Newsletter of the Klamath Bird Observatory Early Winter 2014

Note from the Executive Director

By John Alexander, Executive Director

♦ With stories from the field, this newsletter celebrates Klamath Bird Observatory's foundation, which is rooted in the study of Natural History and the art of Field Biology. As an Observatory we are an institution that supports observation based science. We prescribe intentioned observation and meticulous documentation of our human experiences in the natural world. Using explicit protocols and well-designed studies we document those experiences, collecting scientific information that we then use to inform and improve the way we as a society manage the ecosystems on which all of Earth's life depends.



In this Early Winter edition KBO staff reflect on their experiences from the field:

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President's Perch

By Harry Fuller, KBO Board President

During the field season, Klamath Bird Observatory field crews are daily in touch with the extraordinary. Have you ever held a Yellow Warbler in your hand? They weigh LESS than a music cd, yet they fly hundreds of miles twice each year on migration. Watching mist-netting work by the KBO staff and interns is inspiring, and aweinspiring. Science and wonder come in a potent mix you will not forget.

One spring I was teaching a birding class for adults and took some of my students to KBO's long -term monitoring station at the Willow Wind Community Learning Center. It was early spring and Robert Frey, KBO Biologist and Banding Project Leader, was there with a team of bird banding student volunteer interns, catching migrant and resident birds. First there was a Yellow Warbler. Then the local Song Sparrow, often recaptured due to its year-round residency. There was also a tricky Empidonax flycatcher. Bob and his team made numerous exact caliper measurements, checking the ratio of wing feathers, tail feathers, and size of beak. In the end, they calculated it was a Hammond's Flycatcher. They banded it and off it went, possibly wondering what all the fuss was about.

with several birds in the soft cloth bags. Two of the bags appeared to have birds that were larger than what is typically captured in



Robert Frey holds the territorial Acorn Woodpecker

the station's mist nets. They had netted an Acorn and its cousin, a Lewis's Woodpecker, a rare capture and a first for Bob Frey. The Acorn Woodpecker is a common resident where there are oak forests in Jackson County, whereas Lewis's Woodpecker is a wintering species in the county. They had been found in a net almost side by side. After examination Bob made the following conclusion: the male Acorn was an adult in full breeding condition and thus at the peak of his territorial ardor. The Lewis's was likely just passing by not realizing he was trespassing. The Acorn had flown in hot and agitated pursuit. Neither had paid much attention and flew much lower than is usual for either species, right into a net. I never expected to see a Lewis's Woodpecker being held just two feet from my camera.

Every bird captured as a part of our long-term monitoring has contributed to what we understand about range, weight, feather condition, migration patterns, population change, and even woodpecker territoriality. This information is invaluable to resource and land managers, especially as climate change proceeds.

Just before we left, one of the interns returned

Determining Winter Habitat Use of Migratory and Resident Birds in Western Mexico

By John Alexander, Executive Director

This past winter I had the great pleasure to work with San Pancho Bird Observatory's Luis Morales and Erik Peñaloza, as well as Greg Butcher from the US Forest Service, to develop and test a newly developing field survey methodology. What a thrill– during just one January morning we encountered many of the forest birds that we study during the breeding season in the Pacific Northwest (e.g., Pacific-slope Flycatchers, Hermit Warblers, Black-throated Gray Warblers, Warbling Vireos), along with Mexican residents (e.g., Rufous-bellied Chachalaca, Transvolcanic Jay, Mountain Trogon, Painted Whitestart), all using the pine and oak forests that occur in the western Mexican highlands.

Many migratory birds that breed in the forests of the Pacific Northwest migrate south to winter in Mexico and Central America, where many highly threatened endemic resident species live year-round. While we know that the ranges of these migratory and resident birds overlap during the winter months, little is known about their overlapping habitat needs. To learn more, Klamath Bird Observatory is participating in a collaboration with San Pancho Bird Observatory, the Western Hummingbird Partnership, and the US Forest Service International Programs to conduct field surveys designed to learn more about wintering bird habitat use along an elevation gradient, from the coast to the highlands of western Mexico.

The field study has been designed to test survey methods, and to collect baseline data about habitat use of both resident and migratory birds

during the winter months. Surveys are conducted along routes of point count stations established...

Story continued on page 8

Getting to Know the Black-backed Woodpecker

By Kate Halstead, Biologist

♦ I caught my first glimpse of a pair of Black-backed Woodpeckers early on a cold, damp morning in a dense conifer forest near Upper Klamath Lake in the Oregon Cascades. After drumming briefly on a dead ponderosa pine, they flew silently over my head. I saw only their silhouettes as I squinted into the sunrise, but the hair rising on the back of my neck told me that this was my bird. I was there, in the field, to study this uncommon and enigmatic woodpecker, known to be highly dependent on recently burned forests. It is currently being considered for listing under the Endangered Species Act.

During this past 2014 field season, Klamath Bird Observatory, in collaboration with the National Council for Air and Stream Improvement and other partners, conducted surveys to collect more information about Black-backed Woodpecker use of unburned forests in Oregon. After that first ghostly sighting, they regularly came within arm's reach responding to the audio devices we were using to broadcast recordings of their calls and drumming,



An endemic bird is a native species restricted to a small geographic area

Black-backed Woodpecker © Jim Livaudais

which draw them in. I quickly discovered that this "mysterious" bird was actually a charismatic little clown. Throughout the summer, the crew and I witnessed them gently courting each other, boldly chasing rivals, defending territories with fearsome displays of wing-shaking and "scream-rattle-snarl" vocalizations, and escorting their newly fledged young around the forest to forage on beetle larvae.

As a field biologist, I am always grateful for new opportunities to study interesting species and their native habitats. I am confident that this study is providing novel information to help us to untangle the ecological puzzle of the Black-backed Woodpecker that will help advance forest conservation.

Insect Collecting at Oregon Caves

By Sarah Rockwell, Research Biologist

♦ I had a great field season this year, with the chance to work on several different Klamath Bird Observatory research projects, including something completely new to me: insect sampling. Insects are a primary food source for many bird species, and thus are often studied in bird research. We worked with Oregon Caves National Monument, the National Park Service's Inventory and Monitoring Program, and the U.S. Geologic Survey to start a long-term study of bird and insect communities, recording baseline data in old-growth forests, and comparing areas with tree gaps to those with closed canopies.



Oregon Caves National Monument is one of six national and state parks where KBO is conducting long-term research on forest songbirds in partnership with the National Park Service.

After receiving the specs and equipment, Ellie Armstrong, Trinity River Crew Leader, and I set out into the field on a June adventure to build and set various insect sampling traps. On a steep hillside with towering conifers we set up six Malaise traps, which look like mesh tents, and 18 flight-intercept traps, which are plastic tubs with vertical glass surfaces inside. The trap locations were selected ahead of time, using vegetation maps, so our first challenge was finding the trap sites with GPS units. Off-trail terrain at Oregon Caves is extremely steep and criss-crossed with ravines and huge fallen logs. It was quite a challenge to pack in to the trap sites with the tents, tubs, glass panes, and gallons of insect collection fluid. During the long field day we both suffered a few undignified falls while scrambling on the uneven ground. It was difficult work, but what a gorgeous forest– so many amazingly huge Douglas Firs!

I returned to the field sites several more times during the past summer

to collect insects and do point count breeding bird surveys, collecting data on the many species that prefer mature conifer forests. One morning I was especially thrilled to see a male Sooty Grouse displaying on a log.

With another field season wrapped up, it is fun to reflect on the excitement, challenges, and beautiful wonder offered by a career in field biology. Now, this winter I am working with our data to produce scientific results that will enhance bird conservation and inform more sustainable natural resource management.

The Point Count

By Jaime Stephens, Science Director

Point counting is a common field-based method used for surveying songbirds. KBO biologists complete point count surveys at over 150 study sites each spring. At each study site, we count birds at 12 different points in a single morning, hence the name of the methodology— "point count." At each point, a biologist records all birds that they detect during a five-minute survey period. This might sound like a simple task, but it is quite challenging. Biologists must be able to identify all species by sight and sound; around 90% of birds are detected by sound alone. You may be surprised to learn that identifying the birds is the easy part of the survey. Sometimes there are a dozen individuals singing at the onset of the survey period and the biologist must rapidly transfer this information to their data form, recording species and noting how far away each individual is. Because each bird must only be counted once, the biologist must create a mental map of each bird they detect in order to not double-count the same individuals. They also need to understand how a bird might move around during the five-minute period in order to determine whether a bird in a slightly different location is a new individual or one that has already been counted. This requires intense focus; many biologists describe the act of point counting as a state of Zen.

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My First Visit to a Banding Station

By Marcella Sciotto, Assistant Director

♦ The air was crisp. It was early; fog clinging close to the ground, covering it with its quiet blanket. We follow curves in the road out into the wild. Past abandoned gas stations, National Forest signs; I see the great-wide beauty of Oregon. I am headed into the field, to a banding station for the first time. It's not that I haven't noticed birds. I hear their chirping and whistles. I see them reappear after the quiet winter. I have noticed them but didn't see, until I found myself working at Klamath Bird Observatory. Normally I sit behind a desk, lending my skill-set that has little to do with a Swainson's Thrush. I make things work, grease wheels, cross T's, so our talented scientists can do their field-based work.

At the banding station, hands work slow, rhythmically, in patterns repeated. Deftness, grace, hushed voices and quiet pencils collect data. Somehow holding the bird in a grasp that is at once open and closed. Carefully unfolding wings, counting; is this a fledgling or a young adult back for its first breeding season? A tiny Yellow Warbler is held to my ear. I feel a warm, feathered breast. I hear a hum, a heart beating so fast and faint that it sings. I hold the bird, so bright I'm stunned. This vibrant shade of yellow exists outside of palm trees, outside of a cage? I kneel down, knees dampen quickly on wet, cool earth. With a silent thought of gratitude for seeing the world this close, I release the bird back to the wild.

My Experience as a KBO Intern

By Kaitlin Clark, Summer 2014 Bird Banding Intern and Winter Outreach and Science Communications Intern

I drove 42 hours from Michigan to live and work at Klamath Bird Observatory's Upper Klamath Field Station on the Klamath National Wildlife Refuge Complex. I stood outside at night, overwhelmed by the

cacophony. I filtered individual species, including Sora, blackbirds, deafening Pacific Chorus Frogs, and the occasional splash of a swimming Black Bear– and then there was harmony. The notes that floated uphill from our banding station were beautiful– I was listening to the orchestra of life. I could stand out there for hours, smiling and swaying as the music of the marsh filled my heart with love and my being with joy.

This summer I felt incredibly fortunate to experience great beauty and adventure every day while learning to study, in the field, the tiny feathered travelers of the world- migratory songbirds. I know that their ability to successfully complete their migratory journeys, which requires a hemisphere of intact ecosystems, is directly tied to my ability for a successful and healthy life's journey.

During my internship, working in the field with KBO, I learned how to solve problems, communicate openly, and be efficient (if you're halfway through something, finish it). Our bird banding captain and trainer extraordinaire,

Bob Frey, runs a tight ship and the season was smooth sailing; all six-month banding interns received bander and trainer level certifications from the North American Banding Council. I am astounded by how much I have learned. One lesson that stuck out– we hold individual birds in our hands, and in that short time we are responsible for a life. The lesson– all life requires utmost respect.

The Pacific Northwest is dreamier than I had dreamed it would be. With a six-month field season under my belt, and a new found inspiration, I am now eagerly working for the winter helping KBO in the office, where I am educating the public, writing, managing media, and learning how a bird observatory functions. I feel lucky to live in Ashland, Oregon and experience my first winter in the mountains. Then, come spring, I will go back out into the field, back to the Upper Klamath Field Station, to stand outside at night and once again be a part of the orchestra of life, as a grateful observer and participant.



Kaitlin Clark holds a beautiful Bullock's Oriole captured at one of our banding stations along the Klamath River.

The Klamath Bird KBO's Intern Scientists

By Robert Frey, Biologist

♦ Finding a Black Jelly Fungus in the rich forests of Shenandoah National Park, a new species for the Park's list ... observing the writhing mass of cottonmouth snakes mating ... applying a band on a bird for the first time— these are just a few of the eye-opening experiences a biology professor at a small community college gave me years ago. That professor challenged me to really see nature's connections, to look at, under, and over the Earth, water, and sky. I was inspired to trust an

educated instinct and to go ahead and make my passion for nature my life's work. When one is lucky, someone makes this kind of special impact on the direction they choose on their life's journey.

Through the internships Klamath Bird Observatory offers young academics and professionals, we are

Nest Searching Along the Trinity River

By Ellie Armstrong, Trinity River Field Crew Leader

On many spring mornings over the past two \diamond years I have found myself along the Trinity River, silently crouching behind a blackberry or willow, waiting for a songbird to return to its nest. Depending on a variety of factors, including the individual bird and how conspicuous it may act, the time it takes a field biologist to locate a nest can vary drastically. Occasionally nests are located in minutes. A diligent parent will fly directly to the nest, carrying a piece of nesting material for construction, or an insect for growing nestlings. However, more often than not, finding the exact location of a nest requires lots of time and patience, and careful attention to various observational clues from the nesting birds.

Song Sparrows have specific calls they make only when in close proximity to the nest. Yellow Warbler females chip from the nest in response to the male singing. Once the nest is located I count the number of eggs or take note of the characteristics we use to age nestlings, and then I leave the vicinity as quickly as possible.

2014 Bird Banding Crew

often in the position to instill an ethos of excellent science and a passion for the fieldbased work that we do. Following many of our interns as they pursue careers in field biology, we've learned that they look back at their KBO experience as one which helped prepare them for the challenges of academic and professional careers in the natural sciences. Now, with a recent grant from the

National Fish and Wildlife Foundation's Developing the Next Generation of Conservationists Program, we will continue our successful training program. Our goal is to be part of a positive change in the world through good science, education, and cooperation. We see such change in the intern scientists that we work with as we train them in the art of field-based science.

Monitoring nests helps Klamath Bird Observatory biologists gauge the health of riparian habitats along the Trinity River and provide information used to continuously improve Trinity River Restoration Program efforts. For me, nest searching is a highly rewarding experience. It allows me to study speciesspecific behavior as I become deeply familiar with individual birds and the handful of field sites I revisit several times each week. I eagerly await returning to the field this coming spring for another season of nest searching on the Trinity River.



Lazuli Bunting Nest © Ian Ausprey

Like most thrushes, Varied Thrush feeds primarily on

insects and arthropods in the summer. They collect

these tasty morsels by kicking back leaf litter with

or by shaking leaves back and forth in their bill.

Their diet shifts to berries and seeds in the winter

their long, powerful legs to see what lies underneath,

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Bird Bio: Varied Thrush

By Kaitlin Clark, Summer 2014 Bird Banding Intern and Winter Outreach and Science Communications Intern

♦ The Varied Thrush (Ixoreus naevius) the iconic cover-bird of Sibley's Field Guide to Birds of Western North America, is a familiar and captivating forest songbird. At first they appear robin-like, though shier, stockier, and shorter-tailed. They can be distinguished from other thrushes by their striking slate-gray back and wings; orange breast, eye line, and wing bars (and orange edging on primaries, primary coverts, and greater coverts); and blackish head and breast band. Males and females can be distinguished by distinctness of the

breast band that is darker in males and overall color of upperparts and rectrices, which are slate-colored in males and brownishgray in females. Their eerie, musical trill, reminiscent of a drawnout referee's whistle, is a celebration of solitude in the dark, quiet, oldgrowth temperate rainforests of the Pacific Northwest.

The breeding range of Varied Thrush stretches

from Alaska south into the Pacific Northwest and Northern Rockies, where they are year round residents. Their overwintering range includes northern and coastal California, and reaches as far south as the Baja Peninsula.

Preferred breeding habitat types include mixed and evergreen humid forests, often dominated by Douglas Fir, Sitka Spruce, Coastal Redwood, and other members of Cupressaceae, the Cypress family of trees. They nest in the understories of these forests and can be seen foraging on the ground or just above in trees and shrubs. Nests are built ten feet off the ground, usually on or near small conifers, and are elaborately constructed with layers of evergreen twigs, a core of rotten wood and mud, and lined with fine grasses and moss. One to six brown-speckled, pale blue eggs are laid with up to two broods per season.

inge months and they can be found in a greater variety of habitats, including gardens, parks, riparian areas, and lakeshores. They feed on acorns and many native berries including salmonberry, blueberry, huckleberry, apples, salal, manzanita, and more. During the breeding season, these thrushes are solitary and highly territorial. In the winter months they form loose

solitary and highly territorial. In the winter months they form loose flocks and intermingle with American Robin. During migration they can be seen silently descending on a forest in flocks of hundreds.

The IUCN lists this songbird as a species of least concern, although populations have experienced an overall 62% decline since the



Varied Thrush © Jim Livaudais

1960's, which is concerning. The 2014 State of the Birds Report listed them as a Common Bird in Steep Decline. They are vulnerable to habitat loss, primarily through logging in the Pacific Northwest, predation by cats, and window and car strikes in urban areas. If you have a bird-safe backyard and would like to attract this colorful songbird, try setting up seed feeders and planting native fruiting shrubs. To find this bird in southern Oregon and northern California, search mature forests along the coast or further inland; Oregon Caves National Monument is a great place to start. During Fall migration they can be seen in large flocks along the Klamath and Rogue Rivers and Upper Klamath Lake.

References: George, T. L. 2000. Varied Thrush (*Ixoreus naevius*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/541

Join KBO on Upcoming Events

Talks and Walks: the first of a new community education series hosted by the Klamath Bird Observatory!

Join KBO Board President Harry Fuller in search of the great, gray, and ghostly owl of the north!

> Talk: Wed, February 4, 2015, 6:30pm - 8:00pm, KBO Headquarters: 320 Beach St, Ashland, OR 97520

Walk: February 7th all day field trip, times and location to be announced.

Join KBO hawk master and Board Member Emeritus Dick Ashford for two winter hawk and waterfowl identification classes and field trips to the Upper Klamath Basin.

> Talk: Wednesday, January 7th, 6:30 p.m. - 8:00 p.m. at KBO's Headquarters: 320 Beach St, Ashland, OR 97520.

Walk: Saturday, January 10th, 8am until 5:00 p.m., Klamath Wildlife Refuge

Talk: Wednesday, March 4th, 6:30 p.m. 8:30 p.m. at KBO's Headquarters, 320 Beach St, Ashland, OR 97520

Walk: Saturday, March 7th, 8am until 5:00 p.m., Klamath Wildlife Refuge

All Talk and Walk sessions limited to 14 participants and cost \$25.00 with proceeds supporting KBO's science and education programs. To reserve your space, please contact KBO Board Member Shannon Rio at shannonrio@aol.com.

Additional Talks by KBO Board Members:

KBO Board President Harry Fuller will be talking Great Gray Owl ecology, nesting habits in Oregon and California, and threats to this charismatic great, gray ghost of the north- a true specialty in the Pacific Northwest. Thursday, January 8th, 6:30-7:30 p.m. at Klamath Basin Audubon: Student Union, Oregon Institute of Technology, Klamath Falls, OR 97601.

Harry Fuller will also be giving a talk and field trip on winter birds and spring arrivals through Ashland Parks and Recreation. Thursday, February 26th, 6:00 – 7:00 p.m. at North Mountain Park, 620 N Mountain Ave, Ashland, OR 97520

May 29th—May 31st, 2015, Mountain Bird Festival

The first-ever Mountain Bird Festival was a huge success! Klamath Bird Observatory will once again host this community conservation event next spring. The festival includes bird walks, keynote presentations, venders, destination lunches, fine art, and more. Field trips led by professional bird guides and KBO staff to some of the

most biologically diverse areas in the world. Observe Calliope Hummingbird, White-headed Woodpecker, Mountain Quail. and nesting Great Gray Owls. Registration available online February 6th.



Festival Logo by Gary Bloomfield

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Please select one and make Observatory or KBO:	your tax-deductible donation payable to Klamath Bird	habitat conservation
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Return Service Requested

Determining Winter Habitat Use... continued from page 2

...between 0 and 1800 meters in elevation, each visited monthly. To start, we conduct a point count survey, quietly counting all birds seen and heard during a five minute count time. Then, we conduct a second 5-minute count, during which we play an audio recording of small owl calls, plus the vocalizations of agitated songbirds such as scolding chickadees. This second part of the survey is an important addition to the regular point count method commonly used during the breeding season, when birds are more vocal and easily detected. During the non-breeding season many species are much quieter and cryptic. However, when the audio lure is played, these species that might not be detected during the first part of the survey explode into view, curiously investigating the racket of owl and defensive bird vocalization's, greatly increasing the amount of data we are able to collect on the wintering occurrence of both migratory and resident birds.

KBO Staff

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