The Bosque Watch

The Friends of the Bosque del Apache National Wildlife Refuge

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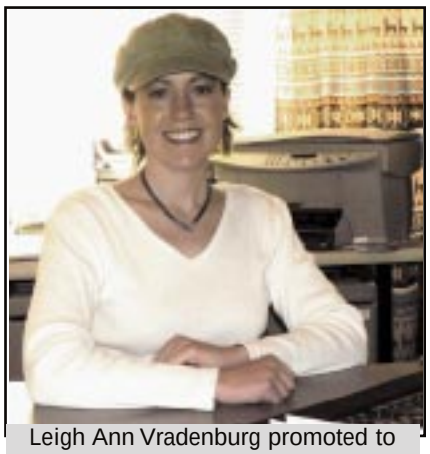
Presidential Musings

Lannan Foundation steps up with more aid

These are exciting times for the Friends. Two and a half years ago, when I became president, there were two things that I wanted to accomplish, one was to move the Friends from a large organization living small to one that could make a difference for the Refuge, the community and our members. Second was to place financial procedures in place in order that we could pursue large grants to help the Refuge. A little over a year ago Tom Sizemore volunteered to be the Friends treasurer and took on the Herculean task of writing procedures for our finances. The first Standard Operating Procedures is complete. The second part will be complete later this year. The budget is now readable and transparent. We now know were we stand at any time.



Leigh Ann Vradenburg promoted to Executive Director

Now, the Friends have been given a two year grant from the Lannan Foundation to grow the organization. The Friends organization is moving from a Board that runs the daily operation and supervises the Friends employees to one with an Executive Director. Leigh Ann Vradenburg, our current Supervisor of Organization, will step into the Executive Director position. Leigh Ann had been an Executive Director for a non-profit in Colorado before moving here. The Board will set policy and pursue funding for projects through events and fundraisers, and the Executive Director will implement the Board's policies, manage all of the Friends employees and pursue grants for projects on the Refuge.

This grant makes it possible for the Friends to move our educational program from a monthly contract to a full-time position. The education program has been a very successful effort that reaches the 3- 5 grade students in Socorro and is making a difference.

This organizational change for the Friends, with additional opportunities, could not have come at a better time for us and the Refuge. Two and a half years ago, the Refuge budget was in fairly good condition; now, due to federal budget cuts, things are much different. Between 2007 and 2009 in the Southwest Region of the Refuge system, which includes Arizona, New Mexico, Oklahoma and Texas, a total of 38 positions are to be eliminated. This includes six refuge managers, seven biologists, and twelve maintenance positions. Bosque at the present time is slated to lose one position, but is expected to provide additional administrative and management support for other Refuges.

I have met with the Nature Conservancy and the Wilderness Society about help on our projected purchase of Chupadera Peak from the Highland Springs Ranch development. The Wilderness Society is sending out an e-mail to its 7,000 members in New Mexico telling them of the importance of the purchase and giving them a link to the Friends website for further information and ways to donate.

The Nature Conservancy is also interested in assisting with purchase of an additional larger tract which contains Willow Springs just off the southwest corner of the Refuge. Tom Melanson and I have talked to Highland Springs Ranch about it. At this time, the larger purchase doesn't look like a go, but discussions are still continuing.

Did some one say, birding in Costa Rica? Costa Rica is a birder's paradise offering a mind-boggling array of species never seen in the U.S. The Friends trip is now available for registration at http://www.holbrooktours.com/FriendsofBosque CostaRica2008 or from the link from the Friends website.

We arrive in Costa Rica the evening of February 20 and return on the 29th. We will be staying in some of the best lodges in Costa Rica. The land cost of $1765 covers all expenses but airport departure taxes, passport and visa fees, insurance, alcoholic beverages, soft drinks, bottled water and personal expenses. Air fare estimated at $850 is additional.

Three hundred dollars will be tax deductible, with two hundred and fifty going to the Friends and fifty to a conservation group in Costa Rica which the participants will select before leaving. The trip is limited to a maximum of 15 persons, so get your reservation in soon. It's going to be a great trip. Make your plans now.

The Friends has lost our Nature Store manager, Cynthia Pearse. She'll be missed. She helped design the new store and led it to increased sales this past year. Thank you, Cynthia! At this time we are interviewing for a new manager and we'll let you know who it is next time.

I guess I've gone on long enough. Come down to the Refuge. Remember, Bosque is a Refuge for ***ALL*** Seasons.

Jon Morrison

From the Refuge Manager

Volunteers and Energy

During the past several months we have realized some initial success in improving our efficiency in electrical use as well as in our goal of becoming at least partially self sufficient in meeting our electrical needs through the development of solar energy. Similar to many of the projects undertaken on the Refuge, volunteers have, and will continue to play a critical role in achieving our goal..

Prior to the Festival of the Cranes last fall, we were fortunate to receive the assistance of volunteer electrician Robert Hodges. Robert and his wife Barbara reside in Green Valley, Arizona. Robert had previously helped out with several projects at Buenos Aires NWR and came highly recommended by refuge staff. Robert spent two weeks at Bosque during early November installing permanent electrical infra-structure throughout the Plaza and headquarters area, greatly improving the overall safety and efficiency of our power supply system. His efforts proved to be particularly beneficial during the festival when multiple exhibitors required electrical hook-ups through out the area, no more mazes of extension cords! Robert returned during January and completed additional system improvements in two Refuge residences and the headquarters.

During Robert's second visit, while discussing our desire to develop solar power, he mentioned another individual, Tom Vineski, who designs, sells and installs solar generating systems, and had helped with the development of a system at Buenos Aires Refuge. I have since contacted Tom and he is planning on visiting Bosque during late March or early April. Tom will conduct an inventory of our energy demands and systems, possible opportunities for improving efficiencies and siting options for developing solar arrays. He would then follow up with internet research for possible resources available in New Mexico. Once we have specific system designs in hand for the various buildings and as funding becomes available we can begin converting the system. Robert and Tom have also each expressed interest in helping with system installation. Who knows, if we're lucky maybe we can have our first solar array installed by this year's festival?

Tom Melanson

The Friends of the Bosque del Apache National Wildlife Refuge is a registered 501 (C) (3) non-profit 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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Nature Store
(In the Refuge Visitor Center)
Open 7:30 a.m. to 4:00 p.m. weekdays 8:00 a.m. to 4:30 p.m. weekends & holidays. 505-835-1828

Friends Educational Series

Explore the Night Sky with Amy Estelle
Sat., April 21; 7:30 pm to 9:30 pm. – Meet at Visitors Center
Learn more the Moon's phases, major constellations, and bright stars of the season through hands-on activities and observation. Binoculars and telescopes will be available for close-up study of the Moon.

International Migratory Bird Day
Sat., May 12; 8:00 am to 4:00 pm. – Visitor Center
Several events throughout the day celebrate the migration of shorebirds and songbirds and springtime in the desert! Join us for bird walks, tours of the Desert Arboretum, cactus growing and propogation demonstrations, and more!

Invertebrate Atlantis: The Amazing World of Aquatic Insects
Sat., June 9; 8:00 am to noon – Visitor Center & Field
Join biologist Leigh Ann Vradenburg in exploring the world beneath the water at Bosque del Apache NWR. Work with equipment and microscopes to explore the humble beginnings of dragonflies, mosquitoes, and more.

Damsels and Dragons at Bosque del Apache NWR
Sat., July 28; 9:00 am to noon – Visitor Center & Field
Join Gary Froehlich as he explores the world of damselflies and dragonflies – their life cycles, where to find them, and how to identify them. Slide program and field observations.

17 Whooping Cranes Perish in Florida Storm

Seventeen of 18 endangered young whooping cranes that followed an ultralight aircraft south from Wisconsin last fall in the sixth year of a project to establish a migrating flock of the birds between Wisconsin and Florida were killed in storms Feb. 1. Excluding the Feb. 1 disaster, 25 per cent of the whoopers introduced on the Wisconsin-Florida route have perished since the first flight six years ago.

A similar ultralight-guided whooping crane reintroduction effort between Grays Lake, Idaho, and Bosque del Apache NWR pioneered by Kent Clegg in 1997 was cancelled after one year, in part, according to Whooping Crane Recovery Teamleader Tom Stehn, because of "unacceptable" hazards to the birds on the Grays Lake-Bosque route.

Web Make-over Features Secure Pay

Friends who have not checked our Friends website recently www.FriendsoftheBosque.org are due for an eye-opening experience. A complete make-over of the site went on-line in mid-January, featuring new graphics, easier navigation and a ton of new information. There's also a secure on-line payment feature for renewing memberships, making contributions and…soon-to-come…on-line purchase of selected items from the Friends Nature Store.

Some additional features include a greater variety of photos, a "What's New" section where news can be posted, youth pages and contests, event posters which can be down-loaded and additions to the on-line library of Bosque materials. Plan soon to log on and spend some time exploring the site…it truly is a treasure!

The make-over is a collaboration between Sandy Seth, our new webmaster, and Wally Newman, who originated the site and has maintained and improved it for more than ten years. Newman, and now Seth, serve as unpaid volunteer members of the Friends Public Relations Committee. The pair worked together for several months to assure a smooth transition to the new format.

Sandy Seth brings an impressive portfolio to her new assignment. She is a second-generation native New Mexican, daughter of Judge and Mrs. Oliver Seth of Santa Fe. She comes from a family who has always loved the Bosque and New Mexico's birds and wildlife.

Sandy is the author of several books, including Adobe! Homes and Interiors of Taos, Santa Fe and the Southwest and a contributor to an upcoming book, The History of Taos for the Taos Historical Society. She has lectured on Southwest art and architecture at the Heard Museum, Phoenix, and was a tour leader and lecturer on Southwest art and architecture for Smithsonian's National Museum of American Art Forum.

Sandy graduated with a BA from the University of New Mexico with majors in English and Art in 1969. She later hand-built several traditional adobe houses and many adobe fireplaces without a crew, doing all aspects of construction. She is featured in several books about women builders and New Mexico women.

In 1998, she earned the first Certificate in Publishing Technology awarded by UNM (computer graphics, print and web publishing.) She later went on to create several hundred art-related and business websites, numerous logos and magazine ads, nationally and internationally.

She co-authored (with artist Valerie Graves and her sister Laurel Seth) the book, Finding Refuge - A Safe Place To Land, in order to benefit the Friends of the Bosque del Apache National Wildlife Refuge. She lives in Taos, and is currently working on book and photographic projects to benefit birds and wildlife.

Volunteer Needed

A volunteer is needed to distribute ***Habitat!*** and Educational Event posters in Socorro on a weekly basis to a list of about 15 locations. Please contact Refuge volunteer coordinator Daniel Perry, 505-835-1828.

Cuentos del Bosque

BOOK REVIEW

Why Birds Sing A Journey into the Mystery of Bird Song

By David Rothenberg

The consensus has always been that birds sing for two reasons, to declare territory and to attract mates. However, for hundreds of years, bird lovers and ornithologists have continued to wonder and study, thinking that there's more to it, that maybe birds sing for joy. The development of tape recorders has helped students immeasurably.

The author is a musician who thought of playing his clarinet to some birds in a conservatory to see whether they would join him. When he and a friend, also a musician, made an appointment to try an experiment in the National Aviary in Pittsburgh, a white-crested laughing thrush consented to join him, both singing and laughing.

When they researched, they found that more has been written about birds than about any other animals and that some people had even held classes to teach birds to sing. The worst discovery was that some people had even tortured birds by keeping them in the dark till they performed acceptably.

The two musicians thought they should travel to Australia to hear the lyrebird, since it is named for a musical instrument, is beautiful, and is a famous singer. In Australia, they found that the lyrebird puts on a grand courting show, which Darwin enjoyed and guessed that female lyrebirds did, too. The lyrebird is a great imitator, but unlike most birds, it takes him six years to learn his whole repertoire.

When the musicians discovered that bird song makes its most attentive human listeners surge into poetry, they quoted Whitman, Keats, and Coleridge. They decided that bird song has pitch, rhythm, pattern, and repose. Birds can discriminate time differences but do not respond well to transposed versions.

They found that the marsh warbler is a tremendous mimic. Having no original song syllables at all, it builds its whole repertoire only out of others' material. It imitates even birds that it hears on its migratory route, which can then be mapped by its songs. Observers know that the marsh warbler does not sing to defend territory or to attract a mate; it must be joy! They have found that a bird who is imitated does not respond to the bird who is imitating.

The much maligned starling has received study because of its ability to mimic. It will imitate any sound, indoors or out. One story has a starling always imitating the tea kettle's whistle. Although the owner bought a new kettle that didn't whistle, the bird always made the sound when the kettle was placed on the stove!

However, the mockingbird is the best for mimicry. It has so many songs that some observers think that it may be imitating the songs of birds that have become extinct. Since most of their songs can be identified, perhaps those that can't are really ancient. Continued on page 5

Park Borgeson in Spotlight

Our own Park Borgeson has received more than his allotted "15 Minutes of Fame" in the past six months. He was featured in a half-hour episode of "The Art of Living" which aired March 15 on Retirement Living TV. RL-TV bills itself as television for Americans 55-plus. The half-hour program was carried at noon on DirectTV and on CN8 (Comcast) stations in 1500 communities in the Mid-Atlantic and New England. The production team spent nearly a full day in January filming Borgeson with the birds at Bosque, and interviewing him and his wife Laura about their retirement lifestyle.

Park also was profiled in New Mexico Magazine's monthly feature Turning the Page in November. Park joined the Friends in 1996, has served three terms on the Board of Directors, and plans to hand over the chairmanship of the Public Relations committee to a successor in April. The Friends Martha Hatch Award, given annually to an outstanding volunteer, was presented to him at the 2006 Festival of the Cranes.

ODE TO BOSQUE DEL APACHE

The way the refuge is laid out,
We can observe without a doubt,
All feathered creatures, great and small;
Sharp eyes can spot them, one and all.
Don't have to crawl inside a blind
Or find a wall to hide behind;
Within our cars, we're not a threat.
I love how close we all can get
While they all go about their day,
To eat and swim, to preen and play.
At dawn and dusk we can see tons;
All sizes, shapes of feathered ones.
The cranes go flying in a line,
Their heads before, their feet behind.
They land upon the fields to graze;
And that is how they spend their days.
There is the Eagle in his tree;
A stately creature, that is he.
The ducks along a sunny bank;
The long-billed heron, lean and lank.
A thousand Snow Geese rise as one,
White bodies sparkle in the sun.
Their wings and sounds do fill the sky.
We stand in awe as they fly by!
They all agree on where to go.
It's like they all just seem to know.
The blackbirds as a cloud do rise,
Tiny black dots against the skies.
We wish to see and not disturb
To photograph and not perturb;
To come so close, to hear their call.
We're glad to see them one and all.
Judith Roderick, 2007

Judith has been an artist her entire lifetime. She loves the natural world and all of its creatures, and enjoys sketching, painting, photographing, and writing poems about them. She volunteers at the Bosque Nature Center in Albuquerque and showed her silk Paintings and watercolors in the Festival of the Cranes art show.

A Lesson in Lepidopterology

By Gary Froehlich

The arrival of spring can signal different things to different people –- the northward migration of birds, longer days, even high winds -– but it is universally a symbol of rebirth. And what better example of that rebirth is there than the transformation of a caterpillar into an adult moth or butterfly? Caterpillars are the larvae of Lepidoptera, as the moths and butterflies are known to scientists (they're often called "Leps" for short). We have here in the U.S. some 750 species of butterflies and more than 13,000 species of moths. *

The Leps undergo "complete metamorphosis", which is to say they have the following stages: eggs, larvae (also called nymphs), pupae, and finally adults. For some species this entire cycle can be completed in a few weeks, while for others it can take a few years. But generally speaking, the cycle occurs in the span of a year, or maybe a couple of times a year. Now, the larvae of all insects go through stages called "instars", in which the little hatchling, or first instar, eats until it outgrows its skin, then bursts out of that skin as a newer and larger version of itself, then continues to eat until it's too big for its skin again, and then the cycle repeats all over. With complete metamorphosis, the final instar pupates (Leps usually build a cocoon or a chrysalis to do so), the larva's individual cells become dissociated, then all the cells are given new assignments and rearranged, and an adult emerges. Amazing!

Monarch larva (final in-star)

(Flies and wasps and ants, among many others, also undergo complete metamorphosis, while many more-primitive insects undergo "incomplete metamorphosis", in which case the nymphs or larvae emerge from eggs, and then the adults emerge directly from the final instar. Grasshoppers, cicadas, and dragonflies are examples of this.)

As if this metamorphosis isn't amazing enough, consider the familiar Monarch butterfly (Danaus plexippus). Starting in March, adult Monarchs leave their winter roosting site near Mexico City and spread into the southern US, where they breed, lay eggs, and die. The next generation spreads still further north, and so on with subsequent generations, until by late summer, over 4-5 successive generations, they have spread well into Canada and Alaska. Each generation of adults lives only 2-4 weeks, except for the generation born in September. Those adults migrate all the way back to Mexico, to the exact same groups of trees their great-great-great-grandparents left, to over-winter and begin the cycle anew the following spring. Talk about rebirth! * [Editor's Note: There are 122 species on a list of butterflies identified in Socorro County provided by State Parks Biologist Steve Cary. Many of these species can be found in Bosque's wetland or Chihuahuan desert habitats.]

Boffo Inaugural RioFest Assures Encore

By Cat McGrath-Farmer

It's over! What a party! fifty six attended the RioFest International Film Festival premier showing of Kilowatt Our Friday night and over 100 attended throughout the day on Saturday, viewing 16 different shorts, comedies and documentaries. The Saturday evening free showing of Al Gore's Oscar-winning documentary An Inconvenient Truth had 176 in attendance for the one showing! That beats any local film attendance by far! This was despite the snow and the governor telling everyone on all the newscasts to stay home and not drive in NM that weekend! Even so, T or C and Magdelena as well as Albuquerque had caring environmentalists attending the two day event. We had interested environmentalists and film fans from TX, CO, and Utah in addition to many of the surrounding cities in NM all coming for the inaugural event.

The films were uplifting, scary and at times had everyone either laughing out loud or trying not to gasp or cry. The buzz following the screenings was about what energy changes viewers planned to implement as soon as they all returned home, starting with the replacement of inefficient energy-using incandescent light bulbs! The environment needs to be an emotional issue and this is the reason filmmaking is such a positive tool to present an environmental message.

RioFest MC Carol Lynn Tiegs, director Bill Kersey at award presentation

Two viewer choice awards were given at the end of the 2007 event. First prize winner Being Caribou received $100 and second prize winner Garpenfargle received $50. 2008 will also include the inaugural Deb Davies Environmental Film Award.

In case you missed it this year, the event will be held again the third weekend in January 2008 in Socorro, NM. Information on film entries and events will be available on the website www.riofilmfest.com. We know you will have a good time and look forward to seeing you there!

McGrath-Farmer is RioFest Executive Producer

Book Review continued

When the musicians pay close attention, they hear the mockingbird running through his routine, almost the same every time, but not exactly.

Although most bird lovers balk at the thought of surgery on a bird merely to discover the secret of its singing, scientists have devised a way to monitor the singing by means of wires into the throat along with a tiny tape recorder, without hurting the bird. Switching back and forth between the right side and the left side of its vocal organ, the bird makes sounds that do not exist in his own song. That is how the mockingbird can sound like all the others.

The book has mostly accessible scientific information and lovely black and white drawings. There are also musical representations of bird songs, mostly clear and helpful. The author finally declares that birds sing for the same reason that we do, because we can. He promises never to give up trying to make music together with birds. "The music made the questions begin, but no answer will erase the gift of the song, one simple offering from human to animal and back."

Barbara DuBois
January 31, 2007

WHY DO BIRDS SING?

If I were a bird, I'd sing, wouldn't you?
The grass is so green; the sky is so blue.
So many sights to be happy about
I surely would sing; I might even shout.
The bird feeder's full; there are worms in the ground;
The bird bath has water; comforts abound;
A bird sings of its territory, narrow or wide;
A male bird sings to attract a bride;
Some students think birds sing just to rejoice;
Poet Maya Angelou adds her welcome voice:
A bird sings because it has a song.
Barbara DuBois

1st Taylor Intern Due in May

Bosque's biology staff will be augmented this summer by an intern selected by New Mexico State University as the first to receive the John P. Taylor Jr. Natural Resource Award.

The Taylor award, which was established at NMSU with memorial contributions following the death in 2004 of Bosque senior biologist John Taylor, will provide financial assistance to one intern each year at Bosque. Undergraduate and graduate students majoring in the area of natural resources, including but not restricted to wildlife, range or environmental science, are eligible to apply. The 2007 intern will be chosen in April, and will work at Bosque from mid-May through mid-August, assisting with field surveys and collecting and recording wildlife and vegetation data under direction of the biology staff.

The Taylor memorial trust fund will provide $1,500 in assistance to the 2007 intern; Friends of the Bosque del Apache will match that with an additional $1,500, and the Refuge will furnish summer housing. NMSU will add another $1,500 to complete the financial assistance package to the intern.

It's not too late to make a contribution to the Taylor memorial trust fund. For information, contact Kirk McDaniel at NMSU, Knox Hall Room 324, email kmcdaniel@nmsu.edu phone (505) 646-7191, or Barbara Wise, bwise@nmsu.edu

Chupadera Purchase Near the Summit

By John Bertrand

The $63,000 summit of the Friends' assault on Chupadera Peak is just a stroll away. As the April Watch goes to the printers, more than $56,000… and counting…is in the bank! [Contributions totaled only $15,000 just three months ago, when the January issue of Watch was printed.]

Volcanic Tuff formations on trail

Privately owned Chupadera Peak, with an elevation of 6,272 feet and a sweeping view of the refuge and the Magdalena and San Mateo mountains, lies just off the west boundary of the Refuge. Bosque's popular Chupadera Wilderness Hiking Trail formally ends at the west boundary, some 200 yards short of the summit. The peak's owner, Highland Springs Ranch development, has offered to sell a 140-acre tract which includes the peak to the Friends for $63,000. When the 140-acre tract is acquired, it is intended to apply for wilderness status, so the parcel can be added to Bosque's 5,286-acre Chupadera Wilderness, forming a protective buffer from the 20-acre "ranchette" building sites Highland Springs Ranch is aggressively marketing.

There is still time to make a tax-deductible contribution by mail to the Friends, P.O. Box 340, San Antonio, NM 87832. Or visit www.friendsofthebosque.org/chupadera and click on the "Secure Payment" option. Contributors of $450 (the price of one acre) or more will be recognized on a permanent marker. Contributions received in excess of the $63,000 purchase price will be used to cover the costs of transferring title, surveying and fencing the site, installing the memorial marker and incidentals.

The Friends began its drive to purchase Chupadera Peak as an addition to the Refuge in 2006, when nearly $10,000 contributed to the Deb Davies Memorial Fund was committed to this purpose. Former NM Tech student Katie Devine, now employed at the National Radio Astronomy Observatory in Socorro, added nearly $8,000 to the drive in January, when she entered a marathon in Phoenix and solicited donations for Chupadera through a secure personal website. The Albuquerque Journal gave major play to the drive late in January with color photos and a story by Tania Soussan on the front of its New Mexico section.The outpouring of generosity has come in contributions from individuals…250 of them…ranging from $10 to $4,500, and from conservation organizations and Socorro's Lions and Rotary International.

***Contributors** of the price of one acre ($450) or more are listed below. All contributors to the purchase of Chupadera will be published after the property has been acquired.*

Audubon Society (Central NM)
Joan Bacon
Raoul & Marjie Bates
Anne Beckett
John Bertrand
John D. Brooke
Patrick & Jill Buckley
Maj. Joseph & Lois Cancellare
Casa Blanca B&B
Barry G. Clark
Eileen Comstock
Dick & Sandra Gold Conway
Cotter Family
Nancy Daniel
Bill & Helen Davies
Percy Deal
Katie Devine
Farzad & Rhonda Love Dibachi
Joseph & Michele Diel
Hiabbe & Bob Dulski
Howard & Debra Friedman
Gary Froehlich & Ann Hodges
Don Graf & Shiela Hall
Terry & Janet Hancock
Bruce Hansche & Christina Husted
Charles Headon
Katherine Hill
Barbara Hill (mem)
Jim & Dody Hoffman
Katherine Hoover
Robert T. Jr. & Ruth C. Hucks
Bob & Audrey Jones
Marilyn Johnson & Ralph Dusseldorp
Paul & Kay Peters Krehbiel
Thang La
Warren & Mary Ann & Molly Laskey
Emerson & Cheryl Learn
Lions Club of Socorro
Peter Manylyk
John & Dinah McPhee
Bob Merkel & Deborah Safford
Audrey Miller
Jon & Jan Morrison
Michael Nelson
NM Tech Earth 7 Envir. Science
Carol Nordengren
Jerry Oldenettel
John & Suzanne Otter
Jerome & Elizabeth Perry
Roger Peterson
Richard & Janis Pfaff
Ashlee Pfaff (mem)
Bill & Anita Phagan
Anne Radcliffe
Patrick & Catharine Stewart-Roache
Pamela Roberts, Robert N. Roberts
Don & Joanne Amter Roll
George & Norma Ruptier
Marianne Sacknoff
Rotary International Socorro
James & Delores Smith
Tyler & Marcia Tingley
Nakita Troxel
William C. Troxel (mem)
Joan & Len Truesdell
R. Craig Walker & Joan Wrobel
Robert & Sylvia Wright
Jim & Cindy Wolfe
Don & Dot Wortman

An Encounter of the Wild Kind

By Owen Williams

Animals are what often comes to mind when one visits a wildlife refuge…water and shore birds in the case of Bosque del Apache. But there are other critters out there, some of them large and armed. Elk for example.

In 2005 while I was helping with the seed yield survey, which is used to monitor waterfowl food production, I had a little encounter with some of these large mammals. I was surveying alone in 18BW (a field enclosed by the Tour Loop) working south from the north end. There was a large bull elk hanging out near south end of the unit. He watched me but seemed unconcerned in what I was doing, until I got to about the middle of the unit. At this point, for reasons not known to me, he suddenly became inordinately interested and came my way at a fast trot.

As I had not had bull elk self-defense training as a part of my orientation when I started working at Bosque del Apache, I was not entirely certain what constituted an appropriate response. Being in the middle of the unit put me a ways from any kind of cover; running did not seem an option. I stood my ground and waited, half expecting to be the first employee to file a claim for elk-goring compensation — providing I survived it.

But the bull stopped about 50 feet off, looked at me — with some malice I thought — and bugled. He did this twice more, and six cows came running out from adjoining unit 18D toward him, (and by proximity, toward me!). "Great!" I thought. Bully is going to gore me and then I will be trampled to a bloody pulp by his harem. But the cows came to a sudden stop, ears all perked up, nostrils flared, and stared at me as if to say "what the !@#% are you, a human, doing out here?!"

All this got the bull's dander up. He snorted, grunted and shook his huge rack at me menacingly, then sidled away slowly, keeping an eye on me. He moved toward unit 18BE, soon joined by the cows, and they paid me no further mind. I breathed a sigh of relief and continued the seed yield survey. It was, after all, just another day at Bosque del Apache.

[Owen Williams is an invasive weed specialist on the Bosque field staff. Owen also authored the informative article on Bosque plants in the January issue, which was incorrectly attributed to a phantom Owen Woods. We apologize for the error.]

Goodbye 'Golden Eagle', Hello 'Interagency Annual'

Have you heard about or seen the "new look" federal visitors passes? For half a century, the 'Golden Eagle' has been America's passport to federal parks and recreational facilities across the land. But in January, the 'Golden Eagle' was supplanted by the federal 'Interagency Annual Pass'. Similarly, the companion 'Golden Age' for seniors has morphed into the 'Interagency Senior' and the 'Golden Access' for persons with disabilities has become (you guessed it) the 'Interagency Access'.

The revised nomenclature accompanies what the feds claim is a snazzier design on the plastic cards: the 2007 annual card features a desert scene; the senior card is imprinted with a pair of bright cactus blossoms; the access pass shows a boardwalk traversing a grove of trees.

As the term "interagency" implies, the new passes will be honored by public facilities of the U.S. Fish and Wildlife Service, National Park Service, U.S. Forest Service, Bureau of Land Management and Bureau of Reclamation.

All three passes are available at the Bosque Nature Store. The Interagency Annual Pass ($80) is valid for 12 months from the month of purchase; the senior pass ($10) and the access pass (free) are lifetime passes. All three passes cover entrance fees and standard amenity fees at federal fee areas. The senior and access passes also offer a 50% discount on federal camping fees. What about the Golden Age Passport in your wallet? Not to worry: existing Golden Age and Golden Access passports are valid for life, and your present Golden Eagle Passport will be honored through its expiration date.

One thousand origami sandhill cranes suspended at Macey Center in Socorro. The origami cranes were one highlight of a month-long exhibit in February at Macey featuring the Friends of the Bosque-sponsored "Mapping the Rio" educational program. Cottonwood Charter School 4th Grade students of Ms. Cecilia Jackson borrowed the idea for the cranes from a book about a young Hiroshima leukemia victim to symbolize hope, and to represent sandhill cranes that use the Rio Grande as a migration corridor.

Also featured in the Macey exhibit, which occupied the foyer to the auditorium, were 40 framed photographs of the Rio Grande from its Colorado source to the Bosque del Apache refuge. Each photo was captioned with a quotation from field journals written last fall by students in Ms. Jackson's class as part of a nine-week unit covering cranes and the river, conducted by the Mapping the Rio program. Mounting of the exhibit was paid for by a grant from Starbuck's Corporation. The photo exhibit is scheduled to move in April to the Randall Davies Audubon Center in Santa Fe.

During the spring term, 4th and 5th Grade students at San Antonio Elementary School and 2nd Grade students at Parkview Elementary are participating in the Mapping the Rio program under the direction of Alex Rykken, Friends of the Bosque del Apache education director.

Prime Time for visiting the Laura Jean Deal Desert Arboretum at Bosque del Apache is the period from April 1 through June 30, when cacti such as the Claret Cup (foreground above) and many other wildflowers offer their showiest blossoms.

Wolves at Yellowstone

By Steve Sherman

I recently conducted a week-long program in Yellowstone National Park on wolves. We spent the whole week on the gray wolf reintroduction program and the ecology of the Yellowstone Wolf. Two days were spent in the Lamar Valley observing their activities and discussing wolf behavior. February is the breeding season and there is a lot of interaction within the pack and between the packs. Three packs are easily observed from the road and we watched the Agate Creek and the Slough Creek vie for dominance along a disputed boundary line. The howling between the packs was the most interesting I have ever heard. In wolf speak, each pack was saying: "This is my territory, you stay out." The Agate pack had, within the last few weeks, driven the Sloughs out of territory they had previously held; the Slough Creek Pack was trying to reclaim it. All the available territories for wolves are currently occupied in Yellowstone and we are seeing some very interesting behavior. Uncharacteristically, much of the dynamics of Yellowstone's wolf interaction can be observed from roads in the park.

The over-all reintroduction effort of the Gray Wolf in the Northern Rockies is a resounding success. In 1995 the first wolves were brought down from Canada and placed in Yellowstone and central Idaho. Today the population in the Northern Rockies totals approximately 1,200. The states of Montana and Idaho have wolf management plans approved by USFWS, with Wyoming still working on theirs. (Wyoming wants to treat the wolf as a predator, a position that is an exception to that of the USFWS.) The USFWS has just proposed delisting the population this year (with the exception of Wyoming, in the absence of an approved plan). The states of Montana and Idaho are working on plans for wolf hunts, with Idaho wanting to reduce numbers by 70%. The details of the proposed hunts have yet to be worked out.

As expected, the ranching community has been against the wolf reintroduction from the start, even though depredation on domestic animals has been considerably less than expected. I find that there is no middle ground when it comes to the wolf…people either hate them or love them regardless of the facts. Wolves have been an economic boon to some (tour guides, motels and restaurants) and a bust for outfitters and hunters. Over all, the wolf reintroduction to the Yellowstone area has been economically beneficial to the area. The wolf is now on the top of many park visitors "want-to-see list". In the past it was the geysers or Grizzly Bears.

I find this a very exciting time for wolf watchers, both in regard to the behavior of wolves, and from the political standpoint.

Sherman worked at Bosque as a resident volunteer in 2001-2, assisting biologist Colin Lee with a Northern Pintail study, and in 2004, with Tandi Perkins' three-year international study of habitat resources on the migration route of the Rocky Mountain Population of Greater Sandhill Cranes. The following report was written during a brief stopover at Bosque in February. Sherman conducts Photography and Ecology Workshops through Elderhostel International and the continuing education department of Montana-Western University. His photos have been published in Life Magazine and most of the major hunting, fishing and wildlife magazines.]

Research and Monitoring Aid Management Practices

By Colin Lee & Gina Dello Russo

What effect does our management have on flora and fauna? What are the best techniques to use in restoring native plant communities? How much water do saltcedar and other plants use? What are the long-term trends of our endangered species populations?

Refuge biologists and other professionals working in desert riparian systems pose many questions related to managing ecological resources such as we have at Bosque del Apache National Wildlife Refuge. Biologists, Ecologists, Hydrologists, and other "-ologists" employ research and monitoring techniques to acquire a deep understanding about the natural world. Bosque offers tremendous opportunities for studying natural communities and, year after year, the research conducted on the Refuge improves our understanding and management of these systems. There are over 35 research and monitoring programs currently in progress on the Refuge. Approximately half of these are directed or conducted by Refuge biology staff and colleagues within the U.S. Fish and Wildlife Service, while the other half are efforts spearheaded by other agencies and institutes. The accompanying table (see facing page) shows examples of some of these projects, divided into monitoring and research categories.

Monitoring focuses on measuring the health or other aspects of a population or natural community in order to improve our understanding of benefits or costs associated with management actions and helps determine necessary actions to take. It normally relies upon repeated measurements using standard procedures in order to detect change, much like a doctor records a patient's temperature and other diagnostic information in the process of prescribing treatment, and will repeat these observations in follow-up visits.

Research, on the other hand, is usually conducted to fill knowledge gaps or test assumptions. Research helps us determine ecological relationships, cause and effect relationships, or population parameters for building ecological models (i.e., models that help us quantitatively or conceptually understand how ecosystems function). It often follows a logical hypothesis-testing process and may use various control and treatment plots.

Of course, many projects have both research and monitoring associated with them. For instance, one hypothesis being tested on the Refuge states that replacing dense salt cedar with native cottonwoods, willows, and other plants will reduce the water use by the natural system. A long term monitoring program by UNM and NMSU turned into a research project when the Refuge cleared 84 acres of salt cedar around one of two monitoring towers. The replacement native vegetation will be monitored for evapotranspiration rates along with groundwater levels, soil moisture, and flooding events to see if this hypothesis is true at the site.

Research and Maintenance Projects in Progress at Bosque (partial list)

General Topic	Principle Investigator(s)	Organization/Institute	Project Title
Monitoring			
Southwestern Willow Flycatcher	Colin Lee, Darrell Ahlers	U.S. Fish and Wildlife Service/Bureau of Reclamation	Southwestern Willow Flycatcher Presence in Historic-Use Areas and Potential Project Sites
Restoration Techniques	Bosque Staff & Paul Tashjian	U.S. Fish and Wildlife Service	Shallow Groundwater Monitoring and Saltgrass Meadow Restoration
Channel Dynamics & Restoration	Gina Dello Russo & Paul Tashjian	U.S. Fish and Wildlife Service	Hydrology of High Flow Side Channels
Prescribed Burning & Restoration	John Vradenburg, Owen Williams, Colin Lee	U.S. Fish and Wildlife Service	San Pascual Burn Baseline Surveys
Invasive Plants	Owen Williams	U.S. Fish and Wildlife Service	Invasive Plant Treatment Monitoring
Rio Grande Silvery Minnow	Steve Platania & Robert Dudley	American Southwest Ichthyological Research Foundation	Rio Grande Silvery Minnow Population Monitoring Program
Rio Grande Silvery Minnow	Chis Altenbach, Terina Niskanen, & Cory Oldham	City of Albuquerque, Albuquerque Biological Park	Rio Grande Silvery Minnow Egg Collection from the Rio Grande Within the Bosque del Apache NWR
Rio Grande Silvery Minnow/ Water Quality	Joel Lusk	USFWS, Ecological Services Office	Rio Grande Sampling for Rio Grande Silvery Minnow and Other Environmental Conditions
Water Quality	David Van Horn, Kristin Vanderbilt, & Lydia Zeglin	UNM, Department of Biology	Surface Water Quality Study and Continuous Water Quality Monitoring Network for the Middle Rio Grande.
Water Quality	Shann Stringer	State of New Mexico, NM Environment Department	Biological Assessment Monitoring of the Middle Rio Grande: Development of Biological Criteria for Water Quality Assessment
Research			
Restoration Techniques	Gina Dello Russo & Vanesssa Beauchamp	U.S. Fish and Wildlife Service/USGS Fort Collins Science Center	Seed-mixture Tests for Xeric Grassland Restoration/Arbuscular mycorrihizal Fungi Association in Restored Riparian Areas
Evapotranspiration	Salim Bawazir, James Cleverly, John Stormont, & Julie Coonrod	NMSU, Department of Civil, Agricultural, and Geological Engineering/ UNM, Department of Biology & Department of Civil Engineering	Riparian Evapotranspiration Studies of the Middle Rio Grande
Wildfire, Flora, & Fauna	Deborah Finch	USDA Forest Service, Rocky Mountain Research Station	Responses of Native Plants, Wildlife, and Water to Removal of Fuels in the Middle Rio Grande bosque/Riparian Ecosystem Dynamics in Relation to Fire
Sandhill Crane Ecology & Management	Leigh Fredickson, Tandi Perkins, Diana Iriarte, & Brett Beasley	South Dakota State University/U.S. Fish & Wildlife Service	Spatial Distribution of the Rocky Mountain Population of Sandhill Cranes in Response to Habitat Condition during the Annual Cycle
River Drying, Aquatic food webs	Tom Turner	UNM, Department of Biology and Museum of Southwestern Biology	Bosque-River Food Web Interactions During Dry-Down Periods in the Middle Rio Grande.
Big Bend Slider Ecology and Management	David Moore	Bureau of Reclamation	Ecology of the Big Bend Slider in the Middle Rio Grande Valley

A *Gulp* of Cormorants??? by John Bertrand

Want to impress your companions next time you are out birding at Bosque? Leave your Swarovski 20x scope with feather-weight titanium tripod hidden in the trunk of your car, and your Sibley's out-of-sight in your backpack. Dazzle 'em instead with your erudition! For example: "Isn't that a sedge of Sandhill Cranes over yonder?" Or "Did you see that spring of teal we just passed?"

The English language has a foible dating back 500 or more years of assigning distinctive words like these to denote groups of individuals of the same species. Thus we refer to "a pride of lions," or "a brood of chicks." There is even a name for words of this kind…they are known as "collective nouns." The origin of many collective nouns is lost in antiquity; others are derived from characteristic behavior of the species Some are attempts at humor or wittiness.

Google "collective nouns" and you may be amazed at the result: 164,000 entries, including voluminous lists, histories, collections…even word games. Ever watchful for ways to keep our readers in the forefront of knowledge, your editor cross-referenced species found at Bosque with several lists of collective nouns, with the following results. Feel free to incorporate these collective nouns into your conversation at your peril.

Antelope (pronghorn): herd
Ants: colony, army
Badgers: cete
Bat: cloud, colony
Bears: sloth, sleuth
Beaver: colony, lodge
Bees: grist, swarm, drift, bike, hum
Birds: flock, flight, dissimulation, volary
Bitterns: sedge, seige
Butterflies: rabble, kaleidoscope, flutter
Buzzards (Turkey Vultures): wake
Caterpillars: army
Coots: covert, cover
Cormorants: gulp, solitude
Coyote: pack, train, band
Cranes: siege, sedge, herd
Crows: murder, horde, storytelling
Curlew: herd
Deer: herd, leash, mob, parcel, clash
Doves: flight, dule, dole, bevy
Doves (turtle): pitying
Ducks: raft, paddling, flush
Ducks (in flight): team, brace, bed, flight, flock
Eagles: convocation, congregation, aerie
Elk: herd, gang
Ferrets (!): business
Finches: charm, trembling
Frogs: colony, knot, army
Geese: gaggle, flock
Geese (in the air): skein, team, wedge
Gulls: colony, pack
Hawks: cast, kettle, boil, leash
Herons: scattering, siege, sedge
Hummingbirds: charm
Jackrabbits: husk
Jays: party, scold
Larks: exaltation, bevy, ascension
Lizards: lounge
Magpies: tittering, tiding, gulp, murder, tiding
Mallards: sord, brace
Owls: parliament, wisdom, study
Pheasants: head, nye, nide, bouquet, bevy
Pigeons: kit, flock, flight
Plovers: stand, wing, congregation
Porcupine: prickle
Quail: bevy, drift, covey
Rattlesnakes: rhumba, den, bed, pit, slither
Ravens: unkindness, murder, congress
Snipe: wisp, walk
Sparrows: host, quarrel, flight, ubiquity
Starlings: murmuration
Swallows: flight, gulp, swoop
Swifts: flock
Teal: spring, diving
Thrushes: mutation
Turkeys: rafter, gang
Turtles: bale, dole, nest, turn
Vultures: committee
Weasels: boogle, gang, pack, confusion
Widgeon: company, trip, coil
Wrens: chime

Photographers Corner

Spring Migrating Birds: Songs and Photos By Jerry Goffe

It's that time of year: the sounds and sights at Bosque del Apache are still there however those sounds and the birds making them are different. Gone are the guttural sounds of the Geese and the honking of the Sandhill Cranes. They have been replaced by the melodic sounds of the songbirds that have migrated up to our Refuge from the south. Some will stay the summer while others use the refuge as a rest stop and then move on.

Common Yellowthroat

Here are some hints for getting better pictures of these birds.

These songbirds are often difficult to find, let alone to photograph. Patience is the virtue that will lead to success in locating the bird but working with the light will lead to a good image. Those that have participated in bird counts know the importance of counting those birds properly illuminated (and therefore possible to identify) and not those backlit. The same holds true for photography. When the sun is working in your favor, delightful images may be obtained, however when the sun is not behind you, your only way to get a good image is by using a flash to augment the exposure and that is a separate subject in itself.

Exposure is not the only issue to consider when attempting photography of songbirds. These birds may not allow you to get closer than say 15 feet. Be prepared by having your lens zoomed to its most powerful focal length at all times. Birds like Warblers and Tanagers are not going to stay put long enough for you to zoom in on them and compose the image. You'll have only enough time to point, focus & set exposure and calmly squeeze the shutter release - maybe. Orioles and Flycatchers aren't much better. They like to bounce around from limb to limb … often! This can be advantageous to you in that they often will stay in the same bush or tree but move throughout that plant. At one moment they be partially obstructed by a limb or twig but within a few seconds may present themselves clear of any obstructions for a delightful image. Use the most powerful lens you have available.

If you're in the market for a new camera but don't want to sink a great deal of money into lenses, consider an advanced point and shoot such as the Canon S3-IS or Panasonic Lumix FZ-50. Both offer 12X optical zoom lenses that are the equivalent of 8.5 power binoculars. Remember, all point and shoot cameras suffer from lag time (the amount of time from when you press the shutter release to when the camera actually exposes the image), so have as much preset as possible … or look for a Grosbeak or Egret that will pose for a longer time. Songbirds are wonderful to hear but require more skill to photograph than the winter birds at the Bosque. Have patience and you'll have fun.

Jerry Goffe is Vice President of the Friends, and frequently can be seen leading photo workshops on the Refuge. He is available to answer questions at jerry@naturephotoworks.com

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Please mail with your check to: Friends of the Bosque del Apache P.O. Box 340, San Antonio, NM 87832

Information on Refuge Issues Available

From time to time, we receive bulletins with information about issues affecting the Refuge and the National Wildlife Refuge System. If you would like to receive copies to keep abreast or take appropriate action, send a request with your email address to friends@sdc.org to be added to our distribution list. Addresses will be kept confidential.

Speak Up!

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.

President George W. Bush, The White House, Washington DC (202) 456-1111 President@WhiteHouse.gov

U.S. Fish and Wildlife Service Regional Director, 500 Gold Avenue SW, Albuquerque NM 87102 (505-346-2545)

Hon. Dirk Kempthorne, Secretary of the Interior, 18th & C Streets NW, Rm. 6151, Washington DC 20240 (202) 208-7351

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