

Friends of the Bosque

Some see the Refuge and wonder why, We see the Refuge and wonder why not?

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Hart's Basin Whoopers Are Gone

By Evelyn Horn

The 'green' reservoir stretches across my view from Crane Point... weeds have replaced the water and there's only a puddle left at the base of the dam. And what will it be like next spring when our Sandhill Cranes come from the San Luis Valley looking for a night's rest here at Hart's Basin? The fields below are dry, barren...no cattle. No corn, no oats or barley, so no silage and no waste grains for next spring's foraging birds. No income for the ranchers or farmers or orchardists. Drought is an ugly word.

And in the midst of my sad revelrie, the E-mail floods into my mind. "The last remaining Whooping Crane in the Rocky Mountain Population has been declared a mortality by the U.S. Fish & Wildlife Service, marking the end of the bi-annual migration on and near the Monte Vista National Wildlife Refuge in the San Luis Valley." Kelli Stone, biologist at the Refuge, went on to state that the 19-year old Whooper left the wintering

grounds in New Mexico in early March of 2002 but was not seen in the San Luis Valley and did not appear on its summering grounds at Red Rock Lake in Montana. And so, Tom Stein (Whooping Crane Coordinator, U.S. Fish & Wildlife Service) has declared the death of 'our' last Whooping Crane.

In 1941 only a few of the world's most endangered cranes existed. This remnant flock's migration route was (and still is) from Aransas NWR along the Gulf Coast to Buffalo Woods National Park in Canada: more than 2000 miles. The precarious situation resulted in attempts to establish a second migratory flock within the Rocky Mountain Sandhill Flock with a migratory route of only about 800 miles: from the nesting grounds in the area of Gray's Lake, Idaho to the wintering grounds at Bosque del Apache NWR. The Canadian biologist gathered Whooping Crane eggs that were flown from Gray's Lake, Idaho, where Rod Drewein and his biologists placed them in the Sandhills' nests (sounds so simple!). Our birds proved to be good parents on this 'cross-fostering project'. But the Whoopers failed to reproduce and in 1989 no more

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From the Manager's Desk

Deb Davies (Deputy Refuge Manager)

Water management is a giant component of Refuge work (all year!). The winter may come along with minimal flows in the river due to the drought. It may be difficult for us to keep flow-through in the wetlands and moist soil units because of very little water in the ditches. The water issue went to court in September and Chief United States District Judge Parker made a ruling in favor of keeping water in the Rio Grande for the benefit of the Rio Grande Silvery Minnow. This ruling is being appealed and the Governor of New Mexico is considering calling for the use of the single exception to the stringent requirements of the Endangered Species Act: the Endangered Species Committee (commonly known as the God Squad). The God Squad is composed of six high-level members from the Executive branch of the federal government and a presidential appointee from each affected state. If the God Squad determines that the public interests outweigh the interests of the endangered species, then it can grant a federal agency an exemption from following the mandates of the Endangered Species Act. Stay tuned!

The Refuge staff is participating in a program looking for long-term solutions to water management and endangered species on the Rio Grande.

By the time you read this, the sandhill cranes and the snow geese should be here in numbers. We have an excellent corn crop this year to feed them. Now all we need is water!

Also, by the time you read this, Maggie O'Connell will be here. She is our new Outdoor Recreation Planner, replacing Laurie Rosenthal (finally!). She will start work at Bosque del Apache NWR on October 21. Maggie comes from Okefenokee NWR in

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A Sand County Almanac

By Aldo Leopold

A Book Review by Barbara DuBois

In A Sand County Almanac and Sketches Here and There, Aldo Leopold, who has been called the father of conservation, uses his sand farm as a springboard to tell his thoughts on everything in nature in three parts.

In Part I, he describes what happens to his land month by month. Another chronology he uses is the history of a tree he has cut down: for example, in 1876 came the wettest year on record. He explains that he feels as though all the land he can stroll on is his property, but later we discover that he has the concept of the Native American, he does not own the land.

He will remind you of Thoreau, urging you to enjoy nature rather than manmade, material possessions. Robert Finch, in the introduction, says, "Nothing could be more salutary at this stage than a little healthy contempt for a plethora of material blessings."

Of course, we all agree with his argument, but besides that, his style is enchanting. Telling about rabbits chewing on trees, he says that "every surviving oak is the product either of rabbit negligence or rabbit scarcity."

He uses analogies effectively throughout: "The autobiography of an old board is a kind of literature not yet taught on campuses, but any riverbank farm is a library where he who hammers or saws may read at will."

"How like fish we are: ready, nay eager, to seize upon whatever new thing some wind of circumstance shakes down upon the river of time! And how we rue our haste, finding the

gilded morsel to contain a hook."

"We tilt windmills in behalf of conservation in convention halls and editorial offices, but on the back forty we disclaim even owning a lance."

In the second section, "Sketches from Here and There," he travels in and out of the United States, to Canada and Mexico. Like Edward Abbey, he complains about roads "that inevitably follow government."

The book has epigram after epigram: "Man always kills what he loves"; "To love what was is a new thing." He has a good word for us amateurs: "wildlife research started as a professional priestcraft. . . In the biological field the sport-value of amateur research is just beginning to be realized." And he gives several examples of amateurs whose work has proved valuable.

The last section, "the Land Ethic," gives a stunning challenge, to abandon thinking of land as only soil, as having only economic value, and to think of land as including flora and fauna and beauty and having value other than economic.

The main reason for reading this magnificent book right now, is that Richard Bodner will be a featured speaker at the Festival of the Cranes, in 1912 Forest Service gear, to bring Aldo Leopold; legacy to life. Hearing the great man's words spoken will enhance your enjoyment of the book, and having read the book will enhance your enjoyment of the presentation.

**Conceptual Restoration Plan Active
Floodplain of the Rio Grande
San Acacia to San Marcial, NM**

By Gina Dello Russo

Overall Project Summary

The goal of this project is to develop a comprehensive restoration plan for the Rio Grande reach from San Acacia to San Marcial. The plan will include a vision statement of the evolution of the river environment with implementation of the restoration plan.

The plan is divided into five phases:

- I. Data collection and Analysis
- II. Specific River Issues
- III. Development of the Restoration Concepts and Strategies
- IV. Development of the Restoration Plan for the Riparian Corridor
- V. Preparation of Monitoring Program

Phase I has been completed. Specific tasks accomplished in this phase included:

- ✓ Project Coordination
 - Contract signed with Consultant (Tetra Tech, ISG) for Phases I & II – April 2002
- ✓ Establishment and Initial Contact with Oversight Committee
 - Project Kickoff meeting held at Sevilleta NWR June 2002
- ✓ Reach Reconnaissance and Photographic Compilation
 - Site visits, including videography, May/June/July 2002
- ✓ Prepare Working Base Maps
- ✓ Comprehensive Project Bibliography Completed
- ✓ Delineate Sub reaches
- ✓ Initiate Existing Data Collection and Identify Known Data Gaps
- ✓ Integrate with Federal and State Agencies – Distribute and Discuss Work Plan
- ✓ Identify Potential Access Limitations and Contact Landowners
- ✓ Review GIS Data Bases and Identify Project GIS Objectives
- ✓ Prepare Fluvial Geomorphic Scope of Work and Review Existing Analysis
 - Cross Section AGG/Deg Analysis
- ✓ Review Existing Habitat Data Bases, In-

ventories and Mapping

- Data gathered from FWS, NMNHP, UNM, USBR, COE
- ✓ Phase I Findings – Oversight Committee Meeting July 2002

Phase II tasks are currently being worked on with a projected completion date of October 30, 2002. Specific tasks underway in this phase include:

- ❖ Identify Sub reaches That Have Narrowed
- ❖ Examine the Performance of Existing Restoration Sites
- ❖ Locate Potential Restoration Sites and Prepare GIS Mapping
- ❖ Create a List and Description of Potential Restoration Techniques and Methods
- ❖ Perform Initial Site Selection and Identify Limiting Issues
- ❖ Identify Required Site Hydraulic and Geomorphic Analyses and Data Gaps
- ❖ Conduct FLO-2D Simulation of Current Conditions and Review Flood Inundation Areas
- ❖ Describe Riparian and Aquatic Habitat Conditions
- ❖ Identify Restoration Goals and Objectives for Habitat Enhancement
- ❖ Review Alternative Restoration Opportunities for Each Site and Create GIS Habitat and Restoration Mapping Tools

At the end of phase I Tetra Tech produced a report on its findings. A summary is included below.

Phase I of the conceptual restoration plan for the Middle Rio Grande reach from San Acacia to San Marcial involved an investigation of the existing data and publishes information on the river and riparian ecosystem. The intent was to compile a database and library of refer-

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Georgia. She also worked at Chincoteague NWR in Virginia and Upper Mississippi River Refuge complex in Minnesota. When she arrives here, she will have worked at four of the top 20 Fish and Wildlife Service's public use programs in the country. Please welcome Maggie; she is the young wave of the future. Oh, and by the way, she is no stranger to the desert... she worked at Death Valley National Park at the early part of her career.

The new Fire Management Officer, Mike Davis, will arrive in early December. Mike comes to us from the Forest Service in Virginia. He is no stranger to the desert either; he earned his master's degree at University of New Mexico in Forest Ecology. Mike has quite a reputation among those he has worked for and with for building partnerships. He will head up the fire program for the entire state of New Mexico, as well as our new fire crew, which now includes Leroy Saavedra, Evan Grain, Joshua Ulbricht, and Christina Romero. Please welcome Mike; we expect him to walk on, well...., fire

Happy birding!

The Festival of the Cranes is coming!!

The Festival of the Cranes, recognized as one of three premier birding festivals in the United States will be here before you know it. Workshops on photography, birding, along with tours of the hidden Bosque and nearby sites will be offered. There will also be special activities for the kids.

Dates are November 19-24 with information available at the Friends website:

www.friendsofthebosque.org/crane

or by phone at (505) 835-2077.

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ence material to support future conceptual restoration designs. One of the purposes of the Phase I investigation was to explore river restoration from a historical perspective by reviewing the evolution of the Middle Rio Grande river considering hydrology, morphology and vegetation composition. Understanding channel morphology and the changes that occurred in response to water and related land resource development would serve as a basis for exploring restoration opportunities. Such opportunities may take the form of providing a greater range of flow regimes, returning to a higher level of river dynamic behavior, removing constraints on channel processes such as invasive vegetation, expanding the active floodplain, increasing channel connectivity, physical reformation of the channel geometry, enhancement of the riparian system and management of the sediment loading.

Historically the Rio Grande had a natural cycle of removal and regeneration of native plant communities with flooding and channel migration. Cottonwood bosques of varying age classes fell victim to channel migration and beaver activity. Woody debris provided coverage and habitat in the river channel. Large flood events filled the valley with ponded water. It is apparent that the wetlands, marshes, open scrublands, alkali flats and meadows were a significant portion of the floodplain community when the Spanish arrived.

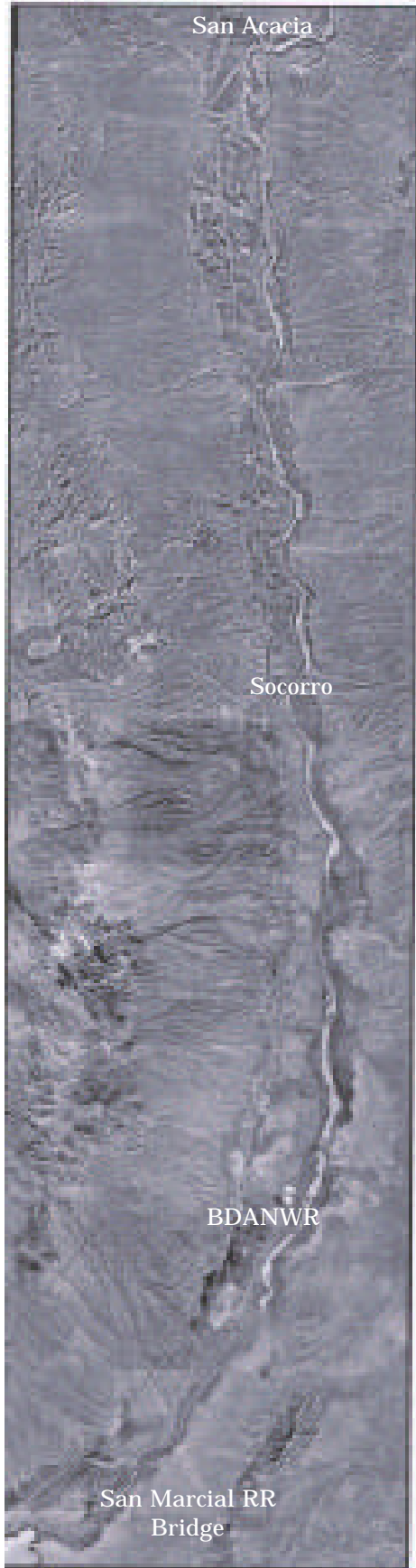
With the beginning of agriculture in the Rio Grande valley about 1,500 years ago, the native vegetation composition and distribution were altered. Landscape fragmentation occurred with deliberate fires and cropland clearing. As a result our knowledge of the historic "natural" Rio Grande floodplain is only anecdotal. Increasing populations (both Pueblo and European) and land cultivation were accompanied by expanded irrigation systems that gradually decreased flows in the system. Eventually upstream reservoir storage attenuated flood peaks and the channel morphology was altered. The riparian vegetation regenerative processes were curtailed as flooding became infrequent, mistimed and of shorter duration. Prominently missing in the river's hydrologic cycles are the

destructive flows that initiated channel migration and bank erosion to remove trees. Gone are the spring flood flows that created the wet substrate in large open areas for germination of native riparian plant species. In response to decreased flooding and reduced sediment loads, the channel has narrowed and the floodplain has become dominated by non-native salt cedar.

Based on a final assessment of the historical vegetation composition and an analysis of the existing sediment load and flow regimes, a restoration plan will be formulated that includes improving river-floodplain hydrologic connectivity, increasing the cottonwood/willow bosque and creating wetlands, marshes and salt grass meadows. In terms of the channel dynamics, a flow regime within existing administrative, legal, and physical constraints will be formulated to sustain a prescribed active channel. The restoration plan will optimize the active channel width-to-depth ratio and channel-floodplain connectivity on a reach-by-reach basis. The plain will consider potential future sediment yield scenarios, the linkage between load and channel form, future aggradation and degradation trends, equilibrium slope, and cross section variability. An adaptive management plan and channel maintenance flows will be proposed.

In phase II, two important channel morphology and hydrology issues will be addressed. The first issue is the long-term decrease in the sediment load at San Acacia. Higher and more frequent discharge without a corresponding increase in sediment supply would exacerbate channel incision and reduce potential flooding. The second issue in the form of a question is: How much flooding and what frequency of flooding are needed to limit the encroachment of exotic vegetation in the riparian zone? What flow patterns would benefit native plants? Currently we are field checking our databases and updating data files for the restoration modeling effort. This includes recent channel surveys and levee elevations. One of the issues that is being investigated is possible channel morphology constraints on restoration concepts in different reaches of the river related to channel incision, long term aggradation and possible levee breaching schemes.

Satellite view of the Middle Rio Grande Valley



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eggs were allotted to the project. Enter this columnist. We choose to live in the rural area near Delta, Colorado, within half a mile of Fruitgrowers Reservoir, know to the locals as Hart's Basin. The reservoir filled during that winter and in the spring of 1990 the Sandhills and the Whooping Cranes came. And so began my love affair with these beautiful birds.

During spring migrations, more than half of the Sandhill flock of 19,000 to 20,000 rest at the Hart's Basin stop-over as did the majority of the Whooping Cranes. Over the years, the Whooper number dwindled and now these five-foot tall flyers are gone from our flyway, probably for my lifetime. Sad. But in recent years Kent Clegg led Sandhills and Whoopers from his Idaho ranch to the Bosque del Apache wintering grounds, Joe Dull guided Whoopers from Wisconsin to Florida with five to eight Whoopers returning to Wisconsin on their own. There's hope that larger groups of Whoopers will be able to follow this new ultra-light guided Eastern migration route. Florida's non-migrating flock is increasing and captive breeding flocks are growing. From the *Operation Migration* website, there are about 300 Whooping Cranes alive today compared to the 15 birds of 1941. So now, I contemplate a trip to Aransas NWF or to the International Crane Foundation's headquarters in Wisconsin to see my birds, alive, again. And I revel in my good fortune to have known these ancient, magnificent birds.

Birds You Might Not Expect in Winter

By Art Arenholz

In winter, we expect to see birds like ducks, geese and cranes. We don't expect to see colorful songbirds, sprightly flycatchers or the other birds of summer. So let's look briefly at some winter surprise birds that are here most winters.

Most insect-eating birds, like Kingbirds and Warblers, go south during fall. But, each winter, you can find several Say's Phoebes perched on a low post or twig, happily flying out to snap a flying insect and returning to a nearby perch. Say's is easy to identify with its dark head, dark and twitchy tail, and a faintly peach-colored belly, and the "fly-catching" behavior.



Another Phoebe we see most winters is the Black Phoebe. Its behavior is much like Say's, but this bird is solid black except for the contrasting white belly.



During summer, we can find two different cormorants perched on a watery log in several places on the Refuge. A recent favorite location is the log complex near the new boardwalk, on the Marsh Loop road. But in winter, it is hard to find a Double-Crested Cormorant, while it is easy to find the Neotropic Cormorant; whose name suggests it should be on a warm, tropical island. To identify the Neotropic, look at the yellow-orange throat-patch. Neotropic's throat-patch points in a "V" toward the back of the head. (Double-crested throat-patch is larger and squarish, and does not have the "V"

shape.

After almost all of the colorful songbirds have flown to a warmer place, we can still find a few birds that did not read the bird books.

Perhaps the most surprising is the Yellow-rumped Warbler. Just about the only warbler to stay through the winter, Yellow rump has adapted his diet to include berries during the cold weather. Found as far north as Albuquerque, this bird has yellow on the crown, throat, sides, and of course the rump. Add patches of white in the wings and tail, and you can identify this bird all year long.

Another small bird that can be mistaken for a warbler in winter is the tiny and very active Ruby-crowned Kinglet.



The olive body reminds you of a dull colored warbler, and a kinglet is certainly nervous enough to resemble a warbler. To confirm the I.D. of the kinglet, look for the dark wing-bar behind the two white wing-bars. Usually, the ruby crown is hard to see.

During summer, we see the Lesser Goldfinch a lot, and the American Goldfinch not very often. But, in winter, both goldfinches are here, but their colors are quite subdued. During winter, American Goldfinch can be identified by stubby bill, brown tones on the body, white wing-bars and a white under-tail. The Lesser Goldfinch also has the stubby bill and white wing-bars, but body tones are greenish or dark, not brown and the under-tail is yellow. Even if you list them as goldfinch species, you will enjoy watching the small flocks move about actively.

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Often mixed in with a flock of other finches is the Pine Siskin. About the same size as the goldfinch, this bird has two aids to identification. First, a heavily streaked body (like a female House Finch), and second, a thin, sharply pointed bill (very unlike, a female House Finch). The touch of yellow in the wings and base of the tail is easily seen in a few siskins in winter, but hard to see in many others.

Another bird with a yellow head is sometimes reported to the Visitor Center staff as a winter warbler. This is the Verdin, a year round resident that is about the size of the tiny kinglet. To identify the Verdin, look for the yellow head, gray body and some chestnut color in the bend of the wing.



Perhaps everyone's favorite blue bird is the beautiful turquoise-blue male Mountain Bluebird. We see this bird in winter more than the Western Bluebird, but we can separate them fairly easily. Unlike the Western Bluebird, the Mountain Bluebird has no rusty color on the chest or back, his blue is lighter in color, and he often hovers when hunting insects in a field.



So enjoy the waterfowl, sparrows and raptors, but look carefully for a splash of color, too. You might be rewarded by a colorful, hardy winter visitor that doesn't know about TRAVELOCITY.COM!

From The Nature Store Manager

By Orinda Spence

Many thanks and kudos are in order for the twelve wonderful volunteers who counted long into the night to do the annual Bosque Nature Store inventory. The twelve helpers included Steve and Paula Green, Mary Nutt, Stephanie Mitchell, Natasha Isenhour, Liter Spence, Jon Morrison, Mary Templeton, Joydeep Bhattacharjee, Kathy Purcell, Daniel Perry and Rita Barker. JoAnn and E.F. Wade very kindly drove to Socorro to pick up the pizza and salads for our supper.

The Festival of the Cranes 2002 items go on sale at the Annual Artists' Reception on October 19, 2002. We invite you all to come and thank the generous artists who have contributed images and paintings for our use. Refreshments are served and it is the debut of Festival shirts, mugs and pins. At this annual reception, we honor the first place winners of the Jr. Duck Stamp Design contest. Jr. Duck prints and post-cards will be available for sale. The artwork that our talented young people do is impressive.

Some new items we have received are: David Sibley's new book "Birding Basics," Michael Forsberg's beautiful crane calendar, the Bird Identifier, and book covers that fit Sibley's and the smaller variety of birding books. We also have indexes with thumb tabs for many birding guides. We are receiving other new books and gifts each day this time of year.

Holiday shopping is great, Friends of the Bosque del Apache always have a 10% discount and there is no sales tax.

Canyon Trail Habitat

(A Glance at just a few of the plants along the Canyon Trail)

By Nancy Daniel

The flood plain of the Rio Grande supports a rich diverse riparian plant community, which in turn feeds and houses a large number of animals. The Canyon Trail offers a close look at a very different habitat. It is largely undisturbed by man and is characterized by alluvial fans of sand and clay deposits as evidence of centuries of moving water. This same water carved out a canyon that comprises a small portion of this 2.2-mile trail. The canyon vegetation is different than what is found in the alluvial fans or on the open desert floor.

At the trail head you will find Desert Willow, Purple Sage, Giant Dropseed and Four-Wing Saltbush to mention a few. Desert Willow (*Chilopsis linearis*) with thin willow-like leaves is actually in the Catalpa Family, can grow into a short tree and has striking orchid-like flowers. Purple Sage (*Psoralea scoparius*) are shrubs in the Pea Family and are covered with small purple flowers in August. The twigs have a faint lemony smell when broken and were used by the Native Americans and early settlers to make brooms. In fact, *scoparius* means broom straw. Giant Dropseed (*Sporobolus giganteus*) is a tall grass with long gracefully bent leaves and a compact, upright seed head. The female Four-Wing Saltbush (*Atriplex canescens*)* is covered with four-winged seeds that range from light, yellow-green in the summer to dark brown in the winter. These seeds are nutritious, the leaves can taste of salt and Four-Wing Saltbush is extremely drought tolerant, which made and still makes this a very important southwestern plant.

As you progress down the trail the plants begin to include Mormon Tea, Fluff Grass, Indian Ricegrass and Creosote Bush. Mormon Tea (*Ephedra* sp.) is often called Joint-Fir. It does look like a bunch of jointed, evergreen sticks and that's pretty much what it is. The sticks or twigs of the shrub were and are dried and used to make tea. Caution is advised, though, since it is thought that our species of *Ephedra* may contain ephed-

rine, which in high dosages can be harmful. (The drug Ephedrine is made from a Chinese species of *Ephedra*.) Fluff Grass (*Erioneuron pulchellum*) is a pretty, little grass and *pulchellum* just happens to mean pretty. Each small, ground-hugging clump of Fluff Grass grows in bare, sandy soil. You will see them scattered over the desert floor, as well as in the alluvial fans. Indian Ricegrass (*Orzopsis hymenoides*) is almost impossible to find, but the reward of the oriental character of its open branches, each ending with a single, small ornamental seed is well worth the search for this 12"-18" grass. Creosote Bush (*Larrea tridentata*)* has evergreen, shiny, yellow-green leaves which have a wonderful aroma after a rain. As the Creosote Bush grows, its branches often droop touching the ground where they root. The center of the shrub then tends to die back and the resulting configuration of live Creosote clones encircling the original plant makes an ideal habitat for the pack rat.

Down the trail, before you are close to the canyon, there is a lone One-Seeded Juniper (*Juniperus monosperma*) on the left not too far off the trail. You can see where the Juniper branches were cut for use – probably fence posts. Close to the Juniper is a pack rat midden (a very messy nest) with a display of those items the real pack rat likes to hoard.

In the canyon, Apache Plume, Three-Leaf Sumac, Honey Mesquite and Bricklebush bear witness to more accessible water. Apache Plume (*Fallugia paradoxa*) is a member of the Rose Family. Throughout the summer this tall shrub is covered with single, small rose-shaped, white flowers and beautiful pink plumes or seeds. The "*paradoxa*" could easily refer to the seed's eye-catching beauty, which can out-shine the attractive but simple flower. Three Leaf Sumac (*Rhus trilobata*) grows more profusely through the canyon portion of the trail. The leaves on this tall shrub are three lobed, as in *trilobata*, and turn deep red in the fall matching the color of the berries soon to follow. Honey Mesquite (*Prosopis glandulosa*)* grows all along the lower portions of the canyon trail but seems to be prolific in the canyon with its long, menacing thorns and much longer, sweetly flavored bean or seed-filled pods.

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Brickelbush (*Brickella californica*) is prone to grow on the south side of the canyon where it gets less sunlight. It is part of the Composite Family and, as with all *Brickella*, can very easily be identified by the taste of its rounded, green leaves. They taste awful! The canyon area houses both Barn and Great Horned Owls. To find where the owls roost, look for white wash just below an opening in the sandstone canyon walls and bones of rodents and other small mammals on the canyon floor below. Mexican Free-Tailed Bats inhabit the western portion of the canyon for a few weeks in the fall.

As the trail continues past the canyon and up to the overlook, nicely situated with a bench to enjoy the view to the riparian area, you'll encounter Prickly Pear and Cholla cactus. Long-Spined Purple Prickly Pear (*Opuntia macrocentra*) has a beaver-tail-shaped pad with spines up to 5" long along its purple-tinged margin. The center of the pads does not have the long spines but still has the very short, fuzzy hairs or glochids. These can be found on most prickly pear species and are barbed. Designed like a fishhook, they don't come out once in contact with your skin. Needless to say, the glochids are not edible but all other parts of the plant above ground are a desirable food source. Dagger Cholla (*Cylindropuntia clavata*) has rounded, low growing stems that are fully armed with impressive white, dagger shaped thorns.

This brief look along the Canyon Trail includes only a minuscule number of plants to be found in this subtle habitat that characterizes the northernmost reaches of the Chihuahuan Desert. All of the plants mentioned here are so accurately illustrated by Robert DeWitt Ivey in his book, Flowering Plants of New Mexico, that a quick reference to his illustrations is worth more than most of the preceding words.

* There are more comprehensive articles on the plants marked by an asterisk. Anyone interested in copies, please leave your name, address and plant(s) of interest in Nancy Daniel's box at the Bosque del Apache NWR Visitor's Center. The telephone number for the Visitor's Center is (505) 835-1828.

Bosque Notes

Robert Kruidenier

On the calendar of my life here at Bosque del Apache, November is a time of greeting old friends, both in the world of birds, and especially in the world of people who know and appreciate those birds. And perhaps, out of many new acquaintances and introductions this November, will come new friendships. Just today -3 October, 2002- I saw and heard for the first time this fall, some of my very best "friends" of the avian world: the Greater Sandhill Cranes.

I have said on numerous occasions that it is the combination of the wildlife here at this Refuge and the people who come to see it, that really gets me excited. In November, we have the highlight of our gathering of wildlife and folks who appreciate the migratory birds, as well as the bobcats, deer, elk, coyotes, and even mountain lions who call this place home, if only for the winter.

Our Festival of the Cranes (November 19-24, 2002) draws people from all over the country. Some of them are coming for the second or third -or more- times. Some of them - coming from El Paso and Denver; Pennsylvania and Manhattan (NYC); The Platte River (NE) and Elephant Butte; Santa Fe, and Ruidoso- I am privileged to call "friends." They are living testimony that I am a lousy correspondent -you know who you are- and I am the grateful recipient of their continued friendship.

For those of you who are coming to the Festival for the first time, "Welcome!" To those of you who are new members of "Friends of the Bosque", a second "Welcome." To those of you who come later on, into December and January, I can only say, "Where've you been?...I've missed you..." Whoever you are, wherever you come from, I hope you will feel free to track me down (and be ready to help me remember

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The Navigator's Triangle

By Amy Estelle

Ornithologists have learned that many migrating avian species navigate by the stars. How amazing is it that the human species navigates by stars imagined as members of avian constellations?

As New Mexico nights grow frosty and long, three first-magnitude stars dominate the western sky: Vega, Deneb, and Altair. Riding high across the sky and favored by navigators, these three stars have guided explorers from the Old World to Outer Space. Each star marks an angle in the triangle, an asterism also known as the Summer Triangle though it is visible through autumn.

Vega, a blue-white star in the constellation *Lyra* (the Lyre), marks the angle closest to the northwest horizon. To the south is Altair, a yellow-white star in *Aquila* (the Eagle). The highest of all is Deneb in *Cygnus* (the Swan). A portion of *Cygnus* is known as the Northern Cross (another asterism). The swan's body, neck, and head mark the long axis of the cross. The swan's wings form the short axis.

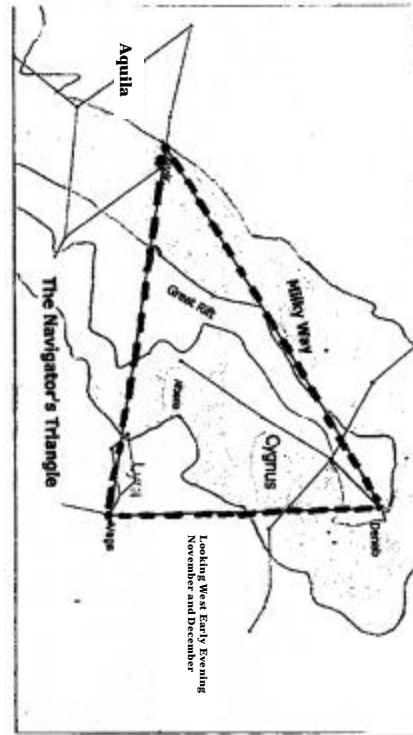
While *Lyra* seems exempt from the avian theme, it too has a feathered past. In a Greek/Roman myth Jupiter sent a vulture to fetch the lyre of Orpheus. Jupiter placed both in the heavens. A European star chart of 1603 pictures the constellation as a vulture clutching a lyre.

On moonless nights Vega, Deneb, and Altair are guideposts to the Milky Way Galaxy, our galactic home. Vega is just below the western bank; Altair marks the eastern edge; and Deneb floats in the middle of the "Heavenly River" (Ancient Chinese and Japanese name for the Milky Way).

Scanning the region inside the Navigator's Triangle with binoculars will reveal countless stars, double stars, clusters, and nebulae. Diligent observers may glimpse the Great Rift, a series of dark obscuring dust clouds that blocks the light of stars beyond. The Great Rift begins at Deneb, the tail of the Swan, and continues down the Milky Way to *Scorpius* (the Scorpion), not visible in November.

By day the golden eagle soars through the Rio Grande rift valley. By night the heavenly *Aquila* forever meets *Cygnus* at the Great Rift along the Milky Way.

To find the Navigator's Triangle look west soon after dark in November and early December.



Asterism

An asterism is a distinctive group of stars but not one of the recognized 88 official constellations. The most famous asterism to observers in the U.S. is the Big Dipper, seven stars in the much larger constellation *Ursa Major*, the Great Bear. In Great Britain these seven stars are known as Charles Wain (wagon).

Alberio

Located at the foot of the Northern Cross (or the eye of *Cygnus*), Alberio is one of the most beautiful and easily located double stars. Though a spotting scope or telescope at 50X, the colors of Alberio's contrasting component stars are revealed: azure and topaz. The double star is about 410 light years distant. The light we see in 2002 left Alberio before Don Juan de Oñate dismounted at a place that would become known as Socorro.

*Our Friends on the Road @.... Montezuma National Wildlife
Refuge*

**By
Cheryl Demerath Learn**

The National Wildlife Refuge System is America's great gift to posterity. Begun in 1902 by President Theodore Roosevelt in an effort to save Florida's last brown pelican rookery from the "feather trade," the refuge system is celebrating its centennial. In honor of the centennial celebration, scheduled for 2003, the Friends of Bosque del Apache will highlight in our newsletter a few of the 530 refuges in the NWR System. We could call it the refuge of the month plan!

This month's "jewel in the refuge crown" is Montezuma National Wildlife Refuge in the Finger Lakes region of New York State. Near the historic town of Seneca Falls, NY, Montezuma covers territory in 3 counties. Founded in 1938, Montezuma NWR serves as a major waterfowl resting area for birds on their journeys to and from nesting areas in eastern and central Canada. In the fall, Canada goose numbers peak at 50,000 and 150,000 ducks spend time there in November. In the summer months, this refuge is shore bird heaven. We curious New Mexico visitors to this lovely refuge posed several questions:

How did a refuge in western New York State, a rural farming area get the name of Montezuma? Legend has it that in 1806 a local physician named his spacious hilltop home after the palace of the Aztec emperor Montezuma. The name was applied to the local area that had marshes around them. As time progressed many of the marshes were drained for agriculture and the building of the Erie canal-later known as the Barge canal. When and how was the refuge founded? In 1938 six thousand plus acres were purchased to restore some of the wetlands to provide resting, feeding, and nesting habitat for waterfowl and other migratory birds. Like our very own Bosque del Apache, the Civilian Conservation Corps (CCC) did the initial work.

What is this refuge most noted for? One of the major achievements at this refuge is the re-establishment of the bald eagle nesting project. New York State had averaged 70 pairs of nesting bald eagles in the 1950's. Heavy pesticide, illegal killing of the birds and habitat loss had resulted in only one pair of nesting bald eagles remaining in 1976. So the "hacking" project was born. (Hacking is an old falconry term. According to the Oxford Dictionary, the hack was the board on which a hawk's meat was laid.) Modern day hacking is a conservation practice in which birds released into the wild are provided with food, as they gradually become independent. According to David Sibley,

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the place where the birds are released is known as the hacking site.

This “hacking” project involved the release of young eagles in the wild. The Montezuma NWR bald eagle hacking project was a first for eagles in North America! Young eagles were placed in nests on towers and had no overt human contact. They were fed initially by unseen humans. Gradually as the eaglets grew, they learned to feed and survive in the wild without human support. As the birds reached maturity in the early 1990’s, they started returning to Montezuma to nest. They treated the hack sites as home! Successful nesting is now occurring at Montezuma and other juvenile eagles are spending time there. About 30 bald eagles have fledged at Montezuma NWR since 1980. This return of the American national bird to the skies of New York State is surely a success story.

Yes, there is a Friend’s Group at Montezuma NWR. The Friends are the Friends of the Montezuma Wetlands Complex. The Wetlands Complex is made up of New York State Department of Environmental Conservation, Ducks Unlimited and the US Fish & Wildlife Service, the state Northern Montezuma Wildlife Management Area and lands owned by conservation groups, neighboring farmers and other private owners. The Friends group encompasses more than the refuge itself. Their mission is to support habitat restoration, wildlife conservation, and enhancement projects. Founded in 2000, the group operates a nature store called “The Lodge”!

A new bird for me was the American Black Duck. Related to the Mallard (*Anas platyrhynchos*), the American Black Duck (*Anas rubripes*) lives up to its name with both male and female exhibiting mallard structure but much darker colors. The American Black Duck and the mallards hybridize so there are some interesting combinations around!

Commonalties that Montezuma NWR shares with Bosque del Apache NWR include a commitment to wildlife and the blessed peace or serenity that so many of us find at our beloved Bosque del Apache. Like Bosque del Apache, Montezuma is located just minutes from major freeways and provides not only nesting, habitat for birds and other wildlife, environmental education, but also the sense of oneness with nature that only these places of beauty can provide.

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names), with your questions and stories. I'm no longer driving the old faded blue government Suburban. Instead, look for me in a generic brown Ford Explorer with USFWS stickers on the doors.

Here's some homework for you, whenever you're going to get here: read yourself to sleep for a few nights with your favorite field guide. Concentrate on the different flavors of Red-tailed Hawks. Study up on eagles, especially the 4-5 years it takes for a Bald Eagle to get that pure white head and pure white tail. There's always a chance for a Golden Eagle as well. If you think you're in the market for binoculars and/or a spotting scope, and are going to be here for the Festival, hold off on spending your money until you get here, if you can: not only will there be a huge variety for you to look through (any birder worth the name will be happy to let you look through their binocs and scopes, and tell you what they like and don't like -none of them are perfect-) but also, Eagle Optics and the Leica folks will be here with all kinds of neat things to drool over. If you already have a spotting scope, bring it. In my humble opinion, it's worth the hassle. I always travel with one- put the tripod in your checked bag, but keep your optical gear with you, in your carry-on.

Wow, we're really covering the bases this time. And please, don't be scared away from the Festival by the thought of crowds. There will be a lot of really neat people, to meet and learn from. There will be workshops and speakers on a wide variety of subjects. So, I'll look for you - whenever you get here. There will be more to see than you can imagine.

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The Friends of the Bosque del Apache

*NWR, Inc. is a tax-exempt organization.
We welcome and appreciate your Membership and donations.*

All members receive a **10% discount** at the **Bosque Nature Store**

Membership Application

Today's Date: _____

Name: _____

Address: _____

City: _____

State: _____ Zip Code: _____

Telephone: _____

Daytime phone: _____

Membership Categories:
(please select one)

- | | |
|-------------------------------|-------------|
| _____ Senior (62+) or Student | \$10 |
| _____ Individual | \$15 |
| _____ Family | \$20 |
| _____ Best Friend / Business | \$100-\$499 |
| _____ Patron | \$500-\$999 |
| _____ Benefactor | \$1000+ |

We welcome donations for special purposes such as memorials, the Junior Duck Stamp Program, education, and especially for Visitor Center / Office

**To determine if your membership is due check your address label for expiration date.
If renewing membership please check _____**

Special Thanks

By Steve Green

This column spotlights those people who through their time and energy have willingly given to the Friends and the Refuge.

Braving the summer heat and mosquitoes Phil Preston continued to be a presence as a docent at the Nature Store.

Percy Deal continues to plant and sculpt the desert arboretum.

Amy Estelle showed 47 people the beauty of the night sky.

Guy Powers represented the Junior Duck Stamp Program at the State Fair.

Jon had help from Ruth White, Mary Ruff, Barbara DuBois and Charles DeMenna in getting the newsletter folded, labeled and mailed.

We had a little get together to help with the store inventory on September 29. In attendance were Orinda Spence, Rita Barker, Natasha Isenhour, Kathy Purcell, Mary Nutt, Jon Morrison, Mary Templeton, Joy Deep, Liter Spence, Daniel Perry, Stephanie Mitchell, and Paula Green.

To all the those above, the Friends thank you.

Deadline for the January-February newsletter is December 6th. Please leave in my box at the Refuge, e-mail them to me at jonmorr@sdc.org or mail to PO Box 508, Socorro, NM 87801. Thanks, The Editor

Friends of the Bosque

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Friends of the Bosque

From the Editor

Dear Friends,

As I write this, the cranes are arriving by the hundreds and soon by the thousands. The worry over the water has abated with plenty of water to flood up all the impoundments on the Refuge, just in time for our winter visitors. The snow geese should be coming in the next few weeks and soon the whole Refuge will be alive with all the waterfowl we so love. During the day from my house in Socorro I hear the Cranes as they wing their way to the Refuge. I hope that all of you will make a special effort to come and visit these wonderful birds and be awestruck once again with the wonders that are Bosque del Apache NWR. While you're there, visit the Nature Store and get an early start on your holiday shopping. Profits from the store help fund projects on the Refuge.

If you can, come to the Festival. This is the 15th Annual Festival and by far will be the best yet. The programs and events scheduled this year are not to be missed. Hope to see you there.

Your Friend and fellow lover of nature,

Jon Morrison