

Hope has returned to Virginia

13 April 2011, By Joseph McClain



Hope models her transmitter moments before her release in spring 2009. The solar-powered unit weighs just a bit over 9 grams and has worked for nearly two years, tracking the bird's migration over thousands of miles. Credit: Barry Truitt, The Nature Conservancy

Hope has returned to Virginia -- and scientists are amazed.

Hope is a whimbrel, a species of shorebird known for its long migrations. She was captured on May 19, 2009 on the Eastern Shore and fitted with a solar transmitter by scientists from the Center for [Conservation Biology](#).

Since that day nearly two years ago, scientists have been able to follow Hope's migrations from her breeding grounds on the upper Mackenzie River near the Arctic Ocean to her Caribbean wintering spot on St. Croix, in the U.S. Virgin Islands.

On Friday, April 8, Hope landed in a marsh off Box Tree Creek in Northampton County, after a 75-hour flight from St. Croix. The Eastern Shore marsh is a staging ground, explained Bryan Watts, director of the Center for Conservation Biology. Hope will feed on the abundant fiddler crabs and recharge for the next phase of her Arctic-bound migration—a 3,200-mile stretch that she may take on nonstop. Her first leg, a 1,850-mile nonstop trip from St. Croix, was a noteworthy feat of navigation.

"We're just amazed at how precise that bird is,"

said Bryan Watts, director of the Center for Conservation Biology. "If you look at the track, she went almost straight north, way out over the ocean, and then got even with Virginia and cut a 90-degree westbound turn to come even with the shore."

Hope was the first of her species to be tracked over a full year's migration and is the first to be tracked over successive years. Watts said the maps of Hope's seasonal travels has contributed an immense amount to scientific understanding of migratory shorebirds.

Watts points out that Hope (and probably other whimbrels in her cohort) keeps migrating between three relatively small-but widely separated-areas. She has always wintered at Great Pond on St. Croix and she has always used the same small area on the Mackenzie River as breeding grounds. In Virginia, Hope has staged at the same small area on Box Tree Creek for four of her last five migrations, including her southbound flight last year.

"One of the exceptional things is how site-specific this bird has been," Watts said. "We've had suspicions of this, but now we're proving that specific individuals are using specific neighborhoods-and doing it repeatedly."

He explained that the site-specific nature of the whimbrels suggest that conservation of these cohorts of birds depends on local preservation. Hope's life cycle centers around a total land mass of probably a few hundred acres, but each of the three locations are vital-and possibly irreplaceable.

"It might be that entire populations depend on relatively few sites. So if you have a major impact to one of those, it could be more devastating than we realize. If Great Pond were to be eliminated, the birds that winter there would have to go elsewhere, or maybe they'd die out," Watts explained.

"Connecting the dots throughout an entire life cycle is something that's new and just coming over the horizon in the study of migratory birds—the

connectivity of places that are separated by such great distances."

Watts said Hope will likely be on her Eastern Shore staging grounds for a few weeks. CCB researchers may join researchers from The Nature Conservancy at Box Tree Creek to try to get a sighting of Hope.

The Center for Conservation Biology is a collaborative unit of the College of William & Mary and Virginia Commonwealth University.

Provided by The College of William & Mary
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