



The Mighty Red Knot

By Taylor Bennett

The Gulf Coast Bird Observatory monitors shorebird species throughout the year. In the winter, GCBO monitors Red Knots in areas of the Upper Texas Coast. During non-breeding shorebird surveys, they have been observed probing along the shores of Follet's Island and Matagorda Beach.

Monitoring this species is vital, as the Red Knot is listed as "Threatened" by the International Union for Conservation of Nature. This status is due to the species' lack of food resources and vulnerability to disturbance by people, vehicles, and dogs. Red Knots are also being impacted by climate change and sea level rise.

Red Knots are about the same size as a robin and have a plump football-shaped body with greenish to black legs. They get their name from the bright, rusty red feathers that appear on their bellies during breeding season. During the winter, that bright red and becomes a dullish gray with streaks and spots along the neck and sides. This makes them harder to distinguish from other shorebirds.

Red Knots are often seen feeding along the shores of beaches in large flocks. They are equipped with a slightly drooped medium-length black bill that they use to probe for prey in the wet sand. Their bills that have special sensory organs called Herbst corpuscles that help them detect differences in pressure, a skill that perfect for finding clams buried in the sand.

During the winter, Red Knots feed on clams, mussels, small crabs, marine worms, and snails. A specialized organ in their stomach called a gizzard breaks down the shells so that they can be digested. Red Knots have the largest gizzard of any shorebird in comparison to their body mass. Studies have shown that their gizzard can even change size depending on the food that they eat.

During the spring, Red Knots mainly eat horseshoe crab eggs along Delaware Bay. In fact, their migration is timed precisely so that they arrive just when the horseshoe crabs are about to spawn. Due to overharvesting of horseshoe crabs, there have been regulations recently put into place along the Atlantic coast for the purpose of providing the Red Knots with their vital food source.

Red Knots are also amazing migrators. Studies have shown that they have the ability to fly more than 9,300 miles during both the spring and fall. This makes them the longest distance migrants in the whole animal kingdom. They breed in the arctic tundra of Canada and then migrate south to as far as the tip of South America. Along the way, they may stopover the Caribbean, the Southeastern and Gulf Coasts of the United States, and Mexico.

How do we know which birds go where? Researchers place bands and flags on the legs of birds. These individualized tags help scientists across the country monitor what specific birds are doing and where they are doing it. Researchers at Gulf Coast Bird Observatory have observed two green-flagged Red Knots so far this year. One was found on Follet's Island and the other was observed along Matagorda Beach

With a wingspan of only 20 inches, Red-Knots can complete non-stop flights of 1,500 miles or more. Once they arrive at their stopover sites, they are often depleted of energy and need to rebuild that energy back up. So if you ever see a Red Knot on the beach, please be kind and give them their space, they deserve it!

If you happen to see a flagged Red Knot, please take a picture and report it to bandedbirds.org.

Photo: Banded Red Knot found on Follet's Island.