



Monomoy National Wildlife Refuge
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2009 Nesting Season Summary – Monomoy National Wildlife Refuge

The following update is a summary for the 2009 nesting season at Monomoy National Wildlife Refuge (NWR). The data within this summary is current as of 29 September 2009. The information is subject to change as the data is reviewed and finalized.

- A total of 33 pairs of federally threatened Piping Plovers nested on the Refuge: one pair on North Monomoy Island, one pair on Minimoy Island and 31 pairs on South Monomoy Island. Refuge-wide, this is six more pairs than in 2008. Twenty-three chicks fledged and overall reproductive success was poor at 0.70 chick fledged per pair.
- A total of 2,347 Common Terns nested on the north tip of South Monomoy Island in 2009. This is a decrease from 6,834 pairs in 2008. Reproductive success was poor at 0.35 chicks fledged per nest (based on A-period nest attempts). Approximately 1,453 pairs (1,258 pairs in 2008) of Common Terns nested on Minimoy Island this season with poor productivity; Common Terns on Minimoy Island experienced frequent overwash and some predation by gulls and black-crowned night-heron. Two-hundred and seventy-five of Common Terns (70 in 2008) also nested on North Monomoy Island with poor productivity due to overwash of the nesting area.
- Zero pairs of federally endangered Roseate Terns nested on the Refuge in 2009 (37 in 2008). All Roseate Tern nesting in 2008 nested on Minimoy Island which no longer contains suitable habitat for this nesting species. In an effort to attract Roseate Terns to South Monomoy Island due to habitat loss on Minimoy Island this year, a Roseate Tern Attraction Project was begun this spring. Twenty four nesting structures were set up amongst several areas on South Monomoy Island in the Common Tern colony that Refuge staff determined to be desirable nesting habitat for Roseate Terns. Decoys were placed near these colonies and two sound systems played Roseate Tern calls throughout the nesting season. The project was not successful in attracting nesting Roseate Terns to South Monomoy Island this year, but will continued as part of an ongoing effort
- In 2009, 547 pairs of Laughing Gulls nested on South Monomoy Island, down from 1,317 in 2008. Overall, productivity was estimated to be poor to fair. Nest destruction efforts were minimal this year due to low numbers of nesting Laughing Gulls and their minimal impact to the nesting Common Terns.
- A total of eight pairs of Least Terns nested on the Refuge during the census period (June 5-

20): 5 pairs nested on South Monomoy Island and 3 pairs nested on Minimoy Island. Overall, productivity was poor on both islands due to predation and overwash.

- A total of 108 pairs of Black-crowned Night-Heron nested on the Refuge in 2009, down from 171 nests in 2008. All but one of the pairs of Black-crowned Night-Heron nested on North Monomoy Island. Forty-one pairs of Snowy Egrets and also nested on North Monomoy Island this season.
- Four pairs of Black Skimmers nested on Minimoy Island in 2009. Reproductive success was poor – 0 chicks fledged per pair. Minimoy Island was one of two nesting sites in Massachusetts for this species in 2009.
- A total of 22 pairs of American Oystercatchers nested on the Refuge in 2008: 8 pairs on North Monomoy Island, 8 pairs on South Monomoy Island, and 6 pairs on Minimoy Island. This is a decrease from 31 pairs in 2008. Four chicks fledged successfully. Overall, reproductive success was poor with 0.18 chicks fledged per pair. This is down from 0.32 chicks fledged per pair in 2008. Predation and nest overwash impacted the success of American Oystercatchers on the Refuge.

Northeastern Beach Tiger Beetles

A total of 102 Northeastern Beach Tiger Beetles were sighted and marked (179 in 2008) during monitoring efforts in 2009. Monitoring was less intensive this year due to the fact that the cohort hatching this year is the smaller of the two cohorts on the Refuge. The presence of tiger beetles on the Refuge in 2009 indicates successful larval survival and adult production, as well as evidence of an established Northeastern Beach Tiger Beetle population on Monomoy NWR.

Horseshoe Crab Work Continues

Monomoy NWR is an important spawning area for horseshoe crabs in Massachusetts. In 2009, approximately 486 horseshoe crabs were tagged on Morris Island, North and South Monomoy Islands with the help of several volunteer groups. Tagging efforts took place during the months of May and June. Sightings of tagged horseshoe crabs should be reported to the phone number listed on the tag itself. This year horseshoe crabs were also surveyed during peak spawning times on the Refuge as part of a region wide effort to study the productivity of our local population.

Monomoy Shorebird Project

The Refuge has recently concluded the first year of a collaborative project involving the capture of Red Knots and other shorebirds that utilize the Refuge and surrounding beaches as a major stopover site during their southward migration. The primary goal of the study was to investigate the health of migrating shorebirds that utilize the Refuge and surrounding beaches in Chatham, Massachusetts. Shorebirds were trapped using two cannon nets at three sites in Chatham, MA which included state, town, and federal property and greatly expanded our local partnerships. Overall, we captured a total of 184 shorebirds, including 16 Black-bellied Plovers, 136 Red Knots, 30 Sanderlings, one Semipalmated Plover, and one Short-billed Dowitcher. All of the birds captured were banded with a metal band issued by the Bird Banding Laboratory and Red Knots, Short-billed Dowitchers, and Sanderlings were marked using uniquely coded lime green color flags. Wing chord, weight, head and culmen measurements were taken from each bird and 181 individuals, mostly Red Knots, were sampled for Highly Pathogenic Avian Influenza. A subset of the Red Knots that were trapped was outfitted with geolocators. Data from these

devices will be interpreted when the individuals are recaptured next year by Conserve Wildlife Foundation.

Volunteers

The Refuge staff wishes to thank many dedicated volunteers, school groups, and conservation partners for their assistance and support with biological surveys, maintenance tasks, and public outreach efforts. There are a variety of volunteer opportunities at the Refuge year-round. If you would like to become a volunteer at the Refuge please contact Kate Iaquinto at (508) 945-0594 ext 13.

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