



Birds Foraging in Field of Triticale. Photo by Bob Hailey

Come Celebrate with Us December 6-9 at Our 34th Festival of the Cranes!

Come to this year's Festival of the Cranes! Celebrate the return to Bosque del Apache of thousands of sandhill cranes, snow geese, ducks, and hundreds of other over-wintering birds. Festival is offering seventy creative workshops and stimulating seminars, both in the field at Bosque del Apache National Wildlife Refuge (NWR) and in high-tech classrooms at New Mexico Tech!

Festival Registration and Workshops

Workshops focus on birding, photography, and environmental education; many include hikes and short walks to share the history and culture of the area! Several of our most popular presenters from years past are returning. We are also excited to welcome new faces.

Festival Registration begins the week of October 9: OASIS (monthly contributing) members can register starting October 9; other Friends members can register starting October 10; and the general public can register starting on October 11. All Festival

workshops and other information, including any updates, are posted on our website, at: <https://friendsofbosquedelapache.org/festival>

Field workshops will be outdoors at Bosque del Apache National Wildlife Refuge, with buses taking registrants to various locations. Many of our very popular presenters are returning, including Steve Ball, Alex Harper, Lisa Langell, Keanna Leonard, Holly Merker, Matt Mitchell, Erv Nichols, Sandra Noll, James Petersen, and Paul Tebbel. We are happy to announce that we will have two nighttime photography workshops at the VLA on the San Agustin plains, one hour west of Socorro.

Thanks to our great partnership with New Mexico Tech (NMT), most indoor workshops will meet in classrooms at Macey Center on the NMT campus in Socorro. The large NMT classrooms will provide us a warm respite from the New Mexico winter. Unlike last year, this year we will be able to fill the classrooms to their normal capacity.



Photography workshop in the field at Bosque del Apache. Photo by Jon d'Alessio.

Expo Room Space: Vendors and Stunning Photos

Our Expo Room space will reside in the downstairs and upstairs lobbies of NMT's Macey Center! Expo Room will feature many of the same great vendors you remember, including Hunt's Photo and Video, Front Range Birding, Opticron, Canon, Tamron, and OM.

Our 2023 Festival Artist, Lisa Benham, will have the only artist booth, where she will share her beautiful work with us.



2023 Festival of the Cranes winning artwork by Lisa Benham.

Free: Anyone coming to the Expo Room space on the first day of Festival will receive a welcome packet with great coupons and other goodies.

The beautiful 2023 Festival Quilt, donated by Fiber Arts Guild of Socorro County, will be on display in the Expo Room space. Follow this link to see a photo of the quilt and purchase raffle tickets:

<https://secure.friendsofbosquedelapache.org/a/quilt-raffle-23>

In the lower lobby, we will display some winning photographs from our photo contests in 2020 and 2021, when our in-person festival could not be held because of Covid. In the upper lobby, October 2 through December 14, Socorro photographer Don Boyd is displaying his photographs and writing from his Year of Refuge project at Bosque del Apache. See page 13 for more information.

Friends Annual Dinner and Keynote Speaker

We will host our Friends Annual Dinner on Thursday, December 7, at Socorro's Bodega Restaurant, known for its delicious food and great service. Dinner will run from 5:30 p.m.

to 7:30 p.m., during which we will announce and honor winners of this year's photography contest and the recipient of the 2023 Martha Hatch Friends Volunteer of the Year award.

Immediately following dinner, Dr. Rich Beilfuss will share a thought-provoking, hopeful, and inspiring keynote presentation. This year, the International Crane Foundation (ICF), a valuable partner to Bosque del Apache and to *Friends*, celebrates its fiftieth year. Dr. Beilfuss' presentation will be twofold. First, he will focus on lessons learned from the past fifty years of crane conservation: most importantly, cranes are global ambassadors, bringing people together for conservation action through diverse partnerships that cross international borders, political regimes, and rural-urban divides. Second, he will focus on a "top ten list" of the most important challenges facing crane conservation over the next fifty years, why they are important, and what we must do to address them.

Friends Celebrates Its 30th Anniversary This Festival

Friends of Bosque del Apache marks its 30th anniversary in November, so we are planning some special surprises during this year's



Dr. Rich Beilfuss, Festival keynote speaker, is CEO of the International Crane Foundation (ICF)

Festival. Please come and celebrate and have fun with us, our many partners, presenters, and attendees, and of course the sandhill cranes! Again, all Festival workshops and other information, including any updates, are posted on our website at:

<https://friendsofbosquedelapache.org/festival>



Sandhill cranes in "conversation." Photo by Hilary Bralove.

Save These Dates & Come Join Us!

Wildlife Zone – Saturday, October 21

10:00 a.m. -3:00 p.m.

This family-friendly and cost-free event is focused on interactive activities for kids, environmental education, and community engagement.

Registration is not required!



Friends of Bosque del Apache will be joined by nearly twenty of our conservation partners to share education and fun activities geared toward children. See rescued wildlife, join a young birders guided walk, get your face painted like the animal of your choice, and win prizes!

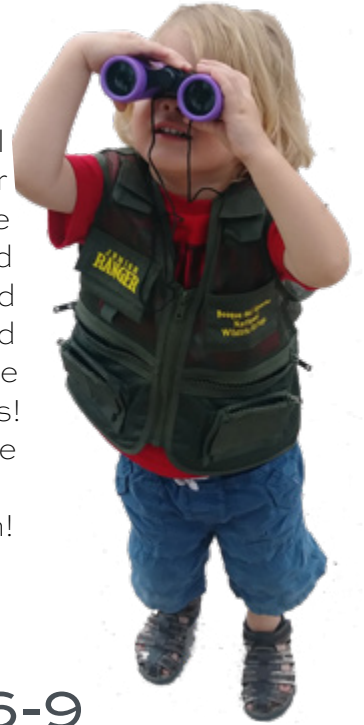
Wildlife Zone will be held at Bosque

del Apache's visitor center and the adjacent plaza.

Again, you do not need to pay or register; just show up and join the fun!

As the event evolves, we will post updates on our website:

<https://friendsofbosquedelapache.org/wlz/>



Festival of the Cranes - December 6-9

Join us for our 34th Annual Festival that celebrates the return of our overwintering birds, especially sandhill cranes. Workshops focus on birding, photography, and environmental education; other offerings include hikes and short walks to share the history and culture of the area! Friends released detailed information about Festival offerings on September 12. Registration starts October 9 for OASIS members, October 10 for Friends members, and October 11 for the public. For more information, see the article in this newsletter on page 1 and offerings posted on our website:

<https://friendsofbosquedelapache.org/festival>



Sandhill cranes in wetland. Photo by Ed McKerrow.

Bosque del Apache Buzz



Chamisa. Photo by Cari Powell

Have you heard the buzz around the refuge? Friends is teaming up with refuge staff and the River for Monarchs project headed by the Institute for Applied Ecology to restore twelve acres of habitat in support of monarch butterflies and other native pollinators! You've probably heard a lot on the news about population decline of the monarch butterfly because of climate change, drought, and loss of habitat. But did you know that in New Mexico over 1,700 additional species of pollinators are facing the same risks? These include over 1,000 known species of bees, 715 species of butterflies and moths, 24 species of bats, and 17 species of hummingbirds.

Pollinators are important to all ecosystems and certainly to the Rio Grande and Chihuahuan Desert ecosystems. Over 80% of plants worldwide require pollination by animals or insects to produce fruit and seeds. Healthy

pollinator habitats provide diverse food resources, particularly pollinator plants, and nesting sites that support and maintain pollinator populations. Pollinator plants supply pollen and nectar to ensure that pollinators have the resources they need to migrate, nest, and reproduce. Through our collaboration with the Institute of Applied Ecology, we are doing our part to help protect monarch butterflies and other invaluable pollinator species. In addition to the twelve-acre site at Bosque del Apache, fifteen other stepping-stone habitat sites will be restored for monarchs (and other pollinators) along the Rio Grande corridor and its major tributaries. Other sites in the project include Valle de Oro National Wildlife Refuge, NM Department of Game and Fish, Pueblo of Santa Ana, NM Department of Transportation Region 6, El Rancho de las Golondrinas, Carson National Forest, and Bureau of Land Management Taos Field Office.



Monarch butterfly on horsetail milkweed. Photo by John Olson

Our plan is to increase and diversify native pollinator plant species on the twelve-acre site currently known as the Observation Blind

Trail. This fall, we will plant over two hundred pollinator-friendly native shrubs and bushes as well as two species of milkweed (showy and broadleaf). Spring of 2024, we will seed the site with native wildflowers. Fall of 2024, we will plant 3,000 milkweed starts (horsetail and showy). Monarch larva cannot survive without local milkweed plants to eat. We will also install additional accessible trails and interpretive signage to educate visitors about the amazing interaction between pollinators and plants as well as give access to the areas where pollinator enhancement is occurring. In addition, we will repurpose the old observation blind to create an accessible outdoor classroom space with an interpretive display built into the old blind.

We will have many opportunities for volunteers

to help us with this project, and we hope to involve YOU on YOUR refuge! Fall 2023 preparation and planting will be completed by the time this article is released, but we encourage you to reach out to Cari Powell, Desert Arboretum Manager, to get on the list for regular project updates and 2024 planting days! You can reach Cari at:

arboretum@friendsofbosquedelapache.org

or 970-759-7299,

or by visiting

friendsofbosquedelapache.org/pollinator-project

We hope you share our excitement for this incredible project!

-Cari Powell, Friends Desert Arboretum Manager



Prickly pear blossom with bee. Photo by Cari Powell.

Gerad Montoya

Can you imagine being the water manager at Bosque del Apache in these very climate-challenging times? That is exactly the job that Gerad Montoya has done so well over the past seven years. Water manager is a more diverse role than I'd ever understood: Gerad maintains canals and ditches, monitors water in areas that host endangered species like the New Mexico meadow jumping mouse and southwest willow flycatcher, measures the refuge's water usage, works with others in the community to understand the water situation, schedules when to strategically flood the fields and when to draw them down, does seed yield counts, and more.



Gerad taking measurements at a well.

Gerad has a diverse background. He's actually been at Bosque del Apache for sixteen years, starting here with the Wildland Fire Program from 2007-2016. Before coming here, he was at the Bureau of Land Management for a year, and he spent eleven years with the New Mexico Fire District, where he served as a statewide resource for national wildlife refuges and fish hatcheries and a national resource during hurricanes, tornadoes, ice storms, and fires. Gerad grew up in Magdalena and attended college at New Mexico Highlands University in Las Vegas. During college, he worked for the US Forest Service part-time. Gerad received a bachelor's degree in physical education and health, with a minor in secondary education, and he taught for a stint at a middle school. Lucky for us here at Bosque del Apache,

Gerad has always had a love for biology and was attracted to the refuge, where he's worked closely with the biology program in his duties as water manager since 2016. While his previous jobs required him to travel frequently, his current role allows him to spend more time with his wife and family, which is a good fit for him as well.

Gerad gave generously of his time for this interview, and we drove all over the refuge so he could explain things on the ground. Currently, the refuge has approximately 1,100 active acres for feeding waterfowl. Gerad shared that this has been a very challenging year with lots of water from snowpack available early in spring, followed by one of the hottest and driest summers on record and water shortages. Some units started to "seed out" early, but then started to burn and get stressed, causing them to drop seed early. So, Gerad had to irrigate a bit more; the small rains in August helped as well. Thankfully, as Gerad has taken seed yield counts, he feels confident that the refuge is on track to deliver its target of 2.5 million pounds of food for the over-wintering birds.



Farm field at the refuge.

As we toured the refuge, Gerad also stopped at wells to do his monthly task of monitoring and recording measurements of the refuge's use of surface and ground water. The refuge is a responsible water partner in the valley, and Gerad reports to the state engineer each month.



Gerad checking well gauges

Gerad explained to me that some of the challenges besides decreasing water availability have to do with infrastructure issues. Fixing infrastructure is very expensive, and much of the infrastructure on the refuge has been in place since the 1980s—concrete ditches and canals, culverts, screw gates, outflow structures. Further, needed equipment (such as a mini-excavator) and staff time are not always available to keep ditches really clean for optimal flow. Moreover, Gerad and a maintenance crew work to keep roadside corridors cleared for visitor visibility and safety for both passenger vehicles and tractors.

During our drive, Gerad patiently accommodated me as I requested many stops to get out of the truck to admire and photograph the beautiful fields. I am a sucker for the sunflowers, which Gerad explained provide good food at this time of the year for all the little birds. Then, in late September, many stands need to be mowed to make way to flood the fields for the incoming ducks, and later geese and cranes. Gerad showed me many of the cereal grains that are grown for the incoming birds, and he showed me his chart of seed yields; for example, I learned that sprangletop yields 9,867 pounds of seed per acre, millet 4,340 pounds of seed per acre, and chufa (ducks love the seed heads and sandhill cranes love the yellow nut sedge) yields 1,570 pounds per acre. Despite many challenges, summer cocklebur treatments and water management prescriptions went smoothly. Gerad noted that it takes a great team—refuge biologists and maintenance

crews and others—to make it all work. We saw mixed fields of waving grain crops, and it was exciting to see the outcome of Gerad's and the team's hard work and to know that the birds will be well fed later this fall and winter. It's almost that time where we watch for broken lines of migrating birds—some who eat, rest, and pass through, and some who stay on the refuge during the entire season.



Gerad holding chufa



Gerad holding sprangletop

It is easy for those of us who visit Bosque del Apache to notice the animals, plants, and wetlands without appreciating all the skill and hard work of Gerad and refuge staff that goes on in the background. All animals rely on plant life and water for sustenance, but with climate challenges, those are harder to come by in this desert environment. We are so fortunate to have a skilled and passionate person like Gerad helping to support habitat and animals at Bosque del Apache.



Gerad Montoya out in the field

Note: If you are interested in learning more about how fields, moist-soil units, wetlands and invasives are managed, see our Bosque Watch articles from the past: Fall 2019 article, "Field of Dreams" on pages 2-3; Summer 2019 article, "Controlling the Invasive Cocklebur" on page 6; and October 2017 article, "Maintaining Productive Wetlands" on pages 1-3. Past issues of Bosque Watch can be found in chronological order at:

<https://friendsofbosquedelapache.org/publications/>

- Deb Caldwell, Friends Executive Director

Summer Interns Play Crucial Roles at the Refuge

In our summer 2023 edition of Bosque Watch, we introduced you to students whom the staff and Friends of Bosque del Apache welcomed for summer internships. We had a host of interns: three funded jointly by Friends and US Fish and Wildlife Service (USFWS) (so that we might pay each intern more), and three others funded through various USFWS programs, such as the Career Discovery Internship Program (CDIP), which is a part of USFWS Student Conservation Association (SCA) program.

Interns worked in different areas with different supervisors. Amanda Walker, our lead park ranger, supervised and mentored the visitor services interns. Claire Revekant, our senior biologist, supervised and mentored the biology interns. We asked the USFWS staff mentors and the interns to remark on their experiences. Interns Morgan, Kaylee, and Caitlin left for their respective universities before we could catch them for their comments, but their experiences are covered in others' reports.

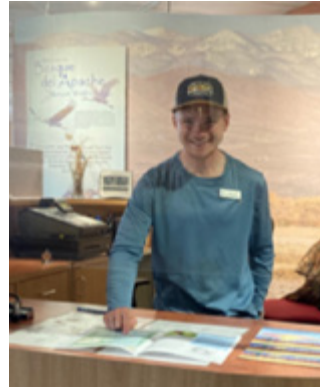
Visitor Services Team

Answering questions, handing out maps, identifying plants or birds – that's only part of the job of a park ranger. Park rangers also write programs, plan events, and troubleshoot exhibits and signs. Morgan May and Nick Bachand, the two park ranger interns this summer, took on these tasks (and more!) during their approximately thirteen weeks at Bosque del Apache. Between planning a Pollinator Day Celebration and writing and leading a refuge tour, both also conducted biology surveys and experienced wildlife up close – whether expected or surprised!

- Amanda Walker, Visitor Services Park Ranger

Nick Bachand

Hi, this is Ranger Nick reporting! I am checking in as the 2023 summer season wraps here at Bosque del Apache National



Nick Bachand

Wildlife Refuge. I had an incredible internship experience that I could not appreciate more, thanks to the support of my coworkers, the refuge staff, and funding from the Friends of Bosque del Apache! I have learned and gained so much from this summer

internship, and I would love to share with you some of the things I have accomplished in reinforcing our mission as a refuge.

I was the park ranger intern with Southern Utah University Intergovernmental Internship Cooperative (IIC), working for visitor services on the refuge! I primarily helped staff the visitor center, which is our gateway to connect with visitors and other public, education, and partner groups and provide timely information about our refuge. I was responsible for day-to-day maintenance and upkeep of visitor facilities, bird feeding for the watchable wildlife program, selling recreational fees, and providing welcome orientation services for our patrons. I pursued many different projects throughout the summer to aid in the education, interpretation, recreation, and stewardship of our beautiful place.

One of my biggest projects was developing, researching, outlining, advertising, and leading an interpretive refuge van tour for visiting public groups. I had the idea to create a program that can be usable throughout all seasons at Bosque del Apache and could connect with a variety of audience members ranging from first-time to returning visitors of varying in ages and backgrounds. During the summer, we generally receive our lowest visitation at the refuge, which can be tough for running informal programs. However, despite some initial challenges with advertising, we still got interest in a tour program from both locals and those from afar! I was very fortunate during my last couple of weeks to lead three summer tour

programs, the last two being booked full and receiving positive reviews after all tours were completed. This could help visitor services plan more programs like this to spark interest, support our work, and showcase Bosque del Apache as truly a “refuge for all seasons!”

In addition, I had the pleasure of creating interpretive posts and updates for our Facebook page to engage visitors in the happenings of our refuge, whether it be current projects on the ground, past and current natural resource management practices, or fun facts about our seasonal and permanent wildlife residents. This was also our main avenue for advertising programs happening on the refuge, including the interpretive van tour program and the pollinator celebration events. I also got the chance to delve into the education side of visitor services by planning and guiding observation walks/lessons for the San Antonio Elementary School and the Pueblo of Isleta Hiking Club. This involved teaching plant and animal identification and observation skills, leading a morning hike on the Marsh Overlook Trail, and swearing in junior rangers near the end of the programs.

I also coordinated with refuge staff, partner refuges, and other agencies, such as the U.S. Forest Service, on many other regional outreach events and programs, including monitor and survey projects for endangered and common species. Highlights from those would have to be surveying for Mexican spotted owls in the Lincoln National Forest and joining the Mexican Gray Wolf Recovery Program at Seville National Wildlife Refuge.

Through all these projects, programs, and experiences, I have gained an array of skills as well as opportunities to build both my professional and personal profile. I hope to continue my journey into public lands outreach and start an entry-level career in the field of environmental education and interpretation. This was a summer full of insight and discovery and an experience that I will look back on fondly and take with me as I return for the winter season as a park ranger intern!

Biology Department Team



Senior biologist Claire Revekant with interns Kaylee, Caitlin, and Will

Another fast-paced, successful summer in the books! This summer, the Biology Department at Bosque del Apache welcomed five enthusiastic go-getters to assist in carrying out high-priority biological tasks: Will Haywood, biology crew leader; Kaylee Seifert and Caitlin Crenshaw, biology interns co-funded by Friends and USFWS; McKenzie Hagenbuch, New Mexico meadow jumping mouse intern; and Marcela Morassi, invasive species intern.

With the refuge still experiencing a biologist vacancy, the interns played a crucial role in keeping the department running. Will, Caitlin, and Kaylee led the monitoring efforts for the southwestern willow flycatcher and yellow-billed cuckoo and managed the federally listed species databases that report submissions to the USFWS Ecological Services office. McKenzie led the monitoring efforts for the endangered New Mexico meadow jumping mouse and managed all associated databases and field work.

And Marcela assisted in the monitoring and restoration work occurring within the river realignment project area, a multi-agency effort. The interns also aided in managing invasive species; participated in target netting the yellow-billed cuckoo, as part of a research project taking place on the refuge;

banded birds at the station located at Valle de Oro NWR; cooperated with the U.S. Forest Service to survey for Mexican spotted owls in Lincoln National Forest; participated in a week-long career development Intern Summit in Albuquerque; and so much more! Their time here also exposed them to working with other federal land management agencies, to four threatened/endangered species, and to writing reports and permits.

On behalf of the Biology Department and staff at Bosque del Apache (BdA), we want to thank McKenzie and Will, BdA returnees, for their enthusiasm and willingness to lead incoming interns; Caitlin and Kaylee for their positivity; and Marcela for her curiosity. We want to thank all the interns for their hard work and wish them the best of luck with the next chapter of their lives. We also want to thank Friends of Bosque del Apache for making their internships possible. As always, we hope the interns remember their time at BdA fondly, and we look forward to watching them progress in their careers.

- Claire Revekant, Senior Biologist

Will Haywood

Our summer crew was made up of two biology interns and one biology crew lead. Caitlyn Crenshaw came to Bosque del Apache from West Texas A & M, Kaylee Seifert from Purdue University, and I, William Haywood, from New Mexico State University. The main focus of our summer was surveying for two endangered species: the yellow-billed cuckoo and the southwestern willow flycatcher. Having a team that shared a commitment to hard work and ethical principles led to successful results. Throughout our summer together, we detected sixty-one southwestern willow flycatchers and thirty-seven yellow-billed cuckoos. We also took part in managing invasive plant species and assisting the intern monitoring the New Mexico meadow jumping mouse, another endangered species the refuge manages for. Towards the end of the summer, we started working on entering data that we collected throughout the summer. We quickly learned how to work well together as a team, which

helped us succeed in our positions. This is something that I will take with me throughout my career!

Our amazing supervisor, Claire Revekant, made sure that we had many opportunities to enrich our experience. Our crew was fortunate to participate in bird banding at Valle de Oro National Wildlife Refuge, Albuquerque, where we banded seventeen birds from seven different species. We also worked with the U.S. Forest Service to survey the threatened Mexican spotted owl in the Lincoln National Forest. We were lucky to have a rare sighting of a pair of spotted owls and their chick. We also attended the Intern Summit in Albuquerque, where we learned about the many different types of positions the U.S. Fish and Wildlife Service offers. This experience opened our eyes to the numerous job opportunities and locations throughout the Service.

Our summer at the Bosque del Apache was a rewarding experience, and we made a positive impact on the environment. I would like to thank Caitlyn and Kaylee for being outstanding crew members, and we would like to thank Claire, our supervisor, for making this a summer to remember! Finally, I would like to thank Friends of Bosque del Apache NWR for contributing funds for our positions. Our positions wouldn't have been possible without them!

McKenzie Hagenbuch



Howdy! McKenzie Hagenbuch here, the New Mexico meadow jumping mouse summer intern. I am writing this four months into my internship, with only about one month remaining—and what a season it has been! I have been monitoring twenty-five camera

traps, which I meticulously place, check on, and move across the landscape of the refuge. My efforts have been fruitful, and I have made multiple jumping mouse detections thus far. I have also had the opportunity to engage in various projects outside of the refuge. In June, I was able to volunteer with a US Forest Service crew to conduct surveys on the Mexican spotted owl in the Lincoln National Forest; that was epic! In July, I attended the Southwest Region Youth Hire Conference in Albuquerque, where I picked up tons of new information in regard to a career with US Fish and Wildlife Service. In August, I got the chance to travel to Sevilleta NWR to volunteer for a day, helping feed their captive population of Mexican wolves as well as spending an afternoon conducting behavioral observations. Finally, towards the middle of August, I spent a week at Rio Mora NWR near Watrous, NM, live-trapping small rodents with Sherman traps—small metal box traps. The best part: we captured three New Mexico meadow jumping mice! I even got to hold one. What an incredible experience! I still have lots of work to do and research to conduct until I leave Bosque del Apache, in just over a month, for my next adventure—in November, I will be moving to Bonaire, an island in the Caribbean, to study the yellow-shouldered Amazon, a parrot whose livelihood is threatened by illegal wildlife trafficking. I will live there for four months. If you'd like to follow my journey more closely, find me on Instagram @Wildbiobabe, where I post wildlife content!



Marcela Morassi

Hailing from the Rio Grande Valley along the southernmost border of Texas, I have made my way back to the river as an Invasive Species Intern at Bosque del Apache. In 2021, a portion of the middle Rio Grande in New Mexico was realigned along a new path; since June, I have been working along this portion to survey for invasive plant species and help create a restoration plan for the banks, wetlands, and scrubland along the river.

Before this internship, I worked in a tropical butterfly research lab, preparing specimens and assisting with butterfly rearing, at the University of Texas, Austin, where I graduated in May 2022 with a bachelor of science degree in environmental science.

Throughout my time at Bosque del Apache, I've been fascinated by the changes I've witnessed in the river and its surrounding habitats. When I arrived in June, I was welcomed by spring snow melt that flooded the river's banks and created tributary-like water systems, which I practically swam across. Just as suddenly, hundred-degree days quickly dried things out, seemingly overnight; by the end of July, the river ran dry. I am eagerly awaiting the shifts that will come as autumn falls upon the refuge.



New Mexico Meadow jumping mice in the field.

Don Boyd Photography Show



Don Boyd at Bosque del Apache. Photo by J. Courtney



Vermilion Flycatcher. Photo by Don Boyd

As a Friends member and sometimes volunteer for more than fifteen years, Don Boyd has visited and photographed at Bosque del Apache NWR hundreds of times, but he might have broken a visitation record for a twelve-month period by photographing there for 357 days between December 21, 2021, and December 21, 2022. Using both full-frame and medium format digital cameras, Don worked to tell the story of what refuge means to him using our refuge along the Rio Grande as the backdrop.

Beginning October 2 and ending December 14, Don will be showing more than thirty

photographic prints on the gallery walls at Macey Center on the New Mexico Tech campus. The prints are from images in his book ***Year of Refuge*** that will be released next spring. Those of you who are subscribers to the Santa Fe New Mexican may have seen his popular quarterly articles about his year on the refuge.

Don will host an Artist Reception at Macey Center from 6:00 to 7:00 p.m. on Thursday, November 30, and invites all to attend. For more information, visit his website at:

<https://www.donboyd.com/collections/168474>



Chupadera Mountains in spring, seen across a wetland. Photo by Don Boyd

Costa Rica –“Pura Vida”

In Costa Rica, most places you go—and all the merchandise you see—will include the phrase, “Pura Vida.” Nobody can quite agree what the two words mean; the literal translation is “pure/good life,” but broadly, it describes the relaxed, optimistic attitude that’s possible when you live at one with nature, rather than in conflict with it.



Scarlet macaws.

This relaxed sense of inclusivity provides the perfect backdrop for this fascinating place: 5.5 million people, most located in the Central Valley, along with the capital, San Jose, in a

country the size of West Virginia. Costa Rica has the world’s densest species biodiversity—5% of the world’s flora and fauna in just 0.03% of its area. The diversity is possible due to the range of habitats and the government’s environmental policies over the last thirty years, which have reduced deforestation and protected—and connected—lands for nature to thrive. Not surprisingly, Costa Rica recently won the inaugural Earthshot, “Protect and Restore Nature” Prize.

Our August trip with Holbrook Travel began on the Caribbean coast at Tortuguero, literally “the place of the turtles.” This is where turtles – principally the green species – nest in the thousands at this time of year. The largest turtle rookery in the western hemisphere, supervised by the clearly visible Milky Way and the omnipresent park rangers, has been repeating this process for eons. Observing the exhausted females performing this prehistoric and heroic act – with the aid of red light and no photographs - feels like both a privilege and an invasion of privacy. In the backwaters, we were fortunate enough to see many bird species and a three-toed sloth with a young cub at the river’s edge. In the mornings, the howler monkeys celebrated daybreak by pelting our metal-roofed huts with fruit.



Keel- billed toucan.

Inland at Sarapiquí, the habitat is classic tropical rainforest. Birds and insects abound along with brightly-colored, poisonous tree frogs the size of your thumbnail. Selva Verde Lodge's feeding station provided continual drama and beauty: the Coati's early morning plantain snack; the clay-colored thrushes (Costa Rica's national bird) lined up like sentries (more interested in fighting than feeding); the beautiful rufous motmot; and the shimmering hermits, woodcreepers, and honeycreepers. And yet, amidst all this abundance, there is extreme rarity. The MesoAmerican biological corridor was established thirty years ago to protect the still critically endangered great green macaws. These magnificent creatures maintain a precarious existence even with all the efforts to protect them. They depend on the towering mountain almond trees (the "tree of life") – well over 150 feet – for nesting and food. The combination of climate change and constant commercial pressure on land makes this level of habitat specialization an existential threat.

Even with its conservation-friendly history, the challenge of balancing environmental protection with commercial interests is obvious everywhere. There's pressure on this tiny country's land from industry, industrialized farming (pineapples and bananas), and residential developments. For how long will it be sufficient to pay \$1,000 to keep each mountain almond tree standing? Part of the solution is to keep rebuilding ecotourism post-Covid, and the government needs to find ways to incentivize these, and other, ecosystem services.

March 4-11, 2024, I'll be leading a tour back to Sarapiquí and then south to San Gerardo de Dota, in the Talamanca Mountains (over 7,000 feet). In addition to the usual suspects, including the resplendent quetzal (at altitude), will be the winter migrants (warblers, tanagers, etc.) getting ready to head north to breed. Friends of Bosque del Apache will benefit to the tune of \$2,500 if the trip is full. Go to the Holbrook website, "Introduction to Neotropical birding with Friends of Bosque del Apache" at this link - <https://www.holbrooktravel.com/where-we-travel/central-and-south-america/costa-rica/costa-rica-introduction-neotropical-birding-friends-bosque-apache-24>

and reserve your place now!

-Jonathan Manley
Friends of Bosque del Apache Board President



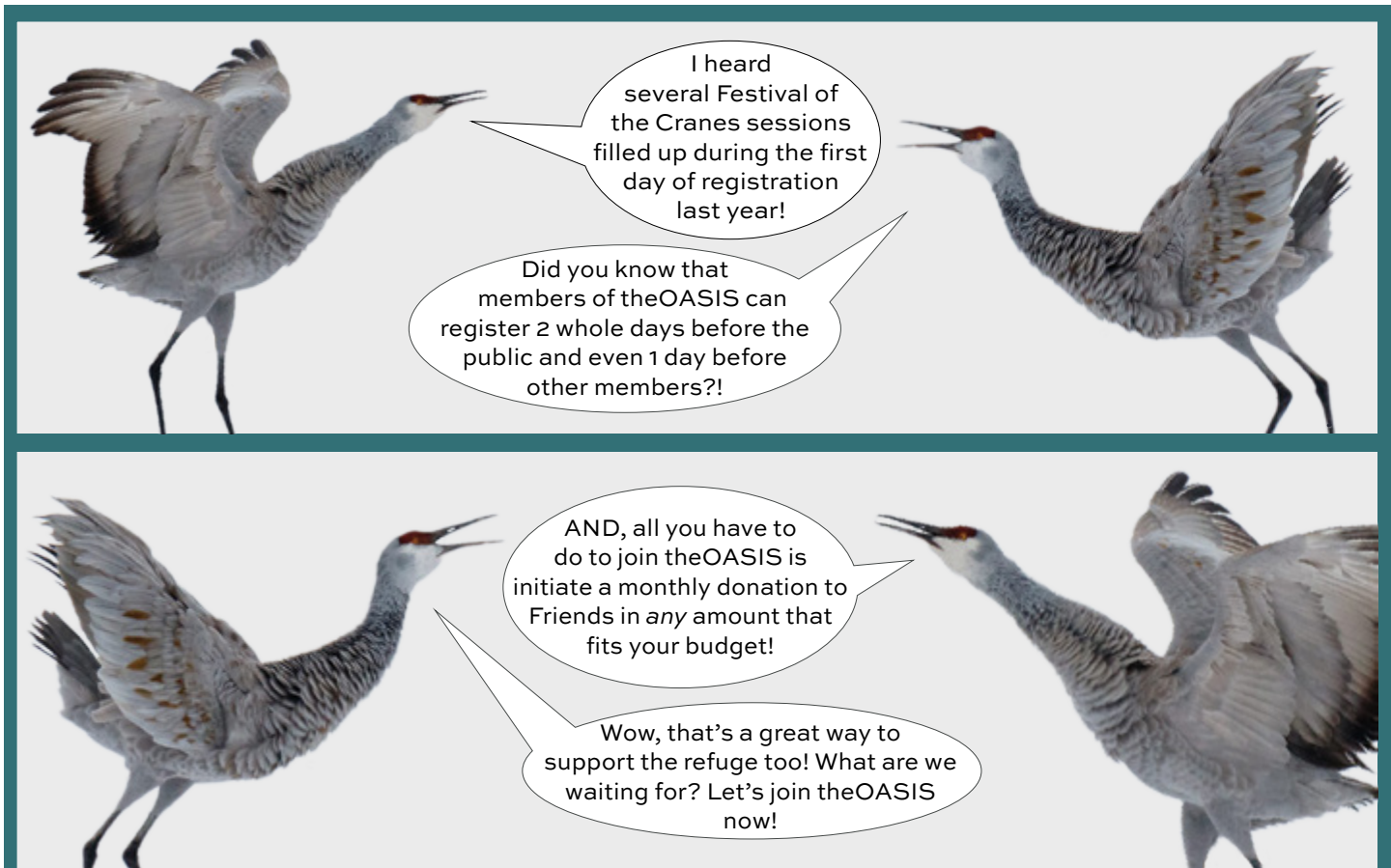
Chestnut colored woodpecker.



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While we always try to be respectful of your inbox by keeping emails to an appropriate minimum, we do usually send a few emails per month. If it seems like it's been a while since you've heard from us, you may have unintentionally unsubscribed from our mailing list! Many members do not realize it, but when you unsubscribe from *any* of our emails you are also unsubscribing from ***all*** future communications, which could mean you'd miss out on everything from event registration information (like Festival of the Cranes) to newsletters and current refuge happenings.

If you're unsure about your email subscription status or need to resubscribe, you can do so at <https://secure.friendsofbosquedelapache.org/a/mailling-list-signup>.



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