

The Bosque Watch



Volume 14, Number 1 Editors: Erv Nichols & John Bertrand
Bosque Watch is published quarterly by the Friends of the Bosque del Apache National Wildlife Refuge, Inc. P.O. Box 340 San Antonio, NM 87832

Presidential Musings

Jon Morrison

Were you at Festival? If not you missed the best one yet. For me, Julie Zickefoose's talk on raising four baby hummingbirds was my highlight. Talk about dedication. She had to feed them every 20 minutes. She'd feed them a sugar solution and parts of meal worms every time they were hungry. Once they got near fledging, she'd pack them in a box to go to the grocery store. It's not everyday that one sees someone feeding baby hummingbirds in the parking lot. Eventually they fledged and were ready to leave the 'nest'. Three of the four made it. They'd stay close to the waiting food until they finally found enough food sources to go on their own. She had no more than got them out, when she received a call about orphaned chimney swifts. But that's another story.

Attendance at the Festival was probably the largest ever. The only saving grace was that it covered more days and so the impact on the Refuge was spread out over more days. Next year's Festival, the twentieth, will be the greatest yet. Plan one week of your next year's vacation for the week before Thanksgiving: that's Festival. Tom Harper, the Festival coordinator, is pulling out all the stops.

On another note, Park Borgenson won the Martha Hatch Award for Volunteer of the year. Park has led the PR Committee for five years and his work has borne fruit in increased awareness of people in New Mexico and across the nation to the Bosque. Park is leaving the Board in January and will be missed.

This coming year, the Friend's will host their first environmental film festival, RioFest, on the weekend of January 19th. There will be a lot of shorts and documentaries dealing with water, the Rio and the Chihuahuan desert. There will also be a screening of Al Gore's feature film documentary on the Earth's climate crisis, *An Inconvenient Truth*. It will be held at New Mexico Tech. Check for further information in this edition of the Friend's Newsletter and on the Film Festival Website, www.riofilmfest.com. Come spend the week and take in the film festival, the birds and the Friends Annual Meeting.

We will continue our drive to purchase Chupadera Peak.

Let us always remember that the Bosque is a renewable energy source for all who visit it and that it is constantly changing. Come take it in and come alive.

From the Refuge Manager

Tom Melanson

Since my arrival at Bosque in July I have been very pleased and impressed with the abundance, variety and quality of public use opportunities provided on the refuge. This has certainly been enhanced with the arrival of winter waterfowl concentrations during November and December and the tremendous viewing opportunities they provide. Having worked on over twenty-five National Wildlife Refuges, I have never experienced wildlife viewing opportunities where such large numbers of wildlife can be viewed at such close proximity to the viewing public.

Over the years, with the help of countless volunteers, the Refuge has been able to develop high quality public use programs, created around the varied and abundant resources which use these lands. Together we have created a nationally recognized program which encompasses more than 14 miles of auto and biking trails, seven observation decks, an observation blind, more than 10 miles of walking and biking trails, a quarter-mile boardwalk and several vehicle pull-offs.

Unrestricted foot access is also allowed in 30,000+ acres of wilderness areas protected within the Refuge. In addition, special events are occasionally allowed in areas normally closed to public access. During the Festival of the Cranes, 21 of the 43 on-Refuge events provided access into some of these areas. Many of these events highlighted refuge management techniques and processes which distinguish Bosque del Apache NWR as an outstanding birding destination. The Refuge also provides several consumptive public use opportunities, including hunting for upland game birds, white geese, mule deer and Oryx, as well as fishing.

In developing any public use opportunity, Refuge staff must ensure it is all compatible with the purpose for which the refuge was established. In doing so, many factors are considered, the most important being those which create wildlife disturbance. In juggling various requests for access by the different user groups (bird watchers, photographers, hunters, fishermen, hikers, bicyclists, etc.) we attempt to adjust timing, location, and degree of access in order to provide a safe and high quality experience for all Refuge visitors, while at the same time attempting to keep disturbance at acceptable levels.

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Friends Annual Meeting

The Friends Annual Meeting is coming up the last Saturday of January, the 27th. Committee meetings will run from 9 – 10, followed by the Friend's Annual Meeting from 10-12. Tandi Perkins will give a presentation on the Friends-supported flyway study she is heading on the Rocky Mountain Population of Sandhill Cranes. There will be lunch catered by a local restaurant. This will be followed by a field trip which will include a Tool Tour. You've seen the equipment, but what does the Refuge need that for and what does it do? This has been one of the more enjoyable programs at Festival and we thought that was just what we needed for the Annual Meeting. If you plan to attend, please RSVP to Leigh Ann at the Friends House (505 838-2120) so we can be sure to have enough food.

Five Candidates Nominated for Board

Five candidates will be presented for election to the Board of Directors at the Friends Annual Meeting Sat., Jan. 27. One candidate currently holds a position on the Board; the other four, if elected, will be new faces to the official family. As provided in the bylaws, officers and directors are elected for two-year terms, and may be re-elected for a second consecutive two-year term or until a qualified replacement is named.

Standing for re-election to the Board is: Steve Green, director and special events committee chair. Brian Ivener has been nominated to fill a vacancy created by the resignation of Dennis Burt. Placed in nomination for previously unfilled seats on the Board as directors-at-large are Paul White, Phil Norton and Polly A. Tausch.

Continuing as Board members are Jon Morrison, president; Jerry Goffe, vice president; Bob Merkel, corresponding secretary; Cat McGrath-Farmer, recording secretary; Tom Sizemore, treasurer, and directors-at-large Nancy Szymanski, Don Tripp and Jerry Oldenettel.

Biographies of the five candidates follow. Steve Green

Steve Green has served past terms on the Board and has headed the Special Events Committee for five years and been a member of the Merchandise Committee since 2004. Five years ago, Steve and his wife Paula conceived the Bus Scholarship Fund, which provides funds to underserved school to make the Bosque educational experience available to their students. Steve's ride-along guide services to Titan Travel's commercial tours of the Refuge have raised hundreds of dollars for the fund.

Green is a retired businessman, whose motivation is that he feels that pay-back is "the right thing to do."

Brian Ivener

Brian Ivener is a frequent visitor to the Refuge to pursue his hobby of photographing birds. He is a senior partner with Ivener & Demkovich, CPAs, specializing in tax, estate and financial planning; and is a facilitator for the Second Judicial District Court Settlement Facilitation Program in Albuquerque. Holder of BA and MA Degrees in Accounting and Economics from the University of New Mexico and a Master of Science Degree from the California State University Long Beach, Ivener has been an instructor at UNM, Albuquerque TVI and University of Wisconsin.

He is treasurer of the New Mexico Library Foundation and past president of the Jewish Federation of Greater Albuquerque and of B'Nai Israel Synagogue.

Dr. Paul C. White

Paul White is a physicist who has worked more than 30 years at Los Alamos National Laboratory. He currently serves as Director of the National Security Office, functioning as a 'National Security Advisor' to the Laboratory Director. Before coming to Los Alamos, Paul was Chair of the Department of Science and Mathematics at St. Edward's University in Austin, Texas.

Paul serves on the Board of Directors of the Los Alamos – Sarov Sister Cities Program, and on the Ethics Committee for the Los Alamos Medical Center. Paul and his wife Margaret are devoted birders, long-time members of the Friends of the Bosque del Apache, and Paul is an avid amateur photographer.

Phil Norton

Phil Norton is a former Refuge Manager at Bosque del Apache (1986-1999), and was an active advocate of the formation of the Friends of the Bosque del Apache in 1993. He retired in 2005 following 35 years with FWS, mostly on refuges in the Southwest. His service also included assignments in the Washington Office and the Denver Regional Office. Since retirement, he has served as a Director of the National Wildlife Refuge Association, representing Region 2. Norton now lives in San Antonio, NM.

Norton states: Refuges were not only my career, but a large part of my life. Now that I have retired, I would like to give something back by staying involved and doing what I can to help protect and preserve this part of our natural heritage.

The Friends of the Bosque 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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505-835-1828

Polly A. Tausch

Polly Tausch has been a member of the Friends for several years. She is a lawyer with the law firm of Fitch & Tausch, LLC. She is retired from the Albuquerque Public Schools where she specialized in teaching gifted children. She has degrees in law, business, education and psychology. Polly has been a mediator for the Albuquerque Metro Court and a docent with the New Mexico Museum of Natural History. She enjoys singing, writing, camping and hiking. She and her husband, Tom, live with their two Great Pyrenees, one Red Heeler and various other critters north of San Antonio, NM.

From the Refuge Manager (continued)

In the process of evaluating disturbance we must also consider the cumulative affects of all public access; this includes the access by Refuge staff and volunteers required to manage the refuge lands for facilities maintenance, water management, biological monitoring, habitat management, research etc. Annually we receive numerous requests to conduct research on the Refuge and each request is evaluated to determine if the results may be applicable to Refuge management and what level of disturbance it may cause. Not all research requests are approved.

Once a program is established, it applies to Refuge staff and volunteers as well as the general public. We also see no need for volunteers or staff to exacerbate disturbance by traveling into closed areas, except during valid work assignments. There are instances where travel into closed areas is restricted to staff and volunteers, even during the work day because of sensitivity to certain species.

In addition to the considerations of wildlife disturbance, we are ethically obligated to prevent even the appearance that any group is receiving special treatment on the refuge. Bosque del Apache NWR belongs to a National System of public lands, but unlike many other public lands, National Wildlife Refuges are considered "closed" unless specifically opened for public use, as deemed compatible with the wildlife resources and management objectives of the Refuge. We believe, as a staff, that all members of the public should have equal access to these lands. Access should not, and cannot be allowed on the basis of association with any individual or organization. In fact, we are actually guided by Executive Order 12674: which states:

(h) Employees shall act impartially and not give preferential treatment to any private organization or individual.

(i) Employees shall protect and conserve Federal property and shall not use it for other than authorized activities.

(n) Employees shall endeavor to avoid any actions creating the appearance that they are violating the law or the ethical standards promulgated pursuant to this order.

We will continue to evaluate special requests for access on a case-by-case basis and any permitted use will be documented via a Special Use Permit for any and all individual or group users, outside general public use policy.

When issuing a permit, we consider (at a minimum) the following:

- Is it an appropriate and compatible use of the refuge?
- Is a comparable experience available in areas currently open to the general public?
- Does the use further the educational/scientific/interpretive needs of the Refuge?
- Does the use set a precedent for other users to request access?

Refuge staff and volunteers will continue to have access to the places they need to go while conducting their regularly assigned official duties and activities. We are not trying to restrict any group from enjoying the Refuge, we simply believe that all visitors should have equal opportunities to enjoy the many viewing opportunities that are currently available, while providing for the resource first.

The Festival of the Cranes in Perspective

Tom Harper, Festival Coordinator

The 19th Annual Festival of the Cranes is now in the history books, and we are turning our attention to producing a gala 20th Anniversary celebration next Nov. 13-18. Visitor attendance at the 2006 Festival, based upon a combination of pre-registrations for scheduled events, tickets sold at the door for events, and a head-count at the Tour Loop entrance, was 9,115 visitors. This compares with attendance of 8,158 at the 2005 Festival.

Organized to celebrate the return of the Sandhill Cranes to Socorro, the Festival also honors the history and habitat of our community. The Festival was created in 1988 as the Bosque Fall Festival, primarily as a local celebration, with all events on the Bosque. Along the way it became the Festival of the Cranes and was offered to a national audience.

The Festival of the Cranes is a part of the education mission of the Bosque del Apache National Wildlife Refuge; It is not a fund-raising event. All revenues go toward the cost of producing the Festival. It is a joint effort of the Bosque del Apache, the Friends of the Bosque del Apache, the City of Socorro and the citizens of Socorro.

Using a few notes I have from the first Festival, and actual numbers for 1991 and 1998 through 2006, I have made some comparisons with previous Festivals. (I keep score in attendee days. An attendee day is one attendee for one day. So, one person for three days is three attendee days.)

For the first Festival in 1988, there were 1274 attendee days. This year there were 2537, very close to double the number. That's about 5% growth in attendee days per year. [Ed. Note: To compile attendance figures above, Harper's "attendee days" were added to the head count at the Tour Loop entrance for the six days of the Festival, which Harper refers to as "daytrippers".]

Attendee days (but not necessarily total visitor attendance) dropped between 1998 and 2000 due to the declining economy and loss of the Whooping Crane migration project. Then in 2001 the economy crashed and tourism went with it. As the economy recovered we returned exactly to the trend line.

There is a bit more to the story. Another objective is to expand the Festival in a way that enhances the experience for attendees and reduces pressure on our resources. Sounds too good to be true? Not if you add events while lowering the number of participants in each event. To do this we are offering more activities during the week. This year, at Macey Center, we had full lecture days from Wednesday through Saturday; events and tours also were added beginning on Tuesday. The Festival is now week-long instead of just weekend. The result is that attendees arrive earlier and stay longer.

Of the 9,115 people who attended the 2006 Festival, 6071 were "daytrippers"...the folks who just dropped in for the day.

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Volunteers and Friends

The Wattled Crane of Africa

Evelyn Horn, Friends Contributor
and Author

Scream...screech...scream! What a frightful sound! Nothing could be further from the melodic, warbling call of sandhill cranes at home! The first bird lunges at the fence. These Wattled Cranes of Africa are nearly 6-feet-tall! The first bird lunges at the fence with ruffled feathers and screaming voice...now the mate joins in the threat display. We've just rounded the bend in the path by their large enclosure and the birds stalk toward Karen and me. The toes are straight out, legs stiff, feathers ruffled, wings and tail spread.

I've read that this African crane rarely bothers to camouflage the nest: it just attacks anything that comes close! Now it stabs at the ground, digging its bill deep into the soil. It raises its head again and screams some more. Now's the time to admire the Wattled Crane. It's not likely that I'll ever get to Africa to see it in the wild.

The threat displays continue as more folks come around the bend. Now the first crane (the male?) crouches and maneuvers his neck...It makes me think of a snake preparing to strike. The bird viciously jabs at the fence. I finally understand the fencing here at the International Crane Foundation. There's a three-or four-foot wide space between the bird's fence and the chain barrier. Clearly this is to keep people away from these precious, expensive birds. But with the ill-tempered Wattled Crane, it seems to me that people need protection too! Karen and I walk on toward the end of their enclosure. The birds become quiet.

The body is dark gray, the wings paler. The neck and breast are white. The heavy, long legs are black and the stout bill is dark. The forehead is covered with dark gray feathers, but the face is red. The most remarkable trait is the heavy wattle, half red from the face and half white from the neck. The bird's secondary wing feathers (those closer to the body) are elongated, and hang down to look like a tail.

But it's raining again...no, it's pouring again. That's why Wisconsin is so green! We'll have to continue our walk later. We want to see all fifteen species of the world's cranes housed here at the International Crane Foundation in Baraboo, Wisconsin.

A Memorable Experience,

Jan Sloan, Volunteer

One of the advantages of volunteering at Bosque for four months is the privilege of parking our RV on the Refuge, within quick walking/driving distance of wildlife wonders that others travel thousands of miles to experience.

One evening (Thanksgiving) as the sky was beginning to change colors, I hopped into the car and drove to the Willow Deck. Many others were there to observe the incoming and feeding cranes on the flooded field. Lovely sunset...beautiful colors.

I continued on to the Farm Deck...no one was there. I stood

and enjoyed the deepening colors of the sky, the quarter moon overhead and the sounds of thousands of Light Geese flying fifty feet over my head. When that many geese fly in waves, the sound of their wings flapping is memorable. These geese were coming in from feeding in the north fields to take refuge in the shallow ponds.

Forty-five minutes after sunset...and it was quiet again.

Greetings From the "On The Road Gang"

Some 25 men and women, hailing from many locations and walks of life, are spending the winter on Bosque del Apache as resident volunteers. For a stipend of \$10 for each day worked and a space to park their RV, these selfless individuals put in a minimum of eight hours a day, four days a week (most spend many more hours) for a term of four months. Resident volunteers assist with nearly every area of Refuge operation: visitor services, educational programs, tour guides, heavy equipment operation, maintenance and construction...even bumping corn for the cranes with a tractor bar. Along the way, strong bonds of camaraderie develop. Following is an informal report on "The Class of 2006-07" **Carol Bree and Beth Ann Williams.**

"Make new friends,Keep the old,
One is silver the other is gold."

When our "Bah Habbah" contingent arrived we became about evenly distributed between first timers and returnees.

Festival was fun, as usual, even though we all collapsed on the day after. We all worked hard and, after clean up Monday, broke early for the day and put our feet up and our heads down. Boy, that nap felt good!

Our new Refuge manager has a droll sense of humor which improves the early Monday morning meeting immensely. As a bonus, his two charming children keep the grandmas and grandpas smiling. With the arrival of our new assistant manager, the two households have increased our pet menagerie with a horse, several chickens and a dog. Both families joined us for Thanksgiving dinner and a great time was had by all.

Deck enhancement continues with our federal screw inspectors and the decks are looking good.

The volunteer-led Scout program is in its second season and going full blast. The first two troops did all the weeding and cleaning of the bus loading area for the Festival. It's fun watching the next generation getting excited about the Refuge as they learn about birds.

It is hard to reach a consensus as to the favorite volunteer job: Visitor Center, fee booth, tour guide or the "Merry Maids of Porta-Potti patrol". The lucky ducks who get the best job are the guys who do the corn bumping and mowing with the river of birds flowing around the tractor.

We all enjoyed the snow, but not the frozen pipes. Not even frozen pipes can diminish the joys of being a Bosque del Apache NWR volunteer.

Festival perspective (continued)

Looking forward, we plan eventually to offer a full day of events on Tuesday. It would be nice to have a 'welcome' reception and dinner on the opening day. We will need a Tuesday attendance of around 300 to do that. Also we are considering adding a dinner on Saturday. Many attendees like the convenience of dinner on the mezzanine followed by the keynote speaker.

Events on the drawing board for 2007 include: An Invertebrate Tour, Plants of the Parking Lot, Hydrology of the Bosque, Chupadera Hike, Invasive Species, Spanish Language Tour and Endangered Species of the Bosque. But, what about YOU? Is there something you would like to present? Don't be shy! Let us know what it is. We like diversity. How about:

- Animal tracks – the canyon trail has lots
- Birding for the blind
- Native American Issues
- Draft Animals on El Camino Real
- Mammals, reptiles and amphibians of the Bosque
- History of the Bosque del Apache
- Geology of the Canyon Trail
- Or?

**Address your thoughts and comments to
Tom Harper – crane@sdcc.org.**

Notes From the Nature Store

Cynthia Pearse

It was an eventful 2006 with remodel, the loss of Deb Davies, the arrivals of the new Refuge Manager, Tom, and Deputy Manager, Aaron. To say nothing of all the wonderful new and returning volunteers for the busy winter season.

I cannot thank all the Volunteers and Staff enough for all the help during Festival. The store sales were significantly higher than last year, which was a record year in and of itself. Thank you so much for supporting the work of the Friends via your purchases in the store. I also want to thank "the guys", both staff and volunteers, that built all the new shelving for the storage room. It makes processing and restocking so much more efficient not having to dig through boxes.

The Inward Flight

*Asking for freedom to fly with my soul
as freely as a crane.*

To soar so beautifully

*to have the power to migrate a thousand miles
and the ability to soar with the wind –*

*I'd let go of the strings that tie us down
then find the bliss of being in nature,
finding its rhythm.*

*To beat my wings to carry myself forward and
up touching the heavens and feeling the love.*

My spirit is alive and I am coming home.

Copyright Adabel Allen, 2006

(Adabel's 'Then There Were Three' design was chosen as the theme art for the 2006 Festival of the Cranes.)

Friends I Have Met in the Arboretum

Percy Deal, Volunteer

The Laura Jean Deal Desert Arboretum displays its charms to an ever-broadening audience. One of the most notable visitors during the 2006 season was a member of the British Royal Society of Cacti and Succulents from Great Britain; also several other British citizens. We were also privileged to host a European bicycle group touring the United States, several provinces of Canada and states too numerous to mention. One visitor introduced himself and said he had spent his childhood in one of three original adobe Bosque staff residences constructed by the Civilian Conservation Corps (CCC) in 1940-41...the residence now houses the offices of the Friends of the Bosque del Apache and the Festival of the Cranes. Of course, other visitors hail from throughout New Mexico and all across the U.S..

Because Nature is only minimally disturbed in the Arboretum, it affords an opportunity to observe desert life in an easily accessible setting, and in greater variety than in well trimmed landscapes. A careful observer might witness a funnel spider at the small end of its artistically woven funnel awaiting the arrival of his next meal. Or a pair of rattlesnakes at the height of their romantic activity. Lizards may be seen in their territorial battles. Last year, there was even a brood of fledgling owls spotted in the Arboretum.

Many species of birds may be seen in the Arboretum...perhaps the principal of these is the Gambel's Quail. Visitors who take a seat quietly on one of the Arboretum benches when quail are heard often are surprised at the how near these birds may come to them, providing an opportunity to truly appreciate the sheer beauty of these stately visitors.

Other birds that have been seen in the Arboretum are Pyrrhuloxia, Phainopepla, Rock and Winter Wrens. House Finches have nested in the chollas on at least two occasions.

There is a good population of lizards in the Arboretum, including the Side-blotched, Desert Spiny, and skinks. The Spade Foot Toad makes its home here. Whether the Collared Lizard is an inhabitant of the Arboretum is open to question.

The Arboretum also provides habitat for several species of bees and butterflies. Desert broom appears to be a specific habitat for one of the small species of blue butterflies.

A less popular inhabitant of the Arboretum is the pack rat because of his voracious appetite for cacti.



Flight deck reflections

A Plethora of Plants

Owen Woods, Invasive Weed Specialist

Birds are the biggest public attraction at Bosque del Apache NWR, particularly in autumn and winter. The number of wintering birds is remarkable. The reason there are so many birds is because of the food and cover provided by the plants. Most visitors however don't seem to recognize the plant diversity on Bosque del Apache NWR, or they don't see it because they visit when the plants are dormant. They see the trees, shrubs, and grasses, but they miss the great variety of herbaceous dicots, the wildflowers.

Just how great is the plant diversity on Bosque del Apache NWR? Here are some figures, close approximations, derived from records of occurrence accumulated over the years by researchers and biology staff, and herbarium specimens of plants collected on the Refuge. There are about 550 documented species in about 90 families. The best represented family is the Asteraceae, or sunflower family, with about 115 documented species. This family includes many of those yellow flowers that are so abundant in good monsoon years, such as the typical tall sunflower, desert marigold, slender goldenweed, fetid marigold, and several others. The Asteraceae also includes some familiar plants that many people may not associate with the sunflower family, such as cockleburs, ragweed, and the so-called seep willows which are not even closely related to the true willows in the family Salicaceae. And, there are numerous other Asteraceae that go unnoticed by most people; ragged marshelder, burrobrush, and plains dozedaisy for example.

Four other well represented families on the Refuge are Fabaceae (pea family) with about 35 species; Chenopodiaceae (goosefoot family, which includes fourwing saltbush and the unpopular kochia) with about 25 species; and the Brassicaceae (mustard family) and Polygonaceae (buckwheat family), each represented by about 20 species on the Refuge. The buckwheat family contains the smartweeds, the seeds of which are an important duck food.

Nearly 10% of the species on Bosque del Apache NWR are introduced. Most of these are native to Europe and Asia, but weeping lovegrass and Lehmann lovegrass have African origins. Lehmann lovegrass has taken over vast areas in southern Arizona, drastically altering the landscape and causing tremendous problems for fire-fighters.

There are about 55 woody species (trees and shrubs), not including those under cultivation, on the Refuge. Eleven of these are trees, including Russian olive, Siberian elm, tamarisk, and mulberry (*Morus alba*), non-natives that are growing wild on the Refuge. Not included here are the two mesquite species, and Sonoran scrub oak (*Quercus turbinella*) since they are more shrub-like than tree-like. Also, this does not include the cacti, of which there are 13 documented species.

That there are 10 documented species of ferns on the Refuge may come as a surprise to many people. Most of these are xeric types that can be found growing on rocky soils and from rock crevices of the Little San Pasqual and Chupadera Mountains. Here we find Fendler's false cloak fern, slender lipfern, star cloak fern, and spiny cliffbrake. The ferns on the Refuge also include a couple of odd little aquatic characters, Mexican mosquitofern (*Azolla mexicana*) and hairy waterclover (*Marsilea vestita*). Mexican mosquitofern is a small floating plant that vaguely resembles a better known species, duckweed. On close examination however one finds that Mexican mosquitofern has crenulate (wrinkled) leaves, or fronds, with multiple lobes that are dull and reddish, and that it produces no flowers or seeds; rather it produces spores, as do all ferns. Duckweed has bright green oval leaves, and it has flowers, minute though they are, and produces seeds. The other fern oddity, hairy waterclover, looks like a clover with most of the leaves in fours, but it can be seen that the leaves' veins all radiate from the base whereas true clovers have a prominent midvein with lateral veins arising from it. The true clover also bears typical clover flowers of course, while *Marsilea vestita* has inconspicuous little stalked bulblike spore-bearing structures.

Many of the plants on the Refuge have interesting properties. They produce a wide array of chemical compounds, some toxic, some bad tasting or smelling, some smell or taste good, and many have been used medicinally. There are thorns, stinging hairs, useful fibers, edible tubers, and inflated pods that when dry produce a sound like a warning rattlesnake. I hope to discuss some of these things in a future article.

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**Book
Review**

Cuentos del Bosque

Barbara DuBois

OFF THE MAP

By Chellis Glendinning

An Expedition Deep into Empire and the Global Economy

Largely autobiographical, this book has the author seeing an analogy between her abuse as a child from a dominating father and the abuse of the world by the dominating military-industrial complex.

When the author made her presentation at the Festival of the Cranes, she pointed out that the book comprises three stories: her autobiography, the story of the appropriation of Hispanic land by the Forest Service and the BLM, and the story of the abuse of our world by governments and corporations.

Participants in the discussion think she uses a fascinating structure, interrupting her other stories now and then to tell of riding horseback in Northern New Mexico with Snowflake Martinez, a neighbor who converses with her about the land. He is one of the Hispanos who have lost the land guaranteed by the Guadalupe-Hidalgo treaty, land that has since been stolen by the Forest Service and the BLM. She says hers is the world of empire; his, the world of the conquered.

All the Hispanos, or Norteños, as she calls them, want to do is to carry on their lives, raising chile, hunting deer, cutting firewood. But government signs now tell them it is no longer their land. Finally, when they have posted their own signs, a hiker trespasses, and they tell him to go away and tell his friends, "We want no more of this conquering!"

Impressive research convinces the reader of the truth of her argument with a chronology from 1940 to 2001, listing details of conquests and protests and riots and destruction and collapsing economies. She shows how self-sustaining peoples have had their lives ruined when corporations take over their land and put them to work at low wages, to produce goods that they had made for themselves before.

When she narrates her childhood, she admits to herself that her heritage is that of the conquerors. In Ohio, there were servants and mansions, which she didn't begin to appreciate as a child. She played in ordered gardens without realizing that they were unnatural.

She doesn't hesitate to vilify all sorts of corporations who carry imperialism throughout the world. The most striking may be Nike in her 1995 example: "Indonesian workers get 15 cents an hour to assemble racing shoes that cost Nike \$5.60 to manufacture. You buy them for \$135. The company makes \$800 million a year. Seventy-five million people are forced by poverty to leave their native lands in search of work."

She finds fault with the World Trade Organization and the International Money Fund. All the villains in her story have destroyed the lives of natives who used to be self-sustaining. She says NAFTA has helped to ruin many such families.

By now the reader must be wishing for solutions. Glendinning has two suggestions: return to living in community, helping one another, trying organic gardening, using solar energy. The other answer of course is to work politically to communicate our concerns about domination, destruction of the envi-

ronment, and persecution of the powerless.

Perhaps the author sees hope for all of us analogous to the success of the farmers who at last presented their pleas to the legislature....Gabriola Island, BC, Canada: New Society Publishers, **Barbara DuBois November 22, 2006**

Nothing Too Much

*The sun was my god
till it proved carcinogenic
but we must not stay in the dark
Light turns our chlorophyll to sugar.
Jogging answered all our ills
till discs began to slip
but we must not retire to the lounge
Movement keeps our pumps working.
The busy ethic maintained society
till we suffered heart disease and ulcers
but we may not play all day
We need food and clothes and shelter.
We avoided four-letter shock
till we liberated language
Now every other decent word
is FEAR or PAIN or HATE or LOVE.
Barbara DuBois November 22, 2006*



Photographers' Corner

Jerry Goffe

"Is there life after fly-out?" That question is asked as often at Bosque del Apache National Wildlife Refuge as the Great State of New Mexico's official question ... "Red or Green?"

Everyday I spend at the Refuge, I see visitors watch the cranes and Geese leave their roosting ponds and fly north or west toward the farm areas. Some people are amazed by the Sandhill Cranes as they walk north before exiting the pond and flying away. Others come to see and hear the geese leave with a mass ascension. In any case, for me the fun begins after the early, and sometimes cold, time of the morning. Where do I go from here? Most days I like to go south, very slowly, on the Marsh Loop to the Boardwalk. On my way there to delight in seeing the Clark's and Western Grebe, I will often see deer, pheasants, numerous hawks and raptors and a large variety of ducks. At the far south end of the loop I notice the new farm area and the birds feeding on the corn and winter wheat. This is a perfect location to catch a glimpse of some coyotes. On the return side of the Marsh Loop, I often see Great Blue Herons, several waterfowl and at the Old Rookery, I look for flickers, Belted Kingfishers, Black-crowned Night Herons as well as a large variety of passerines or songbirds.

Continued on page 8

Photographers corner continued

Need I stop here in fear of too much excitement? As I continue on the Farm Loop, the answer becomes quite obvious. I am most likely to see the New Mexico State Bird, the Greater Roadrunner. In the early morning they face their tail into the sun, pull their wings forward, and expose their back (black skin) to the sun to warm up. As I drive further north, I'm guaranteed to see Sandhill Cranes in the fields, along with waterfowl and the geese. I will keep my eyes open for Mule Deer near the three decks and points north. Once I'm headed west I will be noticing thousands of geese and cranes in the fields. I enjoy waiting for the geese to react and all take to the air at once and then come back to land in the same area they had previously been in. Raptors are present as well as the coyote.

Within a few miles, I have passed the observation (Phil Norton) blind and am heading south. I go very slowly at this point looking to my left and often locating deer, porcupine, bobcat and coyote.

I find the Refuge full of new and exciting new opportunities to see new wildlife and habitat each and every trip I make. I can honestly say there is "life after fly-out!"

Friends Educational Series

Saturday, Feb. 3; 8:00 a.m. – 2:00 p.m. Meet at Chupadera Trailhead

Hike the Chupadera Wilderness Trail (Reservations required.) Led by resident volunteers Jan and Mike Sloan. This is a ten mile strenuous hike to 10,200 feet...the highest point on the Refuge...from a starting elevation of about 4,500 feet. Anticipate scenic vistas and photo-ops along the way, and a 360-degree panoramic view of the San Mateo and Magdalena mountain ranges, Elephant Butte Lake, Fra Cristobal and San Pascual Peak. Javelinas have been sighted on previous hikes. Expect at least six hours of hiking. Wear hiking boots and warm, layered clothing; bring plenty of water and a hearty lunch.

Sunday, Feb. 11; 6:15 a.m. – 4:30 p.m. Visitor Center Wildlife Photography (limit 20 participants, reservations required.)*

Photographer and naturalist Jerry Goffe and his co-instructors will provide an overview on wildlife and nature photography followed by a hands-on experience on the Refuge. Techniques and tips will be utilized while photographing the Sandhill Cranes, geese, landscape and other animals of the Refuge. Canon will be supplying some advanced point-and-shoot cameras and flash units for people to use if they want or need to. Bring your camera, instruction manual, media (memory) cards or film, tripod, lunch and water.

Saturday, Mar. 31; 9:00 a.m. – noon Meet at parking area east of I-25 exit 139 (San Antonio)

Spring Wildflower Hike (limit 20 participants, reservations required.)*

Led by naturalist Bob Merkel. This is a spectacularly scenic canyon west of San Antonio. It is very rich in wildflowers and evidences of the geologic history of the Rio Grande Rift Valley. Expect to walk a mile or so in the canyon, see a wide variety of

A word from the editors

Hi, my name is Erv Nichols, and as of this edition, I will be the editor of the newsletter with John Bertrand. Some of you may know me, I'm new to this position, but I've been hanging around the Bosque every fall for about four years now editing the HABITAT! with John Bertrand. John will be working to gather stories for the newsletter and I will do the graphics and layout. Together we hope to carry on with the tradition of a quality product and improve it where we can. We are starting with a new name: The Bosque Watch, and a new logo. If you like the change, great! If not well, blame Bob Jones, he came up with it. We are also going quarterly in hopes of having more stories and articles to offer (and to give us a chance to slack off a little). Look for more pages and some color in future issues and, we hope, something of interest to all. If you have some things you'd like to see here, send your thoughts to John_Bertrand@hotmail.com. But be prepared, we may ask you to write the story. We are looking for contributors and welcome your input. Anyway, here's the first edition, hope you enjoy it and keep in touch!



Change in E-Distribution of Bosque Watch

Beginning with this issue, members who have been receiving their Bosque Watch (formerly Notebook) by email will receive instead an e-mail notice advising them that a downloadable PDF version of each issue is available for them to access. Instructions for downloading will be included with the notice.

Nearly fifteen per cent of Friends members now receive their Bosque Watch electronically, making available for other worthwhile purposes money which would be spent to print and mail those copies. If you would like to add your name to our electronic list, please complete and mail the authorization below to Friends of the Bosque del Apache, P.O. 340, San Antonio, NM 87832.

I am a current member of the Friends. Please add my name to your Bosque Watch electronic subscriber roll. I understand I will not hereafter receive a printed copy of the newsletter.

Your name _____

e-mail address: _____

Signed: _____

wildflowers, improve your identification skills, learn a little about local geology, and enjoy a wonderful spring day in our northern Chihuahuan desert. The road to the canyon is poorly maintained. Please come in high clearance vehicle if you can, or be prepared to accept a ride. Bring water, snack or lunch, sun protection.

Saturday, Apr. 21; 7:30 p.m. Meet at the Visitors Center Explore the Night Sky with Amy Estelle (Reservations required.)*

This program is designed especially for children ages 8 – 12. Through hands-on activities and observation, they will learn the moon's phases, major constellations and bright stars of the season. Binoculars and telescopes will be available for close-up study of the moon.

*Call 505/835-1828 for reservations.

Friends of the Bosque del Apache FY 2006 Statement of Accounts

Account	Unrestricted	Restricted	Total
INCOME			
Memberships	\$ 24,004.50		\$ 24,004.50
Grants		\$ 497,135.00	\$ 497,135.00
Donations and Memorials	\$ 15,780.51	\$ 24,000.04	\$ 39,780.55
Festival of the Cranes		\$ 62,481.05	\$ 62,481.05
Nature Store	\$ 236,165.97	\$ 615.50	\$ 236,781.47
Bank Interest	\$ 5,900.91		\$ 5,900.91
Gross Income	\$ 281,851.89	\$ 584,231.59	\$ 866,083.48
Nature Store Cost of Goods	\$ 128,031.86		\$ 128,031.86
Net Income	\$ 153,820.03	\$ 584,231.59	\$ 738,051.62
EXPENDITURES			
Mgt & General Expenses			
Office	\$ 44,971.31		\$ 44,971.31
Store	\$ 30,375.88		\$ 30,375.88
M&G subtotal	\$ 75,347.19		\$ 75,347.19
Fundraising			
Fundraising Subtotal	\$ 190.00		\$ 190.00
Programs			
Friends Projects	\$ 3,041.66	\$ 46,462.28	\$ 49,503.94
Refuges Projects	\$ 29,658.54	\$ 26,899.69	\$ 56,558.23
Grants for Others			
Festival of the Cranes		\$ 78,060.18	\$ 78,060.18
Education Wing		\$ 544,305.06	\$ 544,305.06
Programs Subtotal	\$ 32,700.20	\$ 695,727.21	\$ 728,427.41
Total Expenditures	\$ 108,237.39	\$ 695,727.21	\$ 803,964.60
Fiscal Year Total	\$ 45,582.64	\$(111,495.62)	\$ (65,912.98)
Cash Reserves (9/30/05)	\$ (34,432.14)	\$ 246,594.02	\$ 212,161.88
Cash-on-Hand (9/30/06)	\$ 11,150.50	\$ 135,098.40	\$ 146,248.90

Notes from the Treasurer: Thomas Sizemore

This year we have made steady progress towards improving our financial management system. The annual report's new look is a result of converting our accounts' format to one that more clearly displays the two types of funds that we manage. (Restricted funds can only be used for the purpose for which they were given to the Friends.) Since an annual budget only reports the financial activity during the fiscal year, I have also included a cash-on-hand summary to provide you a better understanding of the Friends' financial health. State law required us to request an audit of the FY 2006 accounts, which is still underway. So you are cautioned that the numbers listed above cannot be considered final until the audit is completed. The audit firm will report their findings during the Annual Members Meeting January 27, 2007.

Small Changes Make a Big Difference

By Maggie O'Connell

Significant progress has been made in improving accessibility of the Refuge's public facilities to all visitors, with more to

come. In 2003, Refuge staff conducted an accessibility survey of all public facilities. They evaluated items such as door threshold height, sink height, sidewalk slope, and contrast in exhibit text. Measurements were compared to Americans with Disability Act (ADA) and Uniform Federal Accessibility Standards (UFAS) guidelines. Both sets of guidelines help ensure that the Refuge considers the needs of anyone who might be using new or renovated facilities. While there were many components that met the guidelines, and several items that were easily remedied by simple housekeeping, there was a lot of work to be done.

Since then, Refuge staff, volunteers and Friends have worked together to complete several construction projects. New facilities recently added to the Refuge include new public restrooms, the Christina Ann Lannan Education Annex (which includes a new classroom, visitor center entry, and information and sales desk area) and concrete parking areas at observation decks. A unifying feature of all these projects – major and minor—is an attempt to meet the varied physical needs of all refuge visitors, volunteers, and staff.

Many of the problems from the accessibility survey were eliminated by the completion of new restrooms. The previous building was far too cramped to accommodate any type of mobility device, had items protruding from the walls (a problem for people with limited sight), and doors that were heavy and hard to manage. The new restrooms provide automatic door openers, several choices of stall design, easy-to-manage sinks and faucets, and even changing tables. Protruding objects, like paper towel

dispensers, are designed so they are not hazardous.

The Christina Ann Lannan Education Annex eliminated

problems of the old entry, information/sales desk, auditorium, and much of the visitor center. The former entry featured two sets of heavy wooden doors, the sales and information desk was crowded, and the visitor center was poorly lit and cramped. The new annex classrooms and entry feature lighter doors, the information and sales desks have several different height levels, and the interpretive area is much more open and light.

Outside, some features, such as the boardwalk, were accessible, but lacked the means for people to reach them easily. In the past two years, refuge staff and volunteers have poured new parking pads and sidewalks at the Willow, Coyote, and Flight Decks, as well as the Boardwalk. The Marsh Deck, Chupadera Deck, and Norton Blind are next on the list.

As refuge physical facilities become more accessible, the next challenge is to ensure that messages are reaching the widest variety of visitors. The next major project will be to renovate and update the existing visitor center exhibits. Besides being outdated, exhibits are static and contain mostly text and photos – which appeal only to a narrow portion of visitors. New exhibits will offer a more holistic experience, with elements to hear, touch, and see. The Refuge has received a small interpretive planning grant and will begin identifying themes and stories which are current and consistent with Refuge management priorities. As funds are raised, an interpretive plan for the refuge will be developed and implemented to include all decks, trails, and the visitor center. When complete, visitors will have many opportunities to learn about and connect with the Refuge through a variety of facilities, media, and exhibits.

Make plans to attend the inaugural RioFest film festival January 19-20 at Macey Center

Details at www.riofilmfest.com or call the Friends at 505 838-2120

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

N.M. Senators

Hon. Jeff Bingaman, U.S. Senate, Washington DC 20510, (202) 224-5521, (505) 766-3636 sentor_bingaman@bingaman.senate.gov

Hon. Pete Domenici, U.S. Senate, Washington DC 20510, (202) 224-6621, (505) 766-3481 senator_domenici@domenici.senate.gov

N.M. Representatives

Hon. Steve Pearce, House of Representatives, Washington DC 20515, (202) 225-2365 pearce.house.gov/

Hon. Tom Udall, House of Representatives, Washington DC 20515, (202) 225-6190 www.tomudall.house.gov/

Hon. Heather Wilson, House of Representatives, Washington DC 20515, (202) 225-6316 wilson.house.gov

Editor's Note:

6,200 foot Chupadera Peak just off the Refuge western boundary offers stunning views of the Refuge, and the Magdalena and San Mateo mountain ranges. The Chupadera Wilderness Trail ends at the western boundary, just a few hundred yards from the summit. The Friends now has in hand more than \$15,000 toward the \$63,000 needed to purchase Chupadera Peak and surrounding land to serve as a buffer. President Jon Morrison is actively soliciting grants from several promising sources to complete the purchase. The names of contributors of \$450 to purchase one acre of the needed 140 acres will be inscribed on a plaque at a suitable location. Tax-deductible donations of any size can be made directly to the Friends (call 838-2120 for information), or until Jan. 31 at the web-site listed in the accompanying story.]

Chupadera Peak Acquisition

John Bertrand

The Friends' ambitious project to purchase Chupadera Peak and add it to the Refuge has received a big boost from Katie Devine, a Socorro resident and long-time Bosque aficionado. A personal web-site which Devine established to raise funds for the purchase has brought in \$2,350 as the Watch goes to the printers...and counting!

Devine, the third generation of her family to treasure the Bosque del Apache, began making frequent visits while a student at New Mexico Tech in Socorro. When she learned that memorial tributes following Refuge deputy manager Deb Davies' death last May were being directed to the Chupadera

purchase, Devine decided to enter the 2007 Rock N' Roll Marathon in Phoenix and use her participation as a fund-raiser for the Peak purchase.

After getting a go-ahead from the Friends, Devine contacted the website ActiveGiving.com to set up a personal web-page at <http://www.active.com/donate/runkatierun>. On the web-page under a dramatic photo of Sandhill Cranes and the heading "Katie's Run for the Deb Davies Memorial Fund: Racing to buy Chupadera Peak!" Devine writes:

"I am running the Rock N' Roll Marathon in Phoenix on January 14th, 2007. I've decided to use the run to raise money to help the Bosque del Apache wildlife refuge expand and purchase Chupadera Peak in memory of Deb Davies, a local woman who died of cancer last summer. The Bosque plans to expand its coverage by 140-160 acres, at the cost of \$450 an acre.

"My original goal was to raise enough money to buy two acres of land for the Bosque; however, fantastic support from people visiting this site has allowed me to raise that to three acres, and then four, and now five [as of Dec. 11]. Let's see how much land we can help them buy!"

She continues with information about Bosque del Apache, Chupadera Peak, and Davies' work with the Refuge.

Donors are credited on the web-page; donations received to date from Devine's friends and well-wishers have ranged from \$10 to \$200. ActiveGiving.com collects a small percentage of the donations to cover the cost of producing and sending receipts to the donors, and remits the balance in a check each two weeks to the Friends.

Katie Devine's Deb Davies Memorial Fund web-site is a convenient way to contribute toward the purchase of Chupadera Peak. Visit the site at <http://www.active.com/donate/runkatierun>. Although Devine's marathon is Jan. 14, she has generously offered to keep the site open and updated through Jan. 31.





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Friends of the Bosque del Apache Membership Application

Name _____ Fam Mbrs _____

St _____ City _____ St. ___ Zip _____

Phone _____ Email _____

Check to receive Newsletter electronically

Membership Level

Individual \$20 Family \$25 Student \$15 Senior \$15

Special Friend \$60-99 Best Friend \$100-499

Friend Indeed \$500-999 Lifetime \$1000+

Interests

Help with Friends activities Help with the Festival

Serve on a Friends Committee. Please mail with your check to:

Friends of the Bosque del Apache PO Box 340 San Antonio NM 87832

Remember! Friends Annual Meeting Jan. 27, 10-12