

Sandy Neck Beach Park HCP Annual Report
Nina Z. Coleman, Park Manager
October 20, 2017

Section 1

Introduction

I. Fencing within the Recreation Zone (RZ) was installed on March 23, 2017 within the same general historical placement (per OOC SE3-4713) which is approximately 5 feet to 10 feet from the toe of the dune (figure 1 and picture 1). All dune vegetation was protected by this fencing. This was also the date that the majority of Sandy Neck plover habitat was symbolically fenced (7+ miles of fencing). This effort was accomplished using AmeriCorps Cape Cod.

On April 12, RZ plover activity (track only) was first noted outside of the symbolic fencing, and via the HCP, we did not adjust the fencing to include the protection of this plover habitat. This is also the date that we started raking the RZ outside of the symbolic fencing.

Figure 1 also illustrates the area that was raked five (5) times during the 2017 nesting season. Raking refers to the use of a pick-up truck with a small chain drag (picture 1). The area raked was within the RZ, north (in front) of the symbolically fenced area. This location (area raked) was comprised of $1,625 \text{ ft} \times 30 \text{ ft} = 48,750$ square feet or ~1.2 acres. The intent was to provide a groomed location for ORV use. At no time during the 2017 season were plover scrapes observed within the RZ either behind or in front of the symbolic fencing. No cover boards were utilized within the RZ as the raking and general ORV use seemed to have deterred any potential nesting activities.

II.

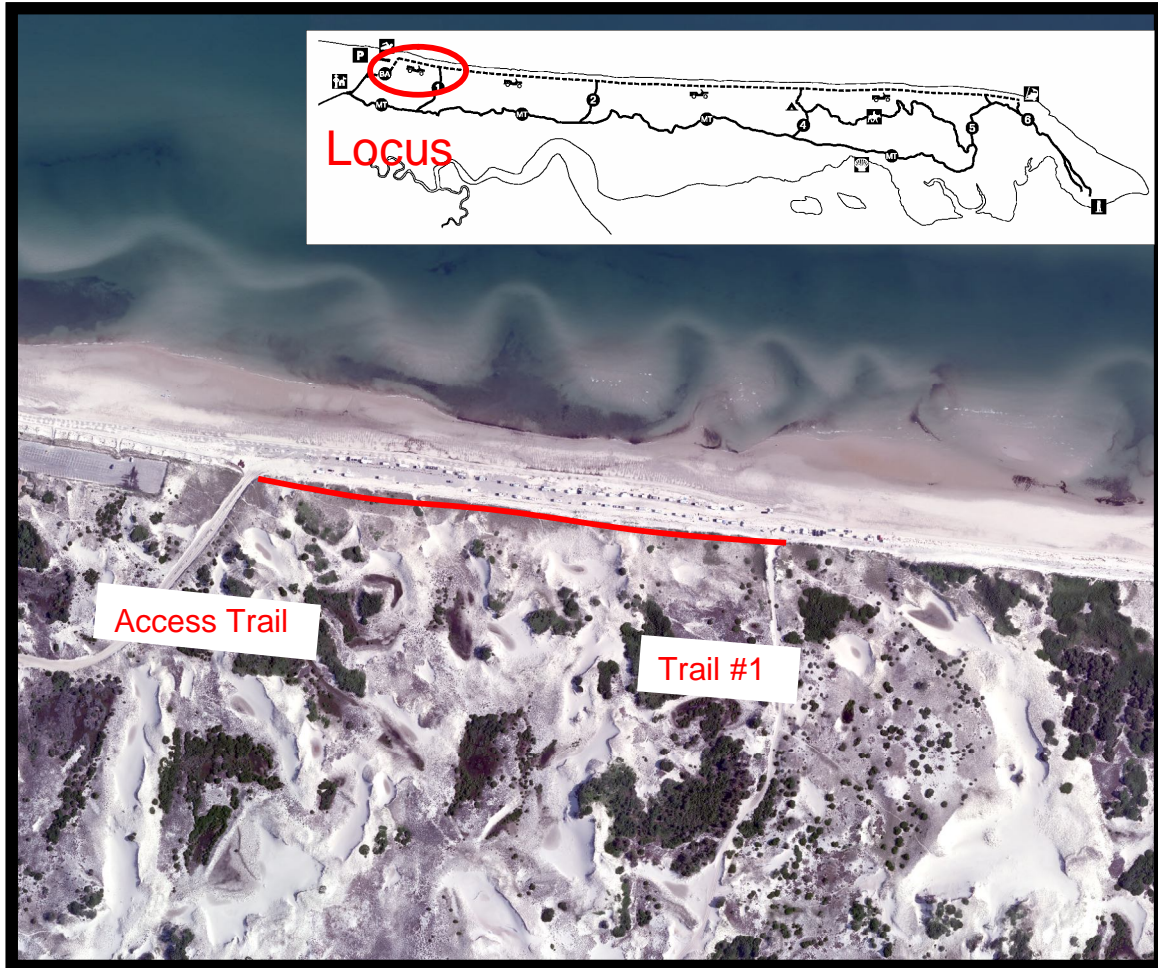


Figure 1: The red line illustrates the location of symbolic fencing that was installed within the Recreational Zone on March 23, 2017 and also demonstrates raked area (1,625 ft X 30 ft).

III. No DFW-approved changes were made to the site-specific IAMP during the reporting period.

IV. Personal responsible for shorebird monitoring includes both professional staff members Nina Coleman, Sandy Neck Park Manager and Sean Kortis, Natural Resource Officer who spend many hours in the field ensuring monitoring quality. In addition, two seasonal shorebird monitors are on duty from April 1-Labor Day weekend. Further, the Turtle Monitor is cross-trained to help with shorebird monitoring as the bulk of the shorebird-nesting season precedes the turtle-nesting season. In addition, four seasonal NROs are trained in escort procedures and basic shorebird ecology and identification.

Plover nests are checked daily within the ORV corridor and at a minimum of every other day in more remote locations. Further, nests within the ORV corridor with unknown hatch dates are monitored twice per day per our Orders of Conditions.

Our OOCs reference State Guidelines for Managing Recreational Use of Beaches for additional monitoring and escorting protocol, exclosures, fencing and signage, etc. This document is required reading for our two seasonal shorebird monitors. Over the years, Sandy Neck has developed our own Shorebird data collection sheets.

Sandy Neck field staff participates in weekly meetings to ensure good communication and daily changes in brood locations are written on a white board in the staff area of the gatehouse.

V. All information regarding shorebird nesting activity was uploaded to PIPODES prior to the September 30th deadline. In 2017, Sandy Neck Beach had 28 plover pairs, 48 eggs hatched, and 15 fledged chicks. Shorebird nesting activity was observed and documented daily via two full-time, seasonal Shorebird Monitors, and all information was recorded on data sheets before it was transferred to the PIPODES database.

Section 2

Implementation of Covered Activities

- I. Fencing within the Recreation Zone (RZ) was installed on March 23, 2017 within the same general historical placement (per OOC SE3-4713) which is approximately 5 feet to 10 feet from the toe of the dune (figure 1 and picture 1). Beach raking efforts were conducted a total of five (5) times throughout the period of April 12th 2017-May 12th 2017. MADFW was not notified per an error by the Park Manager.

II.

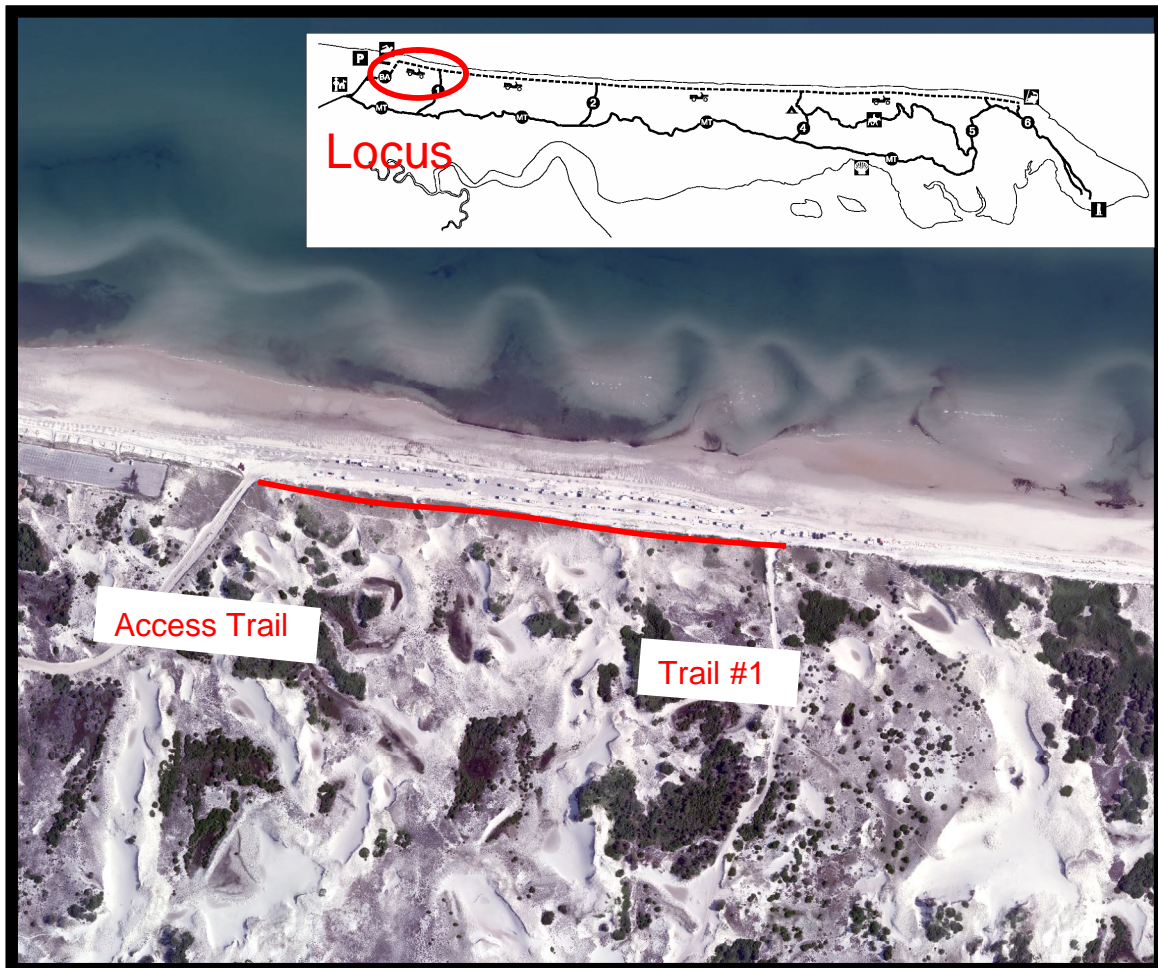


Figure 1: The red line illustrates the location of symbolic fencing that was installed within the Recreational Zone on March 23, 2017 and also demonstrates raked area (1,625 ft X 30 ft).

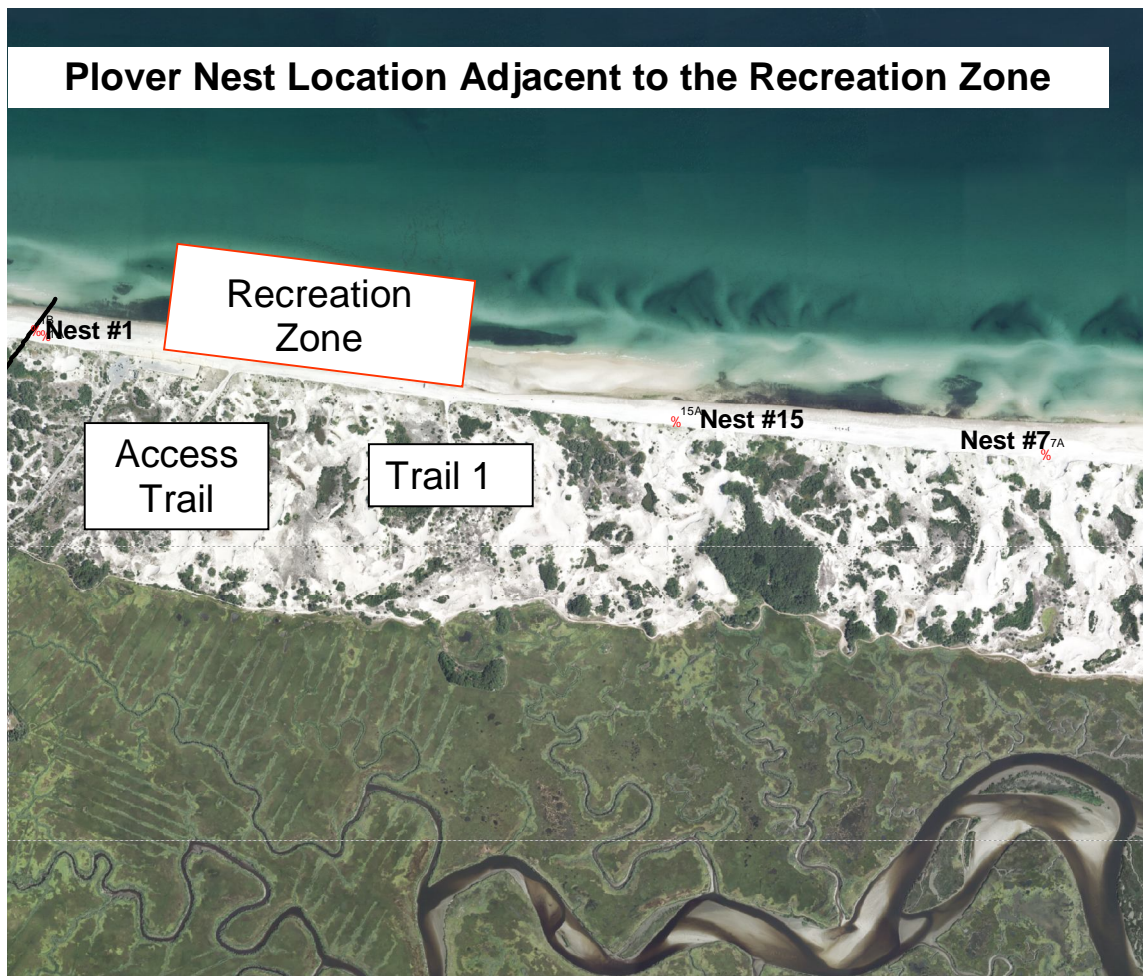


Figure 2: Plover (2017) nest location and numbers for the areas adjacent to the Recreation Zone.

- III. The primary impact minimization procedure involved raking within a portion of the nesting habitat to reduce the likelihood of interaction between breeding Plovers and recreational beach users in the area that was not symbolically fenced. The procedure was undertaken by Sandy Neck professional staff. Efforts included close observation and monitoring of shorebirds in the area to ensure that no mortality occurred. In addition, prior to raking, the area along the inside and outside of the symbolic fence line was checked for any sign of nesting activities such as scrapes, high-stepping track, etc. The purpose of this procedure was to reduce the likelihood that a pair attempting to breed would be disturbed later in the breeding cycle when recreational beach use increases by users such as pedestrians and ORV operators. No signs of territorial or courtship behavior were ever displayed by this pair while within the RZ, and as such, no efforts were undertaken to further reduce fencing and implement coverboard techniques. By proactively raking this area, it is more than likely (through data and monitoring) that this pair moved further down the beach and

successfully nested in a more desirable location, ultimately fledging two chicks.

IV.



Picture 1: Chain drag used for raking within the Recreational Zone. Picture also documents the location of the Recreation Zone symbolic fence location approximately 5 to 10 feet from the toe of the dune.

Section 3

Mitigation

- I. No selective predator management was implemented.
- II. No other forms of approved mitigation were implemented.

Section 4

Recreational Benefits

- I. Due to the covered activities implemented during the 2017 season, the recreational area did not have to shut down entirely for any period of time. The Off-Road Vehicle (ORV) corridor was limited to 0.7 miles on 6/12, re-opened to 1.25 on 6/18, re-opened further to 2.0 miles on 7/18, and re-opened completely to 4.5 miles on 8/18. The public seemed satisfied overall with recreational access, as a total beach closure on the ORV corridor would have had detrimental impacts to both revenue and public perception. A total ORV closure last occurred in June 2013 for a total of one week, and it significantly reduced permit sales that year. However, many patrons did seem confused and misinformed by what the media had reported on the HCP for 2017. This included many questions about escorts past shorebirds (which was not implemented this season). Staff worked hard to educate the public on what the HCP would entail, and what our ability would be to enable access for them, especially in regards to the ORV corridor.

- II. Program Reach and Effectiveness

- Enforcement at Sandy Neck 2017**

- Verbal Warnings: 658

- Written Warnings: 16

- Citations: 67

- Permit Revocations: 16

- No-Trespass Orders: 4 people, 1 dog

14 incidents involving symbolic fencing violations resulted in enforcement action

19 incidents involving leash violations resulted in enforcement action, including 1 dog being banned from the park.

In addition, 7 educational hikes were held at Sandy Neck Beach in 2017 along with 1 Junior Ranger program. All of these events and programs are open to the public, and they allow individuals to learn more about the natural history, ecology and conservation efforts at the park, including efforts put in place to protect nesting shorebirds.

There was no way to quantify attitudinal change. From some interactions with the public, individuals appeared pleased with proactive efforts towards enforcement at the park. Individuals also appeared happy that Sandy Neck was involved with an HCP permit to help ensure recreational access throughout the season.

Appendices

A.

- **March 1st**: All dogs at Sandy Neck are required to be on a leash no longer than 15' and under owner's control at all times.
- **March 23rd**: Over seven (7+) miles of symbolic fencing was installed throughout the park thanks to help from Sandy Neck Staff and Americorps.
- **March 23rd – March 28th**: Additional fencing was installed at Little Neck. Little Neck is an area of the beach closed to Off-Road Vehicles. Over two miles of signage and fencing was erected in this area.
- **April 1st**: Staff began monitoring for shorebird activity while on patrol throughout the park.
- **April 11th**: Plover pairs and nesting activity first observed. This monitoring effort continued daily throughout the season, except when weather or tracking conditions would not allow.
- **April 15th**: Fat-tire bikes and dogs no longer allowed beyond the ORV closure line.
- Symbolic fencing was continually shifted throughout the season in areas of the park where nesting activity was observed. Larger buffers were established in high activity areas, and areas of fencing were bumped out immediately upon discovery of a nest, in compliance with state guidelines. Signage was actively established in areas as well, and shifted according to activity, ORV closures, etc.
- **June 8th**: ORV Corridor reduced to 1.2 miles due to expected hatch of Plover nest #7. ORV corridor remained reduced throughout the season, in compliance with all state and federal guidelines until all Plover and Tern chicks had fledged.
- Sandy Neck Beach is patrolled daily by Natural Resource Officers and other Sandy Neck Staff members. Both Sandy Neck Beach regulations and Town of Barnstable Ordinances are enforced on a daily basis.
- Plover nests are checked daily within the ORV corridor and at a minimum of every other day in more remote locations. Further, nests within the ORV corridor with unknown hatch dates are monitored twice per day per our Orders of Conditions.

B.

Plover and Raking Log within the Sandy Neck Recreational Zone (RZ):

April 12: Partly cloudy day. Plover pair observed. Plover track within high, winter storm wrack line which was located outside of the symbolic fencing. We conducted our first raked effort after observing this plover activity. Raking refers to the use of a small

chain drag behind a pick-up truck (picture 1). High wrack line was removed during this raking effort which improved vehicle access adjacent to the fence line.

April 13: Partly cloudy day. No plovers observed. Some plover track outside of fencing.

April 14: Second raking effort.

April 14 through April 22: Rainy and cool patch of weather (7 out of 9 days were rainy). No plovers or tracks observed.

April 23: Partly cloudy day. Plover pair observed approximately halfway down the RZ. Track behind fence line “poking around” in nesting habitat.

April 24 through April 28: Rainy and cool patch of weather (4 of 5 days were rainy). No plovers or track.

April 28: Nest # 1 (approximately ¼ mile west of the RZ) located at 1 egg (figure 2).

April 29: Partly cloudy day. Plover pair observed just east of Trail 1 (outside of RZ).

April 30: Partly cloudy day. No plovers, lots of track behind fence line in nesting habitat.

May 1 through May 2: No data. Weather was cool and rainy.

May 3: Partly Cloudy. Very windy. No plovers or track. Third raking effort.

May 4: Sunny. Some plover track in RZ. In addition, plover activity observed east of Trail 1 (outside of RZ). Nest #7 found at 1 egg which was located well out of RZ between Trail 1 and Trail 2 (figure 2).

May 5 through May 7: Rainy and cool patch of weather. No plovers observed.

May 8: Partly cloudy day. No plover activity in the RZ. Scrapes observed near Trail 2 (well outside of RZ).

May 9: Partly cloudy day. One plover observed in RZ. Track observed within nesting area behind the fence line on either side of Trail 1 (both in and out of RZ). Future area of nest #15 (located east of Trail 1) very active with multiple scrapes (figure 2).

May 10: Rainy. One plover observed with RZ, Future area of nest #15 very active with multiple scrapes. Fourth raking effort.

May 11: Partly cloudy day. One plover observed in RZ. Some track observed closer to Trail 1. Nest #15 located at 1 egg (outside of RZ).

May 12: Rainy. Fifth raking effort.

No other significant plover activity within the RZ was noted during the 2017 nesting season. All nests (#7, #15 and #1) have pairs observed with their associated nest. No additional pairs of unpaired birds noted within this area.

No track or plover were observed within the RZ blowouts “sho” and “scram” behind the primary dune.

Between the dates 4/12-5/12 a total of 230 vehicles accessed the Sandy Neck ORV corridor.

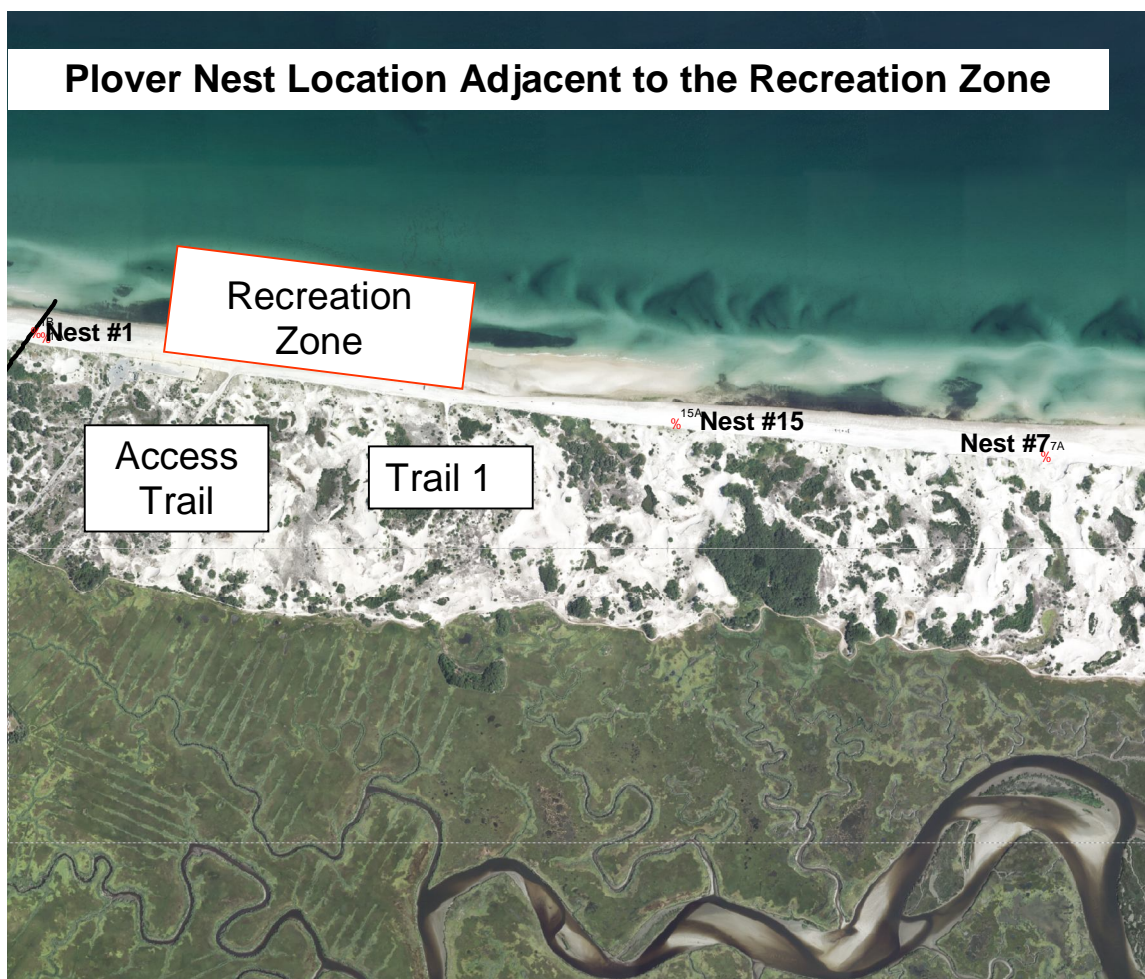


Figure 2: Plover (2017) nest location and numbers for the areas adjacent to the Recreation Zone.

C.

As expected, a plover pair arrived in mid-April and started investigating the RZ area for foraging and nesting opportunities. This has occurred for many years. We observed this pair feeding in the high winter wrack line and determined that the best course of action was to rake this area. This decision was made knowing that there are 7+ miles of high wrack line at Sandy Neck as well as daily tide lines that are undisturbed. After the first raking effort, there was evidence of plover activity occasionally behind the symbolic fencing, “poking around” in the potential nesting habitat. Raking continued in this area, which also provided easier access for vehicle traffic adjacent to the fence line. On May 4th, RZ plover activity began to shift location, and both plovers and tracks were observed on the far eastern edge of the RZ. By the first week in May, the future location of nest #15 started to “heat up” with a lot of track and multiple scrapes (figure 2). On May 10th nest #15 was established 1,700 feet east of the RZ. By May 12th there was no plover activity within the RZ. There is strong evidence suggesting that the pair was deterred from the RZ and was ultimately designated as nest #15. Further, nest #15 was one of the few successful broods this summer with 2 chicks fledged.

NEW NEST EGG/CHICK LOSS CHICK FLEDGE

Access Trail – Trail 2

Date: _____

Monitor: _____ Search Time: _____ Area covered? Y N

Weather and Tide: _____

Daily plan: List Focus Nests due to expected hatch date, re-nest, or fledglings

Adults: _____ Nests: _____ Chicks: _____ Fledglings: _____

| Nest # Date found | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| # adults | | | | | | | | | |
| # eggs | | | | | | | | | |
| Expected Hatch Date | | | | | | | | | |
| Actual Hatch Date | | | | | | | | | |
| # chicks today # expected to see | | | | | | | | | |
| ~ age of chicks | | | | | | | | | |
| (Expected) Fledge Date | | | | | | | | | |
| # chicks fledged total for nest | | | | | | | | | |
| total chicks remaining (Fledged/Unfledged) | | | | | | | | | |

Priorities for next monitor (Focus Nests) and notes:

Access Trail – Trail 2

Date: _____

Adults: _____ Nests: _____ Chicks: _____ Fledglings: _____



Figure 3: Plover monitoring data sheet for area within the RZ. Notes regarding plover activity are documented on the bottom left, and marked in accordance with its location on the attached map.

D. All raking and intensive monitoring efforts in the RZ were conducted by Sandy Neck professional staff.

Additional notes, lessons learned and feedback:

As it was the first year of the HCP, there was some confusion and missed opportunities for communication. First, we failed to notify NHESP when the HCP activities commenced. We would assume that this would be when plover activity occurred outside of the RZ symbolic fencing. It is at this point that, pre-HCP, we would have adjusted the fence line to protect this habitat. Or was the notification needed when the fencing was installed in March? Perhaps more clarification could be provided with this. Further, the decision to rake was per discussions with NHESP during the drafting of the HCP and was noted on page 24 of the final Sandy Neck HCP document. Our interpretation was that we had obtained the necessary permit to deter the birds using this method. Further, raking is not a prohibited activity under the Guidelines when there is no nesting or raising of chicks within the area. As we did not even have a scrape in the RZ, it was confusing that raking was considered not in compliance with the state and federal guidelines, recognizing that the symbolic fenced area was “legally” reduced under the HCP.

Finally, We believe that the use of raking this year achieved the goal of deterring the plovers from nesting in this area without harm. It is likely that the use of cover boards would have been utilized after a pair had begun scraping. To us, it would seem less of a disturbance to deter these birds prior to this type of investment in this location. That being said, we will provide additional information on our raking procedures so that we can continue this activity for the duration of the HCP.

It should also be noted that we should have recorded more detailed data in regards to specific plover behavior, in addition to logging more observations in the area, even on days where the weather was poor or tracking conditions were difficult. In 2018, we plan to draft a new data sheet, specific to HCP-related efforts, detailing all of these observations.

Finally, we wanted to give NHESP feedback from the management perspective about this annual report. Our HCP "contract" references end of year report requirements which we were aware of pre-season. However, the document Plan Participant Guide for Preparing Annual Reports was set in September and was considerably more demanding. Therefore, some of the required data was not collected. Our revised data sheet will be helpful next year but we also respectfully request that expectations are clearly stated pre-season.