



Southward Bound

Tagging Migrants at the Idaho Bird Observatory

Story and Photos by Dale Towell

The full implications of what I had witnessed for the past two days didn't strike me until midnight on this clear October night, as I gazed over the Boise Valley from the top of Lucky Peak.

Far below, thousands of lights glittered. Stretching into the distance, vast expanses appeared empty, devoid of light

and detail. I had watched and learned here as professors, students, and employees of Boise State University captured and banded birds at the Idaho Bird Observatory—birds that I knew were migrating southward—but it was not until now that I began to truly grasp the vast scale of that migration. In my mind's eye, I envisioned literally thousands of forest birds launching themselves from this place, on a journey of hundreds or thousands of miles southward to warmer climates.

My visit to the Idaho Bird Observatory had begun with the songbird banding crew. Morgan Parks, Jenna Raino, and Heidi Ware patiently patrolled vertical nets of fine mesh, catching songbirds as they flew between clumps of hilltop shrubbery. The nets form soft pockets for the birds, but the fibers entangle them even as they provide support and keep their tiny captives from struggling, which would expend precious energy needed for migration.

ABOVE: A metal identification band is placed on a Merlin falcon's leg.

The nets were visited every thirty minutes. Captured birds were gently extracted and restrained while each was outfitted with a leg band. Data were collected, too—gender, age, condition, and a host of measurements—the details of a bird's life which, when compiled for hundreds or thousands of birds, provide scientists with critical information about bird populations.

As each bird was processed (a task that requires only a few minutes), workers shared their expertise with visitors. On the day of my visit, other observers included hikers, retirees, and most notably, fourth- and fifth-grade students from Boise's Foothills School of Art and Sciences, who were visiting with their teachers. All were fascinated by the opportunity to see—and even touch—the tiny birds. Most of the students had never seen live songbirds so close. For many, the highlight of this field trip was an opportunity to hold one of the tiny creatures briefly before it flew into the surrounding forest.

I'm a biologist whose career has been spent working with big game animals, but I consider myself a birdwatcher of sorts. I was delighted by the chance to examine the tiny, jewel-like red feathers adorning a ruby-crowned kinglet, the brilliant yellows of the yellow-rumped warbler, and the sharp eye-bars of a white-crowned sparrow. All are common birds in Idaho, yet rarely do most of us have the opportunity to see them "up close and personal"—and until you do, you probably won't appreciate how incredibly tiny most of them are.

Greg Kaltenecker, director of the Idaho Bird Observatory and a professor



ABOVE: Morgan Parks carefully disentangles a Cassin's vireo from a mist net.

LEFT: A summary of birds captured to date is posted at the banding facility.

BELOW: Jethro Runco records data on a banded Northern saw-whet owl.

* LUCKY PEAK SONGBIRD	
BANDING TOTALS TO DATE	
JULY 16 - AUGUST 31	
Golden Warbler - 452	Audubon Warbler - 217
Audubon Warbler - 194	Yellow Warbler - 238
Dark-eyed Junco - 216	Chipping Sparrow - 182
Ruby-crowned Kinglet - 100	Spurred Towhee - 115
Western Tanager - 39	Warbling Vireo - 33
Least Flycatcher - 36	Oregon Junco - 32
Congaree Warbler - 30	Mountain Chickadee - 30
Cassins Vireo - 32	House Finch - 22
Black-headed Grosbeak - 5	Pink Siskin - 28
Black-headed Grosbeak - 12	Red-breasted Nuthatch - 16
Song Sparrow - 9	Collared Hummingbird - 15
Robin - 14	House Wren - 9
Red-eyed Vireo - 14	Song Sparrow - 8
Belted Kingfisher - 2	Brown Creeper - 2
Fox Sparrow - 5	Cassin's Finch - 9
Hermit Thrush - 2	California Quail - 5
Willow Warbler - 15	Townsend's Warbler - 5
American Redstart - 2	American Robin - 2
White-crowned Sparrow - 2	Western Flycatcher - 2
Stewart Sparrow - 1	Cedar Waxwing - 1
Unidentified Junco - 1	Least Flycatcher - 1
Western Wood Pewee - 1	Gray Flycatcher - 1
Brown-headed Gnatcatcher - 1	
TOTAL NEW SONGBIRDS	
CAPTURED IN JULY & AUGUST:	
2475	



in Boise State University's raptor biology program, arrived in the afternoon with a group of graduate students. Raptors, or birds of prey, such as hawks and eagles, are of course much larger than songbirds, and capturing them requires much more effort. We all shared a cramped building near the raptor nets, which kept us out of view of the sharp-eyed hawks while we scanned the sky. Many raptors actively hunt other birds by day, so we enticed them with pigeons restrained in the mist nets that would entangle the raptors as they attempted to capture seemingly vulnerable prey.

I wondered what these hawks must think, diving through the air at fifty miles per hour or faster, intent on apparently helpless pigeons, only to become entangled in nearly invisible nets just a few feet from their targets. As we waited for the first captures of the afternoon, biologist Marta Curti of the Peregrine Fund and Ed Levine of Merlin Systems, a manufacturer of radio-monitoring equipment, gave the grad students virtually one-on-one instruction on the ways in which tiny radio transmitters affixed to the birds can provide biologists with much-needed details about migration and bird ecology.

Soon we had our first capture of the afternoon—a hungry Cooper's hawk. It was carefully disentangled from the mist net



and rushed into the blind. The students clustered around, learning how to restrain and hold the angry bird as it was banded and measurements were recorded. Tiny details were pointed out, such as how to identify the replacement pattern of wing feathers, a clue to each bird's age. The students learned how to fit the hawk with a tiny radio-transmitter backpack so that the harness would not interfere with the bird's flight or other activities. After it was released and the instructors had departed, I talked with Greg while we wait-

ed for more hawks to arrive.

He had found this site nearly twenty years earlier, when he was a Boise State student. He pointed out that the top of Lucky Peak and other nearby peaks form an approximately fifty-mile-long apex where forest birds concentrate before launching themselves across the Snake River plain on their way south. The numbers of birds passing through are staggering. Over the course of eighteen capture seasons, not only have workers at the Idaho Bird Observatory captured and banded about a thou-

ABOVE: The star of the night's capture efforts, a Northern saw-whet owl, gazes at Idaho Bird Observatory visitors before being released.

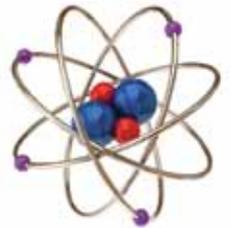
sand hawks annually, but volunteers watching from the top of Lucky Peak have typically counted six thousand to eight thousand migrating raptors between August 25 and October 31. Meanwhile, five thousand to six thousand songbirds of about five dozen species are captured and banded each year. The work goes on around the clock during the fall. There's even an owl-banding program between sunset and sunrise, in which two hundred to a thousand owls are captured and banded each season.

Greg pointed out that the Idaho Bird Observatory is more than just an outdoor classroom that gives college students real-time, first-hand experience with capturing and banding birds and collecting critical scientific information. Another objective of the effort is to provide science education opportunities to all who are interested. Greg proudly pointed out that up to two thousand visitors drop by annually—a number that continues to grow as the program becomes better known.

The following evening, I joined members of Boise's Golden Eagle Audubon Society for a birding field trip with a focus on owl banding. Fourteen people showed up, including elementary students with their parents. We all brought headlamps or flashlights and camp chairs, and most brought snacks to last through the night. As darkness settled, veteran owl-catcher Jethro Runco opened up the nets and began playing a recorded owl call. He described the owl-banding program, which began in 1999, and related some of his experiences while tending the nets during the long night hours. Just as most of the songbirds captured during the day are forest birds that concentrate here before launching their



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southward flights across the Snake River plain, most of the owls captured at the Idaho Bird Observatory are forest owls, Jethro said. By far the most abundant of these is the tiny Northern saw-whet owl, which feeds on large insects and small rodents and birds. Less common is the flammulated owl, a tiny, reclusive bird that feeds almost entirely on insects, especially large moths.

When it was time to visit the nets, we followed Jethro in single file along the forest trail. A flammulated owl waited at the first net. Jethro carefully disentangled it and placed it in a soft, cloth bag. A saw-whet owl was next. Our third capture wasn't exactly welcome—a Northern flying squirrel had glided into a net and was thoroughly tangled in fabric.

Flying squirrels are not uncommon in Idaho forests, but they are rarely seen, because they are active only at night among the trees. They're especially unwelcome in mist nets, because they bite, sometimes leaving big holes in the nets, and in the fingers that disentangle them.

After the flying squirrel was freed, we returned to the banding station, where Jethro banded and measured each owl. As he worked, he told us about the birds' lifestyle. Carefully, he set each owl on the limb of a nearby tree. After its eyes readjusted to the darkness, it flew off. Despite banding owls every night, using the same nets in the same locations over the course of weeks, same-year recaptures are rare as the birds funnel south in their migration.

The next net run we made was when I gazed over the city of Boise far below, and finally began to understand the immensity of bird migration. With that vision came a more complete appreciation of the importance of facilities such as the Idaho Bird Observatory. ■

For driving directions and information about programs at the Idaho Bird Observatory, visit idahobirdobservatory.org. The songbird banding program extends from mid-July to mid-October; hawk banding from August 25 through the end of October; and owl banding from August 28 to the end of October. The road from pavement to the top of Lucky Peak is heavily rutted and makes for slow travel. A four-wheel-drive vehicle with good road clearance is highly recommended.

ABOVE: Fourth- and fifth-grade students watch intently as Morgan Parks tells them about songbirds.