



Our mission is to conserve birds and their habitats.

Surveyors Tackle Rugged Terrain to Monitor Owls

By Teddy Parker-Renga, Communications Manager

Rocky Mountain Bird Observatory refined a study design for monitoring the Mexican Spotted Owl and tested it this summer on national forests in Arizona and New Mexico.

The Mexican Spotted Owl is one of three subspecies of spotted owl. In 1993, it was listed as threatened under the Endangered Species Act and monitoring the owl's population is an important component of its recovery plan.

The vast majority of Mexican Spotted Owls in Arizona and New Mexico live on national forests, so the U.S. Forest Service worked with RMBO biometrician Dr. Jennifer Blakesley to create a monitoring protocol for the owl. From April 1 to mid-July, Jennifer and RMBO technicians implemented this protocol, fanning out across all 11 forests in the two states in search of the owl.

Accessing the survey sites often involved hiking off-trail in rugged terrain and occasionally resulted in encounters with bears or mountain lions. "It was a pretty intensive field season, but overall I had an incredible time," said technician Danny Hofstadter. "I got to see some of the most remote and untouched parts of Arizona."



Mexican Spotted Owl by Quinn Burrell



See **OWLS** on page 10

Aerial Seeding Benefits Greater Sage-Grouse

By Noah Bates, Private Lands Range/
Wildlife Specialist

Standing in a hayfield, the sound of the plane is audible before it's in sight. Then it pops up over the ridge and speeds past to drop its payload, flying so low one can almost touch it.

This is what RMBO rangeland specialist Noah Bates and partners experienced last May during a project to aerial seed clover on 2,650 acres (364 linear miles) of private land

in Grand County, Colo., to benefit sage-grouse. The clover was seeded in irrigated grass hayfields adjacent to sagebrush steppe.

Grand County has an active ranching community, and a large percentage of sage-grouse brood-rearing habitat exists on private lands. Greater Sage-Grouse use the edges of these hayfields during mid- to late brood-rearing season when most herbaceous species in upland sagebrush have dried up or are dormant.

Grouse feed on the clover and also the insects the clover supports. In a dry year, these areas become especially critical habitat for sage-grouse.

Not only will this project increase forage abundance for grouse species, including Greater, Dusky and Sharp-tailed, it will enhance soil health, improve forage quality for livestock and big game, support

See **SAGE-GROUSE** on page 10

Wing Ding: Have a Brew for the Birds! • Oct. 7 • Odell Brewing, Fort Collins, CO • See page 3.

From the Director: Numbers Show Impact on People, Birds, Land

This issue of *The Primary Source* is full of stories showing how we are achieving our mission of bird and habitat conservation by connecting people, birds and the land.

Stories like these, which I love, are one way we gauge our success as an organization. We also track certain metrics, and I wanted to share a few statistics with you from the year that show the outcomes of our work and your support.

200,000 acres: RMBO's Stewardship team enhanced more than 200,000 acres of land in Colorado, Wyoming and Nebraska from July 2013 to June 2014, shattering the team's previous record of 160,000 acres in a year.

These preliminary numbers indicate



the big impact we're achieving on the ground, as habitat loss and degradation are leading causes of bird population declines. These are acres of prairie, shrublands and wetlands enhanced for the benefit of songbirds, grouse, waterbirds and other wildlife, as well as the landowners who partner with us and steward these lands.

1,527 surveys: During the spring and summer field season, RMBO and partners completed 1,527 bird surveys across 12 states in the western U.S. using the Integrated Monitoring in Bird Conservation Regions design. This monitoring effort, coordinated by RMBO, remains one of the largest of its kind in North America and ensures RMBO and partners are keeping our finger on the pulse of bird populations.

139 campers: RMBO connected 139 kids with nature this summer through camps, which is more than double our reach just two years ago. We offered a new camp for toddlers at our Environmental Learning Center and a leadership program for teens and pre-teens to share their passion for birds and nature with younger campers.

7 sparrows: During our second year of studying the winter survival of Baird's and Grasshopper Sparrows on their wintering grounds in Chihuahua, Mexico, seven sparrows were killed by predators, or 9.5% of birds we tracked using radio-telemetry at that study site. Just a year ago, 33 sparrows were killed by predators at the same site in Chihuahua, or 33% of radio-tagged birds.

These observations suggest there are big differences in survival between years, highlighting the importance of multi-year investigations like this one.

Support Our Latest Bird Guide

Bird guides are an excellent outreach tool to get people interested in the birds of their region.

After years of reaching out to folks in Colorado, we recognized a need for a guide to backyard birds of the Front Range. This guide will help us better connect Coloradans to the birds that live in their yards, parks and communities and inspire them to conserve our feathered friends.

We've secured initial funding and the guide is now in production, but we could use your help! To contribute to the guide, contact me at tammy.vercauteren@rmbo.org, or call 970-482-1707 ext. 16.

Fall Events on Deck in Colorado

We've got a fun fall planned to raise your knowledge of birds and some much-needed money for conservation.

By the time this newsletter hits your mailbox (unless it's before Sept. 11), we'll have two talks left in The Secret Lives of Birds speaker series at the Denver Museum of Nature & Science. Join us Oct. 21 for a talk on bird sounds and what they tell us about the hidden lives of birds, and Nov. 5 for the story of the Passenger Pigeon's flight to extinction like you've never heard it before.

Also, join us on Oct. 7 at Odell Brewing Co. in Fort Collins, Colo., for the third annual Wing Ding: Have a Brew for the Birds! Enjoy live music and libations, with part of the proceeds supporting RMBO's bird banding station in Fort Collins.

I hope to see you out and about in the coming months. Happy fall!

- Tammy VerCauteren
Executive Director

The Primary Source

The Primary Source is the member newsletter of Rocky Mountain Bird Observatory.

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The Primary Source logo with a baby Killdeer and a primary feather from a Pelican was designed by Granby, Colo., artist David Utterback. Primary feathers give power to a bird's flight. Our members, Friends, volunteers and partners are the primary source of RMBO's power to accomplish its mission to conserve birds and their habitats.

Editing and design: Teddy Parker-Renga

Like Us On Facebook

Do you want to know the latest on RMBO happenings? Would you like to see photos of the amazing birds we study every day in the field?

Follow RMBO on Facebook to stay current on news and events, view sweet bird photos from our staff and supporters, and get fascinating updates from the bird conservation world. Like us at www.facebook.com/RMBObirds.

2014 Calendar of Events

For the latest on events, activities and programs, visit www.RMBO.org, sign up for our e-newsletter on our website or become a fan of RMBO on Facebook.

Through mid-October: Bird banding stations, various locations in Colorado and western Nebraska. Visit www.RMBO.org for info. Schedule on page 7.

Sept. 27: NoCo Nature Festival (formerly known as the Northern Colorado Birding Fair), 7 a.m. to 3 p.m., free, Nix Farm Natural Area, Fort Collins, Colo.

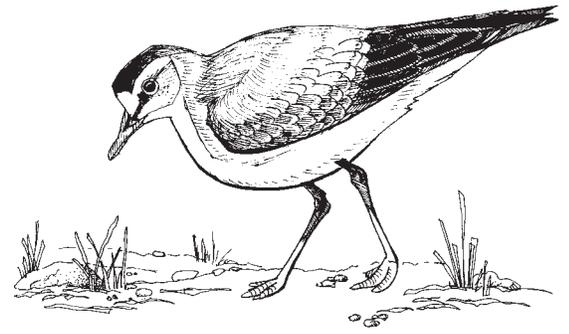


Oct. 7: Wing Ding: Have a Brew for the Birds! RMBO fundraiser for northern Colorado, 7-9 p.m., \$10, kids under 12 free, Odell Brewing Co., Fort Collins, Colo. See below for details.

Oct. 21: The Secret Lives of Birds speaker series at DMNS:

“Bird Sounds: From the Beautiful to the Bizarre” with Greg Budney, curator of audio at Cornell Lab’s Macaulay Library, the world’s largest archive of bird sounds. Budney will reveal what bird sounds – from singing to mimicry to drumming – tell us about the secret lives of birds.

7 p.m., Ricketson Auditorium at the Denver Museum of Nature & Science, Denver, Colo. \$10, or \$8 for RMBO and DMNS members. Tickets: 303-370-6000 or www.dmns.org/afterhours*



Mountain Plover by Sherrie York

Nov. 5: The Secret Lives of Birds speaker series at DMNS:

“The Passenger Pigeon’s Flight to Extinction” with Joel Greenberg, author, naturalist and birder. With 2014 marking the 100th anniversary of the death of Martha, the last Passenger Pigeon, Greenberg will tell the tale of this species’ demise like it’s never been told before.

7 p.m., Phipps IMAX Theater at the Denver Museum of Nature & Science, Denver, Colo. \$10, or \$8 for RMBO and DMNS members. Tickets: 303-370-6000 or www.dmns.org/afterhours*

* Apply promo code **RMBO2014** at checkout to get RMBO member discount.

Third Annual

Wing Ding: Have a Brew for the Birds!

Fundraiser for Rocky Mountain Bird Observatory

Oct. 7, 7-9 p.m.

Odell Brewing Co., Fort Collins, Colorado

\$10, kids under 12 free

Includes beer, snacks and music from the Matt Skinner Band. Chicken wings for purchase from the Wing Shack.

Proceeds support RMBO’s conservation and environmental education programs in northern Colorado.

Tickets: www.RMBO.org, or at the door day of the event



Costa Rica Birding Tour

Join RMBO and the Costa Rican Ornithologists’ Union (UOCR) on an all-inclusive tour to explore the diverse bird communities and ecosystems in Costa Rica.

Expert Costa Rican ornithologists, including RMBO’s new Senior Scientist with the International team Viviana Ruiz-Gutierrez, will be your guides to world-class birding, local culture, and bird research and conservation efforts carried out by the UOCR.

We will spend 14 days exploring birding hotspots and experiencing local culture along the Caribbean lowlands, the Central highlands and Southern Pacific lowlands.

Proceeds from this tour will support RMBO’s international work and UOCR’s citizen science bird monitoring programs, as well as much-needed research and travel grants for graduate and undergraduate Costa Rican ornithologists. Stay tuned for more information at www.RMBO.org!

- **Dates:** April 12-25, 2015
- **Cost:** \$4,500 for this two-week, all-inclusive trip (excluding cost of airfare to Costa Rica)
- **More info:** Viviana Ruiz-Gutierrez at 970-482-1707 ext. 14 or viviana.ruiz@rmbo.org

View recent photos from birding in Costa Rica at www.facebook.com/RMBObirds.



A Taking Flight camper releases a Broad-tailed Hummingbird.



Campers discover the bird species living high in the Rocky Mountains during a hike to Long's Peak.



Making friends is always one of the best parts of summer camp! Photos by Tyler Edmondson.

Campers Transformed After Week in Rockies

By Hannah Haas

Summer Education Assistant

On June 15, two vans packed with excited campers, staff and gear left the Old Stone House and headed west to Highlands Presbyterian Camp near Rocky Mountain National Park. Fifteen campers would spend the next week hiking, rafting, exploring nature, birding and much more as part of RMBO's Taking Flight camp for 12- to 14-year-olds.

Campers with a wide range of birding skills walked in the door for registration on Sunday morning, but relative ability did not stop them from bonding through ice breakers and backseat quizzing of bird calls on the drive up to the mountains.

Regardless of their birding ability, campers demonstrated an impressive amount of enthusiasm and passion for the natural world throughout their entire week at camp. It was obvious when they heard and saw a Wilson's Warbler for the first time during a point count.

It was clear when they were measuring water flow rate and looking for macro-invertebrates as part of a day researching and hypothesizing the ideal habitat components for the American Dipper.

It was palpable when they discovered the transition of life zones – and the bird species that accompanied them – while on a hike toward Chasm Lake at the base of Long's Peak.

In the safe environment of camp, these experiences created an ideal setting for

self-exploration and transformation to occur. As a result, the campers grew so much over their short but impactful time at camp – so much knowledge gained, so much passion discovered, and so many friends made.

It was satisfying to witness their faces when they realized that they had gone six days without the use of technology; when they spotted and identified a bird for the first time all on their own; when they came back, so full of awe, from their first-ever solo hike.

I worked as an education assistant at RMBO this summer, and it is these moments that I have always cherished in being a camp counselor. But this year, the Taking Flight campers have given me even more. They have given me hope that our children are not driven and held captive by technology. They have made me realize that they are also enthralled with the same things that guide my life. They, too, are swept away by the wonders of the natural world.

New Offerings Expand Reach

In 2014, RMBO staff and volunteers engaged 139 campers, ranging from 2 to 14 years of age, through summer nature camps including Taking Flight.

New camp offerings this year included Friday Mornings for Fledglings, with toddlers visiting our Environmental Learning Center for songs, stories, crafts and other fun, and a Leaders-in-Training Program,

where teens and pre-teens assisted with camps by sharing their passion, knowledge and enthusiasm for birds and nature with younger campers.

Thank You!!!

RMBO camps were made possible with the help of dedicated volunteers and others, including Clayton Norman, Bekah Chew, Sherrie York, Larry and Barb Draffin, Amber Tyler, Ed Schneider, Carolyn Clawson, Valerie Bliss, Karen Uyeda, Patricia Taylor, Hannah Haas and this year's Leaders-in-Training: Rachel Dunbar, May McCoy, Hero Dahlman, Hannah Rockwell, Carlie Hartwick, Anna Hartwick and Aliana Ward.

Thank you as well to our camp partners: Highlands Presbyterian Camp and Retreat Center, Rocky Mountain National Park, Colorado Avian Research and Rehabilitation Institute, West Pines Training Center, Nature's Educators, Butterfly Pavilion, Barr Lake State Park and Colorado Parks and Wildlife.

Thank you to our generous funders: Adams County Open Space, Brighton Legacy Foundation, Warner Family Charitable Fund, Norris Family Foundation, Morgridge Family Foundation and Scientific & Cultural Facilities District. Scholarships provided by partners and donors enabled youth of all economic backgrounds to participate in RMBO camps.

See more fun photos from camps at www.facebook.com/RMBObirds.

Bird-Friendly Living: Get Along, Little Birdie, to Your Winter Home

By David Menough

Owner of Wild Birds Unlimited - Arvada

It's started, and the fall exodus of hundreds of millions of birds is becoming apparent at our feeding stations.

Fall bird migration takes place over a period of about five months, beginning in early July with shorebirds and male hummingbirds and ending with sparrows and finches in November. The peak period for movement is in September and early October.

Attracting Feathered Migrants

This is an exciting time in our yards, as many migrant birds are attracted by our food offerings. Seeds, mealworms, fruits, berries and suet will detain them so we can marvel at these new species as they load up for the long trip ahead.

Water is a major attraction, too, particularly in times of drought. Keeping a healthy, clean feeding and watering area for these migrants helps to ensure a successful voyage to their wintering grounds, which are actually second summering grounds.

Most migrating birds will fly by night. Overhead, on a clear evening, will come faint call notes that echo the unseen movement of birds on their way to winter homes that may lie hundreds or even thousands of miles away. Nighttime provides cool temperatures that allow birds to conserve energy in flight.

Long-Distance Champ

The Arctic Tern probably holds the long-distance migration record. Its migratory route is 25,000 miles long, round trip. Our juncos and siskins need only to travel from the mountains to our backyards to reach their wintering range.

So while many birds leave our area for the winter, many other species move into our area during the colder season. We have year-round robins here in Colorado. The spring and summer robins head south for the winter, but we get a group of northern and Canadian robins that winter here.

Birds use many cues to guide them through migration. They are sensitive to the magnetic fields of the earth. They can hear the ultrasonic sounds created by the

oceans on both coasts. Bird migration is also influenced by day-length, the stars and visual landmarks.

We are learning more and more about the intricacies of seasonal flight. Some birds have their vital organs shrink or disappear to lighten the load for their migratory flight. They, then, re-grow these organs upon their arrival at their destinations.

The flight schedule below represents a heads up concerning what to be looking for at what time. It's amazing to see these birds checking their datebooks for their departure days.

Whatever talents birds possess, their extraordinary abilities are remarkable and little understood. We should feel a certain awe when birds appear in our yards each spring and fall with their uncanny precision. To help the birds with their incredible journeys, make certain that your backyard habitat is suitable to provide them with the sustenance necessary to have a safe flight there and back.

The flight schedule below represents a heads up concerning what to be looking for at what time. It's amazing to see these birds checking their datebooks for their departure days.

David and his wife, Kathy, own the Wild Birds Unlimited store at the southeast corner of 88th and Wadsworth in Arvada. Call them at 303-467-2644, or visit <http://northmetro.wbu.com>.

Other WBU Front Range locations:

- Denver, 2720 S. Wadsworth Blvd.
- Fort Collins, 3636 S. College Ave.

For more tips on bird-friendly living, visit the RMBO Blog at www.RMBO.org. Click on the "bird-friendly living" tag.

Live along the Front Range? Tune in to Scott and David Menough for BirdTalk Radio at noon on Saturdays on 710 KNUS.

Fall Migration Flight Schedule

Departures

Sept. 13 - Bullock's Oriole
Sept. 19 - Lark Bunting
Sept. 19 - Yellow Warbler
Sept. 21 - Broad-tailed Hummingbird
Sept. 23 - Western Kingbird
Oct. 9 - Swainson's Hawk
Oct. 10 - Barn Swallow
Oct. 14 - House Wren
Oct. 20 - Great Blue Heron
Oct. 25 - Common Grackle
Oct. 30 - Mourning Dove
Nov. 5 - Mountain Bluebird
Nov. 15 - Killdeer

Arrivals

Aug. 31 - Spotted Towhee
Sept. 1 - Redhead
Sept. 5 - Green-winged Teal
Sept. 5 - American Widgeon
Sept. 10 - Sharp-shinned Hawk
Sept. 12 - Cooper's Hawk
Sept. 12 - Cedar Waxwing
Sept. 14 - Ruby-crowned Kinglet
Sept. 15 - Gadwall
Sept. 15 - Northern Shoveler
Oct. 1 - Rough-legged Hawk
Oct. 6 - Northern Junco
Oct. 12 - Common Merganser

Dates represent average arrival or departure date for Denver and the eastern plains immediately surrounding the metro area. Information taken from *A Birder's Guide to Denver and Eastern Colorado* by James A. Lane and Harold Holt (1979 edition).

Bird Banding: Big Spring at Chico, Slow at Chatfield

From owls to warblers, cool catches mark spring banding season

By Teddy Parker-Renga, Communications Manager

Bird banding brings us cool birds, interesting insights and always new questions, and this spring was no exception. We again shared these experiences with hundreds of visitors, from toddlers to school kids to adults of all ages. Without further ado, here are the birdy highlights from the spring.

Chico Basin Ranch, Colorado

Biologist Nancy Gobris said it was another big spring for banding at Chico Basin Ranch, located 35 miles southeast of Colorado Springs. Nancy and volunteers caught and banded 1,004 individual birds of 69 species. This was the best spring since 2011 and the fifth spring of 1,000-plus birds.

Nancy said they caught a few rare species for this station, including an Eastern Towhee (only the second banded at Chico) and four Blackpoll Warblers. In addition, they caught and banded the station's first two Flammulated Owls. This species had only been seen twice before on the ranch, once in 2004 and again in 2005.

Chatfield State Park, Colorado

Biologist Meredith McBurney said it was a slow spring for migration at Chatfield State Park southwest of Denver. A total of 508 individual birds were banded, about 13% below average for the station and 32% below last year.

This decrease can be partly explained by the fact that we were open fewer hours in the middle of the season, Meredith said, but the biggest impact was the drop in the number of birds caught during the last week. Daily numbers dwindled to the single digits when last year we were banding 20 birds or more.

Meredith noted that we continued to welcome back birds that we had banded in prior seasons, including a Warbling Vireo, first



A resident of The Gardens at Columbine releases a bird at the Chatfield State Park banding station. Photo by Carolyn Jones.

caught in 2008, and two Yellow Warblers, a female banded as a second-year bird in 2007 (now 8 years old) and a male banded as a second-year bird in 2006 (now 9 years old). This male has been caught every spring except for 2008!

Despite lower numbers overall and fewer than usual total species, we caught four new species at the Chatfield banding station: Winter Wren, Blue-winged Warbler, Magnolia Warbler and Townsend's Warbler.

Lee Martinez Park, Colorado

This was our first full spring banding birds at this city park in Fort Collins. Despite high winds and flooding closing the station for a few days, we managed to stay open until the end of May

See **BANDING** on page 7



First-ever Flammulated Owl banded at Chico Basin Ranch (photo by Katie Miller)



Volunteer Lee Farese with a Cooper's Hawk at Chico Basin (photo by Nancy Gobris)



First-ever Magnolia Warbler banded at Chatfield State Park (photo by Jeff Thompson)

BANDING *continued from page 6*

and capture 107 individual birds of 21 different species. Bird bander Anna Harris said cool catches for the season included Lincoln's Sparrow, Black-headed Grosbeak, Hermit Thrush, Swainson's Thrush and Northern Waterthrush.

We appreciate the many schools, families, community groups and others who visited our banding stations to learn about bird anatomy and migration. We welcomed more than 1,300 people to these three stations during the spring. Thank you to the many partners and funders who helped us operate these stations. You help make it all possible!

Want to Visit a Banding Station?

Stations are now open across Colorado and western Nebraska for the fall banding season. Visitors are welcome, and teachers and school groups can arrange a field trip. Learn more at www.RMBO.org.

- Barr Lake State Park, Brighton, Colo. - Closes Oct. 11 (closed Sundays and Mondays)
- Lee Martinez Park, Fort Collins, Colo. - Closes Oct. 11 (closed Sundays and Mondays)
- Chico Basin Ranch, 35 miles southeast of Colorado Springs, Colo. - Closes Oct. 4
- Ela Wildlife Sanctuary (Grand Valley Audubon Society), Grand Junction, Colo. - Closes Oct. 17
- Ridgway State Park, Ridgway, Colo. - Closes Sept. 16
- Chadron State Park, Chadron, Neb. - Closes Oct. 3
- Wildcat Hills State Recreation Area, Gering, Neb. - Closes Oct. 3



This Northern Waterthrush was first caught on May 7 weighing 18.8 grams and again on May 15 weighing 23.4 grams. This bird was likely using Lee Martinez Park as a migratory stopover site, resting and fueling up before migrating north to its breeding grounds. Photo by Anna Harris.



Bird bander Anna Harris shows an Orange-crowned Warbler to families during Poudre RiverFest in Fort Collins, Colo.

A Bit About Bird Banding

By Anna Harris, Bird Bander

RMBO biologists help monitor migration and educate citizens about their natural environment through the capture, banding and release of birds.

Equipped with a special permit to band birds, our biologists follow an established protocol to capture birds in nets, record data on each individual and affix a band to the bird's leg.

Each band contains a unique number. Upon banding, we submit band numbers along with pertinent information about the age and health of the corresponding birds to the Bird Banding Laboratory, jointly managed by the USGS and Canadian Wildlife Service. The information is stored in a central database and shared among biologists and researchers. When RMBO captures a bird banded at another station, we contact the lab to see where and when it was first banded.

Through band recoveries, biologists at RMBO and elsewhere are able to track individuals, species and populations. They are able to monitor trends such as migratory pathways and population dynamics including life span, territory size and site fidelity, aiding in bird conservation efforts.

Banding birds has, in part, taught researchers that some bird species nest as far north as the high arctic, some overwinter as far south as the southern tip of South America, and others settle anywhere in between. According to the Bird Banding Lab, the longest migration flight researchers have discovered so far, thanks in part to recovered bands, belongs to the Arctic Tern, traveling 25,000 miles round trip each year.

Banding data has huge implications about the importance and health of migratory stopover sites for those species traveling thousands of miles. Banding birds is one way researchers can help identify and conserve important tracks of habitat to ensure the longevity of migrating bird species.

Along with science, banding birds is an exceptional educational tool. It's a valuable way for us to teach the public about birds and connect them to nature through the wonder and science of birds and migration.

Tracking Golden Eagles in Western Nebraska



Golden Eagle by Quinn Burrell

By Angela Dwyer, Wildlife Biologist

This summer, Rocky Mountain Bird Observatory assisted the U.S. Fish and Wildlife Service and Nebraska Game and Parks Commission in outfitting Golden Eagle chicks with satellite tracking units in western Nebraska.

Five chicks were outfitted with units. By tracking these birds,

researchers seek to better understand the nesting success, habitat use, survival rate and mortality factors, and migration patterns of Golden Eagles breeding in Nebraska. Researchers are also interested in seeing if the young eagles return to the same sites where they hatched.

Golden Eagles nest on cliff edges in remote landscapes throughout western North America and spend winters in various locations across the West, along with a smaller population from Canada that winters in the eastern part of the U.S. Their status is precarious. With growing development in wind energy along cliffs and ridges where they typically nest, biologists are becoming more concerned.

The USFWS has been tracking more than 70 Golden Eagle chicks over the past couple of years in the southwestern U.S. In 2014, the agency started tracking birds in Colorado, Wyoming and Nebraska, so it partnered with RMBO on this project.

With a strong presence in western Nebraska, RMBO possessed the local knowledge of nesting eagles and positive, on-the-ground relationships with landowners required to access the nest sites, all of which exist on private property in this area. In fact, several landowners attended the tagging process and are interested in learning the outcome of “their” birds; one ranching family even named theirs Garren.

By mid-August, satellite data indicated the eagles were all still close to their nests within a few miles. They spend the day learning to hunt with their parents until they migrate this fall.

Researchers are excited to learn where these birds spend the winter, if they will return next year and how this species uses the landscape for breeding, hunting and migration. With this knowledge, RMBO, USFWS, landowners and others will be better able to conserve this at-risk species.

Volunteer Profile: CSU Student Gains Valuable Experiences

**By Teddy Parker-Renga
Communications Manager**

When Meredith Smith was a young girl, she spotted a Western Scrub-Jay entangled in a line in a tree at her neighbor’s house in Parker, Colo.

Her dad brought the bird down from the tree, and the two worked painstakingly to get it free. “I knew then I wanted to spend my life helping animals, especially birds,” she said.

Today, Meredith is a senior at Colorado State University. She earned a bachelor’s degree in creative writing and is now working on a second bachelor’s in wildlife biology. To gain experience and pursue her passion, she volunteers with RMBO as a citizen scientist through the Eastern

Screech-Owl and Bald Eagle Watch programs, as well as bird banding in Fort Collins.

Meredith said these experiences have all been valuable for her career: practicing data collection and entry as a citizen scientist, gaining hands-on work with birds through banding, and learning about birds from the biologists who run the programs.

She said it was exciting to see two eaglets fledge from the nest she monitored near Fossil Creek Reservoir in Fort Collins this year. While she hasn’t detected



Meredith Smith

any Eastern Screech-Owls during the past two seasons of monitoring, she did detect three Great Horned Owls and that was cool, she said.

Earlier this year, Meredith joined the RMBO staff as a technician. She helped prep for the field season in the spring and is now entering and proofing data gathered during breeding bird surveys.

Meredith said she plans to keep volunteering with RMBO, as time allows. Along with RMBO and school, she works at the Wild Birds Unlimited store in Fort Collins and volunteers with HawkQuest.

“I love learning and being involved, especially if there’s a goal toward helping animals,” she said. “Even if we only give a little back, it makes a big difference.”

In Search of the Nest Site of Our Nemesis Bird

By Chuck Hundertmark, RMBO Member

Since the summer of 2003, former RMBO Board Chair Paul Slingsby and I, often with the help of the late Jim Duggan and other volunteers, have been making forays to the bountiful lakes of North Park, Colo., to survey colonial waterbirds as part of RMBO's ColonyWatch program.

Following protocols handed down to us by the late Rich Levad, we walk the perimeters of several lakes to count Willets, peer through scopes from bluffs at dense clusters of nesting American White Pelicans, and kayak to nesting islands to attract the attacks of territorial Forster's Terns. Early in the season, we watch Western Grebes building nests in the rushes of Lake John, while later in the summer both Eared and Western Grebes delight us as they feed the youngsters riding their backs.

Our efforts have allowed us to document the first nesting of Snowy Egrets at Walden Reservoir and the establishment of a new American White Pelican colony there.

Over the years, though, we came to view one species as our nemesis bird. One of the little visited gems of North Park is 18 Island Reservoir. An extensive wetland with abundant cattails, rushes and sedge, the lake hosts a rich variety of waterfowl. We visit the reservoir several times during the summer, and inevitably on at least one visit we see a small flock of White-faced Ibis.

These ibis nest at only a few locations in Colorado, with the largest colonies in the San Luis Valley. In 1996, two pair nested at Smith Ponds on the Arapaho National Wildlife Refuge. With their regular occurrence at 18 Island, we were certain the ibis were nesting at that location or someplace nearby. Confirmation of nesting, however, eluded us.

This summer, we were caught by surprise when we found suspicious ibis behavior at an unexpected location. Surveying Walden Reservoir on June 28, we spotted White-faced Ibis going back and forth to a small willow island in a pattern that looked very much like nest-tending behavior. Dave Fletcher and Lee and Linda Farrell had joined us that weekend.

That evening, Paul, Lee, Linda and I decided to get a better idea of the size of the population and greater certainty about the

Citizen Science Roundup on page 10



ColonyWatch volunteers Nicole Hornslein and Paul Slingsby search for waterbirds in North Park, Colo. Photo by Chuck Hundertmark.

nesting behavior. At sunset, we returned to the reservoir to attempt a flight line count. Some species of colonial nesting birds that nest in difficult-to-access sites can most readily be counted when they fly back to the colony at sunset. During a 1 hour and 13 minute observation, we counted 76 ibis flying to the willow colony and 26 flying to another colony on a larger island.

On Aug. 1, Paul and I returned with the RMBO kayak. We heard young ibis being fed on the small island as adults flew in to tend them. On the larger island, we spotted several nearly fledged young birds sporting bicolored bills. With a new breeding location confirmed at Walden Reservoir for this species, next summer, we'll plan an evening flight count at 18 Island Reservoir.

Want to join ColonyWatch? See information below about how to become a part of this citizen science program.

Share Your Passion for Nature and Science

Enrollment for these volunteer programs will take place in the early part of 2015. For information about volunteering, visit www.RMBO.org and search under "Act Now!"

Bald Eagle Watch: Monitor and collect data on Bald Eagle nesting behavior and productivity along the Front Range of Colorado. Training held in January. Contact Jeff Birek at 970-482-1707 ext. 25 or jeff.birek@rmbo.org.

HawkWatch: Gather information on raptor migration at our site at Dinosaur Ridge in the Dakota Hogback Natural Area near Morrison, Colo. Training held in February. Contact Jeff Birek at 970-482-1707 ext. 25 or jeff.birek@rmbo.org.

ColonyWatch: Monitor and collect data on colonial waterbirds across Colorado. Program starts in March. Contact Jason Beason at 970-310-5117 or jason.beason@rmbo.org.

Eastern Screech-Owl Monitoring: Gather information on this owl species along the Cache la Poudre River in Fort Collins, Colo. Training held in March. Contact Rob Sparks at 970-482-1707 ext. 19 or rob.sparks@rmbo.org.

Volunteer Naturalists: Assist RMBO educators during in-class programs, field trips and outreach events around the Denver area. Training held in March. Contact Peggy Watson at 303-659-4348 ext. 10 or peggy.watson@rmbo.org.

Bird Feats: Making Strides for Conservation

Report Focuses on Extinction

The Passenger Pigeon was the most abundant bird America had ever known.

In 1860, one flock covered 300 miles of sky as it passed onlookers. On Sept. 1, 1914, the last one died – from billions of birds to none, in half a person's lifetime.

One hundred years after the extinction of the Passenger Pigeon, some of the nation's top bird scientists came together to publish the State of the Birds 2014 report. Birds are indicators of ecosystem health and this report assesses the health of bird populations through a set of habitat indicators, a Watch List of species



most vulnerable to extinction and a list of Common Birds in Steep Decline.

The species assessment database used to develop the Watch List is hosted by

RMBO, and Education Director Kacie Miller served on the communications team. Executive Director Tammy VerCauteren attended the official release of the report in early September in Washington, D.C., as part of a meeting of the North American Bird Conservation Initiative.

If you are a birder, then you may also have contributed to this report! Findings in the report are based, in part, on eBird, Christmas Bird Count and other citizen science data sets.

To read the report online, visit www.stateofthebirds.org. For a printed copy, call 970-482-1707 ext. 30.

Grasslands Video Released

In April, Rocky Mountain Bird Observatory released an outreach video to engage ranchers in northern Mexico in grasslands conservation.

RMBO has a strong presence in Chihuahua and works alongside landowners there to support working ranches and improve grassland habitat for birds and other wildlife.

The video was produced with support from the Cornell Lab of Ornithology, Habitat Seven, IMC-Vida Silvestre, the Commission for Environmental Cooperation and the Neotropical Migratory Bird Conservation Act.

It can be viewed on RMBO's YouTube channel, or at www.RMBO.org.

Citizen Science Roundup

Bald Eagle Watch: More than 50 volunteers monitored 38 Bald Eagle nest sites along the Front Range of Colorado in 2014. At least one eaglet fledged at 14 of those sites, including three eaglets at Barr Lake.

HawkWatch: During the spring count at Dinosaur Ridge, 69 volunteers recorded 756 migrating raptors of 17 species.

ColonyWatch: As of press time, reports were still being filed from 38 citizen scientists who are monitoring colonial waterbirds at more than 50 sites across Colorado, with a new American White Pelican colony found this year.

Eastern Screech-Owl Monitoring: From mid-March to late May, 45 volunteers surveyed 41 sites along the Cache la Poudre River in Fort Collins for Eastern Screech-Owls, detecting the species at eight sites.

OWLS *continued from cover*

The crew ended up surveying 289 sites, visiting 150 of those sites twice. Mexican Spotted Owls were detected on 91 of the sites, including locations where Forest Service biologists were previously unaware of the owls' presence.

Jennifer now has the offseason to evaluate the statistical side of the study design before she and her team head back into the field in 2015. The long-term plan is to use this design year-after-year to monitor the population status of Mexican Spotted Owls. Data obtained through monitoring efforts will help the Forest Service manage this threatened subspecies.

Thank you to U.S. Forest Service Region 3 for the opportunity to collaborate on this project and to forest and district biologists throughout the region for logistical support.

SAGE-GROUSE *continued from cover*

pollinators and benefit songbirds such as Vesper Sparrows and Western Meadowlarks and other wildlife. Projects like this demonstrate how RMBO's Stewardship team fosters partnerships with landowners and finds unique opportunities to apply conservation on the ground.

To complete this project, RMBO worked alongside partners at the Middle Park Conservation District, NRCS, Grand County, Colorado Parks and Wildlife, Habitat Partnership Program, USFWS Partners for Fish and Wildlife and private landowners. Thank you to NFWF for additional funding.

By building resilience into grouse habitat with support from private landowners, RMBO and partners are getting a little closer to ensuring the survival of the Greater Sage-Grouse.

Staff & Board Migrations

Welcome ...

Nancy Hernández Rodríguez received bachelor's and master's degrees in wildlife management from Universidad Autonoma de Chihuahua. She has worked on a wide variety of projects involving grassland fauna and range management, including research on Burrowing Owl population ecology in Mexico. She has spent the last 10 years in the grasslands of Chihuahua, Mexico, as well as South Dakota, Colorado and Oklahoma.



Her experience has shown her the importance of conservation through proper grassland management. Nancy joined RMBO as a private lands wildlife biologist in the spring of 2014 to help conserve the Chihuahuan grasslands. She is based out of a field office in Chihuahua City, Mexico.

Alexandra Mayes grew up in Missouri exploring the woods, creeks and fields that surround her hometown. After receiving a bachelor's in ecology and evolutionary biology from the University of Central Missouri in 2011, she moved to the San Francisco Bay Area to complete an environmental education internship and discovered the awesomeness that is birding. Since then, she has worked a variety of education and bird research jobs across the country. Alexandra joined RMBO in the summer of 2014 to conduct education programs in the Nebraska panhandle.



Viviana Ruiz-Gutierrez, Ph.D., joined RMBO as a senior scientist with the International team in the spring of 2014. Her research focuses on estimating population and community-level responses to environmental changes for resident and migratory bird species in Latin America. She earned her Ph.D. from the Department of Ecology and Evolutionary Biology at Cornell University, and spent several years as a post-doctoral researcher in the Department of Fish, Wildlife and Conservation Biology at Colorado State University. Viviana will be supporting projects related to grassland birds, along with continuing other projects related to bird research and conservation in Latin America. These projects include working with the Institute for Bird Population Studies in California, where she is a research associate, on applying novel statistical models to look at overwintering dynamics of Neotropical migrants, as well as supporting capacity building efforts of the Neotropical Conservation Initiative Program at the Cornell Lab of Ornithology, where she is a lab associate. A native of Costa Rica, Viviana stays active in bird research, monitoring and conservation programs through work with the Costa Rican Ornithologists' Union.



Welcome to our new Finance team: CFO Christine Fabian and Staff Accountants Mike Wright and Abby Mohney

Peggy Watson, born and raised in Brush, Colo., grew up exploring the plains and mountains of her home state. In 2009, she earned her bachelor's degree in biology from Colorado State University. She worked as a licensed Colorado wildlife rehabilitator until 2012, when she was hired as an education intern for RMBO. With a passion for bird conservation and joy of working with people, Peggy joined the RMBO staff full-time as the volunteer and outreach coordinator in 2014. In her free time, Peggy enjoys discovering new trails, skiing and snowboarding, and sitting on the deck with a good book.



Farewell ...

Thank you to the following person for her service to RMBO:

- Christina Santana, Private Lands Wildlife Biologist

Shout Out to Our Interns

RMBO provides educational opportunities to people interested in a variety of career fields, from biology to education to information technology.

Thank you to these awesome interns for contributing their time and talents to RMBO over the past year!

- Musa Asif, Stewardship
- Moriah Bell, Stewardship
- Quinn Burrell, Stewardship and Communications
- Tyler Files, Science
- Cole Frederick, Information Technology
- Hannah Haas, Education
- Carson Lillard, Science
- Jesús Ordaz Morales, International
- Zakhar Volchak, Information Technology
- Aaron Yappert, Stewardship



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The Primary Source No. 46 • Fall/Winter 2014



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 toners and vegetable-based inks on recycled paper

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THANKYOU for supporting bird and habitat conservation!
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RMBO Hats Are Back!

This spring, we
 ran out of our popular
 logo baseball hats and
 have received multiple
 requests from members
 wanting one. Hey, we
 can't blame you. These
 hats are way cool!

A new shipment of
 hats has arrived, and
 we want our members
 to get first dibs before
 they're gone.

Supplies are limited.
 Order yours today!

Colors: Tan, black,
 navy blue and camo

Cost: \$15, or \$13 for RMBO members and volun-
 teers (additional costs will apply for shipping)

To order: Contact Teddy Parker-Renga at teddy.parker-renga@rmbo.org or 970-482-1707 ext. 30, or
 stop by the Fort Collins office. A limited supply is also
 available in our Brighton office.

