

Parker River National Wildlife Refuge is doing a study of how shorebirds use different habitats in and around Plum Island. We are using new technology that allows us to track the birds 24/7. We have put radio telemetry tags on 30 semipalmated sandpipers. Four receiver towers throughout the Refuge will continuously record the location of the 30 tagged birds.

The radio telemetry research project is being coordinated with researchers throughout the Gulf of Maine. Collectively, researchers from Canada to Cape Cod will be putting radio transmitters on thousands of birds this fall. There is a network of receiver towers located throughout the Gulf of Maine, each one is able to uniquely identify any tagged bird that flies within its range. Through this collaboration, we will learn how different groups of birds move through and use the different habitats in the Gulf of Maine.

Here at Parker River, we have also color-banded the birds so that they can be resighted visually. If you find a color banded shorebird, please report the following information to Wildlife Biologist Nancy Pau, at [nancy\\_pau@fws.gov](mailto:nancy_pau@fws.gov)

- Species
- Date, Time and Tide Cycle (e.g. high, low, falling tide)
- Location and habitat (be as specific as possible. E.g. Emerson Rocks, beach)
- Activity: Roosting or Feeding
- Accompanying flock size and species composition (estimates are fine)
- Color band scheme (the birds will have 4 bands, 1 metal band + 3 color bands). Please report as follows\*: (R=M/R; L=W/O Metal over Red on Right leg, White over Orange on Left leg). We used the following color bands: orange, light blue, black, white, red.
- Whether it has a radio telemetry tag (may be difficult to see)

\*It may be difficult to distinguish colors of all 3 color bands—if so, please record any colors you can or the fact that there was a color banded bird at a specific location. Our partners in Canada and Maine are color marking semipalmated sandpipers as well. Their birds will have a white or green leg flag. For white flags (Canada), please report Alpha-numeric codes on the flag. For green flags (Maine), please report accompanying color bands.



These radio transmitters are called nanotags because they are very small (10mm long and weigh 0.3 grams)



Nanotags are glued to the back (under the feathers), with only the antenna showing.

This bird is color banded R=M/R; L=B/O. Right leg: metal over red; Left leg: black over orange (black is not visible in photo)

Four radio telemetry receiver towers on the Refuge record the locations of tagged birds 24/7. These are part of a larger network of towers located throughout the Gulf of Maine (Canada to Cape Cod), each able to unique identify birds tagged by any collaborating researcher.

The equipment on these towers is very sensitive.

**PLEASE KEEP AWAY FROM THE TOWERS.**

