The Trustees of Reservations Request for

Certificate of Inclusion (COI) on Coskata-Coatue Wildlife Refuge, Nantucket

Annual Report

October 2017

572 Essex Street

Beverly, MA 01915

Introduction

The Trustees of Reservations did not implement activities covered (OSV use in the vicinity of unfledged piping plover chicks) under the Certificate of Inclusion (COI) on Coskata-Coatue Wildlife Refuge, Nantucket in 2017 (Figure 1).

Figure 1: Coskata-Coatue Property and Trail Map

The shorebird management and protection program at Coskata-Coatue Wildlife Refuge was initiated in 1986 and completed its 31st year in 2017. Coskata-Coatue is a 1,117-acre area comprised of oak and red cedar maritime woodlands, dunes, salt marshes, ponds, lagoons, and barrier beaches. The property is owned and managed by The Trustees of Reservations, a state-wide, non-profit land conservation organization. Adjacent properties are owned and managed by the U.S. Fish and Wildlife Service (USFWS – Nantucket National Wildlife Refuge) and the Nantucket Conservation Foundation (the Haulover and Coatue Wildlife Refuge). Coskata-Coatue supports an ecologically significant barrier beach system that provides suitable nesting habitat for piping plovers, least terns, and American oystercatchers among other species. In 2017, all three of these coastal waterbird species utilized this habitat for nesting.

The program's goals are to protect shorebird adults, nests, chicks, and associated critical habitats from human disturbance and predation using a variety of fencing techniques, intensive monitoring, predator management, and public education. Initiatives implemented to protect shorebirds in 2017 are based on guidelines distributed by the Massachusetts Division of Fisheries and Wildlife (MDFW 1993).

Fieldwork on Coskata-Coatue began in mid-March with surveys of all potential nesting sites. Suitable habitat was identified and demarcated using symbolic fencing and interpretive signage at this time. Areas selected for protection were sites that have been historically used for PIPL nesting as well as habitat that had the potential for nesting activity based on the needs of species.

Regular monitoring began on April 3rd with daily monitoring beginning on May 1st. Once piping plovers and American oystercatchers began arriving at the site, observations were made using binoculars or a spotting scope to identify all pairs within the study area. All pair-bonding behaviors (i.e. courtship, copulation, scraping, territory defense, etc.) were recorded and nest searches were conducted daily in all suitable habitat. All PIPL nests were subsequently discovered within areas closed to vehicles prior to nesting season, so at the time of nest detection additional fencing and signs were needed only to prevent adults from being flushed by pedestrians or boats coming ashore. These buffers varied from a 20-30 foot radius around the nest to a 50-yard radius (recommended in the guidelines established by the state of Massachusetts (MDFW 1993)), depending on pedestrian activity. Fencing was also used to protect habitat near the primary dunes and to encourage vegetation growth and dune restoration.

Active nests and predator activity in nesting areas were monitored throughout the season. Data were collected associated with breeding biology included duration of egg-laying and incubation, hatch, predation, abandonment, washout, and duration of the interlude between nest failure and re-nest. Based on an incubation period of 28 days, hatch dates were estimated whenever possible. In accordance with the Massachusetts state guidelines, beaches were closed to over-sand vehicles from ocean side to bayside at a minimum distance of 100 yards from each piping plover nest two days prior to the predicted hatch date (Figure 1). Beaches were also closed to dogs from April 1st through September 16th in order to protect nesting and staging shorebirds.

Figure 1: Fencing on Nantucket by Site and Date

Nantucket			
Site	**Date of Closure**	**Description**	**Earliest Opening**
The Galls	4/1	North Parking Lot	Opened 7/22
Glades	4/1	Sound side beach from South Lot, south to Marker 7	Opened 7/29

Great Point	6/2	Inside trail, North of Marker 4 and Sound-side beach north of Marker 5 up to Great Point	Opened 7/29
The Galls	7/10	Inside trail (dunes) south from Marker 3 down to Brock Cottage lot on the sound side and Marker 2 on the Atlantic Side	Opened 7/27

Communication was an important part of the efficacy of the program. The shorebird monitor, superintendent, and rangers communicated regularly to monitor and prevent violations such as speeding, dogs, kite flying, drone operation, and pedestrians entering restricted areas. The rangers and gatehouse staff were also updated regularly on the status of shorebirds and vehicle closures.

The following data were collected on nest site characteristics: percent cover and species of vegetation within a three-meter radius of the nest, habitat type (upper beach, primary dune, vegetated/unvegetated interdune, washover, or other), specific location (latitude and longitude) using a Global Positioning System (GPS) unit, and distance (m) to mean high tide line. After hatching, broods were monitored (location, number of chicks, behavior, etc.) regularly until they fledged (i.e. sustained flight of 50+ feet or reached 35 days of age).

Targeted lethal crow control conducted by the USDA came to an end this season but rat elimination efforts continued. Throughout the nesting season, non-poisonous bait eggs were placed in 3 mock exclosures in the hopes of attracting crows. However, based on physical evidence like tracks and pictures from trail cameras, only gulls were taking the eggs. For this reason, poison eggs were never utilized. Rat bait boxes were placed on the property on 5/1/17 and removed on 7/20/17. Within that period of time, a reported 390 ounces of the rodenticide Diphactinone 50 and bait was consumed. Despite unsuccessful crow removal, predation was not an issue for nesting piping plovers.

The 3 Piping Plover pairs produced 5 nests and 17 eggs. Of those 17 eggs, 2 hatched (11.75%) while 15 did not hatch (88.25%). The maximum number of chicks ever observed was 2 and they died before fledging, bringing the chick loss rate to 100%. Only 1 of the 3 pairs (pair 05) was able to hatch 2 eggs (33.33%) while the other 2 pairs lost their nests before hatching (66.66%). Of the 5 nests, only 1 was considered an incomplete clutch (20%). The 80% nest failure rate can be attributed exclusively to overwash. Avian predation was the most likely causes for this year's 100% chick fatality.

All field observations were recorded in field notebooks. Daily observation forms were filled out at the end of the day and included predator management information (See Appendix A). Nest information was recorded in nest attempt forms. Logs were kept for incidents (See Appendix B), and fencing dates (See Table 1 above) in the form of Excel documents. Essential vehicles signed into notebooks at the entrance to areas temporarily closed to OSV traffic (Log notebooks can be presented upon request). Census information was recorded online on PIPLODES and TERNODES following guidelines. Staff coverage

consisted of 140 hours of Ranger hours (including 40 hours/wk of Shorebird Technician time) per week from Labor Day to Columbus Day. The Superintendent was trained in shorebird management and behavior as well as at least one ranger and/or gatehouse staff who filled in for the shorebird technician when she took days off.

Implementation of Covered Activities

The Trustees of Reservations did not implement activities covered (OSV use in the vicinity of unfledged piping plover chicks) under the Certificate of Inclusion (COI) on Coskata-Coatue Wildlife Refuge, Nantucket in 2017.

Mitigation

Trustees implemented mitigation in the form of a comprehensive predator management plan on Crane Beach, Ipswich. It benefited 30 pairs of piping plovers. Predation remains a primary limitation on plover productivity at Crane. Two methods of predator management (lethal and non-lethal) were utilized in 2017. A comprehensive, lethal predator management program was implemented by contracting with USDA APHIS Wildlife Services, with funds granted to the Trustees by Massachusetts Fish & Wildlife, under the Piping Plover Habitat Conservation Plan http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-informationand-conservation/rare-birds/piping-plover-hcp.html. Methods under this contract included lethal control for American crows, great horned owls, and coyotes. In addition, the Trustees implemented non-lethal control methods using electric fencing and one circular exclosure. All methods were implemented on a case by case basis depending upon nest location and predator activity. As can be seen in Table 4, (43/72) 60% of nests were unprotected, (29/72) 40% of all nests were protected by electric fencing, and one plover nest with a wire exclosure. Of the 22 predated nests (17/22) 77% were predated within no protection and (5/22) 23% were within electric fencing.

Crow management was contracted through USDA APHIS Wildlife Services. Management lasted between April 19th and June 5th and involved the construction of mock bait stations, pre-baiting, and services provided by USDA deploying toxicant DRC- 1339. Bait Stations were designed to replicate non-lethal predator protection in the event predators have keyed into these methods. Bait stations included three open-topped 2X2 inch wire mesh exclosures. Hard-boiled chicken eggs were placed inside exclosures mimicking a shorebird nest. An ongoing log recorded the uptake of pre-bait and toxicant laced eggs. Game cameras placed at all three of the bait stations recorded predators taking bait. Of the three bait stations, two received uptake of pre-bait and a third was removed after receiving no uptake. Once uptake of pre-bait by crows became consistent, USDA was notified and they deployed DRC-1339 toxicant laced eggs. Twelve toxicant eggs were deployed this season and 6 of 12 were taken by American crows. Pre-baiting continued after USDA deployed the last round of toxicant on May 12th but no further uptake of pre-bait occurred and baiting stopped at all locations on 5/19.

Additional efforts to remove crows with firearms occurred this season in response to two crows displaying targeted behavior, frequently predating plover nests. In total 5 plover nests were lost to these individuals, which were seen at similar times of day, consistently foraging along the eastern end of the beach. Ecology staff witnessed one of these crows predating a plover nest. Due to the animal's disregard

for a nearby bait station, control with firearms was contracted with USDA Wildlife Services to prevent further nest loss. On 5/12 the eastern portion of Crane Beach was closed to the public, control was implemented, and one crow was removed with a shotgun. On 5/13 new toxicant deployed on 5/12 was taken by American crow and crow predation ceased for the remainder of the season. This was a good example of the importance of monitoring predator behavior, and the effectiveness of a quick reaction to predators through lethal control.

The most conspicuous predator was one or more great horned owls with learned predatory behavior, present on the beach for a fourth year in a row. Least tern nests were frequently discovered predated and 3 plover nests were predated this season by an owl. Due to a great horned owl targeting circular exclosures in both 2014 and 2015, circular exclosures were not used in 2016. This remained the case in 2017 until 2 owls were removed by USDA Wildlife Services on May 23rd and the other on the 24th. In response to the owl's removal, one circular exclosure was erected around a plover nest for the first time since 2015. However, within a few days an adult plover was killed at the exclosure. Plover feathers were discovered and an owl was caught on camera trap at the exclosure, which is the first time we documented an adult mortality at an exclosure with a camera trap. As a result, the exclosure was removed and the remaining adult abandoned the nest shortly after. We assume that the owl with the learned predatory behavior was not one of the two removed, or that multiple owls are displaying this predatory behavior.

Coyotes, which first arrived to Crane Beach in the late 90's, are the other most active predator. Trends in recent years show coyotes becoming particularly active when least terns arrive, begin nesting, and especially when their nests hatch. For the first time in the programs history, efforts to lethally remove coyotes were implemented as part of USDA's predator management plan. One coyote was removed this season using call backs and firearms on 7/10 (Table 2). The philosophy of coyote control at Crane is not to remove all the animals from the system, but rather reduce the number of animals who have learned to predate shorebirds at Crane over the years. We believe there is value in maintaining coyotes in low densities to control meso predators like skunks – a predator that has seldom been documented as a nest predator on the beach.

Table 2: Predators Taken by Firearm

Date	**State**	**County**	**Site**	**Who conducted?**	**Great Horned Owl**	**Coyote**	**Crow**
3/29/17	MA	Essex	Crane Beach	USDA	0	0	0
4/18/17	MA	Essex	Crane Beach	USDA	0	0	0
5/12/17	MA	Essex	Crane Beach	USDA + Ecology Staff	0	0	1
5/19/17	MA	Essex	Crane Beach	USDA + Ecology Staff	0	0	0
5/23/17	MA	Essex	Crane Beach	USDA	1	0	0

5/24/17	MA	Essex	Crane Beach	USDA	1	0	0
6/12/17	MA	Essex	Crane Beach	USDA	0	0	0
7/10/17	MA	Essex	Crane Beach	USDA + Ecology Staff	0	1	0

Electric fencing was used widely in 2017 for both plovers and terns. Two large fence set-ups covering roughly 11 acres, were erected west of the Red Trail protecting 18 plover nests and many tern nests. Five smaller set-ups covering about 6 acres in total, were used in other areas protecting 10 plover nest. Thirty-nine percent (28/72) of the nests were protected by electric fencing. In conjunction with discouraging mammalian predation, electric fencing added an additional buffer to our symbolic fencing by preventing foot traffic associated with fencing violations. This reduced the risk of a violator stepping on a nest, and proved valuable in areas frequently used by the public. While electric fence effectively reduces mammalian predation, it does not protect against avian predators. Eighteen percent (5/28) of nests within electric fence failed due to an unknown predator, which is highly suspected to be avian (owl).

Thirty-nine pairs of piping plover nested on Crane Beach in 2017, an increase from 30 pairs that nested in 2016. These 39 pairs produced 72 nests, 253 eggs, 96 chicks and 33 fledglings. The overall productivity was .85 fledglings per breeding pair; falling short of the 1.25 productivity target necessary to support growth in the population. Of the 72 total nests, 45 failed. Nest failures (45/72) were due to a combination of (22/45) 49% predation, (10/45) 22% were buried by wet wind driven sand, (7/45) 16% were washed out by high tides and (6/45) 13% was due to abandonment or infertility. Nest predation was identified by observing tracks, nest bowl disturbance and eggshell fragments. Of the 22 predated nests, (10/22) 45% were to unknown predators, and (12/22) 55% were to known predators; (4/12) to coyote, (3/12) to great horned owl and (5/12) American crow (Table 3). Compared to 2016, nest predation increased by 12 and nests lost to storm events increased by 8, likely contributing to the lower productivity this year.

Table 3: Cause of Nest Failure, Crane Beach, Ipswich 2017

Cause of nest failure	Electric Fence	Circular Exc	No Protection	Total failures from this cause
Unidentified (predator)	3		7	10
Coyote	0		4	4
Crow	0		5	5
Great Horned owl	2		1	3
Sanded Over	3		7	10
Washover	2		5	7
Abandoment	2	1	2	1
Total	12	1	31	44

Recreational Benefits

The Trustees of Reservations did not implement activities covered (OSV use in the vicinity of unfledged piping plover chicks) under the Certificate of Inclusion (COI) on Coskata-Coatue Wildlife Refuge, Nantucket in 2017. The beach was not closed to OSV traffic at the location the COI was meant to cover. Other closures did not impact OSV travel significantly.

Appendices

Appendix A: Daily Observation Forms*

Coskata-Coatue Wildlife Refuge Daily Observation Forms

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
5/1/2017				Shea and Fred	Foggy with showers, 56F, no breeze		2	0	0	1	0	Acting very "nesty" (broken wing display). Both birds were out and about indicating that if there is a nest it is not complete.	NO (not observed)	NO	NO	NO	
5/2/2017																	
5/3/2017				Fred								1 egg nest found					
5/4/2017	8:25AM	3:45PM	7hr 20min	Shea Fee	Sunny, Wind SE @ 11mph, 60°F, Tides- Hi 7:26AM Lo: 1:31PM	Erected 2 5/15mph signs (1 just N of M3 and 1 N of the blow hole) and 1	4	0	0	2	0	1 adult foraged while the other guarded the nest. No incubation observed	Tracks near M3 leading up road to South Lot and at 5mph sign. No birds seen	Male seen courting female	NO	NO	
5/5/2017	9:45AM	12:00PM	2hr 15min	Shea Fee and Caitlin Brock	Overcast, wind SE@ 30mph,50°F , Tides- Hi 8:32AM Lo: 2:33PM		2	0	0	1	0	Both adults seen foraging south of USFW fence, 1 adult went back towards the nest as I approached 2 egg nest. Parents very territorial/ protective	Lots of tracks near path to exclosure. No birds seen	NO	NO	NO	
5/6/2017																	
5/7/2017	8:00	3:00	7hr	Shea	Sunny with rain in the afternoon, 50F, wind SSW @ 15mph, Tides: Hi 10:30am Lo	Twine was cut at marker 3 and half way down the galls.	6	0	0	3	0	3 eggs. Pair seen defending nest from gull that were eating shellfish in the vicinity	Pair seen doing territorial flights together near 5mphh sign on Atlantic side. After they	NO	New pair spotted at M5 car fence. Followed them	NO	
5/8/2017																	
5/9/2017																	
5/10/2017	9:00	4:00	7hr	Shea	Partly cloudy rain earlier in the morning, 53F, wind N @ 9mph Tides: Hi 12:25pm Lo	Tightened twine at M5 fence and fixed broken twine at	5	0	0	2	1	1 adult seen incubating. Other adult seen flying from east side of lighthouse then continued to forage	Seen foraging together near 2nd triangle sign. 2 new scrapes found in	NO, lots of tracks near Lot entrance	1 individual hear peeping 100 yards north of North Lot	NO	
5/11/2017	9:00	3:30	6hr 30 min	Shea	Party cloudy, 51F, wind NNE @ 10mph, Tides: Hi 1:22pm Lo 7:02pm		7	0	0	3	1	Incubating. Both individuals seen	M3 later in the afternoon scrapes being maintained and lots of	Pair seen in Lot. Incubating male (possibly from Galls pair) flew north into Lot where it was chased by	NO	NO	

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
5/12/2017	12:00	5:00	5hr	Shea	Partly cloudy, wind NNE @ 17mph, 51F, Tides- Hi 2pm Lo 7:40pm		7	0	0	3	1	Incubating	Pair seen foraging just north of M3 Atlantic side, new scrape found in between 1st two scrapes	Both adults seen, male sitting in nice scrape in NE corner of Lot	Pair seen foraging at bend going	NO	
5/13/2017	8:15	4:30	8hr 15min	Shea	Cloudy, wind E @ 11mph, 46F, Tides- Hi 2:40pm Lo 8:18am	Closed beach at M3 due to impending storm. Blocked	8	0	0	4	0	In	Pair foraging near 5mph sign Atlantic side. All 3 scrapes maintained	Male foraging between North Lot and blowhole. Female resting in Lot. 2 well maintained scrapes in	Pair seen foraging near bend going north	New pair spotted. Male making territorial flights	
5/14/2017																	
5/15/2017																	
5/16/2017	8:30	3:30	7hr	Shea	Sunny, wind WSW @ 14mph, 62F, Tides- Hi 4:17pm Lo 10:16am	Put mph signs back up at the Galls and reopened	6	0	0	2	2	Incubating	Male seen at M3 female not seen, All scrapes overwashed	NO	Pair seen near wood thing with nails followed them south as		
5/17/2017	8:20	3:40	7hr 20min	Shea	Sunny, 63F, wind SW @8mph, Tides Hi 5:34am Lo 11:03am	Closed all access points to the sound side beach between Cottage Lot and	6	0	0	3	0	1 adult incubating while other foraged on east side of lighthouse	Male first seen near M3 then flew over to sound side where he made territorial flights with his mate foraged. Seemed to	Pair seen in area between North Lot and Blowhole doing territorial flights	NO	Foraging between M7 and M8 traveling south.	
5/18/2017	8:30	3:30	7hr	Shea	Sunny, 62F, wind SW @14mph, Tides Hi 6:24pm Lo 11:52am	Fixed broken twine at South Lot	7	0	0	3	1	NO	Male seen earlier in the day Near M1 without mate. Both individuals seen later on the Atlantic	1 individual seen flying from Lot into area 4. Mate not seen	Seen flying North towards Great Point. Later seen at	Seen scraping Both resting 25yards west of M7	
5/19/2017	8:20	3:20	7hr	Shea	Sunny, 63F, wind SW @15mph, Tides Hi 7:16pm Lo 12:44pm		5	0	0	2	1	Incubating	NO	Foraging and loafing near shoreline in southern portion of the Lot. Fred saw male scraping on	Not observed but I new scrape was found in fenced	1 individual foraging near M7	
5/20/2017	8:15	3:15	7hr	Shea	Overcast, 52F, wind NNE @22mph		4	0	0	2	0	NO	Territorial dispute with North Lot male 12 was down Galls on Sound side. Pair was later seen	1st seen in Galls fighting with Galls male. Later seen back at North Lot foraging	NO	Seen foraging together just east of M8 heading west	
5/21/2017	7:45	2:30	6hr 45min	Shea	Sunny, 57F, wind NE @15mph, Tides Hi 8:29am Lo 2:30pm		9	0	0	4	1	Incubating. Male seen defending territory from pair that has moved up from Area 4	Male seen flying from north end of Galls into North lot where he was harassed by the North	Defended territory from invading Galls male and later seen foraging near the shoreline	Seem to have taken up residence near Great Point	Seen resting together about 3/4 of the way between M7	
5/22/2017				Fred										1 egg nest found in NE corner of the Lot	1 egg nest found in fenced dune		

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
5/23/2017																	
5/24/2017	8:15	2:45	6hr 30min	Shea	Scattered showers, 55F, wind NE @15mph. , Tides Lo 11:16am, Hi 5:08pm	Fenced North Lot and posted 'no entry' and no dogs signs	7	0	0	3	1	1 adult incubating	NO, scrapes not being maintained on Atlantic side	Seen flying from blowhole. Not defensive of 1 egg nest.	See in fenced dune area, male peeped at me when I approached	Seen foraging half way between M7 and M8 heading east.	
5/25/2017																	
5/26/2017	8:00	11:00	3hr	Shea	Scattered showers, 51F, wind NW @17mph, Tides Hi 12:19pm, Lo 6:53pm		2	0	0	1	0	NO	NO	Nest lost. Lot appeared to have been flooded but scrape was still intact. No predator tracks were	Seen in tracks near dune. Nest has 3 eggs. Expected Hatch	NO	
5/27/2017	8:00	3:15	7hr 15min	Shea	Partly cloudy, 54F, wind ENE @10mph, High tide 1:00pm		7	0	0	3	1	NO	1 adult heard and seen peeping and flying around south lot. I suspect it is the male from the Galls pair	1 adult seen foraging 20ft north of lot. Later both adults flew around lot then went north towards the lagoon then crossed over to the Atlantic side.	NO	Seen in wrack and dunes 50yds east of M7. A few possible scrapes in that	PIPL pair seen scraping and making territorial flight in the northeast corner of the Cottage Lot. Female was very interested in the scrape. I think it is a new
5/28/2017	8:00	2:30	6hr 30min	Shea	Partly cloudy, 53F, wind SE@15mph, Tides Hi 2:52pm Lo 8:21am		0	0	0	0	0	NO	NO but new scraped found 50-150 yds north of M3	NO	NO	NO	NO
5/29/2017												2 eggs were lost from the nest. Overwash suspected					
5/30/2017												Adults still incubating remaining 2 eggs					
5/31/2017	8:20	3:00	6hr 40min	Shea	Foggy with rain in afternoon, 60F, wind SE @10mph, Tides Hi- 5:44pm, Lo- 11:06am		4	0	0	1	2	Adult seen incubating 2 egg nest	Seen in dunes at M3. 3 good scrapes in that immediate area (2 in dunes, 1 in wrack line). Pair later seen near 5mph sign.	NO but a 2 egg nest was found where they have been seen scraping in the past. Nest is 30ft south of the triangle sign near the 5mph sign in the wrack.	Incubating 4 egg nest	NO	NO

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
6/1/2017	8:15	3:15	7hr	Shea	Foggy with sun in afternoon, 58F, wind SW @ 15mph	Fixed twine at M5 closure and inside M7	3	0	0	1	1	NO	Seen 100yds north of M3 courting, scraping, and copulating	2 egg nest not being incubated this morning. Second nest visit in afternoon 2 eggs being incubated by North Lot male. Female not seen	NO	NO	NO
6/2/2017	11:00	4:00	5hr	Shea	Sunny, 65F, wind WSW @ 12mph	Put up 4 more area closed signs in the Galls. Beach was closed at M4 around	2	0	0	1	0	NO	NO	Male seen incubating 3 egg nest in morning. Female seen in the afternoon near nest site	NO	NO	NO
6/3/2017	7:45	2:45	7hr	Shea	Partly cloudy, 59F, wind W @ 15mph, Tides. High 8:24pm, Low 2:00pm		7	0	0	3	1	still incubating as of this morning. No hatch out.	Seen in the afternoon. Male was scraping near iced tea bottle again and female went and sat in the scrape. Seen	Male seen incubating nest. Female not seen	Incubating	NO	NO
6/4/2017	8:15	3:15	7hr	Shea	Sunny, light breeze, 65F	Fenced AMOY nest 04A and opened all beach access	4	0	0	2	0	NO	1 egg nest found near iced tea bottle. Male seen incubating egg but did not seem very protective	Male incubating female seen foraginng near North Lot	NO	NO	NO
6/5/2017																	
6/6/2017																	
6/7/2017	8:30	3	6.5hr	Shea	Cloudy, wind NE @ 15mph, 55F, Tides- Hi 11:40am Lo 7:40pm	Fixed broken twine at inside M7	5	1	0	2	1	Nest hatched out on Monday. 1 Chick seen in grass near nest sight with parents protecting it	NO,2 egg nest failed due to Overwash	4 egg nest failed due to overwash. Seen resting together at southern end	Incubating	NO	NO
6/8/2017	8:00	3:00	7hr	Shea	Sunny, 62F, wind S@6mph, Tides Hi 12:09pm, Lo 5:49pm	cut away loose twine at M5 car fence	5	2	0	2	1	both adults and 2 chicks seen near lot of dune on east side of point. Chicks seemed healthy and parents were very attentive and	NO	Seen again at Blowhole then later seen scraping in the middle of the North Lot.	1 adult from pair seen foraging in the north section of area	NO	NO
6/9/2017	11:00	3:30	4.5hr	Shea	Rain in the morning sunny later in day, 59F, wind WSW @	Fenced AMOY nest 06A and posted 'area	0	0	0	0	0	NO	NO	NO	NO	NO	NO

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
6/10/2017	8:00	3:45	7hr 45min	Shea	Sunny, 68F, wind	Fenced AMOY nest 05A and opened sound side beach between M7 and M8. Fixed twine around AMOY nest 04A.	3	0	0	1	1	NO	NO	Male made 2 scrapes near west side of lot and 1 in NE corner. Seen copulating near scrape closest to water. Female seen trying to court male (high stepping) and scraping	NO	NO	NO
6/11/2017	8:15	3	6hr 45min	Shea	Sunny, 61F, wind WSW @ 16mph	Adjusted fencing around AMOY nest 05A	0	0	0	0	0	NO	NO	NO	NO	NO	NO
6/12/2017																	
6/13/2017																	
6/14/2017	8:30	3:30	7hr	Shea	Sunny, 66F, wind NE@12mph	Put up no kite signs in Galls, blowhole, and north lot	6	2	0	3	0	Male with 2 chicks foraging on west side of point, female on east side	NO	Found 1 egg nest. Male seen sitting on it. Female later came to inspect the nest. Male attempted copulation	Both adults doing broken wing display near 4 egg nest	NO	NO
6/15/2017	8:15	3:30	7hr 15min	Shea	Sunny, 65F, wind SE@10mph	Removed fencing that was around AMOY nest 04A	4	0	0	2	0	NO	NO	Nest still at 1 egg. Pair seen harassing AMOY A7 that was close to nest site	NO	NO	Found 4 egg nest that I suspect belongs to this pair. Nest is located in a sandy patch behind a vegetated
6/16/2017	8:30	3:30	7hr	Shea			2	0	0	2	0	NO	NO	Male incubating 2 eggs	NO	NO	Marked area near nest with stick. Female incubating eggs, male not seen

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
6/17/2017	9:45	3:45	6	Shea	Foggy w/ showers in morning, 65F, wind WSW @ 5mph Tides, Hi: 6:06am, Lo: 12:11pm	Closed first 2 entrances at the Cottage Lot and put up car fence north of the third entrance.	5	2	0	4	1	1 adult with 2 chicks on east side of point	NO	Female seen standing near nest while male chased another male w/ incomplete collar north out of the lot	1 adult seen incubating	NO	female seen incubating
6/18/2017	9:00	1:45	4hr 45min	Shea	Rain in morning clearing to partly cloudy, 70F, wind SW		2	0	0	2	0	NO	NO	Male incubating 3 eggs	NO	NO	Female incubating 4 eggs
6/19/2017																	
6/20/2017																	
6/21/2017	8:15	2:15	6hr	Shea	Cloudy, 62F, wind SW @ 17mph, Tides: Hi 10:16pm, Lo 3:48pm		7	2	0	4	0	Male seen on east side of point with 2 chicks, female seen on west side	NO	Female incubating while male foraged nearby. Did not check nest due to high winds	Incubating, both adults doing broken wing display	NO	Female seen incubating
6/22/2017	11:00	3:30	4hr 30min	Shea	Sunny, 76F, wind SW @ 10mph		4	0	0	3	0	NO	NO	Female incubating 4 eggs	Both adults seen flying away from nest. As I approached 1 flew back	NO	Female seen foraging then later incubating. Male not seen
6/23/2017	8:20	2:20	6hr	Shea	Partly cloudy, 64F, wind SW @ 16mph, Tides: Hi 11:30am Lo 5:37pm		6	2	0	4	0	Male and 2 chicks foraging on west side of point. He was extremely proactive of the chicks. 1 chick was seen vigorously flapping its wings attempting to fly. Female later seen alone on east side of point.	NO	both seen chasing gulls away from the nest area. Nest is still at 4 eggs. Thought I saw male chasing another plover north out of the lot but I couldn't really tell.	1 adult incubating	NO	Nest was unattended on first visit but second visit female was incubating
6/24/2017	11:45	1:15	1hr 30min	Shea	Rain in morning, 65F, wind SW @ 20mph, Tides, Hi 12:30pm Lo 6:40am		1	0	0	1	0	NO	NO	Nest overwashed, neither adult seen	NO but Allison said chicks had hatched	NO	Female seen incubating male not seen
																	Male incubating 4 eggs.

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
6/25/2017	8:00	2:15	6hr 15 min	Shea	Sunny, 75F, wind SW@7mph		1	0	0	1	0	NO	NO	NO	NO	NO	Male incubating 4 eggs, approached nest- broken wing display but no peeping. Male seen later in day foraging at M3. Female not seen
6/26/2017																	
6/27/2017																	
6/28/2017	8:00	3	7hr	Shea	Sunny, 65F, wind W@15mph		3	1	0	1	0	NO	NO	NO	Seen together with 1 chick in the blowout on the E side of the lighthouse. Adults seen after a male Harrier hunting in the dunes.	NO	Approached nest, no birds incubating or seen in area. Female later seen on beach- false incubating
6/29/2017	8:00 & 11:00	8:50 & 2:30	4hr 30min	Shea	Overcast, 70F, wind SW @20mph, Tides: Hi 5:18pm, Lo 11:04pm		2	0	0	1	0	NO	NO	NO	NO	NO	Male seen incubating then later seen foraging sound side near nest site. He late flew back over to the nest the female flew over the dune to Atlantic side. Male seen late afternoon foraging
6/30/2017	8:00	3:00	7hr	Shea	Partly cloudy, 70F, wind SW@20mph		2	0	0	1	0	NO	NO	NO	NO	NO	Male seen foraging near M then seen short while later in S. lot. Female incubating 4 eggs. Approached nest and got broken wing displa
7/1/2017	9:00	3:00	6hr	Shea	Sunny, 69F, wind SW@15mph	Fixed twine in North Lot	4	3	2	3	0	Seen with 2 fledged Chicks at the tip of the point	NO	NO	Seen near fenced dune arguing with male from pair 01. Chicks seen on east side of lighthouse	NO	Female seen defending nest. Still 4 eggs with no signs of hatching

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
7/2/2017	8:30	2:30	6hr	Shea	Foggy clearing to sun, 70F, wind SW @ 10 mph		2	NO	NO	1	0	NO	NO	NO	NO	NO	Female seen on nest in the morning. In the afternoon female was seen at nest with male on the beach, he then flew to the South Lot to forage
7/3/2017	8:15	3:30	7hr 15min	Shea	Sunny, 79F, wind SW @ 8mph		4	2	NO	2	0	Seen foraging together in area 4 then seen again up at Great Point. Allison told me she saw both fledglings foraging at the point	NO	NO	Seen on east side of lighthouse. 1 adult seen with 1 chick near the water then they eventually joined the other adult and chick in the dune blowout. Allison saw three chicks later that	NO	Checked nest, still at 4 eggs no adults seen
7/4/2017	8	2:45	6hr 45min	Shea	Sunny , 80F, wind NE @7mph	Salvaged 2 posts that had been washed out in the North Lot	3	NO	NO	1	1	Saw what I believe to be the male from this pair foraging in North Lot	NO	NO	NO	NO	Nest still at 4 eggs, both parent seen on beach
7/5/2017																	Nest reduced to 3 eggs
7/6/2017																	
7/7/2017	8:15	9	45min	Shea	Foggy with rain later in they day, 66F, wind S @ 15mph		0	NO	NO	0	0	NO	NO	NO	NO	NO	Checked nest, 3 eggs but no adults seen
					Cloudy clearing to sun in afternoon, 70F,	Put up 5 caution oystercatcher chicks near AMOY nests 06 and 05 also to						What I think is the male from pair 01 was seen being very lethargic in the North Lot. He let me get very					Saw male defending three eggs and later saw what I

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
7/9/2017	8:15	3	6hr 45min	Shea	Cloudy clearing to sun in afternoon, 70F, wind SSW @ 15mph Tides- Hi: 6am to 6:08pm	Put up 5 caution oystercatcher chicks near AMDY nests 06 and 05 sites to protect chicks. Signs urge vehicles to stick to the lower set of vehicle tracks	3	NO	NO	1	1	What I think is the male from pair 01 was seen being very lethargic in the North Lot. He let me get very close to him then would walk a few steps away and lie down. No vocalization or defensive behavior. Male not seen	NO	NO	NO	NO	Saw male defending three eggs and later saw what I suspect was the female flying back to the nest site from the north
7/9/2017	8:30	2:45	6hr 45min	Shea	Sunny, 72F, wind WSW @15mph, Tides: High- 1:10pm, High- 6:49pm		2	1	NO	1	0	NO	NO	NO	NO	NO	male 1st seen on beach in front of nest sight then when a harrier approached female joined him in the beach. Checked nest and found 1 chick and 2eggs. I watched from spot in dune all afternoon. Parents sticking close by and attending to chick while still incubating 2 eggs. As of 2:25pm there was still only
7/10/2017	7:30	2	6hr 30 min	Shea	Sunny, 72F, wind WSW@15mph		2	2	NO	1	0						Family still in interdune area. Parents trying to get chick over to sound side beach unsuccessfully. 1 parent checking road side dune for possible access point. 2nd chick hatched a 11am. Both chick mobile by
7/11/2017				Fred													1 chick lost but parents managed to get the remaining one over the

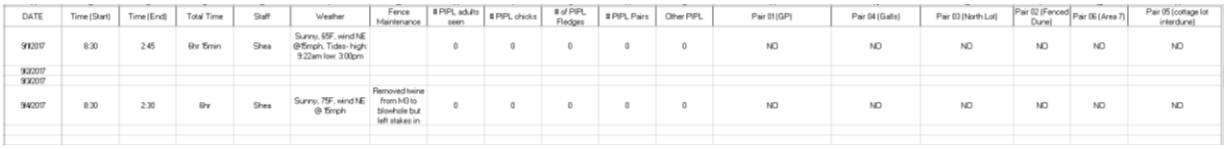
DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
7/12/2017	8:15	3:15	7hr	Shea and Fred	Foggy clearing to sun, 78F, wind SW@15mph		7	3	1	3	1	Seen with 1 fledgling	NO	NO	Seen with 3 chicks	NO	Found 2 adults and 1 chick just north of cottage lot. I followed them as they foraged to the Cottage lot then left them just north of the Cottage lot.
7/13/2017	8:30	2:40	6hr 10min	Shea and Fred	Partly cloudy, 80F, wind SW @ 5mph		5	3	NO	2	1	1 individual that is probably from this pair was seen on east side of the point	NO	NO	Both adults seen with 2 chicks in LETE colony east side of point	NO	Seen foraging just south o Cottage Lot, then moved int Lot and later continued to forage 25yds north of Lot. Both parents and 1 chick seen.
7/14/2017	7:00	1:30	6hr 30min	Shea	Cloudy with rain in afternoon, 64F, wind NE@10mph		4	1	NO	2	0	NO	NO	Seen at 12:30 foraging together in the blowhole fencing	NO	NO	Seen foraging just south o Cottage Lot, then moved int Lot and later continued to forage 25yds north of Lot. Both parents and 1 chick seen.
7/15/2017	8:30	2:45	6hr 15 min	Shea	Rain in morning clearing to sun, 72F, wind NE @5mph, Tides- Hi: 5:20pm, Lo: 10:51am		3	3	NO	2	0	NO	NO	NO	1 adult seen with 2 large chicks by water on east side of Great Point	NO	2 adults and 1 chick seen foraging 25 yds north of Cottage Lot
7/16/2017	7:30	2	6hr 30min	Shea			2	1	NO	1	0	NO	NO	NO	NO	NO	Male seen foraging 200yds north of Cottage lot, female and chick seen in Cottage lot
7/17/2017																	
7/18/2017				Fred		extended closure to M7											pair with chick seen 30yds north of southern car fence
7/19/2017	7:30	2:45	7hr 15min	Shea	Foggy, 75F, wind SW@15mph		2	0	3	1	0	NO	NO	NO	Pair seen at point with 2 fledglings. Saw the 2 chicks flying a few feet. 3rd chick later seen alone by lighthouse	NO	NO
					Sunny, 81F, wind SW										Male seen on		

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
7/20/2017	7:50	1:50	6hr	Shea	Sunny, 81F, wind SW @12mph, Tides: low 3:25pm high 9:55pm		2	0	1	1	1	NO	NO	NO	Male seen on west side of Great Point	NO	NO
7/21/2017	7:10	1:45	6hr 35min	Shea	Sunny, 83F, wind SW@12mph, Tides- Low: 4:23pm, High: 10:52pm		5	0	2	2	1	*see notes	NO	*see notes	*see notes	NO	*see notes
7/22/2017	7:15	2:30	7hr 15min	Shea	Sunny, 80F, wind SW@9mph	Opened up North Lot to vehicles	4	0	0	0	4						
7/23/2017	8:20	3:00	6hr 40min	Shea	Partly cloudy, 71F, wind SW@10mph	Helped Allison move fencing north at the Point and created a walking path around the point.	0	NO	NO	0	0	NO	NO	NO	NO	NO	NO
7/24/2017																	
7/25/2017																	
7/26/2017	8:00	2:00	6hr	Shea	Sunny, 70F, wind NE @10mph		0	NO	NO	0	0	NO	NO	NO	NO	NO	NO
7/27/2017	8:00	2:45	6hr 45min	Shea	Sunny, 64F, wind S @ 10mph, Tides: Low 9:22am Low 3:55pm	Removed detour at Cottage Lot, removed fencing that was around AMDY nest 05, and opened up inside trail at	1	NO	NO	0	1	NO	NO	NO	NO	NO	NO
					Sunny with fog, 70F,												

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
7/29/2017	7:50	3:30	8hr 40min	Shea	Sunny with fog, 70F, wind SW @10mph, Tides: low 10:11am high: 4:45pm		2	NO	NO	0	2	NO	NO	NO	NO	NO	NO
7/29/2017	11:45	2:30	2hr 45min	Shea	Rain, 66F, wind NE @18mph, Tides: high 5:05am Low 11am	Rangers erected fencing at M5 entrance to beach so people wouldn't drive in the newly formed gully. They also moved Galls fencing back about 10ft	0	0	1	0	0	NO	NO	NO	NO	NO	NO
7/30/2017	7:45	2:30	6hr 45min	Shea	Sunny, 70F, wind NE @20mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
7/31/2017																	
8/1/2017																	
8/2/2017	7:45	2:30	6hr 45min	Shea	Partly cloudy, 71F, wind SW@10mph, Tides: High 8:47am Low 2:29pm		1	0	0	0	1	NO	NO	NO	NO	NO	NO
8/3/2017	10:30	3:30	5hr	Shea	Overcast, 75F, wind SW @7mph	added 2 posts to southern vehicle fence in the North Lot	0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/4/2017	7:45	2:30	6hr 45min	Shea	Sunny, 70F, wind SW @ 10mph, Tides- high 8:47, low 2:29pm	Opened sound side beach from cottage lot to M7 and put up more "caution AMOY chicks" signs	0	0	0	0	0	NO	NO	NO	NO	NO	NO

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
8/5/2017	8:00	2:30	6hr 30min	Shea	Foggy, 70F, wind S @ 10mph, Tides- high 11:37am low 5:03pm	Took down exclosures 1 and 3	0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/6/2017	8:30	2:00	5hr 30min	Shea	Sunny, 70F, wind WNW @17mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/7/2017																	
8/8/2017																	
8/9/2017	8:45	3:30	6hr 45min	Shea	Sunny, 75F, wind SW @10mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/10/2017	8:30	2:30	6hr	Shea	Sunny, 77F, wind S @ 6mph, Tides: low 8:26am, high 3:01PM	Took down exclosure 2	1	0	0	0	1	NO	NO	NO	NO	NO	NO
8/11/2017	9:00	2:00	5hr	Shea	Showers in morning, overcast, 71F, wind NE @ 7mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/12/2017																	
8/13/2017	8:30	2:30	6hr	Shea	Showers in morning clearing to sun, 75F, wind SW @7mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/14/2017	8:45	11:15	2hr 30min	Shea and Caitlin	Sunny, 79F, wind SW @ 10mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/15/2017	8:15	2:00	5hr 45min	Shea	Sunny, 79F, wind NE @ 10mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO

DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
8/16/2017	8:40	12:30	3hr 10min	Shea	Scattered showers, 70F, wind SSE @ 10mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/17/2017																	
8/18/2017																	
8/19/2017																	
8/20/2017	8:20	2:45	6hr 25min	Shea	Sunny, 79F, wind NW @ 11mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/21/2017																	
8/22/2017																	
8/23/2017	8:20	2:00	5hr 40min	Shea	Cloudy with showers in morning, 73F, wind SW @ 18mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/24/2017	11:00	3:30	4hr 30min	Shea	Sunny 80F, wind SE @10mph		1	0	0	0	1	NO	NO	NO	NO	NO	NO
8/25/2017																	
8/26/2017	8:45	2:00	5hr 15min	Shea	Sunny, 75F, wind NE @ 5mph	Adjusted loose twine in North Lot	0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/27/2017	8:45	1:45	5hr	Shea	Sunny, 73F, wind SE @10mph		0	0	0	0	0	NO	NO	NO	NO	NO	NO
8/28/2017																	
8/29/2017																	
8/30/2017																	
8/31/2017	8:30	2:30	6hr	Shea	Sunny, 75F, wind NE @18mph, Tides high- 8:25am, low- 2:11pm	Took down all nesting shorebird and no kite signs from M3 to M4 and removed AMOY chicks signs from west beach of Coskata	0	0	0	0	0	NO	NO	NO	NO	NO	NO
					Sunny, 65F, wind NE												



DATE	Time (Start)	Time (End)	Total Time	Staff	Weather	Fence Maintenance	# PIPL adults seen	# PIPL chicks	# of PIPL Fledges	# PIPL Pairs	Other PIPL	Pair 01 (GP)	Pair 04 (Galls)	Pair 03 (North Lot)	Pair 02 (Fenced Dune)	Pair 06 (Area 7)	Pair 05 (cottage lot interdune)
5/1/2017	8:30	2:45	6hr 15min	Shea	Sunny, 65F, wind NE @15mph, Tides- high 9:22am low 3:00pm		0	0	0	0	0	NO	NO	NO	NO	NO	NO
5/2/2017																	
5/3/2017																	
5/4/2017	8:30	2:30	6hr	Shea	Sunny, 75F, wind NE @ 15mph	Removed twine from M3 to blowhole but left stakes in	0	0	0	0	0	NO	NO	NO	NO	NO	NO

*Daily Observation Form files can be sent in more readable form.

Appendix B: Incidents

Date	**Location**	**Description**	**Action Taken**
5/7/17	Galls	Someone cut fencing near marker 3 and drove through fenced area till about half way up the galls where the twine was cut again.	Twine was repaired. No nests or birds were harmed.
5/8/17	Galls	Car backed up through fencing on Atlantic side of Galls to turn around	Fencing repaired
5/20/17	M7- Great Point	Car drove around closure at M7 then continued north along the sound side to M5 fence. Fence at North Lot access road was also broken and lot was driven through.	Fences were repaired. No nests or birds were harmed.
5/28/17	Galls	Woman inside fencing collecting shells	Escorted her out and ask her to stay out of all fenced areas due to threatened nesting birds.
7/3/17	Great Point and Galls	Drone seen at lighthouse and again at M2 later in the day	Alerted rangers but I could not figure out who was operating it
8/13/17	Great Point	Drone over water	Told operators drones are not allowed
8/26/17	Haulover	Beach bike track up to M1	