Tahoe scientists studying secret travels of thrush

A rare Swainson’s thrush before being outfitted with a tracking device. Photo/TINS

By Jim Sloan

In 2009, Will Richardson was doing some summertime bird-monitoring research in aspen stands in Ward Canyon near Lake Tahoe when he heard an unexpected birdsong.

It was a high, pleasing, spiraling song, like a flute, and he recognized it right away as the song of a Swainson’s thrush, a bird that had all but disappeared from Tahoe and the Sierra south of Yuba Pass.

He heard one bird singing and then he heard others responding. To his astonishment, he realized that there was a small colony

of the elusive bird.

“It floored me,” said Richardson, executive director of Tahoe Institute for Natural Science. “I always expected to see them and always wondered why they were never there. So, it was pretty thrilling to find a pocket of survivors.”

Richardson had studied thrushes in Vermont and Canada years before and had earned his doctorate in ecology, evolution and conservation biology from the UNR by studying bird communities in Sierra aspen habitats. He knew that Swainson’s thrushes had been common at Tahoe years ago and that their disappearance from Tahoe and other areas of the Sierra was considered “one of the unresolved mysteries of Sierra Nevada ornithology.”

He decided to investigate. He wanted to find out if the birds were declining, stabilizing, or rebounding in the Tahoe region.

He knew that Tahoe had plenty of habitat to attract the bird, which favors aspen forests and dense, riparian thickets. So, to explain its small numbers, he reasoned that he would need to learn if the bird’s wintertime habitat had changed in a way that affected its resiliency. That meant capturing birds twice.

First he had to catch some and attach a tiny tracking device. Then, the next year, he had to catch the banded birds a second time to retrieve the data. Not a simple proposition.

Secret to scientific success: Know how to pick a fight

To capture Swainson's thrushes for his study, Will Richardson of the Tahoe Institute of Natural Science said he "basically picks a fight with the bird."

He sets up nets in a bird's known territory and plants decoy thrush in a tree. Then he sneaks off a short distance and plays a sound of the Swainson's thrush's spiraling woodwind song. Other thrushes, intent on protecting their territory, swoop in to drive off the invaders. Some get caught in the net.

Richardson removes them, takes measurements, attaches leg bands and the tracking device, and releases them. The next summer he plays the same trick and tries to recapture the same birds.

"You basically need to catch the same bird twice, and that's not easy when you consider how few birds there are to begin with," Richardson said.

While he's not sharing the location of his Ward Canyon

site, Richardson said birdwatchers can find Swainson's thrushes along Strawberry Creek just below the Lover's Leap trailhead (off Highway 50 west of Strawberry Lodge), along General Creek at Sugar Pine Point State Park, and along the Upper Truckee River near Hawley Grade south of Christmas Valley.

Swainson's thrushes are more likely to be heard than seen. Their song has a "ventriloquial quality" that makes them difficult to track. They also fly around quickly, and sometimes they use a quiet song that sounds like it's farther away than it actually is. – *Jim Sloan*

Although Swainson's thrush has an estimated global breeding population of 100 million birds, the species has lost 38 percent of its numbers since 1966, according to the Cornell Lab of Ornithology.

The bird breeds in the north and migrates in fall to Mexico, Central America, and northern South

America. Birds from the majority of the United States and Canada winter in South America while the

Pacific Coast population migrates to Mexico and Central America.

According to researchers at Cornell, Swainson's thrush is

particularly sensitive to such breeding habitat problems as grazing, development, human activity, and nonnative invasive plants.

Migrating Swainson's thrushes are killed – in greater numbers than any other bird species – by collisions with windows, radio and cellphone towers, and tall buildings.

In 2014 and 2015, with financial support from the Sierra Foothill and Sacramento Audubon Society chapters, TINS and colleagues at the Point Reyes Bird Observatory captured more than three dozen thrushes from Ward Canyon, Strawberry Creek, and Plumas County locations and equipped them with one of two tracking devices.

In subsequent summers, the team recaptured 15 of the 46 originally tagged birds. What they have learned has surprised them.

The Tahoe birds from Ward Canyon and Strawberry Creek were not migrating to Mexico, as Richardson

had theorized, but were joining eastern birds for a trip to northern South America. The Plumas County birds, meanwhile, were "bopping all over the place," with some making their way to Central America.

One Swainson's thrush from the Quincy area spent the winter in balmy Panama.

The conclusion? It's too early for solid theories yet, Richardson said. His colleagues are still breaking down the data collected from the tracking devices, and another colleague from UC Santa Cruz is doing genetic tests on feathers from the captured birds.

Richardson hopes that additional data will shed some light on the habits of the Swainson's thrushes spending their summers at Tahoe. He also plans to monitor the thrushes' nests to

determine how many young they produce at places like Ward Canyon. It will be a few more years before any solid theories emerge.

In the meantime, he’s encouraged. “It’s great to know these birds are coming back to the same location each year,” he said. “They are producing young here, and that’s also encouraging. We know babies are produced, but whether there are enough young to sustain the population still isn’t clear.”

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