

Vt. Biologists Crow As They Again Meet Their Thrush - This Time In The Tropics

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On a remote, forested ridge in the Dominican Republic, the miracle appeared at dawn, when the birds of the tropics come to life.

Kent McFarland, a biologist from Vermont, hit the play button on his Radio Shack tape recorder and crouched in the undergrowth.

A plaintive "*pweeur*" whistled from the tape in regular intervals. "*Pweeur.....pweeur.....pweeur.*"

From the humid dawn darkness came a reply from the real thing: "*Pweeur.....pweeur.*" It then barked a couple agitated, trilly growls. Finally, it darted from the understory and landed headfirst in a rectangular net so fine it hangs like mist in the forest.

McFarland hurried to the net and aimed the beam of his headlamp. A brown-olive bird with a spotted breast hung motionless in the mesh. It was a Bicknell's thrush, one of the rarest breeding songbirds of the Northeast. But it wasn't just any Bicknell's thrush. It was a Vermonter.

The Bicknell's thrush McFarland netted in an isolated tropical forest on Dec. 2 turned out to be the very same individual his team of ornithologists had caught and identified six months earlier on the slopes of Mt. Mansfield.

That a tiny songbird can be caught on Vermont's highest peak, released back into the wild, and then depart in the fall, migrating along the Atlantic coast and out into the Caribbean Basin, only to be recaptured later in the Dominican Republic by the same researchers, is so implausible that McFarland can hardly believe it happened.

"We're still in a state of shock," said McFarland, a biologist at the Vermont Institute of Natural Science in Woodstock. "And what's even more remarkable is that it was the first day we were down there and it was the first bird I caught."

McFarland's bird represents not only a legendary encounter between man and thrush but also an important discovery for ornithologists working to protect a rare species that sings like a flute. It shows the Bicknell's thrush has a good thing going: It spends spring and summer almost exclusively in mountain-top stands of spruce and fir, and it passes the winters on Caribbean islands.

Ornithologists know the thrush's breeding territory extends from New York's Catskill Mountains northward toward the Gulf of St. Lawrence and eastward into Maine and Cape Breton Island, Nova Scotia: But the exact winter range is, more of a mystery. It is believed to include the Dominican Republic, Haiti, Puerto Rico, Cuba and Jamaica.

"VINS's discovery of a Vermont breeding Bicknell's thrush in the Dominican Republic's remote Bahrucó National Park", said Chris Rimmer, the organization's research director, is a "direct biological link between the mountains of Vermont and those of the Dominican Republic." And it is

a link that will help ornithologists develop strategies for protecting not only the thrush but other mountaintop birds of the Northeast.

On breeding grounds in the north, biologists say, ski area development, new communications towers and, increasingly, wind Power development are the thrush's greatest threats. Evidence also suggests that acid rain and global climate change can damage the health of these forests over the long term and threaten the birds' existence.

If the loon and its wail are symbols of a pristine northern pond, then the Bicknell's thrush and its elegant song embody sub-alpine forests - the stunted growths of balsam fir and red spruce that cover many of the high peaks in New York and northern New England.

"It's an indicator for the quality of our environment," McFarland said, explaining that high-elevation species are among the most sensitive to the threats of global warming and airborne pollutants.

"This bird is ranked by the U.S. Fish and Wildlife Service as the number one conservation priority for neotropical migrants in the Northeast. So it's one of those birds we're responsible for - basically us and some Caribbean islands."

Deforestation on those Caribbean islands is the greatest threat to the thrush, as it is to most other birds in the New World tropics. While the Dominican Republic may represent a winter stronghold for the Bicknell's thrush, McFarland said, much of the habitat across the border in Haiti is gone.

Thrush No. 1231-40012

So how did McFarland know that the Bicknell's thrush in his net that morning in the Dominican Republic was the very same thrush his team had identified on Mt. Mansfield on June 16, 1995?

Even to the experts, all Bicknell's thrushes look alike. Shaped like an American robin, but about three inches shorter from bill to tail, the Bicknell's thrush (*Catharus bicknelli*) is olive-brown above and pale below, with bold, dark spots on the breast. Its song, a thin, flute-like spiral, sounds a bit like that of its cousin the hermit thrush, Vermont's state bird.

Bicknell's thrushes typically arrive in New England just before the snow melts in late May. Males establish territory and attract mates by singing into June. In a nest of twigs and fresh moss, females typically lay three or four bluish eggs lightly speckled in brown.

The thrush in McFarland's net probably left Mt. Mansfield in late September or early October, migrating along the Atlantic coast and striking out over the ocean from the Carolinas or Florida. And as it headed off toward the Dominican Republic, the thrush wore on its right leg an identification bracelet from Vermont.

It's called bird banding. When ornithologists catch a bird in their nets, they record its age, wing length, sex, fat content, and they clamp on its leg a tiny silver bracelet with a unique U.S. Fish and Wildlife Service identification number, essentially an avian Social Security number. So if the bird is ever recaptured, researchers can know where it's been, or at least where it was initially banded.

VINS biologists have banded 148 individual Bicknell's thrushes across the Northeast since research began in 1992, one of which was a male, born in the spring of 1994. Number 1231-40012.

Once a bird is captured and banded, the best odds are that it will be captured in the same spot. That's because birds are territorial during the breeding season - they stay put. But once a banded bird leaves its breeding range, a researcher almost never expects to hear from it again, unless it returns next spring to the same site, as songbirds often do.

Very rarely, bird banders get news that one of their birds hit a window or was dragged in by a cat somewhere along the migratory route. A North American researcher banding birds on breeding grounds can never know exactly where their subjects spend winters because the territory is so vast and remote.

That's what makes McFarland's discovery remarkable. Those 148 banded Bicknell's thrushes could have been anywhere among suitable habitat in the Dominican Republic and nearby islands. To recover or even catch a glimpse of a banded bird on its wintering grounds is rare enough (VINS and other researchers say it has happened only two other times). But for researchers to band a bird on its breeding grounds and then recapture it again in its winter habitat has probably never happened. It's almost as if someone tossed a message in a bottle into the ocean and I found it later on some remote island.

VINS researchers knew Bicknell's thrushes hung out in the Dominican Republic. But to venture out into a single tract of forest and recapture one of the 148 banded birds there, out of a world population estimated to be between 10,000 and 20,000 pairs, has bird researchers fluttering.

"It's unbelievable. It's totally unprecedented," said Peter Marra, an ornithologist at Dartmouth College, whose team has banded thousands of songbirds and had only one of them recovered. It was a black and white warbler that hit a building while migrating through the Boston area.

The news from the Dominican Republic was especially pleasing to Dan Lambert, a VINS field biologist who first caught and banded the bird on Mt. Mansfield last June. "To catch that bird once is a feat," he said. "But to catch it twice, 2,000 miles apart is really quite spectacular." "This is like a bird bander's dream come true," said McFarland.

"It would be amazing enough if somebody else captured the bird down there. But for us to mark the bird on the breeding ground and in the same year march down to the wintering ground and recapture it - I couldn't even begin to calculate the odds." Said Rimmer, "I'm still shaking my head in disbelief."