

# BOSQUE WATCH



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## Bob Merkel's Passing Leaves a Void

by John Bertrand

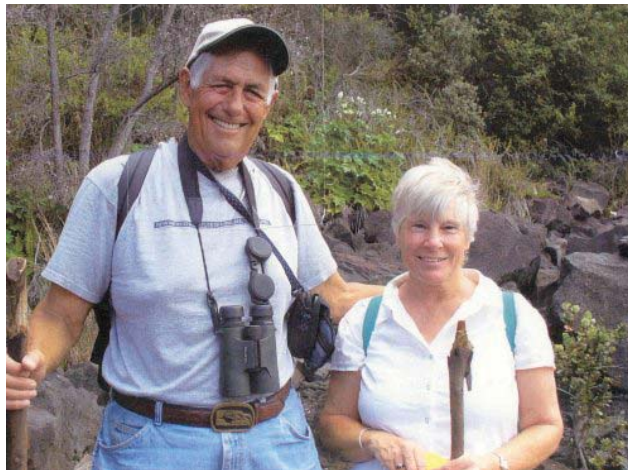
There is a void in our hearts. Bob Merkel is no longer with us to exercise his editorial judgment over the *Watch*. Nor to send encouraging reminders to Friends' members that it's time to renew. His detailed reports showing distribution of members by state or growth in income from sustaining memberships will no longer enlighten his fellow-members of the Friends' Board. His hiking companions on the Canyon Trail will wait in vain for Bob's authoritative voice to call out the name of that pink composite blooming along the trailside. For Bob Merkel passed away unexpectedly at his home in Socorro Nov. 18, the day after he led a vigorous Festival of the Cranes hike and was scheduled to lead other hikes on two succeeding days.

Bob and his wife Debby first introduced themselves to the Friends of the Bosque del Apache as guests at the Annual Meeting in 2004, the year they moved into their home in Socorro. Bob told the gathering simply that they had visited the Refuge and liked what they saw; that they had come to the Annual Meeting to see how they could help.

Bob quickly made himself indispensable. A regular contributor at bi-monthly meetings, he was elected to the Board of Directors in 2006 as Corresponding Secretary, a position he rapidly expanded into de facto membership chairman. Discovering

that nearly one-third of the Friends' then 823 members of record had not paid their current year's dues, he sent letters highlighting recent Friends' activities and asking them to renew. Those who did not were purged from the rolls.

In every succeeding month, members due for renewal have received



Bob Merkel and Debby -- Hiking companions

a warm letter from Bob. Renewals skyrocketed, many upgrading from a basic membership to one of the higher sustaining membership categories. With Bob's careful nurturing, membership zoomed to a peak of 1,174 in 2008, and active membership has remained at or above 1,000. Sustaining memberships now bring in well over 50 per cent of the Friends' membership revenue.

To achieve these impressive results, Bob budgeted his time to spend a portion of Wednesday each week working at his desk in the offices of the Friends. Even with this

demanding workload, he committed an unfailing two hours weekly to landscaping tasks assigned to him by Refuge Coordinator of Volunteers Daniel Perry. Bob was credited with 1,698 hours of service to the Refuge during his six years as a volunteer.

A frequent contributor to *Bosque Watch* of articles on arcane floral phenomena (e.g., his Cochineal article in this issue), Bob assumed the editorship of this publication in October, 2008.

Aside from his superb organizational skills, Bob Merkel brought to the Friends a deep commitment and an insatiable curiosity about the world of nature around him. In Bob and Debby's first year in Socorro, Bob had corrective surgery performed on both hips, freeing him to resume a lifelong love of hiking and sharing his observations with companions.

In the spring of 2007, Bob led a spring wildflower hike as part of the Friends' educational series, beginning his annual participation in the series with hikes focusing on the flora, fauna and geological features of the Refuge. With the enthusiastic reception of these hikes, and Bob's participation in a companion series of area hikes sponsored by the Socorro Consolidated Schools, Bob was scheduled at the 2010 Festival of the Cranes to conduct four outings to areas of historical or archeological significance or scenic beauty. Bob also contributed programs on New Mexico's Native American Heritage at the 2008 and 2009 Festivals.

As if his volunteer activities for the Friends and the Refuge were not enough, Bob also found time to survey and place labels identifying plants along the nature paths at the Sevilleta National Wildlife Refuge. His active involvement with the Bosque-affiliated Save Our Bosque Task Force is outlined in an accompanying article.

Of Bob's leadership in the Socorro Schools' Hike First series, Director of Human Resources Vanetta Perry said: "Bob Merkel led many hikes for our monthly school district/community Hiking First hikes. He was a brilliant naturalist, a walking encyclopedia in the desert. He was passionate about the desert, native flora and fauna, and shared that passion with hikers who joined him on his many



Bob Merkel (center) doing what he liked best (photo courtesy Richard Sonnenfeld)

sojourns. Personally, I learned so much about the desert from him, and was inspired by his enthusiasm and passion for teaching and his embrace of the local areas."

Finally, Bob and Debby were instrumental in organizing a volunteer group from the Unitarian Universalists of Socorro to "Adopt a Mile" of U.S. Highway 60 between Socorro and Magdalena.

Bob Merkel's passing leaves

more than a void in our hearts. It leaves a gap in essential conservation work that may take three or more volunteers to fill. It deprives us of a Friend, a role model and an inspiration to do more. To say that he will be missed is an understatement. In truth, he is irreplaceable.

## Save Our Bosque Task Force: Tribute to Bob Merkel

For a number of years now, Bob Merkel had been a valued member of the Save Our Bosque Task Force, a non-profit organization focused on protecting and restoring bosque wildlife habitat, providing environmental education and recreational opportunities for the 45 mile stretch of river that includes Bosque del Apache NWR. He was an energetic volunteer for this organization as well as so many others in the community.

Bob worked on many projects while serving as Secretary of the Task Force, representing the Friends of the Bosque del Apache NWR. In his unique position as a liaison between the Friends and the Task Force he was able to provide coordi-

ination between these two groups, working to better our Rio Grande ecosystem. He joined in all Task Force twice-annual Bosque Trash Pick Up Days unless he and Debby were traveling.

He provided support for the Task Force website (SOBTF.org) and most recently wrote the new trail guide for the Socorro Nature Area, an outdoor education area outside Lemitar, New Mexico, jointly managed by the Bureau of Land Management and the Save Our Bosque Task Force. Bob was such an asset to the Task Force; he will be sorely missed.

--Gina Dello Russo and  
Doug Boykin

## A Word from Your Erstwhile Editor

My appearance in this space as fill-in Editor is a bit like the opera diva who keeps popping up again in the death scene after singing her 'Positively Last Aria'. A spot of history is in order. Back in the nineties, Bosque Watch was Bosque News, an in-house-printed organ founded by Martha Hatch [yes, the Martha Hatch after whom the Friends' highest honor is named]. For a period during the mid-nineties, while Martha was indisposed, I assumed the editor's mantle until Martha was ready to reassume the helm, when I reverted to the role of Erstwhile Editor.

Now flash forward to 2001. Jon Morrison picks up the reins, reinventing the Bosque News as the larger, professionally-printed Friends of the Bosque Newsletter, which he directs until 2005, when the dual responsibilities of Editor and President of the Friends become too burdensome. It's here that my present claim to the title 'Erstwhile Editor' is reborn: After a brief interregnum by Don Begley and Joyce Johnson, Jon convinces me that my services as "ink-stained-wretch-in-charge" are once more required.

Three years later, a willing Bob Merkel steps up, burning with editorial zeal, and relieves me. Bob brought to the Watch an encyclopedic knowledge about plants and an unquenchable curiosity about the world around him which he shared with his readers of these pages, together with his love of the Bosque.

Now, with Bob's untimely passing, I lower my posterior once more uneasily into the editorial chair to complete the January 1 issue which Bob had begun. These have been an active three months on the Refuge and in the Friends since the October issue was printed. Bob and I will do our best to tell you about them. Then I intend to reclaim my title of "Erstwhile Editor" ... for the second time!

--John Bertrand

## Presidential Reflections

by Paul White

Permit me a bit of liberty here. Indulge me as I liken our organization, the Friends of the Bosque del Apache NWR, to the great river, the Rio Grande, that defines our beloved Refuge. We often think of 'our' river in local terms. Some of us see it daily or cross it going to and from work. Others have a more distant view, enjoying the cottonwoods and other plant life nourished at its banks. Some can hike along its banks or, like me, walk on the edges of cliffs overlooking its peaceful flow. So, too, do many think of the Friends solely as a 'local' organization, with members drawn just from the communities near the Refuge or along the Rio a few miles north or south. But, like the Rio, our group is sustained by life-giving tributaries that stretch into distant mountains, fields and far-flung places. In today's parched climate, the river needs every drop. So, too, do we Friends need the support of every one of you. Thank you!

Let me stretch this analogy a little further. Development, population growth and climate change over hundreds of years have altered the way the great river flows. It no longer follows the old cycles of flooding and silting. Gone are the oxbows and natural sand-bed channels and riparian riverbanks of old. (See "The Dynamic Rio Grande on Bosque del Apache NWR," in the 2011 Habitat.) In order to fulfill its purpose of protecting the wildlife that follows the Rio in its wintering migrations, the Refuge must intensely administer the water and the land adjacent to the river. The old river is gone, but in its place the Refuge creates a managed wetland that supports migrating birds and

other wildlife.

It is in this 'management' role that I wish to convey some news about the Friends. Our organization doesn't just happen; we aren't just a collection of like-minded people who love the Bosque. We are entering a new fiscal year, and our group is changing like the seasons. We welcome new members, some of whom joined during the Festival of the Cranes. If your membership is expiring and you haven't had a chance to renew, now would be a good time. Your support, like runoff for the Rio, is essential for a vital, vibrant organization. Our Board, your set of elected governing representatives, is also evolving. We mourn the loss of Bob Merkel, our Secretary. He gave us so much, with grace and humor. We miss him, even as we look to fill those large and always-moving shoes. Any volunteers? Greg Freidline, who stepped forward to fill our vacant Treasurer position, has now moved to Texas to pursue an advanced degree. We thank him and wish him well. We also thank four At-Large Directors who have moved off of the Board – Kale Batsell, Steve Green, Brian Ivener and Phil Norton. In no particular order, a partial list of their contributions includes: overseeing a rewriting of our By-Laws; providing vital insight into Refuge needs; leading a review of our Education Program; and continually inspiring our Bus Scholarship Program. But even as these Friends leave our Board, we embrace new faces. Our interim Treasurer (at least until the next Annual Meeting) is Marj Longenbaugh, a Refuge volunteer, computer consultant and business person. New At-Large Directors are: Linda Brown, rancher, business woman and operator of the Fite Ranch B&B; Jill Green, Refuge volunteer

and high school teacher; and Robert Moran, retired engineer, businessman and Festival volunteer. We also congratulate re-elected At-Large Directors Karla Moore and Lise Spargo. Like a river, we are always changing, refreshed with new faces, new ideas and new vitality.

With this new life, what will we become? It is early yet, but some priorities are already clear. We have established an ad hoc committee to review our Environmental Education Program. As many of you know, Alex Rykken, the inspired creator and leader of our Mapping the Rio Watershed Education Program left for a new career opportunity in Colorado. How can we best fulfill our educational goals following Alex's departure? What is the most appropriate successor for MTR? Our review committee will help identify options and lead us in our decision-making. We have also established a new Visitor Center Liaison Committee, working with Refuge management as it develops new exhibits for the current Visitor Center, and brainstorming options for the future. Other priorities will emerge as the flow of our work continues. What will we become? Give us your input; what are your concerns and your priorities?

As we look ahead, recalling the riparian Rio of old and imagining what it and we might become, I am moved by a poem I stumbled across recently, a poem about Turkey Vultures (P.13). "Turkey Vultures," you say? Kathleen Ramsay, former Director of the Wildlife Center in Espanola, said during a Festival workshop that the Turkey Vulture is her favorite bird, graceful and effortless on the wing and perfectly adapted to its environment. We should be so fortunate as we Friends evolve, flowing towards an uncertain future.

## Refuge Manager's Report by Tom Melanson

### Year of Many Accomplishments

With the successful completion of the 23rd annual Festival of the Cranes event, we are reminded that we have so much to be thankful for – excellent staff, wonderful volunteers, and a hard working Friends' support group. This year's Festival was a spectacular event and this was due to many factors – great event coordination, outstanding volunteer support, compelling sessions & speakers, fabulous weather, and of course the stunning variety of wildlife. Everybody had a good time.

Festival is also a time when the Refuge can showcase many of its accomplishments and this year was no exception. Perhaps the most successful story was the Refuge output in corn production – 1.2 million pounds! New contract farmers, better seed-stock and lots of hard work went into this year's crop and the results are apparent for all to see – beautiful rows of corn and lots of birds.

Elk put in an appearance during this year's Festival and some of the elk had white collars around their necks – this is a result of a collaboration between the New Mexico Department of Game and Fish and the Refuge. The state is assisting us with an elk study in which we will capture and collar 30 adult elk cows and bulls. The Refuge is seeking to establish data on its elk population and the state is interested in monitoring them for signs of Chronic Wasting Disease. This is the first of a three year study the results of which will help us develop a future management plan for this wildlife species.

Festival visitors were treated to outstanding panoramic views of the south end of the Refuge from two

separate locations: the newly built Point of Land Scenic Overlook and from newly cleared lands along the John Taylor Memorial Trail. The Point of Land Scenic Overlook was completed and opened to the public in early October. This new pull-off and parking area is located along State Route NM 1, approximately four miles south of the Visitor Center. Visitors walking the John Taylor Memorial Trail were astounded by views resulting from the clearing of approximately 70 acres of Salt Cedar, which used to dominate this area. Scenic views of the Cottonwood Bosque, San Pascualito Mesa, and San Pasqual Mountain, once obscured by thick and tangled Salt Cedar trees, can now be enjoyed by all along this new trail, which is located at the south end of the Marsh Loop.

Visitors also had the opportunity to see the newly rehabilitated parking lot that was installed at the Visitor Center earlier this year. Work on it was begun in May and completed in late September. Less visible but no less important was the installation and activation of a new Ground Source Heat Pump installed only last month. This new system provides heat for the administrative offices, further reducing the Refuge's reliance on fossil fuels.

## School Bus Fund Nears Challenge Goal by Cheryl Learn

Thank You! Thank You! To all of the artists who contributed to the second annual silent auction for the Emerson Learn Bus Scholarship Endowment at the Festival of the Cranes. Also, many thanks to those of you who bid on and took home some beautiful pieces of art, whether they be a turned wooden bowl, elegant hand-built pottery items, hand knits, jewelry, 24 hours with Jerry

Goffe (the master photographer himself) or airline tickets. (Thank you Southwest Airlines for awarding us tickets for the second time). Special thanks go to Sylvia Goffe, who enlisted the help of several Albuquerque artisans. Overheard were comments that the location of the silent auction and quality of the art were better than last year. Hopefully we will get better and better every year. We made about \$2,600 on the silent auction, about \$1000 more than last year.

Thanks to the generosity of The Friends and the Rio Fest, a wonderful gift of over \$3,000 came our way and went directly into the endowment fund. Will wonders never cease? Special thanks to Jon Morrison (a past president) of The Friends and Francie Deters for this great gift. The endowment fund was challenged to meet a goal of \$25,000 within 3 years of Emerson's death. As unbelievable as it seems to me, we are nearing that goal. Now, we have ONLY \$75,000 more to go to make it a self-sustaining fund.

When fully funded, the endowment is designed to spin off funds from investment earnings to fully meet requests from schools for bus scholarships to subsidize transportation costs for field trips to the Refuge. Should you wish to make a financial gift, be aware that the Friends of Bosque del Apache are a 501 C 3 and your donations are tax deductible. Donations may be sent to:

The Emerson Learn Bus Scholarship Endowment, Friends of Bosque del Apache, PO Box 340, San Antonio, NM 87832.

### EDUCATION SERIES

Check the website [www.friendsofthebosque.org](http://www.friendsofthebosque.org) and click on Educational Events for programs on the education series beginning in February.

## 2010 Festival of the Cranes Declared a Resounding Success!

by Robyn Harrison

By nearly all accounts, this 23rd Festival of the Cranes was the best yet. There were few complaints, many compliments, gorgeous weather, and even the birds managed to organize themselves into a proper fly-in by mid-week. Things happened that I never could have predicted or planned for: we had to move the Rio Viejo hike to the Canyon trail because of mountain lion activity; San Miguel church was closed a few weeks before Festival because of questions about its structural integrity but tour guide Nick Keller adapted; we lost one of our most enthusiastic hike leaders, Bob Merkel, mid-Festival, so we hiked in his honor instead of with his guidance.

Thanks to all of you who tried our online registration. There were glitches to be sure, but we will try to iron those out before next Festival. We had 812 pre-registered attendees, compared to 781 last year. On Saturday more than 900 people went through the herpetology exhibit in the Lannan Center (one of the few places we can actually COUNT people!)

Eighty-plus volunteers made this Festival happen. Some are resident at the Bosque and will be here to assist in the Visitor Center, with tour groups and doing landscaping, maintenance and other chores through February. Some summer volunteers stayed through Festival and still others came just to help with Festival. Plenty of community and regional volunteers stepped in to help at the Macey Center, the Friends tent and on the Tour Loop decks. I owe a huge debt of gratitude to all of them. Festival wouldn't be possible without them.

We found ourselves being written about in newspapers from the Dallas Morning News to the Salt Lake City Tribune, from Taos to El Paso. NPR came to experience a fly out. KOB and 3 other radio stations carried interviews about the Festival.

The City of Socorro outdid themselves with the Social on the Plaza (only 7 beer glasses left!), the sold-out cooking classes, the historic tours, and a performance by the Belleville Outfit that had everyone dancing.

Planning for next year already has begun. Circle the dates November 15-20 for the 24th Festival of the Cranes. We will strive to get the brochures in the mail and the information on the website some time in mid-August, opening registration the 1st of September. In the meantime:

- \* make sure your Friends' membership is up-to-date,
- \* send in any suggestions for ways we can improve the Festival or ideas for keynote speakers or workshops you'd like to see offered,
- \* pick out your best photos and enter the photo contest (info will be on our website),
- \* take a hike in Bob Merkel's honor.

Thanks for your participation and continued support!

### Film Flam

white egrets  
on black bulls  
and me with  
only color film.

--Barbara Dubois

## DVD Review

by Bob Merkel

### "FIRST FLIGHT: A MOTHER HUMMINGBIRD'S STORY"

Noriko and Don Carroll. 2009 (45-min. running time + extras) \$19.95 in the Friends' Nature Store

The Carrolls "retired" to Las Vegas, NV, from New York City a few years ago and bought a house. Among other things, the house came with a hummingbird nest attached to a clothesline under the roof of the back patio. One day that spring, a female hummingbird appeared and started refurbishing that nest!

Their backgrounds in nature writing, photography, and advertising production kicked in. They christened the hummingbird "Honey," set up video equipment all around the nest, and proceeded to record her nesting activities over the next three years. Their final product, this DVD, shows Honey collecting nest material, feeding among the garden flowers, laying her two eggs, and then raising "Ray" and "Zen" to and beyond their First Flight. Noriko narrates, in her Japanese-accented English, over a pleasing sound track.

Honey, by the way, is a female Black-chinned Hummingbird, the same species that nests in numbers each summer around the Bosque del Apache Visitor Center. One extra on the DVD is a "Making of" featurette and another is a slide show with images of several other hummingbird species as well as stills from the video [more at *HummingbirdStory.com*]. My wife and I liked this DVD so much we plan to gift a copy to relatives.

## Kingdom of Jordan Eyes Clone of Festival of the Cranes

by John Bertrand

Could there one day soon be a clone of the Bosque del Apache Festival of the Cranes in the middle-eastern Kingdom of Jordan? Not so far-fetched as it may seem. A personable pair of observers from The Royal Society for the Conservation of Nature (RSCN) in Jordan attended our 23rd annual Festival of the Cranes in November. Their mission was to pick up pointers for a possible 2011 wildlife-themed festival at Jordan's Azraq Wetland Reserve, a protected nature preserve similar to units of the National Wildlife Refuge System in the U.S.

The observers from Jordan were Reef Fakhouri and Hana Al-Banna, representing Wild Jordan, the business arm of The Royal Society for the Conservation of Nature. They also visited the Rio Grande Nature Center and the Rio Grande Zoo in Albuquerque during their ten-day November stay to learn more about nature outreach programs into the community conducted by these facilities. Their visit was a follow-up of an inspection by Jordanians a year ago of Bosque and other desert wetlands in the Southwest as part of a USAID-funded Jordan Parks Project through the Department of the Interior.

Hosts to Reef and Hana while visiting the Festival were Friends' Executive Director Leigh Ann Vradenburg and Refuge Senior Biologist John Vradenburg, whose tour of Jordan's nature reserves last May under the same sponsorship was described in the July 2010 issue of the Watch.

A wildlife festival at Azraq would be the first of its kind in Jordan, according to the observers, and could serve as a demonstration project for similar festivals at others of Jordan's seven nature reserves. At Azraq and the nearby Shaumari reserve, visitors may catch a glimpse of Oryx, Persian Onagers, Little Egret and the Killifish.

Jordan's spring and fall bird migrations into the Azraq Wetland Reserve are similar to the migrations



Jordanian observers (from left) Reef Fakhouri and Hana Al-Banna pause for photo with Leigh Ann Vradenburg during 23rd Festival of the Cranes.

of Sandhill Cranes and Snow Geese around which the Bosque festival is built. The Azraq region's eastern desert and mountain topography resembles that of Bosque's middle Rio Grande setting. Festivals at other nature reserves in Jordan could be built around different species of wildlife found in those areas, the visitors suggested.

RSCN, an independent non-governmental organization founded in 1966, was given the mandate from the Jordanian government to protect and manage the Kingdom's nature heritage. Wild Jordan man-

ages ecotourism and the socio-economic projects which are associated with the reserves that link the protection of nature with improving the livelihoods of local communities. More than 100 people are employed by Wild Jordan in these projects, making products which are sold in the Nature Shops at the reserves.

The Festival of the Cranes, which is the largest single activity of the year that brings tourism dollars into the Socorro/San Antonio New Mexico area, is an apt model for a projected wildlife festival in Jordan. The economic impact of the Festival to the local region is estimated in *Banking on Nature*, a 2006 report published by US Fish and Wildlife, to be between \$1.25 and \$2.2 million.

The pair expressed amazement that after 23 years, the Festival of the Cranes continues to survive and grow, adding something new each year to keep it fresh. They also were impressed with the Festival's combination of wildlife and cultural events.

When the visitors were asked to name their favorite Festival activity, each cited the evening fly-in of cranes and geese. Remembering the experience, Ms. Al-Banna enthused: "The color of the sky was great...the combination of the color and the birds coming in was wonderful."

Asked in an interview what impressed them most about the team which produces the Festival of the Cranes, both visitors exclaimed in unison: "The volunteers! Everybody has a job assigned and knows what to do." The pool of prospective volunteers in Jordan is limited, the guests explained, because volunteerism is new to the Jordanian culture but is growing in popularity, especially among the young.



Egrets at Azraq Wetland Reserve

According to the visiting pair, Jordan is regarded by European nations as the best ecotourism destination in the middle-east. Last month, Britain's Guardian newspaper presented its Ethical Travel Award to Wild Jordan. Wild Jordan, which operates as a business, earned \$1.3 million last year, primarily from its ecotourism based activities such as entrance fees, eco-centric activities and environmentally-friendly eco-lodges located inside and near the reserves.

But earnings from ecotourism are overshadowed by Jordan's overall tourism. Jordan has been described as "an open museum" because antiquities from its rich history are ubiquitous on the landscape; many have been preserved as formal sites. International and domestic tourists spent \$2.6 billion in Jordan in the first nine months of 2010, with these sites the main attraction.

For more information about Jordan's reserves and accommodations, visit [www.rscn.org.jo](http://www.rscn.org.jo) on the web.

### Closures

The following facilities remain closed to ALL public activity due to increased mountain lion activity:

- Entire portion east of the Rio Grande
- Low Flow Conveyance
- Rio Viejo Trail
- Group Reservation Campsites

Closed to pets only:

- Marsh Boardwalk Trail
- Marsh Overlook Trail
- Lagoon Trail
- John Taylor Memorial Trail

## New Overlook Opens Historic Vistas

by John Bertrand

The Refuge has opened a new permanent view point to visitors located 3.2 miles south of the Visitor Center, a few hundred yards off State Highway 1. Called Point of Land Overlook, the site derives its name from a natural feature of the same name. The gated entrance currently is open from 8:00 a.m. to 3:30 p.m., but as soon as a timed gate opener has been installed, access will be extended to match regular Refuge hours from one hour before sunrise until one hour after sunset. There is no entrance fee to visit the overlook.

The automobile-accessible Point of Land Overlook is saturated with history. It offers a panoramic vista across the Refuge's river floodplain and overlooks in the distance the site of the 1862 Battle of Valverde and other historic sites. Just a stone's throw below the viewpoint, oxen-drawn Spanish caravans carried freight along a west branch of El Camino Real de Tierra Adentro from the mid-1600's until the arrival

in 1880 of the Santa Fe Railway. The west branch departed from the main El Camino route near Val Verde, passed through present-day Socorro, and rejoined the main route at Sabinal.

There is parking at the site for both passenger vehicles and RVs. Cement walks make the vistas fully accessible to persons with disabilities. An information kiosk of the stucco-over-adobe design recently adopted by the Refuge features three panels of Refuge information.

On the drawing boards, but possibly a year from installation, is a forty-foot-long adobe and stucco wall which will be faced with panels recreating the Pueblo, Spanish/Mexican and American periods of the area's history.

The Point of Land Overlook has been in the active planning stage since 1990, when it was included in the Refuge's Public Use Management Plan. The project was constructed with funds from the Federal Highway Administration.



Jenna Melanson  
Checks Out Point of  
Land Overlook

# A FESTIVAL FOR ALL AGES

## Scenes from the 23rd Festival of the Cranes



Whatever floats their boat, whether raptors, reptiles, blacksmithing, flyouts at sunrise, dazzling artwork, or the perfect composition in their camera viewfinder, thousands found it to enjoy at the 23rd Festival of the Cranes.



Photos courtesy of Erv Nichols, Sandra Noll, Dwayne Longenbaugh, Ed Gaffey and Robyn Harrison



## Heli-darting Kicks Off Elk Study

by John Bertrand

Fourteen elk were tranquilized with darts fired from an overhead helicopter and collared on the Refuge the week of Oct. 18, the first round of an intended 30 elk to be collared. It was the kick-off of a three-year study of an expanding elk population on the Refuge, and its implications for providing suitable habitat for the Refuge's flocks of Sandhill Cranes and Arctic Geese and other wildlife species.

The dramatic October air/ground operation merited colored picture and story spreads in the Albuquerque Journal and local newspapers. Two network TV channels also planned on-the-spot coverage, but this was scrubbed when a shift in the wind grounded the chopper for a day.

The collaring operation is being conducted under direction of Refuge Senior Biologist John Vradenburg, in conjunction with New Mexico Department of Game & Fish (NMDGF), which provided the aircraft and tranquilizing technicians for the October round. While tranquilized from the dart-injected sedative, the elk bulls and cows were fitted by a ground crew with radio collars, examined for



NMDGF tech fires tranquilizing dart at bull elk below.

health, and checked for Chronic Wasting Disease. A reversal injection returned the elk within minutes to their normal activities on the Refuge. Collaring of additional elk to fulfill the study's complement is being scheduled as equipment and personnel become available.

Refuge Manager Tom Melanson termed the joint operation an example of a combined federal and state effort which can yield results that are beneficial to everyone. The radio collars permit Refuge staff, volunteers and student researchers to monitor the herd's movements, activities and mortality (if any) for up to a year. The data will be shared on a continuing basis with NMDGF. Collecting this data is an essential element in developing a management plan for the elk which balances their needs with the needs of other species which inhabit the Refuge. Approximately 535 species of vertebrate animals occur on the Refuge, indicating the richness and diversity of its environment.

Although elk were present historically in central New Mexico, they were nearly eliminated more than a century ago due to hunting and changes in habitat. According to NMDGF biologists, centuries ago before humans reshaped the landscape, elk were primarily creatures of the plains, spending their lives grazing. NMDGF reintroduced elk to the region's mountainous areas in the mid-twentieth century.

Elk were not a resident species on the Refuge when it was created in 1939. They began moving onto the Refuge from the nearby Chupadera and Magdalena mountains, and along the Rio Grande corridor about 15 years ago. Abundant feed and the absence of hunting on the

Refuge have created conditions favorable to their expansion. Estimates based on field observations place the size of the current elk population on the Refuge between 80 and 100 animals.

The elk currently roam the entire Refuge, but are concentrated in three herds. They forage on a combination of natural vegetation and agricultural crops (alfalfa, cereals and corn) intended for wintering flocks of Sandhill Cranes and tens of thousands of Arctic Geese and other waterfowl. Corn comprises an important component of the diet for these winter residents.

The current Refuge management plan calls for production of 1.5 million pounds of corn annually on Refuge crop lands. Elk, like the birds, will feed on corn. The increasing elk population is competing with the birds for the corn planted on the Refuge. Corn depredation by the elk contributed to the severe shortage the Refuge experienced last winter.

The type of data that state and federal researchers hope to gain from the study of the resident herd over the next three years is reliable population estimates, health and specific dietary information, and migration patterns and locations for the herd.



Collared bull elk returns to herd minutes after receiving reversal shot.

# How Prickly Pears Enriched the Spanish Empire

by Bob Merkel

Last summer the prickly pear growing right by our mailbox suddenly had a few small, cottony bits of fluff on a couple of the pads. Turns out each clump of waxy fibers was covering an insect whose tiny proboscis was stuck into the pad like a soda straw. The insects seemed to prefer the edges of areoles (the bumps that spines grow from) which I suppose are easier to penetrate. About three days later I noticed some more on a prickly pear growing right near our Bosque del Apache Visitor Center.

Then I recalled something I'd heard about a red dye called carmine, or cochineal. Didn't it come from some kind of insect that lived on prickly pears? Well . . . That simple inquiry opened up a whole world of connections and more and more questions.

Hernán Cortés and other conquistadors who invaded what is now Mexico found Aztec people wearing garments featuring brilliant red colors, much brighter than was then available in Europe (from madder plants). The new dye, they found out, came from tiny so-called scale insects that lived on prickly pears and covered themselves with a fibrous waxy coating. The white coating was a protection from predators and also helped to conserve moisture in the desert.

The Spanish soon established an industry to grow prickly pears to feed more and more and more cochineal bugs. Export of live cochineal insects was strictly prohibited. Foreigners weren't allowed to even visit production areas. In Europe rumors were spread: the dye came from the cactus fruit, or maybe from some kind of seed, it was said.

During the next two centuries, the value of cochineal dye exports to Spain was exceeded only by those of gold and silver.

This bright red dye provided a big payoff to the Spanish crown. It took around 200 years before other European countries learned the truth. The celebrated Dutch microscopist van Leeuwenhoek showed in 1704 that the dye was composed of insect bodies. At first people didn't even believe it but eventually the monopoly was broken by establishing cochineal production elsewhere. By the late 1800s world cochineal production reached about 7 million pounds. [by the way, it takes about 70,000 insect bodies to weigh a pound; a large and healthy cactus plant would yield about 20 pounds of dye per year.] At the start of the 20th century, however, cheap "aniline" or "coal tar" dyes, including bright reds, caused the market for cochineal to collapse.

*Dactylopius coccus*, the source of commercial cochineal, is a southern species related to mealybugs, aphids, cicadas, and a number of other insects that live on sucked-up plant juices. The ones we find at Bosque del Apache and in the Socorro area are members of a more northerly



White scale on cactus pad source of cochineal (red dye).

species, probably *D. confusus*. In any case, under all the white fluff is the female bug, silvery gray on the outside but filled with body fluids containing the dye, carminic acid. [It's thought that carminic acid is distasteful to predators.] This kind of dye is applied to wool or silk, primarily, along with a metal salt such as alum or a tin salt as a "mordant" to improve colorfastness. Different mordants produce different shades of red or pink.

I've wondered whether these cochineal scale insects have any preferences among different species of cacti. According to the literature, some *Dactylopius* species do prefer chollas. Several kinds of prickly pears grow wild on the Refuge: Engelmann's (*Opuntia engelmannii*), Black-spined (*O. macrocentra*), Brown-spined (*O. phaeacantha*), and maybe also the Plains Prickly Pear (*O. polyacantha*). So far I've seen the scales only on Black-spined Prickly Pears in the Desert Arboretum near the Visitor Center.

The carmine red of cochineal is enjoying something of a revival in this century. It is used in food colorings, in so-called "natural" cosmetics, on wool and silk fabrics, and even in some paints. Current production comes from the Canary Islands and several countries in Latin America.

One other aspect of these scale insects is that they are, after all, predators on the cacti. Where prickly pears are used as landscape plantings, homeowners often complain that cochineal scales are unsightly and damage the plants. In Australia, prickly pears escaped cultivation and became a huge invasive problem. The agricultural authorities there finally released a grasshopper and a moth that lived on prickly pears. They were much more effective in controlling the

cacti than cochineal scale insects turned out to be.

And so you see what I meant at the beginning of this little story. Those white spots on the prickly pear in our yard led to a little entomology, an interesting bit of Spanish colonial history, some chemistry of dyeing, a brief detour to Australia, and a foray into prickly pear botany and ecology. I hope that you enjoyed the ride.

## From the Journal of a Refuge Volunteer by Cathie Sandell

### Visitor Center visitor meet & greet -- Friday, 5 November 2010

This is my first day in the visitor services rotation for the winter season. It is still dark outside as I walk to the Visitor Center! First order of business is to turn on the lights, outside speakers, and cash registers (we are opening two now), feed the birds, count the money, put the snacks out, run up the flags, and open the doors to visitors. No one walks in for the first 45 minutes. This will change as the season progresses and the early morning wildlife viewers arrive for hot coffee and cocoa as soon as we open. Today it is an opportunity to vacuum and restock the Nature Store. Our week of training was interesting and varied and now we get to put all that information to use. Our first visitors are a van load of senior citizens from Belen who come twice a year. One of them comes from a family who homesteaded in New Mexico and has a relative who penned "Home on the Range." Talking to visitors and hearing their stories is one of my favorite things. We start the Refuge video for them, the first of many showings today. The new TV makes it a pleasure to view once again. It's pretty busy for a Friday. There

are two large tour groups in the afternoon – the German exchange students are taken out on the Refuge bus by two volunteer tour leaders and the landscape Board member Bob Merkel. Sales are brisk in the Nature Store including to a family from Ecuador (relatives of a Friends' member) who do their holiday shopping while here and another individual who buys two turquoise necklaces with matching earrings. We see a lot of holiday shopping this time of year, which is good for the Friends and good for the Refuge. Closing is the opposite of opening, with the added task of restocking the drink fridge and tallying the money for deposit. I walk the long way home through the boneyard and see my first Brewer's Sparrow for the year. Before dark I drive over and fill my propane tank, one of the benefits of being a resident volunteer.

### Fee Booth – Saturday, 6 November 2010

It's a beautiful sunny crisp fall day with golden cottonwoods and an adult Bald Eagle visible on the snag between the Flight Deck and Eagle Scout Deck. At least the sun is up when I arrive at the fee booth as weekend hours are 30 minutes later. After loading the cash register and recording pass numbers I put out the stop sign and open the shades for business. Early morning is a good time to count the "Iron Ranger" money before it gets busy. As it warms up the sparrow activity increases in the 4-Wing Salt Bushes around the fee booth and today they are joined by a mockingbird. There is a Friends' Board meeting this morning so many familiar faces are coming by the fee booth. I have sold a few daily passes but far more of the visitors already have a Golden Age or Senior Pass. It's 10:30 a.m., warm enough to open the fee booth door. I can hear the snow geese as

they return to the Flight Deck pond to spend the day. Today they have chosen a location that is visible from the window. There is always something to watch so binocs are part of my fee booth gear. I sometimes bring a book or magazine but rarely ever open it until February when visitor usage, both people and birds, slows down. Bicycles, motorcycles, several big RVs and lots of cars, the beautiful weather brings people out in droves this afternoon. At closing there is a line of vehicles out to NM 1. I hand out fee envelopes, drop the blinds, and head in to the Visitor Center to reconcile accounts and record my hours. Busy days go very fast.

### Visitor Center Phones – Sunday, 7 November 2010

A pink and gold sunrise this morning, with the time change I have time to sit in the sun in my trailer and enjoy a cup of tea before heading over to work. One of the pleasant things about volunteering here is the short 5-minute walk to work. I'm back in the Visitor Center today; this time my primary job is to answer the phone. On a weekday I would stay back in the Bullpen (the office area) running copies, relaying radio messages, filing and sorting for Refuge staff, etc. But on weekends there are more visitors and fewer phone calls so I join the meet-and-greet volunteer out in the Center. There are visitors waiting at the door for us to open, and with new volunteers it takes longer to get through the opening procedures. We will get quicker at this with practice. I try my hand at restocking the Nature Store without the store manager's help; can't find much of the back stock so only replace some of the merchandise sold yesterday. We are busy again as it is another beautiful day on the Refuge. Many people come this time of year spe-



## Sandy Cops Martha Hatch Award: "She Keeps Us Connected" by John Bertrand

Anyone who has visited the Friends' website ([www.friendsofthebosque.org](http://www.friendsofthebosque.org)) which Sandy Seth designed and maintains as webmaster will understand why Sandy had to be the recipient of the 2010 Martha Hatch Award...the Friends' highest honor. President Paul White presented the award to Sandy in a ceremony following the Annual Friends' Dinner at the Festival of the Cranes.

Sandy also left an indelible mark on the 23rd annual Festival: her photograph titled "Sandhill Crane Pair - Reflections" was chosen as the Festival's theme. The image was reproduced on banners lining the main street in Socorro, and on Festival literature and merchandise.

The Martha Hatch Award is given annually "to the person who best exhibits the characteristics of an ideal volunteer and who has made outstanding volunteer contributions to the Friends and the Refuge." In presenting the award to Sandy, the Friends' President said: "...our honoree has loved everything about the Bosque ever since she first laid eyes on it...Sandy, it seems as if every time I turn around, I am discovering something else you have done in support of the Refuge and the Friends." White continued his introduction with 14 concrete professional and financial contributions Seth has made to the Friends.

When the call for Martha Hatch nominations was issued, three members responded with nominations for Sandy. Selected from the many reasons cited in Sandy's cause are these:

• "Every photograph or notecard Sandy has created in the last 10 or

11 years ties to the Refuge with eloquent pleas for supporting the place, the people working there and the wildlife that depends on it."

•(From the Festival Coordinator): "To put it colloquially, Sandy has bailed my butt out more often than I care to admit and has never mentioned it to anyone else."

•"Sandy always seems to be working on a new poster, a banner or an article or whatever is needed by the Friends. She is constantly trying to think of new ideas to promote the Refuge and bring in new visitors. If



Paul White presents 2010 Martha Hatch Award to Sandy Seth at Festival of the Cranes.

one could begin to put a price tag on what she does everyone would be amazed at what she donates."

Sandy is a second-generation New Mexican. It was a trip to the Bosque del Apache that sparked an enduring love affair with the wintering Sandhill Cranes, and nudged her into taking up wildlife photography as a serious avocation in 2002. "I thought maybe I could make a contribution toward their understanding," she said modestly. Today Sandy's images of the Bosque rank with those of the top nature photographers. She says she views her wildlife art not as a business, but as a way to call attention to the value of all life, especially birds and wildlife and the habitat they rely on for survival.

Sandy became a member of the Friends in 2003 and a Business Sponsor in 2005, contributing through the [BirdSongGallery.com](http://BirdSongGallery.com) online gallery which she owns with partner Valerie Graves.

Sandy's signal contribution to the Friends has been keeping the organization connected in an age of rapidly advancing electronic communications. She assumed the position of Friends' webmaster from Wally Newman in 2006, and completely revamped the site in 2009, adding the Friends' Online Nature Store link and PayPal capability for secure on-line payment for merchandise.

Next she turned her attention to the Festival of the Cranes website, simplifying navigation and adding a List Status page with real-time updates for availability of reservations for all Festival activities. In 2010, she installed on-line reservations to the Festival site. Sandy also created a website for the Friends' Mapping the Rio educational project, on which student activities were posted.

In 2009, Sandy ushered the Friends into the blogosphere, creating and updating a Festival of the Cranes blog with daily postings from the 2009 Festival. You can check into her postings from the 2010 Festival at [festivalofthecranes.blogspot.com](http://festivalofthecranes.blogspot.com).

Before turning to photography, Sandy pursued an interest in regional architecture and use of native materials in building. She is known in the Taos area for her advocacy of building with native materials, and for five houses in the Territorial and Pueblo styles which she hand-built from adobe.

Sandy has lectured on Southwest art and architecture at the Heard Museum in Phoenix, and was a tour leader for the Smithsonian's National Museum of American Art Forum.

Sandy derives her passion for New Mexico's natural resources and

traditions from a family with deep roots in New Mexico. Her father, Judge Oliver Seth, was for 34 years a member of the Federal 10th Circuit Court of Appeals, retiring as its Chief Justice. Her mother was founder of the pioneering Canyon Road Art Gallery, one of the first of Santa Fe's illustrious showplaces for regional artists.

## Book Review by Barbara Dubois

**WINGED WONDERS: A Celebration of Birds in Human History** by Peter Watkins and Jonathan Stockland. 2005, 2007. New York: Bluebridge. 207 p.

In nineteen chapters, the authors identify sixteen birds. The effect is somewhat similar to that of [100 Birds and How They Got Their Names](#), but this book has more legends and anecdotes. The last three chapters discuss bird illustrators, state birds, and birdsong, any of which might fill a whole book itself.

Before naming any bird, the authors have "The Attractive Collection," the words we use to describe a group, such as "a gaggle of geese." My favorite has always been "an exaltation of larks."

The separate discussions vary in length and in interest. The eagle turns out to belong to the falcon family, and then the falcon chapter is especially rich in detail, for example, the falcon has been used in sport since 3000 BC. "Pecking Order" means that only certain people could own certain birds: only a king could carry the migratory Gyrfalcon; a prince, earl, or duke could carry the Peregrine; a priest could carry a Sparrow Hawk; a lady might carry the Merlin, even today called a "Lady's Hawk"; a yeoman could carry a Kestrel.

Mankind held the falcon in such high esteem that he began to name weapons after the birds: "faucon,"

"fauconnette," "robinette," and "saker" to name a cannon. When guns came into use for hunting instead of falcons, the gun was called a "musket," the name of the male Sparrow Hawk. Sparrow Hawks were used later to rid the Crystal Palace of messy sparrows in the Great Exhibition. The authors find the falcon celebrated in a sonnet by Gerard Manley Hopkins. Then, throughout the book appear quotations from poems by Tennyson, Wordsworth, Shakespeare, Blake, and the Psalms.

The chapter about the goose is fun. Geese have been associated with humans for at least 6000 years, and "goose" is one of the oldest words of the Indo-European languages. Probably the first birds domesticated by humans, geese are easily reared, hardy, and are paired for life. In legend, we find geese in stories of the Chumash Indians of California, in Egypt, in India, Norway, Greece, and France.

Mother Goose Tales started about 200 years ago, and there was a "Goose Bible," printed by a printer whose trademark was a goose. Goose feathers have been useful in bedding, and geese have been used as watchgeese. We can appreciate all these features as we enjoy watching the snow geese on and above our ponds.

The Kingfisher has a colorful legend: Noah sent it out after the dove for signs of receding rain, but it flew right into a storm and the lightning striped it blue from head to toe. Then to avoid the storm, it flew above it, where the sun thought it was impudent and scorched it. Another story is that its poetic name is Halcyon, the name of the happily married Alcyone, daughter of Aeolus, God of the Winds. Envious of her happiness, Zeus hurled a thunderbolt at her husband and drowned him in the ensuing shipwreck. Alcyone of course threw herself into

the sea to join her husband. Then Zeus repented and turned them both into kingfishers.

Therefore, sailors think the kingfisher is their protector. Since the kingfisher nests seven days before and seven days after the winter solstice, sailors think these days are calm and peaceful and "halcyon" days.

The ostrich is always fascinating. Like most authors nowadays, these authors contradict the silly old tale about the ostrich burying its head in the sand. They say that it sinks to the ground and lowers its head, so that it is flush with the ground. Other books say that it merely lowers its head so that we cannot tell what it is doing because it is hard to get close to an ostrich. Ostrich eggs have become symbolic because they are so large. They are a symbol of creation and fertility and led to the Easter egg!

Since the owl is my favorite bird, I am unhappy with all the legends about evil connected with it, especially in New Mexico, but it still symbolizes wisdom. The owl has exceptionally high visual sensitivity and very acute hearing. In medieval monasteries it was thought to be pious because it sat still in the tree all day. In Athens, the owl was associated with Athena, the Goddess of Wisdom. The Athenians were the first people to use double-sided coins, with Athena on one side, and her owl on the other. The coins were known as "owls."

The last bird discussed is the King, the Wren! I hadn't known it was the King. It is a fine nest-builder and has friends everywhere. In legend, the birds gathered to choose a king. The eagle seemed like the natural winner, but the wren hid in the eagle's feathers and thus managed to fly higher! The bird's cunning is reflected in its name: in Old English, words beginning with

“wr” indicate twisting or perversity: writhe, wriggle, wring wreathe, wrist, wrench.

Wherever you dip into this charming book, you will find fascinating details of whatever bird you meet. An index and occasional illustrations enhance the pleasure you will derive from this fine volume.

## Charlie Wheeler's Volunteer Legacy by Daniel Perry

One day in the late 1980's, Charlie and Katy Wheeler walked into the Visitor Center and saw a Government-issued poster which had been posted by the administrative assistant. The poster read: "Ask about Volunteering". They did, but nobody knew what they were talking about. Charlie and Katy asked to see the Manager, but he had not seen the poster nor really thought about having volunteers. Or what he would do if someone asked.

This was the beginning of the volunteer program at Bosque del Apache National Wildlife Refuge. Charlie and Katy paid for their own RV site at Bosque Birdwatcher's RV park and spent a couple of weeks weeding and painting. They continued to volunteer in succeeding years, eventually in over 6,000 combined hours at the Refuge.

When I appeared at the Refuge in 1996, Charlie was giving tours. His wealth of knowledge was being passed around by word-of-mouth. This inspired me to compile his and the other old-timers' knowledge into the Naturalist Handbook so that information could be passed down.

Charlie passed away last October. He left a legacy of knowledge and work at the Refuge that we miss to this day. The greater legacy is the outstanding volunteer program at the Refuge with over 26,000 hours donated annually by volunteers.

*The Friends of the Bosque del Apache National Wildlife Refuge is a registered 501 (C) (3) nonprofit corporation incorporated in New Mexico. The Friends promotes appreciation and conservation of wildlife and habitat through environmental education and natural history experiences at Bosque del Apache National Wildlife Refuge.*

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*Government decisions determine the fate of the Bosque del Apache. You can help by letting key decision makers know how you feel about the Refuge and other natural resource issues.*

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