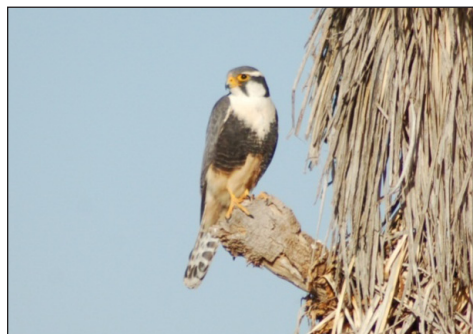




Celebrating 25 years of bird and habitat conservation • 1988 - 2013



A female Aplomado Falcon perches near her nest in a yucca in Chihuahua, Mexico.

Saving the Aplomado

By Roberto Rodríguez & Pedro Calderón
Private Lands Wildlife Biologists

“Another nest has failed.” This is the recurring news that technicians monitoring Aplomado Falcons in Chihuahua, Mexico, have reported over the last 18 years.

Initiated in 1996 by the Peregrine Fund and sustained by Rocky Mountain Bird Observatory, Aplomado Falcon monitoring has revealed a marked decrease in the number of breeding pairs and successful nests in Chihuahua. In 2005, 25 occupied territories were monitored, producing 19 fledglings. This year, 11 occupied territories were located and only four chicks fledged.

The grasslands inhabited by Aplomado Falcons are characterized by deep soils and flat terrain, which are also preferred



See **SAVING** on page 9

From Camper to Aspiring Biologist

By Teddy Parker-Renga
Communications Coordinator

With another successful breeding bird survey season in the books, RMBO biologists and technicians have returned from the field. In late July, I caught up with technician Kellen Mortensen at home in Portland, Ore., ready to dive into his data entry and proofing.

Kellen spent this past spring and summer surveying birds for RMBO under the Integrated Monitoring in Bird Conservation Regions program. Despite getting up at 4 a.m. every day, he said he had a fun season surveying birds across much of southern Wyoming. “I love being out in the woods and mountains,” he said, but “it’s good to sleep in my own bed again.”

This was Kellen’s first season working as a field technician for RMBO, but not the first time he’d been impacted by the organization. At age 12, back in 2000, he participated in On The Wing, a weeklong field ornithology summer camp in the Rockies.

A native of Whidbey Island in Washington State, Kellen was a budding young birder when he first laid eyes on the Rocky Mountains on his drive to camp. He said that experience left a lasting impression on him, along with seeing an American Dipper playing in a creek by his campsite.

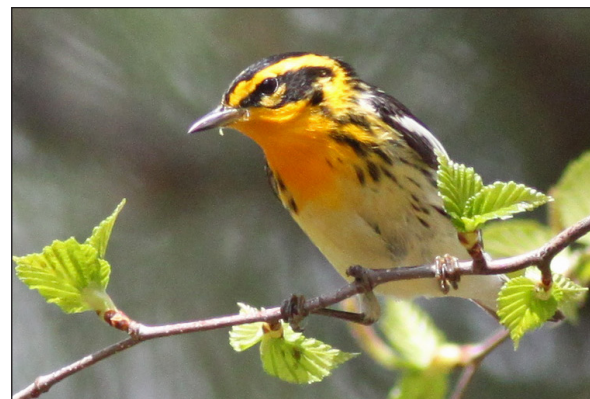
Looking back on his time at On The Wing, he reminisced about exploring habitats, birding in montane forests and creating a field guide of plants and birds.

“The counselors were some of the best birders I’d ever met,” he said. “They could tell a woodpecker species just by its drumming.”

He said the RMBO camp really fueled his interest in ornithology and honed his auditory skills, helping him learn how to identify bird species by songs and calls. It also helped build his self-confidence being among kindred spirits. “Meeting birders my own age really inspired me,” he said.

Looking ahead, Kellen said he’d join the IMBCR crew again next season, and he hopes to continue down his career path in ornithology. In fact, the entire notion of pursuing a career with birds was something he gained at On The Wing. “Seeing people with a job in a bird-related profession gave me hope that I could do that, too,” he said.

On The Wing returns in the summer of 2014. Read about this summer’s camp season on page 4, and learn more about RMBO camps and the IMBCR program at www.rmbo.org.



Kellen Mortensen spotted this Blackburnian Warbler, a species typically found out East, during IMBCR training in South Dakota. Photo by Michael McCloy.

From the Director: At the Forefront of Bird Conservation



I recently returned from a Partners In Flight meeting in Utah. I made the trek with RMBO staff from all disciplines so we could meet with our bird conservation brethren to discuss strategies for addressing the full life-cycle conservation needs of birds.



This latest issue of *The Primary Source* exemplifies how RMBO has embraced the need for full life-cycle conservation in our work, addressing the needs of birds at their various life stages, when and where they need it most.

At RMBO, we are striving to make a lasting impact on the people, birds and

land of the Rockies, Great Plains and Mexico. From inspiring an up-and-coming ornithologist through *On The Wing* more than a decade ago to hiring him for the field crew this summer, the seeds we plant continue to grow.

Board chairman Larry Modesitt got in the field to experience RMBO's work firsthand conserving Mountain Plover nests in Nebraska. There is no comparison between reading about plover conservation and seeing and hearing one hatch. And to think all this success was accomplished through a simple tool – stakes to mark nests – and landowners willing to allow access for surveys.

In addition, RMBO biologists in Mexico and the western U.S. continue to identify win-win opportunities with landowners that improve land, productivity and habitat for birds and other wildlife. Whether it is enhancing range management or combating invasive species, they are at the forefront of addressing the greatest threat to birds: habitat loss and degradation.

Thank you for helping make life-changing camps and stewardship efforts with private landowners possible. As a member, your donations provide scholarships so all kids can participate in camps. Your donations also provide seed money for habitat projects and matching dollars for our stewardship program. In addition, your support ensures we are at the conservation planning table, guiding and identifying strategies to ensure healthy populations of birds across the Americas.

Help Us Reach Our Campaign Goal

Fall is upon us, and it's hard to believe we are three-quarters of the way through our 25th anniversary celebration at RMBO. We are also honing in on the last leg of our Quarter Century Campaign, with a goal of \$250,000 in private donations. Thank you to all who have donated. As a member, your annual dues and additional contributions have gone toward this campaign.

We are using the Black Swift's 8,000-plus-mile annual migration to symbolize progress toward our campaign goal; every \$30 donated gets us one mile closer to the goal. So far, we've raised more than \$141,000 through gifts and pledges from members like you, putting us more than halfway to our goal and the swift to its breeding grounds in the U.S.

It's time now for the Black Swift to return to its wintering grounds, but we need your help. Please consider making a donation to RMBO however fits best for you, whether it's a membership renewal, a gift membership for a friend or loved one, a 25th Brick for Birds (see below) or a donation during Colorado Gives Day on Dec. 10.

I hope to see you this fall. With lots to do, from bird banding to our annual BBQ for the Birds to another great speaker series at the Denver Museum of Nature & Science, be sure to get out and join us in celebrating the wonder and science of birds.

- 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 habitat.

Editing and design: Teddy Parker-Renga

Artwork: Sherrie York; Black Swift

Reserve Your Place in RMBO History!

RMBO is pleased to offer the opportunity to purchase personalized bricks to be permanently placed in the walkway leading up to the Old Stone House.

For only \$125, your brick will be engraved with anything you want. All bricks will also be engraved with the phrase **Celebrating 25 Years.**

Proceeds from the 25th anniversary bricks go toward RMBO's Quarter Century Campaign. To order, contact Teddy Parker-Renga at 970-482-1707 ext. 30 or teddy.parker-renga@rmbo.org.

2013 Calendar of Events

For the latest on events, activities and programs, visit www.RMBO.org, sign up for our new 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 information. Schedule on page 7.

Oct. 3: DMNS speaker series:

“Save the Last Dance” with award-winning wildlife photographer Noppadol Paothong. Noppadol will share stories and images of the impressive, often bizarre courtship behaviors of grouse from his new book *Save the Last Dance: A Story of North American Grassland Grouse*.

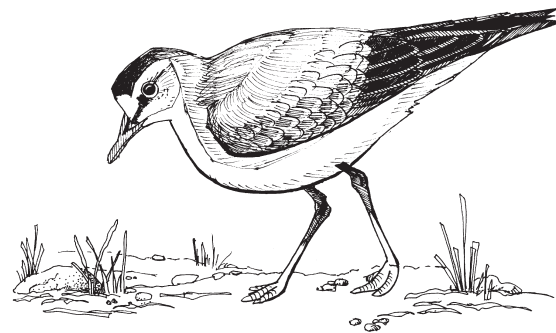
7 p.m., Phipps IMAX Theater at Denver Museum of Nature & Science, Denver, Colo. \$15, or \$12 for RMBO and DMNS members. Lecture, book sale and signing, and reception. Tickets: www.dmns.org*

Oct. 5: BBQ for the Birds, RMBO’s annual member picnic, Old Stone House at Barr Lake, Brighton, Colo. See below for more information.

Oct. 22: DMNS speaker series:

“Get to Know the Crow” with Dr. John Marzluff, professor of wildlife science at the University of Washington. Dr. Marzluff will share funny, awe-inspiring and poignant tales about the intelligence and traits of crows.

7 p.m., Ricketson Auditorium at Denver Museum of Nature & Science, Denver, Colo. \$10, or \$8 for RMBO and DMNS members. Lecture, book sale and signing. Tickets: www.dmns.org*



Nov. 20: DMNS speaker series:

“Living Dinosaurs” with Dr. Julia Clarke, associate professor of vertebrate paleontology at the University of Texas at Austin. Dr. Clarke will present research and discoveries that scientists are using to paint a vibrant new picture of dinosaurs and the origins of birds.

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

* Use promo code **RMBO20** at checkout to get RMBO member discount.



Rocky Mountain Bird Observatory's annual BBQ for the Birds

Saturday, October 5, 2013

Old Stone House, 14500 Lark Bunting Lane, Brighton, Colorado
(north entrance to Barr Lake State Park off Bromley Lane)



Activities start at 7 a.m. View schedule at RMBO.org.

Bird Banding • Bird Walks & Talks • Kids' Activities • Music
Barr Lake & Old Stone House History Walk • Live Raptors
Exhibitors • Silent & Live Auctions • Harvest-Themed Lunch

R.S.V.P. by Sept. 27 to save \$1 off per person

\$11 members • \$13 non-members • \$6 ages 5-12 • under 5 free

Register at www.rmbo.org or 970-482-1707 ext. 30 by Oct. 3
- or at the door (cash, check, MasterCard, Visa or Discover)

Proceeds support RMBO's environmental education and conservation programs.

Renowned birder

Greg Miller to lead bird walk, present “My Big Year” and conduct eBird workshop



Wildlife photographer

Noppadol Paothong to conduct workshop and judge RMBO's 2013 photo contest

Camp Season Rocked!

By Emily Snode, School Programs Coordinator

This past summer, RMBO offered seven weeks of day camps and one weeklong overnight camp. Needless to say, it was a busy summer, but a rewarding one as well.

“In many ways, I see the summer of 2013 as an environmental educator’s dream come true,” said Community Education Coordinator Tyler Edmondson, who manages RMBO’s camp programs. “A number of camps resulted in far more than I anticipated, including a few campers whose initial experience grew into summer-long commitments as Teen Volunteers.”

RMBO staff and volunteers engaged approximately 90 children, ranging from 5 to 14 years of age, through camps.

Taking Flight was a new offering. This six-day, overnight camp for 12- to 14-year-olds kicked off the season in June with 13 campers. It was hosted at Highlands Presbyterian Camp near Rocky Mountain National Park, so the facility and location provided ample opportunities for field trips, hikes, birding, making new friends and traditional camp activities, such as canoeing, rock climbing, archery and a challenge course.

“In my 10 years of working in the camping industry, I can honestly say that Taking Flight was the best week of camp that I have ever experienced,” Tyler said. “It was a perfect blend of learning, sincerity, silliness, laughter, adventure, exploration and, of course, fun!”

RMBO camps were made possible with the help of dedicated volunteers and other individuals, including Nikki Roth, Sara Gremel, Amber Tyler, Dale Jones, Leah Dempsey, Patricia Taylor, Rachel Dunbar, May McCoy and Andrew Devlin.

Thank you as well to our summer camp program partners: Highlands Presbyterian Camp and Retreat Center, Rocky Mountain National Park, Rocky Mountain Nature Association, Wildlands Restoration Volunteers, Butterfly Pavilion, Denver Botanic



Taking Flight campers show off some nests. Photo by Nikki Roth.

“I gained much more maturity and independence by going to this camp. I also gained friendship from so many people here. . . . By the second day, everyone is a friend to everyone. And this experience has definitely changed my life forever.”

- Taking Flight camper

Gardens, Denver Zoo, Barr Lake State Park and Colorado Parks and Wildlife. And thank you to our generous funders: Adams County Open Space, Brighton Legacy Foundation, Warner Family Charitable Fund, Norris Family Foundation, Morgridge Family Foundation, Scientific & Cultural Facilities District and walk-a-thon participants. Scholarships provided by partners and donors enabled youth of all economic backgrounds to participate in RMBO camps.

Volunteer Profile:

Naturalist Gremel Touts Connection to Nature

By Teddy Parker-Renga
Communications Coordinator

During RMBO’s 25th anniversary in 2013, it’s only fitting to profile another volunteer who knew the organization in the “pre-trailer” days.

Sara Gremel was a volunteer and then seasonal employee at Barr Lake State Park a quarter-century ago when RMBO was founded. She’s always known about the organization, having lived in Brighton, Colo., on and off for 28 years, and has a passion for environmental education. But it wasn’t until fall of 2011 that she joined RMBO’s Volunteer Naturalist program with prodding from good friend Nelda

Gamble (a founding RMBO educator and the subject of last issue’s profile).

As a Volunteer Naturalist, Sara helps out educator Emily Snode with school programs. This past June, she also volunteered during Taking Flight, joining educator Tyler Edmondson, intern Nikki Roth and 13 kids ages 12 to 14 in the Rocky Mountains for a week of camp.

Sara said she’s a member of RMBO,



Sara Gremel

too, for the same reason she volunteers: RMBO’s ability to connect people to nature through its programs. She said too many people become connected to technology, but “reconnecting people to the earth, birds and nature is what matters.”

Sara’s dad was a Colorado State University graduate and forester who instilled in her an appreciation for nature. She said she wants to do the same for others, including her own children and granddaughter.

“A song lyric comes to mind, “Teach your children well,” she said. “You pass down generationally what you feel to be the best way to live, and for me that’s a connection to nature.”

Citizen Scientists Study Eastern Screech-Owls

By Teddy Parker-Renga

Communications Coordinator

Eastern Screech-Owls are the most common owl species in North America, yet little is known about their habitat needs or population dynamics. To fill these knowledge gaps – and get citizens involved in science linked to their natural environment – RMBO launched a new project in March in Fort Collins, Colo., to monitor Eastern Screech-Owls along the Cache la Poudre River.

The river, a designated Natural Heritage Area, is prime habitat for these owls along the eastern edge of the Front Range and a valuable resource for recreation, making it ideal for a citizen science project, said research biologist Rob Sparks.

“This helps us fill both scientific and social objectives,” Rob said. “We can gather data on screech-owl breeding populations and habitat needs, while involving citizens in a project that helps them connect with nature and learn the value of the Poudre River and surrounding habitat.”

From mid-March to late May, volunteers visited 39 survey sites along the Poudre River three times at night. Following a set protocol, volunteers alternated between call playback of an Eastern Screech-Owl breeding song and silent periods at the site and documented any owls detected. They also collected data on the noise level, time, moon phase and other variables and documented if other owls were present.

Data sheets have been returned and final numbers are in. A total of 19 Eastern Screech-Owls were detected across seven of the survey sites, along with six detections of Great Horned Owls.

The Eastern Screech-Owl is an indicator species for the City of Fort Collins, so this information will help gauge overall riparian health along the Poudre River urban corridor and guide future conservation efforts for this important natural area.

This project was made possible by a grant from Denver Field Ornithologists



An Eastern Screech-Owl peers out of a nest box attached to a plains cottonwood tree along the Cache la Poudre River in Fort Collins, Colo. Photo by Rob Sparks.

and assistance from City of Fort Collins staff, RMBO staff and, of course, dedicated citizen scientists.

Citizen Science Roundup

Bald Eagle Watch: Despite the nest at Barr Lake failing due to late heavy snows in April, a total of 31 Bald Eagles fledged at the 26 nests monitored through this program in 2013.

HawkWatch: During the spring count at Dinosaur Ridge, 44 volunteers recorded 1,100 migrating raptors of 17 species, including Turkey Vultures.

ColonyWatch: As of press time, reports were still being filed from 33 citizen scientists across Colorado who are monitoring colonial waterbirds.

Share Your Passion for Nature and Science

Needs for these volunteer programs are typically assessed at the start of the year. For more 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 Emily Snode at 303-659-4348 ext. 11 or emily.snode@rmbo.org.

Recoveries, Rare Species at Banding Stations

More than 1,340 birds banded at Chatfield park, Chico ranch

By Emily Snode, School Programs Coordinator

The spring 2013 bird banding season was an eventful one, with a total of 1,341 birds banded between RMBO's stations at Chatfield State Park and Chico Basin Ranch in Colorado.

Plus, both stations had a "recovery"! A recovery is when a biologist recaptures a bird banded at another banding station, which provides crucial data to biologists about bird migration patterns.

Chatfield State Park

Biologist and Bird Bander Meredith McBurney caught 742 individual birds encompassing 56 species at the banding station at Chatfield State Park, located outside Littleton, Colo., this spring.

Swings in weather, such as an April 1 snowstorm, brought a record number of Hermit Thrushes and Orange-crowned Warblers to the station, in addition to lots of Yellow-rumped Warblers (both Audubon's and Myrtle subspecies). Ten percent of the birds captured at Chatfield this spring had been previously banded by Meredith, including a Yellow Warbler that is now at least 9 years old!

Meredith's list of "coolest" birds from the season included a Yellow-billed Cuckoo, Black-and-White Warbler, Nashville Warbler and a banded Broad-tailed Hummingbird, which had been previously captured and banded in the fall of 2010 near Fort Davis, Texas (see Meredith's story to the right).

RMBO provides programs at the Chatfield Banding Station in partnership with the Audubon Society of Greater Denver. In 2012, the station was renovated by University of Colorado students and has proven to be not only beautiful but effective.

See **BANDING** on page 7



Recovered Broad-tailed Hummingbird by Jordan Spalding

"On May 15, we caught a pair of Broad-tailed Hummingbirds in the same net. I released the female, then started to show the male to a group of young children out with their parents. There, on its tiny leg, was a band! I turned the data in that evening to the USGS Bird Banding Laboratory, and by morning I knew it had been banded in the fall of 2010, as a hatching-year bird, at a big hummingbird banding operation in the Davis Mountains near Fort Davis, Texas. According to a bander, many young Broad-tailed Hummingbirds linger there in the fall before completing their migration down to Mexico."

- Meredith McBurney, reflecting on a recovery



Yellow Warblers were abundant at the Chatfield station this spring. Photo by Barbara Van Horne.



A boy releases a bird at the Chatfield station. Photo by Bob Knapp.



This Yellow-billed Cuckoo was a "cool" catch. Photo by Barbara Van Horne.

Experience Wild Birds Up Close in Fort Collins

By RMBO Staff

RMBO is partnering with the Fort Collins Museum of Discovery to bring a bird banding station to Fort Collins, Colo., this fall.

The station will provide the opportunity for people of all ages to experience the variety of birds that migrate through or reside along the Cache la Poudre River.

In addition, data collected at the station will help the city and other natural resource managers with planning and conservation efforts in the area.

For International Migratory Bird Day on May 11, 2013, the station was set up to test the waters, so to speak, around the museum. Species caught that day included both Audubon's and Myrtle subspecies of Yellow-rumped Warbler, American Robin

and Chipping Sparrow, among others, with more than 150 people visiting the station to celebrate migration.

The station is located just west of the museum and runs from Sept. 16 to Oct. 11. It is open to the public from 7 to 9 a.m. on Tuesdays and Thursdays and 7 to 11 a.m. on Saturdays. Special public days are set for Sept. 21 and 28. School groups are welcome but need to schedule first by calling the museum at 970-416-2812.

Thank you to the following banding station funders: Wild Birds Unlimited of Fort Collins, Denver Field Ornithologists and New Belgium Brewing Co. Money raised at the Wing Ding, which drew more than 250 people to Avogadro's Number on Aug. 22 in Fort Collins, will also help support the station this fall.



A youngster views a Chipping Sparrow before it's released at the Fort Collins Banding Station on International Migratory Bird Day 2013. Photo by Jennifer Blakesley.

BANDING *continued from page 6*

Chico Basin Ranch

Biologist and Banding Coordinator Nancy Gobris banded 661 individual birds encompassing 68 species at Chico Basin Ranch, located 35 miles southeast of Colorado Springs, Colo. These numbers were slightly lower than previous years, since overall migration was a bit late this spring.

Nancy noted nine Long-eared Owls and three Gray-cheeked Thrushes as highlights from the season, along with the recovery of a Yellow-rumped Warbler. This tiny bird weighing only a half-ounce was originally banded in Mackenzie, British Columbia, on Sept. 4, 2012. Yellow-rumped Warblers can breed as far north as Alaska and winter as far south as Central America.

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. 13
- Fort Collins Museum of Discovery, Fort Collins, Colo. - Closes Oct. 11, public days Sept. 21 and 28
- Chico Basin Ranch, 35 miles southeast of Colorado Springs, Colo. - Closes Oct. 5
- Ela Wildlife Sanctuary (Grand Valley Audubon Society), Grand Junction, Colo. - Closes Oct. 18
- Ridgway State Park, Ridgway, Colo. - Closes Sept. 17
- Chadron State Park, Chadron, Neb. - Closes Oct. 4
- Wildcat Hills State Recreation Area, Gering, Neb. - Closes Oct. 4



Nine Long-eared Owls were caught at Chico. Photo by Bill Maynard.



This Gray-cheeked Thrush was one of three caught at Chico this spring. Photo by Steve Brown.



Blue-winged Warblers are rare at the Chico station. Photo by Steve Brown.

Stewardship Spotlight:

Using Bio-Controls to Battle Spread of Spurge

By Colin Lee

Private Lands Wildlife Biologist

Leafy spurge, an invasive, noxious weed in many parts of Colorado, has become prevalent along the South Platte River, especially in riparian areas and high-flow channels in the floodplain.

While annual monitoring revealed only traces of the weed a few years ago, surveys in 2012 found leafy spurge to be rapidly spreading on lands enrolled in the Natural Resources Conservation Services' Wetlands Reserve Program along the South Platte. In fact, leafy spurge had invaded up to 50 percent of acres on some WRP easements.

To combat the problem, biologist Colin Lee has been working with landowners and partners in Morgan, Washington and Logan counties in Colorado to develop treatment plans. Part of this effort has involved collaborating with Colorado State University Extension to develop leafy spurge treatment guidelines and Integrated Pest Management plans specific to riparian areas with wildlife habitat goals.

In the past year, Colin has worked with 14 WRP landowners to spot treat leafy spurge across 1,600 acres of South Platte floodplain with herbicides.

Release the Bugs

Bio-controls, or living organisms used to control pests, present another option for hindering the spread of leafy spurge and other noxious weeds.

In July, as part of the IPM plans, Colin took advantage of a program offered by the Colorado Department of Agriculture's Palisades Insectary to conduct two releases of leafy spurge bio-control beetles. The flea beetles can be effective in the control of leafy spurge, especially when combined with other IPM methods, such as herbicides or mowing. While these beetles have been used for decades in Colorado and surrounding states, these two releases were among the first in the Lower South Platte, according to insectary staff.

Beetle larvae burrow into the ground during the fall, so the first milestone will be to see if the beetles survive their first winter. Larvae should then start feeding on the roots of spurge, which should show



Private Lands Wildlife Biologist Colin Lee releases flea beetles to control leafy spurge along the South Platte River in eastern Colorado. Photo by Dollie Gonzales.

the initial signs of stress next spring. By mid-summer next year, the landowners should be able to locate adult beetles at the release sites.

By reducing leafy spurge on WRP easements, habitat should become more viable for wetland and grassland birds and other wildlife along the South Platte River. In the meantime, Colin and the landowners will be keeping a watchful eye out for their tiny, hopping allies.

Tracking Raptor Migration from the Rockies

By Jason Beason

Special Monitoring Projects Coordinator

This past summer, RMBO and National Park Service biologists outfitted two Osprey near Rocky Mountain National Park with satellite tracking units.

The work was part of a project to identify migration routes, stopover sites and winter ranges for the species. The project will help the park service better understand large-scale connections between other parks, private lands and other countries to the plight of breeding species at RMNP.

While the ultimate destinations of the Osprey won't be known until this winter, a primary goal of the project is to strengthen connections between Estes Park, Colo.,

at the door of RMNP, and its Sister City, Monteverde, Costa Rica, through their shared wildlife resources.

To engage young people, RMBO and NPS educators plan to work with local schools to incorporate Osprey migration tracking into classrooms programs.

In addition, light-level geolocators were attached to the satellite tracking units to test the accuracy of the geolocators, which RMBO biologists are using to track the migration of Black Swifts, Western Tanagers and Swainson's Thrushes as part of other research projects.

To follow the Ospreys' migration, visit www.rmbo.org. We'll be posting a page there soon showing the birds' routes.



RMBO biologist Nancy Gobris holds one of two Osprey outfitted with satellite tracking units this summer. Photo by Mitch Acker.

Newborn Plover Highlight of Neb. Field Experience

By Larry Modesitt, RMBO Board Chairman

During the live auction at RMBO's 25-year gathering, Kevin Corwin and I were the lucky winners of a trip to join RMBO biologists working to save Mountain Plovers in western Nebraska.

Mountain Plover populations have been in steep decline as their nesting habitat – very arid, bare ground, often near prairie dog towns – has been reduced. I'd known that RMBO began a successful plover conservation program in 2003, and I was anxious to see how it was done.

In June, to kick off our trip, biologist Angela Dwyer took Kevin and me to dinner and explained the program. The next morning, at 6 a.m., Kevin and Angela went off in one direction, while technician Clay Edmondson bounced me out to a crop field on his ATV. Clay held up a receiver to detect the location of one of a few radio-collared plovers, an effort to find where they forage. Alas, we didn't detect any.

We then met up with biologist Larry Snyder, the project leader, who was eagle-eyeing a possible nest site so that a technician, or an amateur like me, could mark it. Larry directed me with hand gestures to a spot where a plover had been heading repeatedly. It was a thrill when the three eggs in a small, stick-covered scrape suddenly appeared to me. I was on the lookout for ravens, as I had heard they can watch techs marking a nest, thereby alerting themselves to an easy meal.

I placed stakes in the ground about 30 inches apart to mark the nest's location. Technicians endure this hot, dusty area for months, often searching in vain for plover nests, so it is great that RMBO has taught many farmers how to locate nests themselves, mark the nest area and avoid tilling that small patch of land until the plovers either hatch or the nest fails for another reason, like predation.

Clay predicted one nest could have a hatchling. When we arrived, if we held the egg to an ear, we could hear tiny peeps. We also could hear tapping – barely – as the chick was pecking to get out. One of the eggs revealed a tiny hole where the chick



Angela Dwyer, Larry Modesitt, Kevin Corwin and Larry Snyder pose for a photo in a crop field in western Nebraska during a field experience won during the live auction at RMBO's 25th gathering.

was making progress. We returned two hours later and were rewarded with a newly hatched Mountain Plover. It was still wet and lying exhausted from its ordeal of escaping from its 1-inch-long egg.

It's simply amazing in less than three hours this little 2-inch-long weakling will be up, walking and finding its own food. The parent's job is nearly over. It will lead its progeny to food and warn them about predators. That's all chicks like this one need, to use a phrase I now know is real, to hit the ground running.

Sound Like Fun?

RMBO will be auctioning off field experiences like this one during the BBQ for the Birds on Oct. 5 at the Old Stone House in Brighton, Colo. (see page 3). Visit www.rmbo.org and click on the BBQ under Events for a list of trips being offered.

SAVING *continued from cover*

land for cattle grazing and agriculture. Oftentimes, when grazing productivity is low, land is sold, cleared and converted to row-crop agriculture, destroying habitat.

But habitat loss due to land conversion or mismanaged grazing isn't the only threat. Drowning in stock tanks, a lack of nesting structures (there has been a considerable reduction in mature yuccas, primarily because of cold fronts and prolonged drought), shrub encroachment and poisoning by agrochemicals are all hazards. To reduce these risks, RMBO biologists have installed escape ramps in stock tanks and erected artificial nests designed to reduce depredation of chicks and eggs

by ravens and Great Horned Owls. Soil and water conservation efforts are also under way.

Currently, the biggest opportunity is engaging landowners and collaborating with them to create management strategies that will be both profitable and environmentally sustainable. This will improve grassland and forage quality and minimize conversion of grasslands to agriculture.

RMBO is on the ground in Mexico, directly supporting landowners and searching for financial resources to initiate projects that maintain and improve grasslands. These projects include modifying fences and redistributing watering systems to better manage grazing.

RMBO is monitoring the grassland bird communities during these changes, and using the information to inform and improve future land management and quantify the effects of conservation on bird populations. RMBO's goal is to support five successful breeding pairs of Aplomado Falcons and enroll 500,000 acres by 2020.

These efforts are the key to balancing rancher livelihood, sustainable cattle production and conservation of the grassland ecosystem. These actions will benefit not only the Aplomado Falcon, but various species of declining grassland birds that winter in the Chihuahuan Desert.

Read more about RMBO's grasslands work in the Sept. 2 issue of High Country News.

Bird Feats: Making Strides for Conservation

State of the Birds on Private Lands

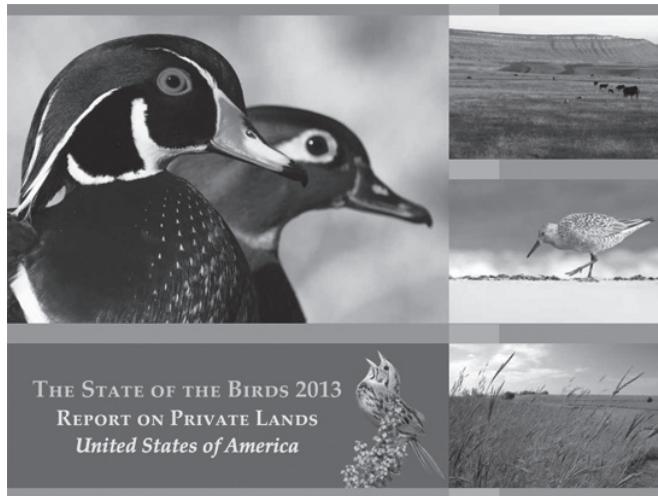
The State of the Birds 2013 report, released in early July, is the first of its kind to offer a comprehensive look at bird distributions and conservation on private lands in the United States.

RMBO, as a leader in private lands conservation, played an instrumental role in the development of the report. RMBO was asked by partners in Washington, D.C., to participate.

Stewardship Director Seth Gallagher penned the grasslands section, specifically highlighting the Wineinger-Davis Ranch, a past Leopold Conservation Award winner, and RMBO's collaborative Mountain Plover nest-marking program. Executive Director Tammy VerCauteren assisted with messaging for the report, as well as the development of communication tools.

The report will be used to inspire and motivate landowners across the U.S. to engage in conservation. It will also help citizens understand and value the importance of private lands – and the people who own and manage them – for healthy bird populations.

To read the report online, visit www.stateofthebirds.org.



stateofthebirds.org. For a printed copy, call 970-482-1707 ext. 30.

Visintainers Win Leopold Award

Congrats to the Visintainer Sheep Co. of Craig, Colo., for winning the 2013 Leopold Conservation Award.

The award is given annually by the Sand County Foundation, Colorado Cattlemen's Association, Colorado Cattlemen's Land Trust and Peabody Energy to recognize private landowner achievement in voluntary conservation.

Visintainer Sheep Co. is a sheep and

cattle ranch. Dean Visintainer and his son Gary jointly run the operation, where concern for the land has always been essential to their management.

RMBO Private Lands Wildlife Biologist Brandon Miller based out of Steamboat Springs, Colo., nominated the Visintainers for the award. Brandon has collaborated with the Visintainers on sage

grouse habitat enhancement projects on their ranch in the past.

RMBO in *High Country News*

The Sept. 2 issue of *High Country News* features a cover story on the plight of the grasslands in Chihuahua, Mexico, highlighting RMBO's ongoing efforts to conserve birds and habitat there.

Be sure to check out the article, and read more about RMBO's work in Chihuahua on the RMBO blog and cover of this issue of *The Primary Source*.

Staff Publications: 2012-2013

Association of habitat characteristics with winter survival of a declining grassland bird in Chihuahuan Desert grasslands of Mexico. A. Macías-Duarte and A. O. Panjabi. *The Auk*.

Opportunities and challenges to implementing bird conservation on private lands. E. Ciuzio, W. L. Hohman, B. Martin, M. D. Smith, S. Stephens, A. M. Strong, and T. VerCauteren. *Wildlife Society Bulletin*.

The Northern Black Swift: Migration path and wintering area revealed. J. P. Beason, C. Gunn, K. M. Potter, R. A. Sparks, and J. W. Fox. *The Wilson Journal of Ornithology*.

Inundation of playa wetlands in the western Great Plains relative to landcover context. A. M. Bartuszevige, D. C. Pavlacky, Jr., L. Burris, and K. Herbener. *Wetlands*.

Hierarchical multi-scale occupancy estimation for monitoring wildlife populations. D. C. Pavlacky, Jr., J. A. Blakesley, G. C. White, D. J. Hanni, and P. M. Lukacs. *Journal of Wildlife Management*.

Anthropogenic landscape change promotes asymmetric dispersal and limits regional patch occupancy in a spatially structured bird population. D. C. Pavlacky, Jr., H. P. Possingham, A. J. Lowe, P. J. Prentis, D. J. Green, and A. W. Goldizen. *Journal of Animal Ecology*.

Nest Microclimate at Northern Black Swift Colonies in Colorado, New Mexico, and California: Temperature and Relative Humidity. C. Gunn, K. M. Potter, and J. P. Beason. *The Wilson Journal of Ornithology*.

Staff & Board Migrations

Welcome ...

Peter J. Ampe, Esq., joined the RMBO Board of Directors in May of 2013. Peter is a senior associate with the law firm Hill & Robbins, P.C., where he concentrates on natural resources law, and specifically water law, for public and private entities. Prior to joining Hill & Robbins, Peter was the First Assistant Attorney General for the Federal and Interstate Water Unit of the Colorado Attorney General's Office. Peter received his B.A. from the University of Illinois and his J.D. from the University of Colorado School of Law. He enjoys numerous and varied outdoor pursuits in the mountains and plains of Colorado.



from the University of Cape Town. He is a board certified general surgeon and plastic surgeon with a strong conservation ethic and commitment to service. Among other past and current board experience, he is the chairman of the board for Mending Faces, a nonprofit that provides free surgical correction for impoverished children in developing countries inflicted with cleft lip and cleft palates, who would otherwise not have a chance for surgery.



Pedro Angel Calderón-Domínguez joined RMBO as a private lands wildlife biologist in March of 2013, based out of a field office in Chihuahua City, Mexico. Pedro holds a bachelor's degree in ecology and a master's degree in natural resources management from Universidad Autónoma de Chihuahua. For 12 years, he has worked as a range and wildlife science, management and conservation specialist. He has extensive experience developing projects with multiple partners that address wildlife species of conservation concern in the Chihuahuan Desert and Sierra Madre Occidental. Currently, he is interested in wildlife habitat restoration through the promotion and implementation of adaptive management and sound rangeland management techniques.



Jose Roberto Rodríguez Salazar, or Beto, joined RMBO as a private lands wildlife biologist in the spring of 2012 to reach out to ranchers in Chihuahua, Mexico. Beto is based out of a field office in Chihuahua City and is finishing up a Ph.D. in human dimensions and wildlife from Universidad Autónoma de Chihuahua. During his career, he has collaborated with international and national non-governmental organizations to study raptors and grassland birds and their habitats.



David Charles, M.D., joined the RMBO Board of Directors in May of 2013. Dr. Charles received his medical degree

Farewell ...

Thank you to the following people for their service to RMBO:

- Rachel Bock, Staff Accountant
- Kelly Corman, Private Lands Range/Wildlife Ecologist
- Noe Marymor, Private Lands Wildlife Biologist
- Andrew Pierson, Shortgrass Prairie Coordinating Wildlife Biologist
- Nathan Schmitz, 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!

- Elisa Austell, Communications & Membership
- Hector Garcia, International
- Chaitanya Khairnar, Information Technology
- Clara Lebow, Science
- Amanda Matthias, Science

- Anabel Medina Hernández, International
- Katie Morgan, Education
- Katie Ray, Science
- Nicole Reese, Science
- Kaity Ripple, Science
- Nicole Roth, Education
- Mariana Jovita Silva Piña, International
- Zakhar Volchak, Information Technology
- Peggy Watson, Education





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Chip in at www.rmbo.org
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THANKYOU for supporting bird and habitat conservation!
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25th Long-Sleeves

Just in time for cool fall weather: 25th anniversary long-sleeve shirts!

The shirts feature artwork on the back by popular wildlife artist Ram Papish with a diversity of species and habitats. The front has the RMBO logo.

Style: Pre-shrunk cotton available in gray and white

Sizes: Youth Small to Extra Large

Cost: \$22, or \$20 for RMBO members and volunteers (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.

25th T-shirts still available in select sizes!

