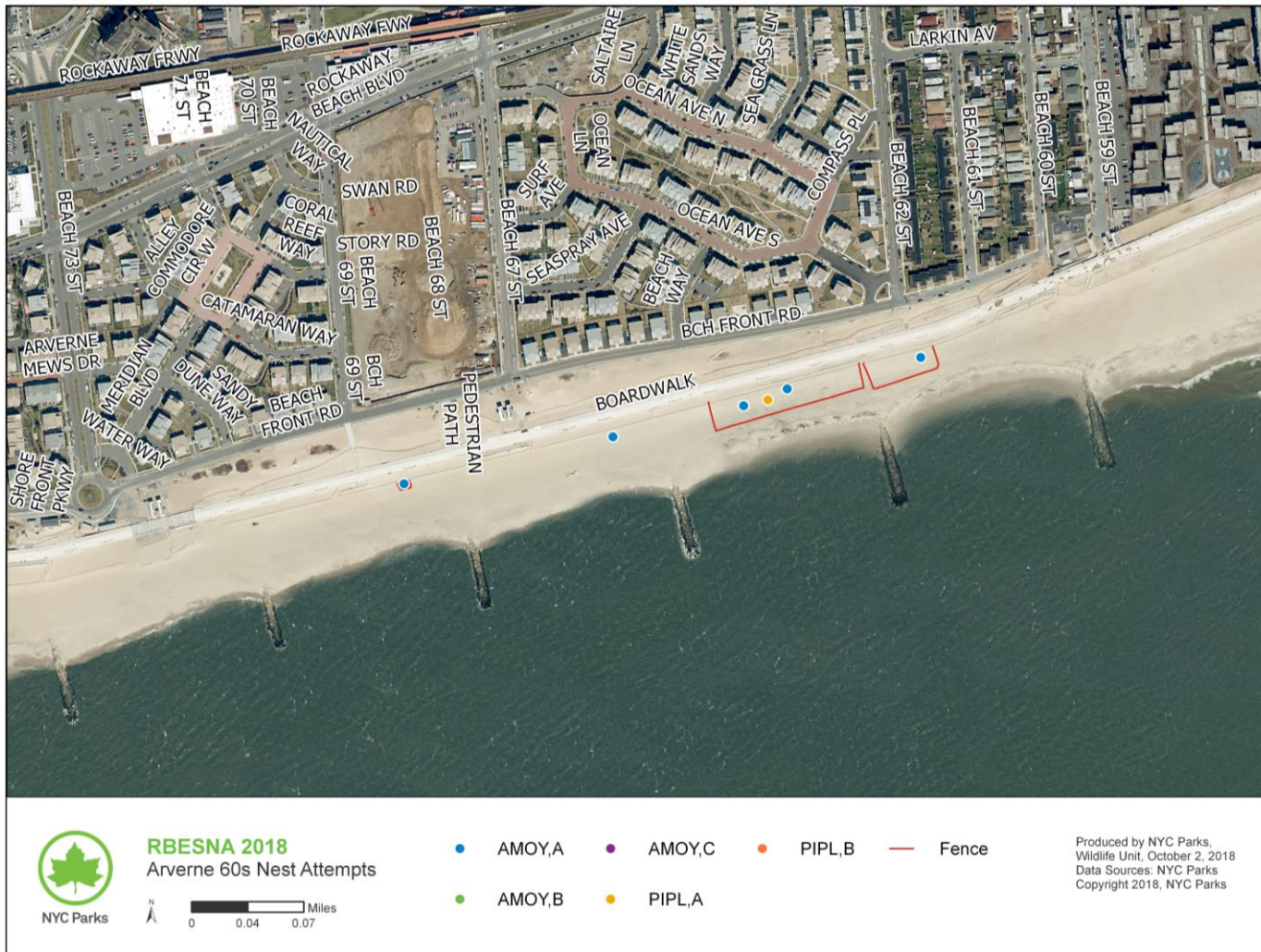


- AMOY,A
- AMOY,B
- AMOY,C
- PIPL,A
- PIPL,B
- Common Tern
- Black Skimmer
- Least Tern
- Fencing

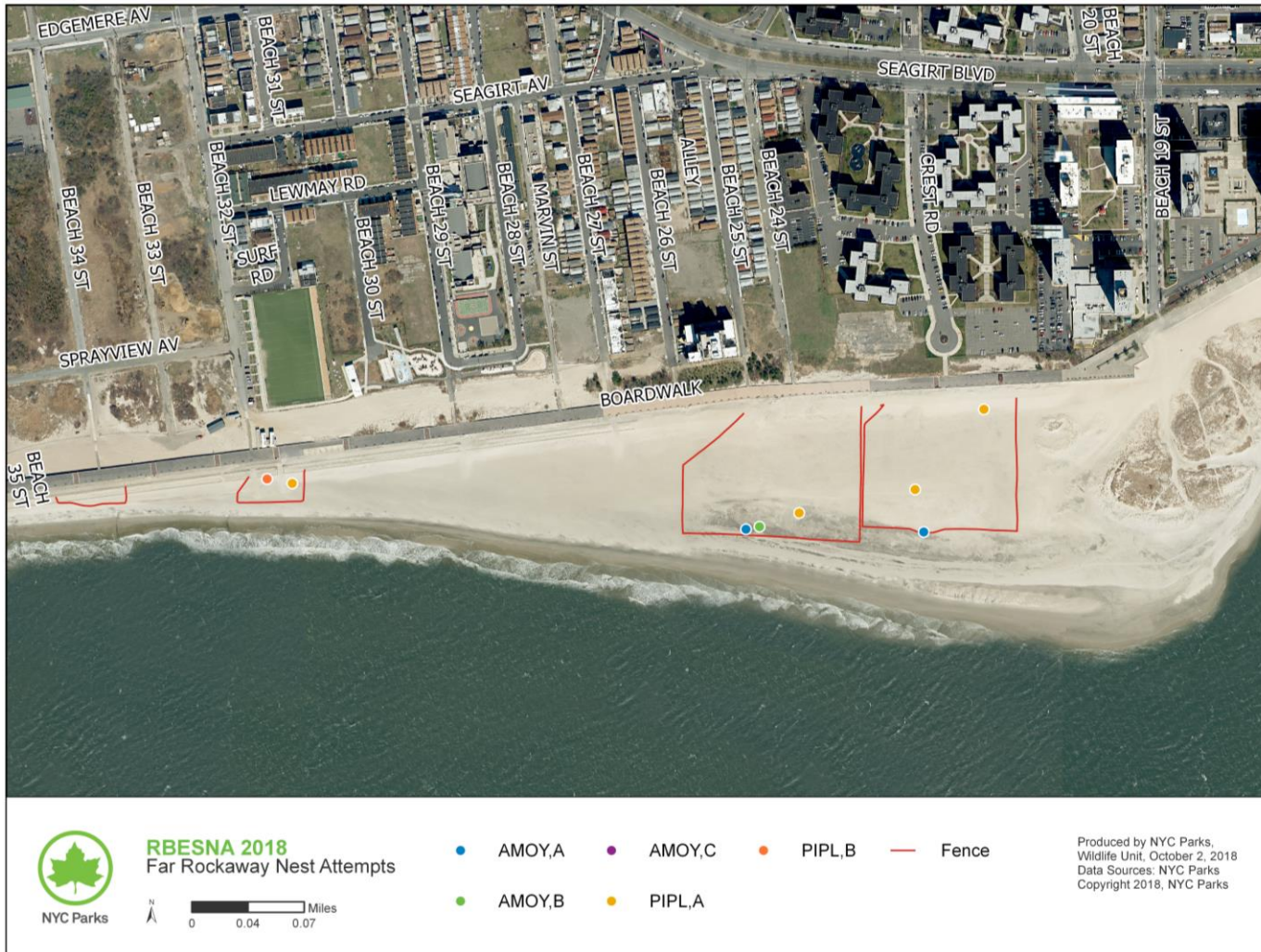
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Beach 64 St. Site Nest Locations



Far Rockaway Nest Locations



Results

Piping Plovers

- 21 pairs
- 94 eggs laid
- 67 chicks hatched
- 33 chicks fledged
- 1.57 productivity rate (chicks fledged/pairs)
- 71% of eggs hatched (chicks/eggs)
- 49% of chicks fledged (chicks fledged/chicks)
- 51% mortality (chicks lost/chicks hatched)



Results

American Oystercatchers

- 33 pairs
- 127 eggs laid
- 70 chicks hatched
- 49 chicks fledged
- 1.48 productivity rate (chicks fledged/pairs)
- 55% of eggs hatched (chick hatched/eggs)
- 70% of chicks fledged (chicks fledged/chicks)
- 30% mortality (chicks lost/chicks hatched)



Results

Least and Common Terns

	Least Tern	Common Tern
1st Count	297	1,761
2nd Count	216	807
Chicks	374 Total Chicks*	

*Mixture of common and least tern chicks



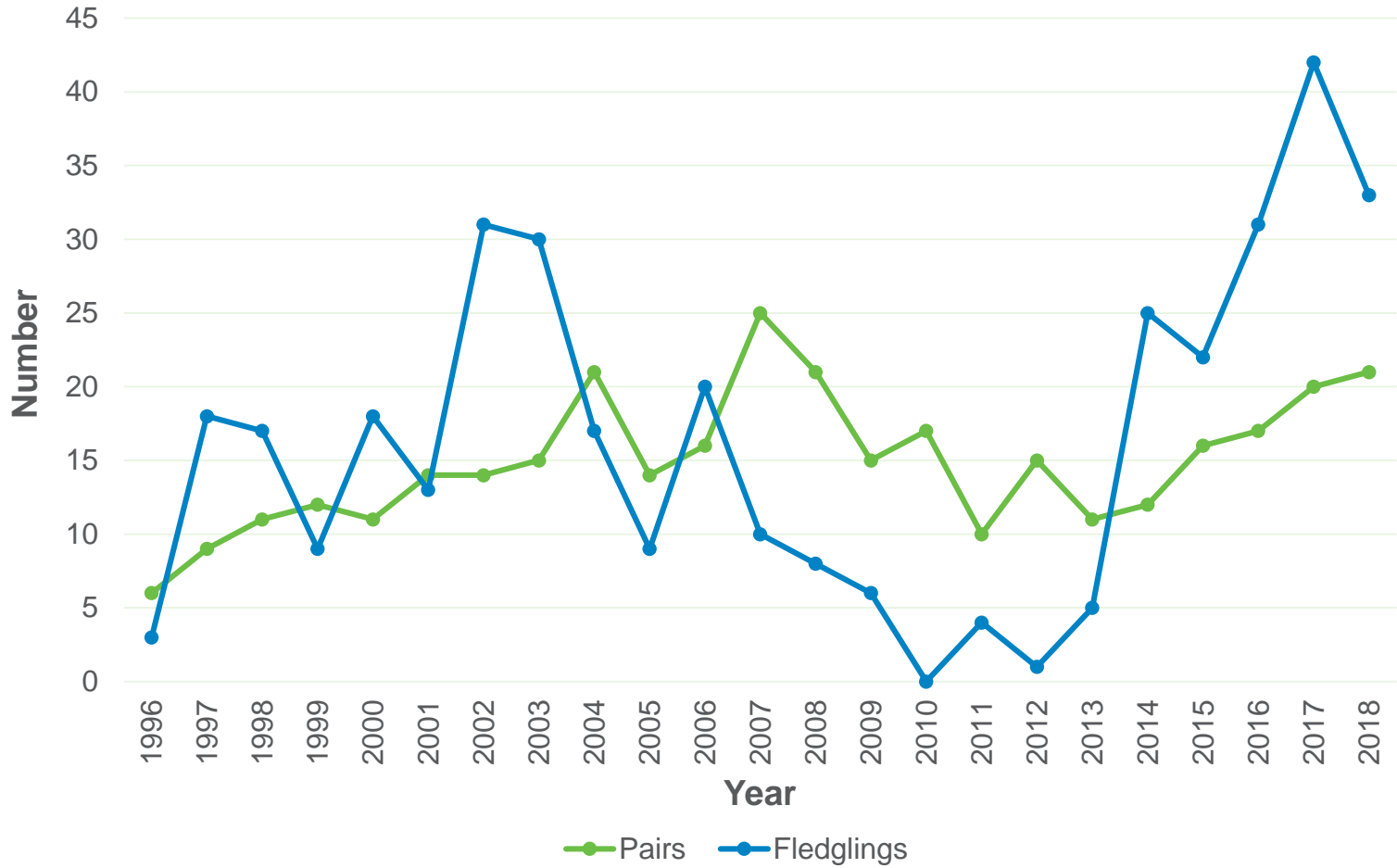
Results

Black Skimmers

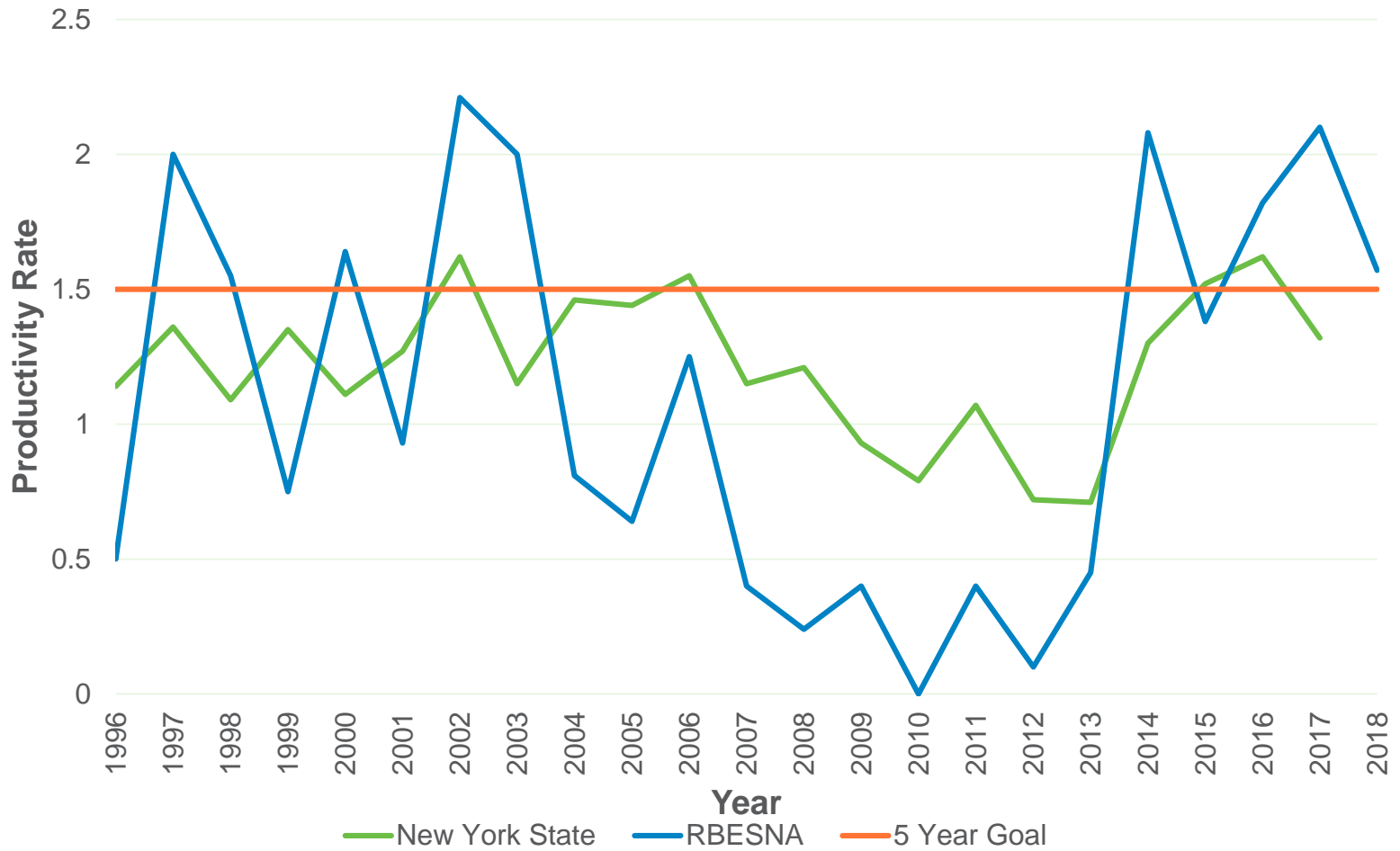
Black Skimmer	
1st Count	295
2nd Count	336
Chicks	38



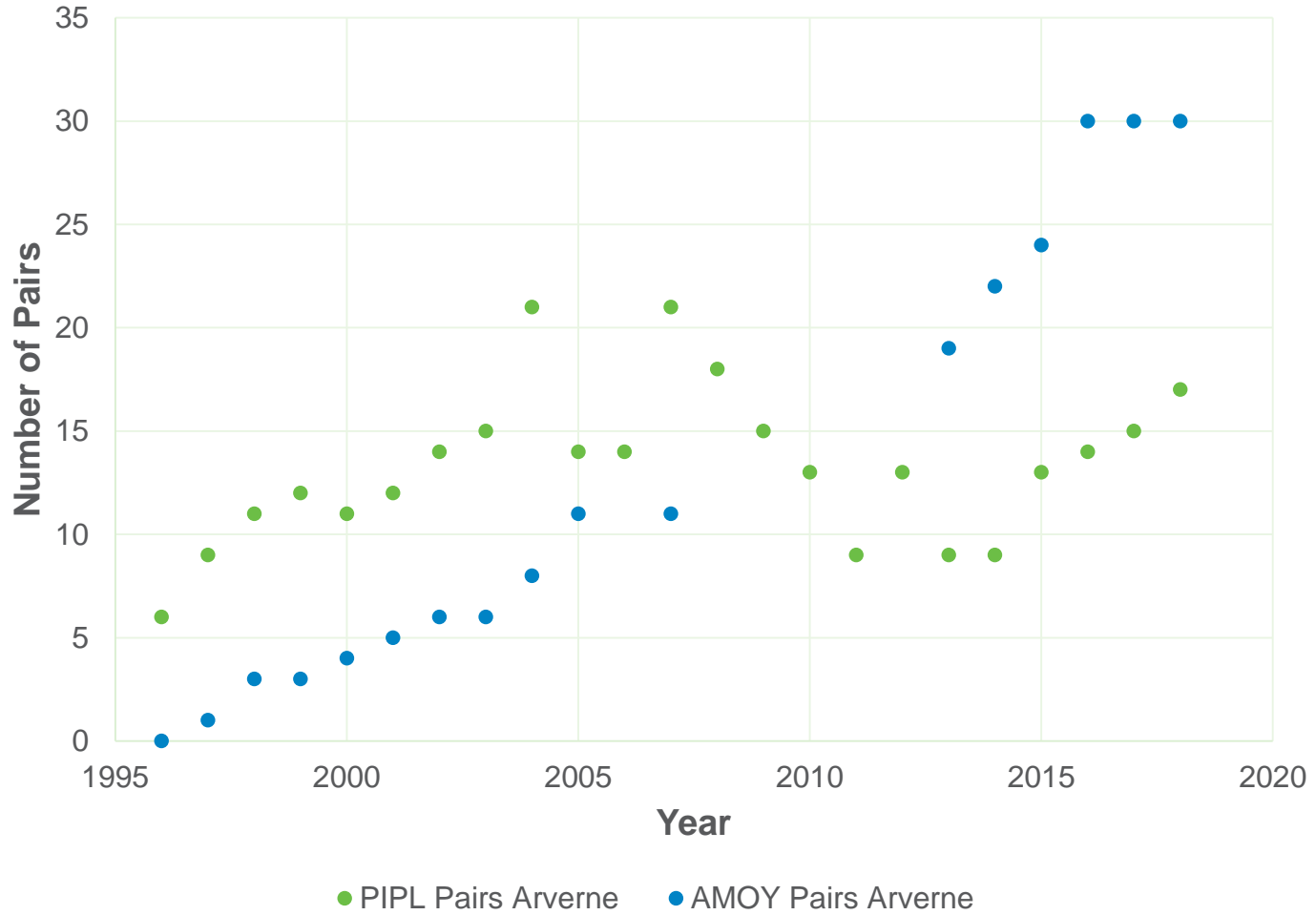
Historic Overview



Historic Overview



Historic Overview



Piping Plover Management Challenges

- Predation by raccoons
- Possible predation by cats
 - Cat tracks observed in plover sites throughout the breeding season
- Vehicle and pedestrian disturbance



Far Rockaway RBESNA 2018
Nest Proximity to Feral Cat Colony

NYC Parks



- Feral Cat Colony
- PIPL Nest Attempt
- AMOY Nest Attempt
- Fence

Produced by NYC Parks,
Wildlife Unit, December 4, 2018
Data Sources: NYC Parks
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Potential Solutions



Potential Solutions



Community Engagement



Thank You



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