

Monomoy National Wildlife Refuge

May 7th – June 30th, 2016 [Issue 11]

Photo Credit: Jackie Page

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Photo of the Month



A Message from Monomoy

As the shorebirds flock back to Monomoy with warming weather, so do the seasonal staff! On May 17, 2016 we held our annual staff orientation, and welcomed back returning staff, Cheryl Horton (Piping Plover Tech), Becca Mattson (Tern Tech), and Emilie Seavey (Tern Intern). We'd also like to give a warm welcome to our new staff this season: Gina Zanarini (American Oystercatcher Tech), Jenn Malpass (Nanotag Tech), Lauri Leach (Piping Plover Intern), Ella Lunny & Laura Tanedo (Tern Interns), and Devan Blazey & Nam Le (Visitor Services Interns).

While the birds worked on their nests, staff prepared for the much needed monitoring and protecting of Monomoy's wildlife. Our plans to renovate the Monomoy Light and Keeper's Station continued to move forward through interagency partnerships with the U.S. Coast Guard Air Station Cape Cod, the Town of Chatham, Chatham Municipal Airport, Robert Childs Inc., the Friends of Monomoy NWR, and more than a dozen Refuge volunteers who helped move tons of lumber and dry wall from a helicopter drop! This update covers the Refuge's progress throughout the month of June.

2016 Field Season Update

This is a monthly synopsis of biological activities on South Monomoy, North Monomoy, and Minimoy Islands. Information within this report is subject to change. For up to date information, please contact Refuge Staff.

Bird Sightings

Double-crested cormorant	Black-bellied plover
Great black-backed gull	Semipalmated plover
Herring gull	Sanderling
Laughing gull	Dunlin
Bonaparte's gull	White-winged scoter
Great egret	Common eider
Snowy egret	Black duck
Killdeer	Horned lark
Willet	Saltmarsh sparrow
Black-crowned night heron	Peregrine falcon
Barn swallow	Northern Harrier
Least sandpiper	Red-winged blackbird
Ruddy Turnstone	American crow
Common Loon	Osprey
Red-tailed Hawk	Gray Catbird

Bird Activity

Piping Plovers (PIPL)

The first PIPL nest of 2016 was found on May 4th on South Monomoy Island, with 3 eggs. The first PIPL nest on North Monomoy Island was found on June 13th, and the first PIPL nest on Minimoy Island was found on May 29th. At the moment, there are 46 piping plover pairs nesting on the refuge: 43 on South Monomoy Island, 2 on North Monomoy Island, and 1 on Minimoy Island. There is a total of 21 active plover nests on the whole refuge. The first nest to hatch on South Monomoy Island was on May 30th with 2 chicks, and the first nest to hatch on North Monomoy Island was on June 22nd. A total of 24 broods on the refuge have been recorded: 23 on South Monomoy Island and 1 on North Monomoy Island. As of right now, only 1 nest has fledged chicks, though our bio staff expects many more chicks to fledge in the coming weeks. A total of four exclosures have been placed to protect PIPL nests from predation.

American Oystercatchers (AMOY)

The first AMOY nest of the 2016 field season was found on May 4th on South Monomoy Island with 1 egg. The first confirmed hatch was on May 29th. Our bio staff counted and monitored a total of 16 AMOY pairs on the refuge: 8 on South Monomoy Island with 4 active nests and 3 broods; 4 on North Monomoy Island with 3 broods and 1 active nest; 4 on Minimoy Island with 3 broods and no active nests. At the moment, no chicks have fledged.

Common Terns (COTE)

Camp was set up early this year on May 7th to enable staff to perform gull harassments to discourage large gulls from nesting within the tern nesting area. Camp was full staffed and open seven days a week as of May 19th. Nest boxes were scattered throughout the colony, 36 productivity plots were placed, and blinds were erected. The first common tern nest of the 2016 field season was seen on May 17th. The first chick was seen on June 7th. Approximately 540 chicks have been banded inside productivity plots and will continue to be monitored throughout the nesting season. Bio staff has trapped 50 previously banded adult common terns to identify their ages and hatch locations. Staff performs feeding and kleptoparasitism stints daily within the colony. Over 30 refuge volunteers and staff participated in our annual common and roseate tern census on June 10th through the 12th. We counted a total of 10,505 common tern nests and 2,738

laughing gull nests in the South Monomoy colony.

Roseate Terns (ROST)

Two sound systems, shelters, nesting condos and teepees were set up as of 27 May to attract more roseate terns and provide cover for nesting. There are a total of 14 roseate tern nests within the main colony. Seven of the nests have hatched. A total of eleven adult roseate terns have been trapped for band identification or attachment. Additional adults will be trapped as time allows. 11 chicks have been banded with both BBL and a blue plastic readable (PFR).

Black Skimmers (BLSK)

No new information to report. BLSK have not been sighted on the refuge.

Least Terns (LETE)

Least terns have been spotted on South Monomoy between plover beach and the Lighthouse on the east side of South Monomoy Island and have also been scraping on Minimoy Island! Least tern census was performed on South Monomoy Island and Minimoy Island between June 16th and 20th though numbers have yet to be compiled. Census results will be included in the next update. The first least tern chick was verified on South Monomoy Island on June 16th.

Laughing Gulls (LAGU)

Census revealed 2,738 laughing gull nests in the colony on South Monomoy Island. This number was adjusted using LI and is a significant increase from the 1,424 pairs counted in 2015. The first laughing gull chick was confirmed on June 14th. Five-hundred nests were destroyed on June 14th to minimize competition for habitat and resources between laughing gulls and common terns.

Roseate habitat restoration Project

Monomoy's dedication to create suitable habitat for the endangered roseate tern was accomplished through last years efforts.

A habitat restoration controlled burn was conducted last year in order to make the habitat more suitable for Common and Roseate terns. The project proved successful as the main colony's nesting area has expanded. Staff continue to monitor the roseate tern habitat area by taking photo to

document growth of plantings and long term success of the project.

Nanotag Project

Monomoy is excited to continue support of Pam Loring's PhD work and Kate Iaquinto's Master's work involving nanotagged piping plovers in both Massachusetts and Rhode Island. This project is using nanotags to track the movements of coastal birds during the breeding, staging, and migratory periods of their life cycles. The project hopes to identify potential threats posed by offshore wind development and gain a better understanding of the differences in movements between birds at the remote site Monomoy/South Beach, and birds on mainland nesting beaches in Rhode Island. During the 2013 and 2014 field seasons, American oystercatchers and common terns served as surrogates to this project by testing out the new nanotag technology and the efficacy of the tower area. In both 2015 and 2016 refuge staff and project staff including Pam Loring, Kate Iaquinto, Jenn Malpass, and Christine Fallon collaborated with Peter Paton of the University of Rhode Island to trap 25 piping plovers on Monomoy and South Beach. These plovers were affixed with a uniquely coded green leg flag, a blue color band, and a nanotag. An additional 25 individuals were tagged on Rhode Island mainland beaches. These individuals are tracked using both stationary receiving towers near the tagging sites and hand tracking by project staff. Levels of human use at all tagging sites are being documented throughout the summer.

This project is funded by BOEM (Bureau of Ocean Energy Management) and is in collaboration with USFWS, UMass Amherst, and URI.

Exclosure Study

As in 2015, plover staff on the refuge are contributing data to a study out of SUNY-College of Environmental Science and Forestry (ESF), led by lead investigator Jonathan Cohen and postdoctoral researcher Abigail Darrah. The objective of the study is to evaluate the effectiveness of nest exclosures with regard to abandonment, adult mortality, and nest survival of piping plovers. The results will be compiled and used in a model designed to help guide site-specific effects of management actions including exclosure use on plover population growth rate.

Horseshoe Crab (HSC)

During June 18th -19th, refuge volunteers and staff tagged 529 horseshoe crabs on the northern tip of South Monomoy Island. Horseshoe crab spawning surveys were completed on Morris Island this year though results have not been compiled.

Salt Marsh Integrity

In 2013, Monomoy participated in the region wide Saltmarsh Integrity assessment, a project aimed at evaluating the health and resiliency of our saltmarshes. In late September 2014, six SETs, or Surface Elevation Tables, were installed throughout the refuge; 3 on North Monomoy, 1 on Morris Island, and 2 on Minimoy. The last SET was installed at Hospital Pond on 29 April, 2015. As of the fall of 2015 all the SETs have been read at least once.

Feldspar plots were also placed at each SET location between the spring and fall of 2015. Feldspar plots will further help staff record the changes in the marsh elevation over time.

Saltmarsh elevation changes over time due to a multitude of factors including sediment load and sea level rise. SETs will help the region monitor elevation and accretion over time. This information will then be used to evaluate natural and human-induced changes in elevation as we advance our understanding of saltmarsh resiliency to seal level rise.

BREAKing News and Accessibility

Over the winter, the break continued to follow a similar pattern as in 2014 and 2015. Sand from outside of the cut continues to push into the southway, creating new shoals for boat operators to navigate. Access to the southern half of the southway is similar to 2015 where it is navigable 3 hours before and 2 hours after high tide. The current navigable channel is complex to describe however the Chatham Harbormaster has marked the northern portion of the break with a series of red bouys. This channel is accessible off of H bouy on the eastern end of the Morris Island Channel. The southern portion of the break is unmarked but staff have currently been using a small channel off the north tip of South Beach. In addition to tide restrictions, northward and eastward winds causing large waves to roll into the shoals can make the break impassable. We expect weather and tides to continue to play an important role in accessibility of the northern portion of South Monomoy Island this year and are

embracing the logistical conundrum as best possible.

Visitor Services

With two new interns serving as the Visitor Services staff, new programs and ideas have been in the making for the greater summer. In the first few weeks of June, our Visitor Services staff and volunteers hosted several school fieldtrips from the Dennis-Yarmouth school district. Over the years, we have garnered a wider range of support local schools and institutions. Extending our initiative to show more of our bio work, our piping plover technician, Cheryl Horton and our bio staff installed a live camera in the tern colony. It captures the daily life of common terns in our large colony. We have also been actively coordinating with our Friends of Monomoy group for talks and events this summer. They are hosting an interesting talk about Sharks on July 13th. With cooperation and coordination with their group, we are also hosting our own events called Exposure To Nature Days on July 10th and July 24th. These two days are purposed to bring people of all ages from around the area to enjoy the great wildlife and environment the refuge has to offer. The event consists of a wildlife presentation, an interpretive trail walk, an interactive game, and a fun craft station.

2016 JULY						
SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

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2016 AUGUST						
SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

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Current & Upcoming Events

Exposure to Nature Days **July 10th, July 24th**

Awareness Inspires **July 13th**

**Conservation: White Sharks in
the North Atlantic**

Shorebird trapping **July 30th-August
6th, August 26th-
September 1st**