



Photo: Dan Williams

## Birds of Bernardo

Visitors to the Bernardo area of the Ladd S. Gordon Waterfowl Complex south of Belen will find new blinds, viewing platforms and trails this year.

Please see Page 12.

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## Who's watching?



Photo: Dan Williams

The Rio Chama Wildlife Area is known for its healthy population of mule deer.

## State wildlife areas often overlooked

By Dan Williams

There's a spot in northern New Mexico where, if you tilt your head just right, you can hear an elk bugle, a raptor cry and the sweet music of a mountain stream -- all at the same time.

"This is a very special place, the kind of place you never get tired of, no matter how many times you've been here," Chama resident Greg Friday said as he gazed across a meadow in the Edward Sargent Wildlife Area. His job as manager of the Los Ojos Fish Hatchery allows him to visit the area often. Its eastern boundary is just a stone's throw from the Chama village limits.

Friday and others who live in northwestern New Mexico are fortunate to live near the Sargent, William Humphries and Rio Chama wildlife areas, all coveted by hunters

and wildlife watchers for their healthy populations of deer and elk.

The areas are among 67 similar properties owned by the Department of Game and Fish in locations around the state. The Department leases another 28 properties, all dedicated to protect and enhance fish and wildlife populations and habitat, and to provide wildlife-related recreation. Properties range in size from the 33,000-acre Colin Neblett Wildlife Area near Eagle Nest

...continued on Page 14



Photos: LuAnn Tafoya, left, Dan Williams, above



The Red Rock Wildlife Area near Lordsburg is home to New Mexico's captive breeding herd of desert bighorn sheep. Guided tours are offered every year to people lucky enough to draw a Gaining Access Into Nature permit.



# Oil and Gas Guidelines publication addresses development's effects on New Mexico wildlife

In its ongoing efforts to enhance and protect New Mexico's wildlife and habitat, the New Mexico Department of Game and Fish has published a set of guidelines for oil and gas developers, regulatory agencies and concerned citizens to promote attention to conservation while continuing to develop energy resources.

"These guidelines were developed at my request to further conserve our precious wildlife and supporting habitat," Governor Bill Richardson said.

The Oil and Gas Development Guidelines publication is available on the Department's website,

www.wildlife.state.nm.us. It contains 39 pages of discussion, research, and suggested options to further responsible energy development while maintaining responsible environmental practices. Written and researched by Department biologist Rachel Jankowitz, the publication addresses the inherent problems energy development poses to wildlife, such as habitat fragmentation and degradation, erosion, water quality, and chemical hazards. It also includes recommendations to avoid problems and mitigate existing habitat degradation.

The guidelines address oil and gas development effects on sensitive

species and the state's species of greatest conservation need, as identified in the Comprehensive Wildlife Conservation Strategy for New Mexico. It also recognizes the importance of wildlife to New Mexico's economy and quality of life. Wildlife-related recreation brings an estimated \$1 billion a year to the state.

The guidelines are intended to provide information and promote discretionary use among industries, regulatory agencies and citizens who recognize the negative impacts oil and gas development can have on wildlife and habitat -- and who are open to suggestions about ways to remedy problems.

## State fish gets a special home above Santa Fe

McClure Reservoir, a major storage site for Santa Fe's water supply and forbidden fruit for anglers, is now a nursery for New Mexico's state fish, the Rio Grande cutthroat trout.

The Department of Game and Fish stocked about 2,000 6- to 12-inch trout in the reservoir Dec. 6. The fish will be used as brood stock to produce more of the native trout to be stocked in waters around the state.

McClure Reservoir is one of two impoundments on the headwaters of the Santa Fe River that are used for the city's water storage. Together, they are capable of supplying 40 percent of Santa Fe's freshwater needs. Public access to McClure, and Nichols Reservoir downstream is restricted to official use to protect the city's watershed.

"This is an ideal location to expand our efforts to produce more Rio Grande cutthroats for our restoration program and for recreation," said Kirk Patten, Department fisheries biologist. "It also will give us an opportunity to replace non-native fish in the Santa Fe watershed with natives -- our state fish."

Each of the stocked cutthroats is injected with a passive integrated transponder tag, similar to the tiny computer chips used to identify pets. The tags will allow biologists to identify the pure-strain native fish when they are captured later for spawning. In the spring and early summer, fish will be collected by electroshocking, nets and other methods. Eggs will be stripped from the females and fertilized by milt from

the males, and then the fish will be returned to the water. The eggs will be transported to the Seven Springs Hatchery, where they will be hatched and raised to stockable-sized fish.

Under an agreement with the City of Santa Fe, the Department hopes to stock 100 to 500 adult Rio Grande cutthroat trout in the reservoir each year.

New Mexico's population of Rio Grande cutthroat trout currently is limited to 84 small headwater streams in the northern part of the state. The Department's ongoing restoration project intends to expand that population, preserve the pure native strains of the fish, and keep the species off state and federal endangered lists while maintaining cutthroat angling opportunities.

## Commission expands Gila trout opportunities

New Mexico anglers now have more opportunities to catch -- and even keep -- a Gila trout, because of the recent downlisting of the species from the federal endangered list and subsequent actions by the State Game Commission.

The Game Commission removed the prohibition on possession of Gila trout at its November meeting, an action that will allow the Department of Game and Fish to stock 2,000 to 3,000 of the rare fish in public waters other than those designated as recovery streams. Before the federal downlisting, the

Department could not stock those "extra" Gila trout raised every year in the Mora National Fish Hatchery, because doing so would also eliminate angling in those waters. Stockings of Gila trout ranging from 2 inches to more than 12 inches most likely will occur in southern New Mexico lakes and streams this year.

A related action by the Game Commission placed a daily bag limit of two Gila trout and unlimited brown trout, with no gear restrictions, in Gilita, Willow and Little Turkey creeks

above the confluence of Gilita Creek and Snow Creek.

The objective of both actions was to provide angling opportunities and expand habitat for pure strains of Gila trout, which currently occupy 11 streams in New Mexico and two streams in Arizona.

Limited catch-and-release angling for Gila trout also will be available on select streams this year. Details will be available soon on the Department's website, www.wildlife.state.nm.us.



Photo: Dan Williams

**Bobby Chavez helped stock about 2,000 genetically pure Rio Grande cutthroat trout in McClure Reservoir on the headwaters of the Santa Fe River in December. The fish will be used to help expand and preserve populations of New Mexico's state fish.**

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# Judges get tough on illegal outfitters, wildlife poachers

By Dan Williams

GRANTS – An outfitter who admitted to cheating hunters, forging licenses and evading state taxes was sentenced to 10 years in jail in one of New Mexico’s biggest cases of poaching and wildlife-related fraud, and one of the harshest sentences ever handed down in New Mexico for wildlife-related crimes.

The September sentencing was the fourth in the past 18 months in which New Mexico wildlife crimes resulted in significant jail time.

Thirteenth Judicial District Court Judge Camille Olguin also sentenced Adrian Romero, 35, to five years probation following his jail term, and ordered him to pay almost \$200,000 in restitution to 28 hunters whom he and his wife, Henrietta Romero, swindled in their illegal hunting and outfitting operation from 2002 to 2004. The Romeros pleaded guilty in October 2006 to a combined 10 felony charges, including racketeering, forgery, tax evasion and embezzlement. Henrietta Romero, 33, was sentenced Oct. 30 to five years probation as part of a plea agreement.

“It is important that we prosecute these types of cases vigorously – to send a strong message that New Mexico will not tolerate this type of illegal activity,” District Attorney Lemuel Martinez said. “We place high values on our trophy wildlife, and we must protect it along with the integrity of legitimate hunters and guides.”

The Romeros, of Grants, were indicted in January 2006 on 66 felony charges related to the operation of their business, Non-Typical Outfitters. They were accused of forging hunting licenses and hunters’ signatures, arranging and conducting illegal hunts, and failing to report state gross receipts amounting to \$244,000, on which substantial state taxes were evaded. Their plea agreements require them to pay thousands of dollars in restitution to all fraud victims listed in the indictments, and to reimburse the state for all back taxes. Henrietta Romero also agreed to never again act as a hunting guide, outfitter or landowner agent, and to give up her hunting and fishing privileges for 15 years in New Mexico and the other 23 states that are members of the Interstate Wildlife Violator Compact.

The indictments were the result of a 1 ½-year investigation by the Department of Game and Fish and the New Mexico Taxation and Revenue Department.

“Illegal hunting is becoming more of a commercial, high-dollar activity – and those activities are often accompanied by tax evasion,” said Alvan Romero, director of the Taxation and Revenue Department’s Tax Fraud Investigations Division. “I see our division becoming more and more involved in these types of investigations.”

“These cases are well-worth the wait and all the hard work,” said Chris Chadwick, a Department conservation officer who was in the thick of the Romero investigation. “We’re hoping this will send a message to out-of-state

hunters that it is safe to hunt here in New Mexico, and that we won’t tolerate unethical or illegal outfitters.” Recent cases that resulted in jail time for the convicted included:

- **October 2006:** A former Catron County outfitter was sentenced to serve nine years in jail in connection with an illegal hunting operation. Rita Floyd, 54, pleaded guilty to racketeering, fraud over \$2,500, and two misdemeanor counts of outfitting without a license. She originally was charged with 101 counts, including 60 felonies, for her role in an illegal scheme to forge licenses and sell hunts to out-of-state hunters.
- **February 2007:** A Guadalupita man caught trespassing and hunting elk without a license was sentenced to 30 days in jail and ordered to pay \$2,114 in fines.
- **July 2007:** A jury convicted a Taos man of poaching elk -- his fifth wildlife-law conviction -- and a judge sentenced him to six months in jail and ordered him to pay \$4,208 in fines. Three other men convicted in connection with the poaching of four cow elk were fined more than \$1,000 each and put on probation.
- **August 2007:** Two Fort Worth men were sentenced to 90 days in jail and ordered to pay \$10,750 each in criminal and civil penalties after the men went on an antelope-killing spree along the highway between Raton and Clayton. The men killed five antelope and were in possession of a deer they killed illegally in Idaho.

Alfredo Montoya, Chairman of the New Mexico Game Commission, said harsh sentences and significant civil penalties are needed to deter people seeking to profit by stealing New Mexico’s wildlife. The state Legislature, Gov. Bill Richardson and the Commission have approved civil penalties up to \$10,000 for poachers convicted of taking “trophy” wildlife.

“Maybe jail time and heavy fines will get the message across to people who are essentially stealing some of our most prized resources,” Montoya said. “Our trophy wildlife means a lot to our legitimate hunters and outfitters, and it has a significant impact on our rural economies. These recent court cases illustrate the Department’s commitment to stop the poaching and protect our resources.”

Recent studies indicate that hunting and other wildlife-associated recreation bring nearly \$1 billion to New Mexico’s economy, including \$127 million from outfitting and guiding businesses.

The New Mexico Department of Game and Fish encourages citizens to join the anti-poaching fight by using the Department’s toll-free Operation Game Thief hotline, (800) 432-GAME (4263), or visiting the Department’s website, [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us). Reporters can remain anonymous and receive rewards if charges are filed. To report tax fraud, please call the New Mexico Tax Fraud Hotline, (866) 457-6789.



Photo: Kathleen Raphael

**A bighorn ewe jumps out of the trailer and sprints into its new home in the Rio Grande Gorge, where it will join an existing herd released in 2006 by Taos Pueblo.**

## Bighorns have new homes in Gorge, Dry Cimarron

New Mexico has larger Rocky Mountain bighorn sheep herds in the northeast and in the Rio Grande Gorge following the release of 59 sheep captured Aug. 10-11 in the Pecos Wilderness.

A crew of New Mexico Department of Game and Fish biologists, conservation officers and staff used drop nets baited with salt blocks to capture the sheep near Pecos Baldy. The sheep were then transported by helicopter to Terrero, where they received blood tests, vaccinations and were fitted with radio collars.

Thirty-four sheep were taken to the Dry Cimarron River Canyon in northeastern New Mexico, where they will supplement an existing small southern Colorado herd that occasionally uses the Dry Cimarron area.

Twenty-five sheep were taken to Bureau of Land Management property in the Rio Grande Gorge, where they will join a small herd released last year by Taos Pueblo.

“The sheep released last year are adapting quite well to the Rio Grande Gorge,” said Elise Goldstein, a bighorn sheep biologist for the Department. “In fact, the new herd produced about 12 lambs this spring.”

The New Mexico National Guard provided a Blackhawk helicopter and crew to move trapping gear into the wilderness and back. Representatives

from Taos Pueblo, the BLM and the U.S. Forest Service also assisted in the trapping and release operation.

Bighorn sheep restoration began in New Mexico in the 1930s, but struggled until the animals were moved to the Pecos Wilderness in the 1960s. That herd is now the source for many transplant operations, and the statewide population now has grown to approximately 1,000 sheep. Moving the animals helps keep the population within the limits of the available alpine habitat.

The Rio Grande Gorge near the Taos Junction Bridge was identified as suitable low-elevation habitat for bighorn sheep in 1993.

“We’re thrilled to be a partner in this effort,” said Linda Rundell, New Mexico State Director of the BLM. “As part of our agency’s Restore New Mexico program, we’re working with landowners, conservation groups and other agencies to restore degraded landscapes and habitats throughout New Mexico. The final step – reintroducing native wildlife to areas where they’ve declined or disappeared – is the icing on the cake.”

Funding for the traps and transplanting operations comes from the Foundation for North American Wild Sheep and the federal aid program of the U.S. Fish and Wildlife Service.

### Gila monster

Mitch Ballard’s second choice in the draw for a 2007 elk license will be his first from now on. A monster 7-by-7 bull settled that. It’s a trophy by any standards. Now it’s only a matter of waiting for the official scoring: Will it top 370? Ballard took the big bull with one shot through the heart from about 200 yards on the third day of the first rifle hunt in Unit 16 B, an area known for its large elk. He and three friends were self-guided, and carried the elk out in quarters on backpacks. “It happened real fast, and it’s a good thing because I would have fallen to pieces if I had had to look at him for very long,” Ballard said. “Up to then, the only elk I’ve seen that big were either on the wrong side of the fence or on someone else’s wall.”



Photo courtesy of Mitch Ballard



Northwest



Photo: Dan Williams

# Winter is prime time for predator calling

## Cunning coyotes challenge hunters, wildlife watchers

By Ross Morgan

How many times have you been sitting with your back against a tree calling turkeys, and just as a big Tom struts in to your decoy -- just when you are getting ready to shoot -- he suddenly spooks and runs off? You sit there for a second trying to figure out what went wrong, and then you suddenly catch movement out of the corner of your eye. As you turn and look, you see a bobcat or a coyote creeping through the brush, headed in the direction of the fleeing turkey.

It turned out that while you were calling a turkey, you also were calling the turkey's predators -- a sporting activity in itself.

Predator calling is one of the fastest-growing hunting sports in North America. It isn't hard to learn; all you need is some persistence and a little patience. If you aren't a hunter but enjoy viewing wildlife, a set of camouflage clothing, a good predator call and a little bit of time can produce some really good photos or video.

### Calls and camo

Calls are designed to make noises resembling those made by a wounded animal, usually the predators' prey species. Three types of calls can be used: open-reed, closed-reed and electronic. All can be highly effective and cost anywhere from \$5 to \$600, depending on whether they are custom, commercial, handmade or electronic. The best way to learn how to call is to spend a day with



Photo: Jennifer Morgan

**Predator calling can be rewarding whether you're after a pricey pelt or a prize photograph. Above, the author poses with a coyote he called in during a trip to northern New Mexico.**

an experienced caller learning the basics on how to call and the best places to make stands. If you don't know anyone who has experience predator calling, there are many types of instructional "how to" videos and tapes available on-line or at your local sporting goods store that can help you out almost as well.

Predator calling isn't much different than other types of hunting when it comes to clothing. It is very important to conceal yourself by choosing and wearing camouflage that best matches your surroundings. Most predators are known for their sharp eyesight, keen hearing and keen sense of smell, so you want to make sure that you are very well concealed and that you always call into the wind. However, sometimes the bobcats or coyotes travel around you and come in downwind if they are suspicious. This is why you always want to keep your eyes open and pay close attention.

Typically, the best times to call are the first couple hours after sunrise and the last couple hours before dark. Choosing the right kind of call, and finding the right spot to set up and make a stand are equally important. Depending on the terrain, a stand can last anywhere from 15 to 45 minutes. The rule of thumb is that the more open the terrain, the longer the stand. I had a professor in college once tell me that if you called in one coyote for every four stands that you made, you were doing really well. Don't be in a hurry to leave. You don't want to be walking back to the truck, and then turn around and see a coyote of fox running off.

The top choices of firearms among most predator callers are .17, .22, .23, .24 or .25 caliber rifles, with the most popular cartridges being .17, .22-250, .223 and .25-06. In some areas with thick brush, a 12-gauge shotgun with No. 4 buckshot may be

a better choice. These calibers are the most popular because of their ability to kill the animal and not ruin the hides. You want to be sure and not ruin these hides because some of them can be worth a pretty good chunk of change, especially bobcats.

### Plenty of space

Some private landowners have management plans that include the taking of predators and often times are willing to let hunters on their property to call and take them. Always remember to ask first before hunting or fishing on private lands. However, there is a vast amount of public land that is accessible within New Mexico for calling predators and doesn't require a lot of time searching.

This year, the State Game Commission acquired an easement that allows hunters, anglers and trappers to harvest protected species on certain State Trust lands. Unprotected species also may be taken on easement lands by persons holding valid hunting or trapping licenses for protected species on those lands in season.

### Licenses and rules

One thing to remember if you decide to head out and give predator calling a try is that coyotes and skunks are not protected furbearers. Resident hunters don't need a license, Habitat Stamp or a Habitat Management and Access Validation. Nonresidents are required to have a valid hunting license of any type to hunt nongame species.

Raccoons, badgers, weasels, foxes, ringtail cats, bobcats, muskrats, beavers and nutria are protected and do require a New Mexico trappers license.

To learn more about dates and license fees, see the furbearer portion of the New Mexico Big Game and Trapper Rules and Information Booklet. When in doubt, contact your local Department of Game and Fish conservation officer or area office.



Photo: Dan Williams

*Ross Morgan is the Department of Game and Fish public information officer for the northwest area. He can be reached at area office in Albuquerque at (505) 222-4704 or ross.morgan@state.nm.us.*



# Northeast deer are starving, according to recent study

Drought, poor habitat linked to population declines across the West

By Clint Henson

For years, a favorite question around coffee shops and campfires has been, “Where are all the deer?” Then there’s the recollection, “When I was a kid, there were deer everywhere.”

Conversations begin to get really interesting when people start speculating about what happened to the deer. Coyotes, lions, over-hunting, not enough hunting, too many elk – the accusations go on and on. It seems the only point of agreement is that deer populations are down, and not just in New Mexico. Most of the West is also wondering, “Where are the deer?”

An ambitious study was begun a few years ago in northeast New Mexico to try to answer that question. The Santa Fe Trail Adaptive Management Partnership (STAMP) researched deer survival on more than 1.2 million acres of public and private lands in Colfax County. Researchers included representatives from the New Mexico Cooperative Wildlife Research Unit from New Mexico State University, the Berryman Institute from Utah State University, and the New Mexico Department of Game and Fish.

“This was one of the first major research and management efforts in the region, if not nationally, where public and private interests worked collaboratively to investigate and address declining mule deer populations,” said Barry Hale, deer biologist for the New Mexico Department of Game and Fish.

The study began in December 2001 by capturing and radio-collaring 38 mule deer does. Researchers observed the does for three years and evaluated their survival and the survival of their fawns. They also tracked the deer’s movements and studied the habitats they used. Many other factors were evaluated, including precipitation, hiding cover, and current and past land management practices.

Each doe was assessed for nutritional health using ultrasound to measure body fat levels. The initial data were surprising: The body fat of the captured deer ranged from only 6 to 9 percent. This was extremely low and showed that the available nutrition was very deficient in the summer and fall of 2001.

Researchers waited and watched each deer once a week as they approached fawning season. As the fawns were born, they would be found hiding in dense cover and were easy to catch so they could be weighed and radio-collared. Again, the first data were not good. The average birth weight



Photos: Clint Henson

**A study in northeastern New Mexico indicated that malnutrition was the leading cause of deer deaths, and that a deer fawn is 20 times more likely to survive for every 1 percent increase in body fat of the mother doe.**

of 19 fawns born in 2002 was only 2.3 kilograms (5.07 pounds). The birth weight should be more than 3.6 kilograms (7.94 pounds). All of the fawns died within 26 days of birth in the first year of study. But the worst was not over for 2002. The survival rate for the does was the lowest recorded for any deer population -- 63 percent. Thirteen of the 38 collared deer died in 2002, along with all of the fawns.

As researchers found each carcass, the cause of death was classified as malnutrition, predation, illegal harvest, accidental, disease or unknown. If the body condition was very poor, the deer was classified as dying from malnutrition, even if it had been scavenged by predators. So it came as no surprise that malnutrition was the most common cause of death in 2002. Extremely low precipitation levels in Colfax County in 2001 and the spring of 2002 were not enough to produce the food needed for the deer to thrive. The drought led to low body fat in does, low birth weights of the fawns, and a downward population trend of 36 percent.

Research from the first year of the STAMP project, while dismal, gave biologists the first real answer to the deer population decline: starvation. Fortunately, the deer had better luck in the next two years. Rainfall levels returned to more normal patterns in the spring and summer of 2003 and were above average in 2004.

In 2003 and 2004, 69 more does were captured, radio-collared and studied for survival. Another 21 deer were captured and checked for body condition, but were not radio-collared. Malnutrition continued to be the main cause of deer mortality throughout the study period, even though conditions improved into 2004.

As precipitation increased so did, body fat levels in does, and fawn birth weights. Survival numbers increased slightly in 2003 as 3 of 34 fawns survived through December.



In 2004, 28 of 47 fawns survived, with a total doe survival rate of 91 percent. The overall population gain, however, was only 6 percent. In 2002 the population decline was 36 percent, and in 2003 it was a 5 percent decline.

Researchers calculated that a fawn was 3.4 times more likely to survive for every 1 kilogram gain in birth weight, 8.8 times more likely to survive for every 1 centimeter of summer precipitation, and 20 times more likely to survive for every 1 percent increase in the body fat of the mother doe. Another factor that aided in fawn survival was the increase in hiding cover in 2003 and 2004. The study also found that as birth weights increased, the birth



Photo: Dan Williams

**New Mexico's large areas of pinon-juniper is not ideal habitat for mule deer, according to a recent study of deer survival in northeastern New Mexico.**



dates were earlier. Most fawns were born around July 14 in 2002, July 8 in 2003 and July 3 in 2004, indicating that does will hold fawns longer to increase birth weights. Earlier birth dates for fawns showed that the mother had better nutrition, which meant more and better quality milk for the fawns. This helped the fawns grow faster with a much better survival rate.

When researchers compared deer body conditions with habitat use, they found that body fat was proportional to the pinon-juniper communities in the annual and summer home ranges. The higher the amounts of pinon-juniper in a deer’s home range, the lower its body fat percentage. And because body fat in does is the single-best predictor of fawn survival, addressing this type of habitat may be a key to increasing high quality habitat for deer.

The easy part of the STAMP research is over. Now begins the challenge to land managers to improve habitat and available forage, which will take many years and some help from the weather. Ultimately, New Mexico lives or dies by the rains, and when it comes to measuring the effects of precipitation on habitat and wildlife, deer are New Mexico’s canaries in the mine shaft.

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# Don't miss your shot at an oryx this year

Application deadline is Feb. 6

By LuAnn Tafoya

Got oryx? New Mexico has more of the African antelope than it needs, and invites everyone seeking an impressive trophy or who is just fond of tasty game meat to take a crack at the annual drawing for licenses.

Applications for hunts must be either postmarked or submitted online by midnight Feb. 6. Hunters can find all the details in the 2008-2009 Big-Game Hunting & Trapping Rules & Information booklet, available. The booklets will be available in December on the Department of Game and Fish website, [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us), and at vendors statewide and Department offices in Santa Fe, Albuquerque, Las Cruces, Raton and Roswell.

Various types of oryx hunts are offered on White Sands Missile Range and on public and private lands off-range. If you are looking to hunt all month long, try applying for one of the off-range population-management hunts. Open areas include land controlled by the U.S. Forest Service, Bureau of Land Management, the State of New Mexico, and private property with written permission. A good land-status map is highly recommended if you draw a population-management license.

If you're hunting just for some excellent oryx meat, try applying for one of the "as called" population-management hunts. You may be assigned to hunt on

White Sands Missile Range, San Andres National Wildlife Refuge or on lands controlled by other agencies that require a \$150 access fee. Up to 250 hunters may receive licenses, based on a ranking system. Keep in mind that 155 hunters were called during the 2006-2007 hunting season, and the higher your ranking number, the less likely you will get called. If you are lucky enough to be called, it may be on short notice, so be prepared. Individuals can only apply for one type of population-management hunt.

If you're looking for a trophy, try applying in for a weekend once-in-a-lifetime hunt on White Sands Missile Range. There are three different locations on the range that are included in these hunts: Rhodes Canyon, Small Missile Range, and Stallion Range. All areas offer good hunting, but keep in mind that there are fewer licenses issued for the Small Missile Range, so your odds of drawing one may be longer. You will be required to pay the \$150 access fee and you will not be able to apply for one of these hunts again once you've drawn one. The odds of drawing a once-in-a-lifetime oryx license are about 6.4-to-1. Last year, 10,179 hunters applied for 1,585 licenses.

Another option is to apply for a broken-horn hunt. These hunts are available to those who have not held a once-in-a-lifetime hunt. The bag limit for these hunts is an oryx of either sex that has one or more horns missing at least 25 percent of



Photo: Don MacCarter

**Hunters who apply for a once-in-a-lifetime hunt for oryx in New Mexico have about a 1-in-6 chance of getting a license in the annual drawing.**

its normal growth.

If you have never gone oryx hunting and are successful in the drawing, expect a great time. Oryx are smart creatures, and over the years these hunts have become more difficult. Glassing and stalking are the most effective hunting techniques. If you spook a herd or oryx, move on and find another group to stalk. If you just drive around the range all day, expect to come up empty handed. Get away from the roads and you'll find oryx.

Once you have successfully

harvested your oryx, get ready for work. Oryx have very tough hides and you'll go through several knives if you don't have the right type. In the end, oryx meat will not disappoint you. The meat is lean, with a rich but mild flavor. Try marinating oryx steaks in olive oil before grilling them, then enjoy!

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## GAIN puts participants up-close-and-personal with wildlife

By LuAnn Tafoya

If you're looking for a non-hunting activity that will put you in touch with wildlife, check out Gaining Access into Nature (GAIN). The program has become increasingly popular since the New Mexico Department of Game and Fish started it two years ago. Activities include guided tours to see elk, deer, lesser prairie chickens, and bighorn sheep. Occasionally, participants can assist Department biologists and conservation officers

in electroshocking fish surveys, bighorn sheep trapping operations and other projects.

Participants are chosen by a lottery-type online drawing, and successful applicants are charged nominal fees. To see current GAIN opportunities and application deadlines, please visit [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us), and click on the "Recreation" tab at the top of the page.

GAIN activities in the southwest area include visits to the Red Rock Wildlife Management Area, home of the endangered desert bighorn sheep. Visitors to the area 24 miles north of Lordsburg get to see the site of the Department's captive breeding program, where sheep are raised, then trapped and released in bighorn habitat elsewhere in the state. GAIN participants are escorted through the expansive sheep pens, where they have excellent photo opportunities and views of the sheep. Lucky applicants also learn about the desert bighorn

management plan and objectives, funding for the program, predator control, and sheep biology. Some lucky GAIN applicants get to tag along, shoot photos and even pitch in and help biologists as they catch, treat, transport and release the sheep into new habitats.

Perhaps the most popular of the GAIN activities in the southwest also is the newest. This past fall, 12 lucky participants accompanied Department's wolf biologist and

tracked Mexican wolves in the Gila National Forest. Individuals learned what a day in the life of a wolf biologist was like and details about the wolf reintroduction program. The tour was a full day of driving forest roads and using electronic monitoring equipment to "track" wolves.

More GAIN activities are expected to be offered in 2008, so stay tuned to the Department website for details.



**Desert bighorn sheep are raised at the Red Rock Wildlife Management Area and then captured and relocated in suitable habitat such as the Hatchet Mountains of southern New Mexico.**

Photo: Dan Williams





# Head southeast for a mixed bag of birds

## Hunt for waterfowl in the morning, quail after noon

By Mark Madsen

Early morning ... sun's coming up ... clear sky ... looks like it's going to be a beautiful, mild winter day. Decoys are set ... very little wind ... and the birds are starting to fly.

Sounds like the start of a good morning of waterfowl hunting. The location could be in the upper Midwest or the flooded timber of the Mississippi Delta. But what about New Mexico?

When you mention New Mexico, most hunters think about monster Rocky Mountain elk or trophy mule deer. People don't normally associate New Mexico with good hunting opportunities for waterfowl. That said, several locations in New Mexico offer excellent waterfowl hunting. One of those areas is the Pecos River Valley from Roswell to Carlsbad, where hunters can find lots of ducks, geese and sandhill cranes.

Eastern New Mexico is part of the Central Flyway and contains numerous locations where ducks, geese and cranes stop on their southern migration. Some flocks even hang around all winter. Places like Bitter Lakes National Wildlife Refuge, the Overflow Wetlands, and the Seven Rivers Waterfowl Management Area offer food and security to migrating waterfowl.

Open Gate, a new landowner-incentive program offered by the Department of Game and Fish, also opens a couple of private properties for waterfowl hunting. Both of these areas are along the Pecos River east of Roswell.

### Waterfowl outlook good

This season, hunters can expect to find many species of ducks, with mallards being especially plentiful. Good opportunities also exist for pintails and canvasbacks. The valley attracts good numbers of snow geese, some Canada



Photo: Lance Cherry

**Waterfowl hunting is expected to be good to excellent this season in southeastern New Mexico.**

geese and sandhill cranes that call the valley home for the winter months. Duck season opened in late October and runs through Jan. 27. Pintail and canvasback season opens Dec. 20. The season for light and dark geese opened in mid-October and runs through Jan. 27. Sandhill crane season opened Oct. 31 and runs through the end of January.

The majority of the waterfowl and cranes in the Pecos Valley roost on Bitter Lakes National Wildlife Refuge and then scatter throughout the valley during the early morning hours to feed. Smaller numbers of ducks, geese and cranes roost on the Overflow Wetlands.

Hunters have good success in the public hunt area along the southern boundary of the middle tract of the refuge as well as the private property just north of U.S. 380. One of the new Open Gate properties is north of U.S. 380 along the Pecos River and should offer hunters some good pass-shooting opportunities.

Duck hunters also might try the Overflow Wetlands just west of Bottomless Lakes State Park. Another Open Gate property is just south of the state park and borders the Overflow Wetlands. The Seven Rivers Wildlife

Management Area is at the north end of Brantley Reservoir between Artesia and Carlsbad. This area offers good-to-excellent late-season hunting opportunities for waterfowl and sandhill cranes. Special hunt rules are in affect for Bitter Lakes National Wildlife Refuge and Seven Rivers Wildlife Area.

Most of the better goose hunting opportunities occur on private lands throughout the valley when flocks land to feed in agricultural fields. Some access may be obtained by hunters who take the time to find out who owns the fields and then get written permission to hunt from the landowner. The same scenario is true for sandhill crane hunting. Some geese and sandhill cranes also can be taken when they are leaving the Bitter Lakes refuge first thing in the morning.

### Afternoon quail, doves

So, you've had a good morning hunting waterfowl and sandhill cranes, but you haven't had your fill of bird hunting for the day? Before you pack everything up and head to the house, how about changing out the non-toxic shot for some lead and hunting dove and quail?

The nice thing about winter hunting in southeastern New Mexico is that waterfowl seasons are open during the same times as upland game birds. Dove season is open until the end of December, and quail season runs until Feb. 15. You can hunt waterfowl and cranes in the morning, switch to upland game birds during the middle of the day, and then be back in your favorite duck blind for the evening hunt.

Better-than-average precipitation during the spring and summer has resulted in excellent dove and quail habitat. Some area ranchers have reported seeing several hatches of quail this year, especially scaled quail. Bird numbers should be good, with coveys scattered just about everywhere. The mild weather

last fall also kept a lot of doves in the country. Good numbers of mourning and white-wings can still be found. Eurasian collared doves also live year-round in the Pecos Valley.

Hunters wanting to pursue bobwhite quail should try the Clovis/Portales area. Most of the better bobwhite hunting is on private property, so you must get written permission.

Public hunting opportunities for bobwhites can be found on the Department's lesser prairie chicken areas in the Milnesand area. Only non-toxic shot may be used on Department-owned wildlife areas.

### Lots of public land

Good scaled quail hunting can be found throughout southeastern New Mexico. Scaled quail occupy many habitat types and it comes down to the type of terrain you prefer to hunt. Scaled quail can be found in the sand county that starts east of Roswell and runs all the way to the Texas state line southeast of Carlsbad. They also can be found throughout the Pecos River Valley and the foothills of the lower Sacramento and Guadalupe Mountains.

Thousands of acres of public lands (BLM, state, and National Forest) can be found throughout southeastern New Mexico, providing more than adequate access for upland game bird hunting. Several Open Gate properties also have been opened up, providing additional hunting opportunities on private land.

For more information about bird hunting opportunities on the Bitter Lakes National Wildlife Refuge, call Steve Alvarez at (505) 625-4009. For information about Seven Rivers Waterfowl Management Area, call Richard Artrip at (505) 457-2660. More information about the Open Gate program can be found on the Department of Game and Fish website, [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us), or by calling George Farmer at (505) 624-6135.

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Photo: Dan Williams

**Plenty of spring and summer moisture brought good quail habitat for quail in southeastern New Mexico. Scaled quail are the most common species, although hunters also can find bobwhite and Gambel's quail.**







# Roadkill takes a detour

## Tijeras Canyon project creates safe passage

By Dan Williams

With a lot of help from their friends, deer and other wildlife now can commute more safely between habitats in the Sandia and Manzano mountains east of Albuquerque.

Activation of electric fencing and highway mats now provides the animals safe passage over and below Interstate 40 and N.M. 333, formerly Route 66.

Laura Finley, a volunteer member of the Albuquerque-based Wild Friends conservation group, flipped the switch to the system designed to keep wildlife -- and vehicles -- out of harm's way.

"This was a really neat project from the beginning," said Finley, one of 800 students who participate in the Wild Friends efforts each year. "We didn't have trouble getting people interested in it because we all have seen road kill while driving around the state. It was amazing how it grew and how much community support there was."

The ambitious project has roots in the 2003 Legislature and House Joint Memorial 3, sponsored by Rep. Mimi Stewart, with support from Wild Friends. The memorial directed the Department of Game and Fish and the Department of Transportation to work together to reduce wildlife-vehicle collisions in New Mexico. Before long, the community was on board and the Tijeras Canyon Safe Passage Coalition was formed, consisting of federal and state agency employees, UNM employees, Carnuel Land Grant members, conservation groups and

**Mark Watson, a habitat specialist with the Department of Game and Fish, looks for wildlife tracks in in an Interstate 40 overpass in Tijeras Canyon. Members of the Tijeras Canyon Safe Passage Coalition cleared away non-native vegetation under overpasses so animals will have safe routes to sources of food and water on both sides of the freeway.**

Photo: Dan Williams



Photos: Mark Watson, Dan Williams

**More than 700 wild animals are killed every year on New Mexico's highways (top).**

**A \$750,000 network of fencing, warning lights and under-freeway passages is designed to prevent about 30 collisions between vehicles and large game animals a year in Tijeras Canyon (above).**

concerned citizens.

Turning on the power was among the final steps in the development of a \$750,000 system to reduce wildlife-vehicle collisions along five miles of highways through Tijeras Canyon, where about 30 deer, bears and an occasional mountain lion die every year. The electrical system is a vital component of the project, which also includes 8-foot wildlife-proof fencing, passages under existing overpasses, warning signs and solar-powered motion-detecting cameras that turn on highway caution lights.

"This is the only system of its kind in New Mexico and among only a few in the

United States," said Mark Watson, a habitat specialist with the Department of Game and Fish. "We're expecting it to significantly reduce vehicle-wildlife collisions in Tijeras Canyon. It also will reconnect Sandia and Manzano mountain wildlife habitats, giving animals safer passage to seasonal sources of food, water and shelter." Nationwide, an estimated 71 million acres of wildlife habitat are lost to primary highways. The Insurance Institute for Highway Safety estimates that more than 1.5 million deer-vehicle collisions a year result in more than 29,000 human injuries, 150 deaths and \$1.1 billion in property damage.

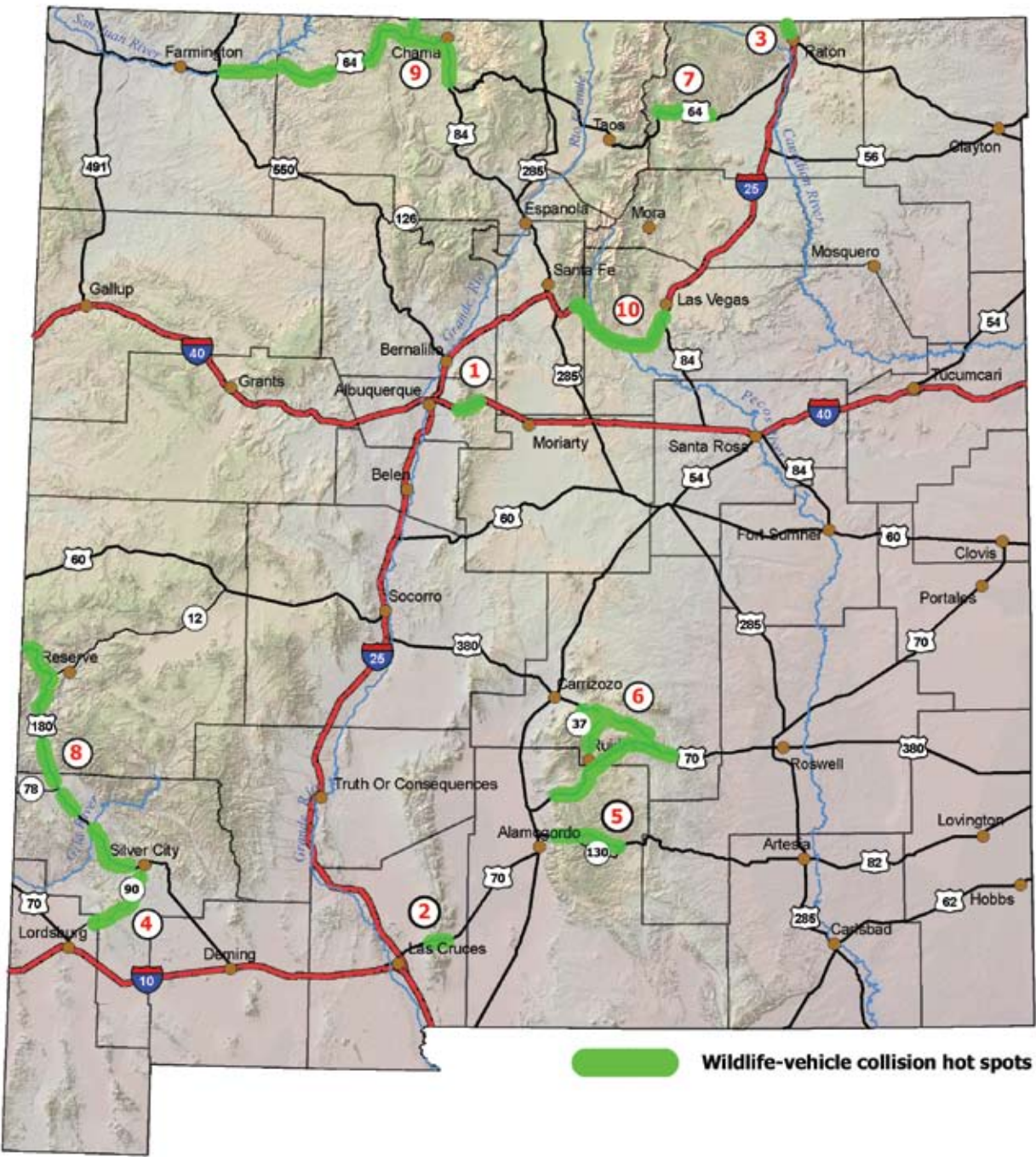
The 7-foot-high Electrobraided fencing in Tijeras Canyon is designed to deliver a mild shock to animals that touch it, discouraging them from passing through. The fences consist of several horizontal strands of black rope-like material that is about a half-inch in diameter. The fence can deliver a 6,000- to 7,000-volt, 4 milliamp shock for 3/10,000<sup>th</sup> of a second -- enough to sting, but not seriously harm a human. The Electrobraided Fence Company in New Brunswick, Canada, will monitor the fence 24 hours a day by satellite, alerting local crews if repairs are needed.

The project also includes five Electromats, which are built into roadways and act like electric cattle guards, preventing wildlife or other animals from crossing. The approximately 4-foot-wide mats span



# Dangerous vehicle-wildlife collision highways

- 1. Tijeras Canyon** (deer) – Interstate 40/N.M. 333, Bernalillo County.
- 2. San Augustine Pass** (deer/bighorn sheep) -- U.S. 70, Dona Ana County.
- 3. Raton Pass** (deer, cougar, bear, elk) – Interstate 25, Colfax County.
- 4. Burro Mountains** (deer, elk, javelina) – N.M. 90, Grant Co. -- Tyrone
- 5. Cloudcroft to Mayhill** (deer, elk) – U.S. 82 and N.M. 130, Otero County.
- 6. Ruidoso/Capitan/Hondo Valley area** (deer, elk, bears) – U.S. 70, U.S. 380, N.M. 48, N.M. 37, Lincoln County.
- 7. Cimarron area** (deer, elk, bear) – U.S. 64 through Cimarron Canyon, Colfax Co.
- 8. Gila National Forest** (elk, deer, javelina, bears) – Silver City area, U.S. 180 from N.M. 78 to N.M. 12, Grant and Catron Counties.
- 9. Rio Arriba/San Juan counties** (deer, elk) – U.S. 64/84 from Tierra Amarilla to Bloomfield, and to the Colorado border.
- 10. Glorieta to Las Vegas** (bear, deer, elk) – Interstate 25, Santa Fe and San Miguel counties.



the roadways in four locations along N.M. 333 and across the I-40 on- and off-ramps at Tijeras. The mats along N.M. 333 are designed to encourage wildlife to cross the road in designated areas where motion-detecting cameras trigger caution lights that alert motorists to slow down when wildlife are present. Pedestrians can safely walk across the mats as long as they are wearing shoes, and bicyclists can cross with no problem. Timed switches will allow dogs and horses to cross. The on- and off-ramp mats are designed to keep wildlife off the freeway. Twelve specially designed escape ramps were constructed in case animals somehow become trapped inside the I-40 fencing.

The additions to the wildlife corridor were included in the \$27 million GRIP 1-40 Carnuel-to-Tijeras project. Governor Richardson’s Investment Partnership, or GRIP, is a \$1.6 billion transportation initiative aimed at improving the state’s highways, while creating thousands of local jobs.

“This has been an exciting and educational project for us,” said Mark Fahey, a project design engineer for the Department of Transportation. “We did some things we’ve never done before, and I learned a lot about the status of Tijeras Canyon as a back-and-forth route for wildlife.”

One key component of the project was secured when the City of Albuquerque purchased 63 acres of land north of I-40 from HawkWatch International. The \$650,000 purchase protected a vital wildlife corridor from impending housing developments. The property is now designated as “open space.”

“We were able to work with former City

Councilor Martin Heinrich and the City Council and get the property just in time,” said Scott Wilber, director of the New Mexico Land Conservancy, which facilitated the deal. “Before that, HawkWatch was considering selling the property to any buyers, and they were getting lots of offers from developers.”

Watson said the Tijeras project is a step in ongoing efforts to reduce the 700 to 900 collisions between large wildlife and vehicles that are reported in the state every year, and many others that are not reported. A fencing project on U.S. 550 between Aztec and the Colorado border, and the Tijeras project already have helped reduce those numbers, paving the way for similar projects in the future.

“Now that everything is in place, the long-term success of the Tijeras Canyon Safe Passage Project will require monitoring by the Department of Game and Fish and the Department of Transportation and an expectation by the public that all the components are maintained and functional,” Watson said. He is monitoring wildlife reactions to the fencing and how under-highway passages are utilized to determine how well the system is working.

“We hope to demonstrate that wildlife-vehicle collisions in Tijeras Canyon are greatly reduced and that this system will provide safe passage for wildlife in the Sandias and Manzanos into perpetuity,” Watson said.



Photo: Dan Williams

Electric highway mats, electric fencing and chain-link fencing work together to keep wildlife out of harm's way on N.M. 333, formerly Route 66, in Tijeras Canyon.



# Saving the natives

## Costilla project will protect pure-strain cutthroat trout

By Dan Williams

Ty Mitchel gently lifted the small trout and held it in the sunlight to see its brilliant colors -- orange and gold, with distinct black spots toward its tail.

“Beautiful, just beautiful,” he said, returning the fish to the upper Rio Costilla in northern New Mexico. “How often do you get a chance to catch a native cutthroat?”

New Mexico anglers are fortunate to have opportunities to catch Rio Grande cutthroat trout. The state fish inhabits about 84 streams in the northern part of the state, and although its habitat has dwindled to 11 percent of what it once was, the trout is not considered endangered or threatened.

Kirk Patten, a fisheries biologist with the Department of Game and Fish, hopes to keep it that way. This past summer, Patten and fellow biologist Eric Frey led a team on a mission to preserve pure strains of the native fish for posterity. A few miles upstream from Mitchel, they were applying the pesticide rotenone to Comanche Creek and its tributaries in the Valle Vidal Unit of the Carson National Forest.

“The treatment was the last phase in a stepwise approach to eliminate all the non-native fish species from the drainage,” Patten said. “Once we’ve done that, we can return the pure-strain Rio Grande cutthroats to their historic habitat.” If all goes well, he said pure-strain cutthroat trout could be restocked in Comanche Creek and its tributaries sometime next year.

"We consider this project extremely important, not only because it's our state fish, but also because it's the Department's mandate to protect native species," Patten said. "The Rio Grande cutthroat trout is found only in one place in the world -- southern Colorado and northern New Mexico. It would be tragic and irresponsible for us to see a native species permanently displaced by non-natives."



Photos: Dan Williams

**Costilla Creek in the Valle Vidal Unit of the Carson National Forest is known for its spectacular scenery and outstanding angling opportunities for Rio Grande cutthroat trout. Keeping a pure strain of the trout -- New Mexico's state fish -- is the objective of a 10- to 15-year project that started in June 2007.**



In July, about 20 miles of streams were treated in the first phase of the ambitious project to restore native cutthroats to the Rio Costilla watershed, which consists of more than 150 miles of streams, 25 small lakes and Costilla Reservoir. Project partners include the Department of Game and Fish, U.S. Fish and Wildlife Service, U.S. Forest Service, Interstate Stream Commission, Trout Unlimited, New Mexico Trout, Turner Enterprises and the Vermejo Park Ranch, the Rio Costilla Cooperative Livestock Association, and others. Patten said he expects the entire project to take 10 to 15 years.

“It is definitely a long-term commitment,”

Patten said. “This summer was a great first step.”

Before the treatment, trout and other native species were removed or relocated by electroshocking, netting and by relaxing fishing regulations. Rotenone, an organic pesticide derived from plant roots, helped eliminate the remaining fish.

“We were able to save most of the trout before we treated the stream,” Patten said. “We salvaged around 2,000 trout and moved them downstream to the Rio Costilla for angling.” He said the rotenone took care of almost all of the remaining fish, including rainbow trout, "cutbows," which are

## Rio Grande cutthroat trout (*Oncorhynchus clarki viriginialis*)

**Historic range:** Most likely encompassed all cool waters in the Rio Grande drainage, including the Chama, Jemez and Rio San Jose river drainages, along with suitable waters of the Pecos and Canadian river drainages.

**Habitat requirements:** Clear, cold water, naturally-fluctuating flows, low levels of fine sediment in channel bottoms, well-distributed pools, stable stream banks, and abundant stream cover.

**Threats:** Habitat loss, caused mainly by livestock grazing, water diversions, logging, road building and urban and agricultural development, and introduction of exotic fishes



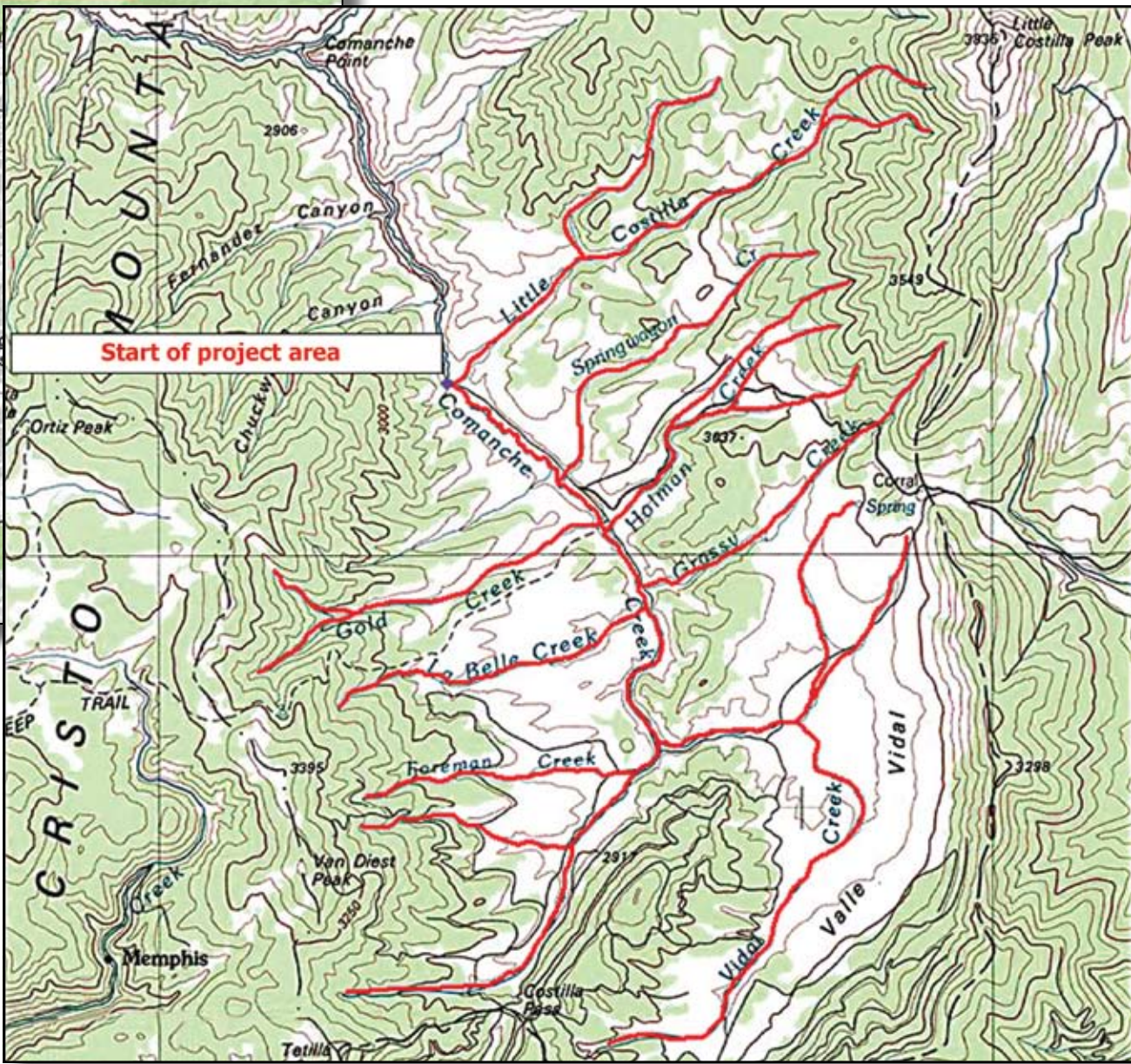
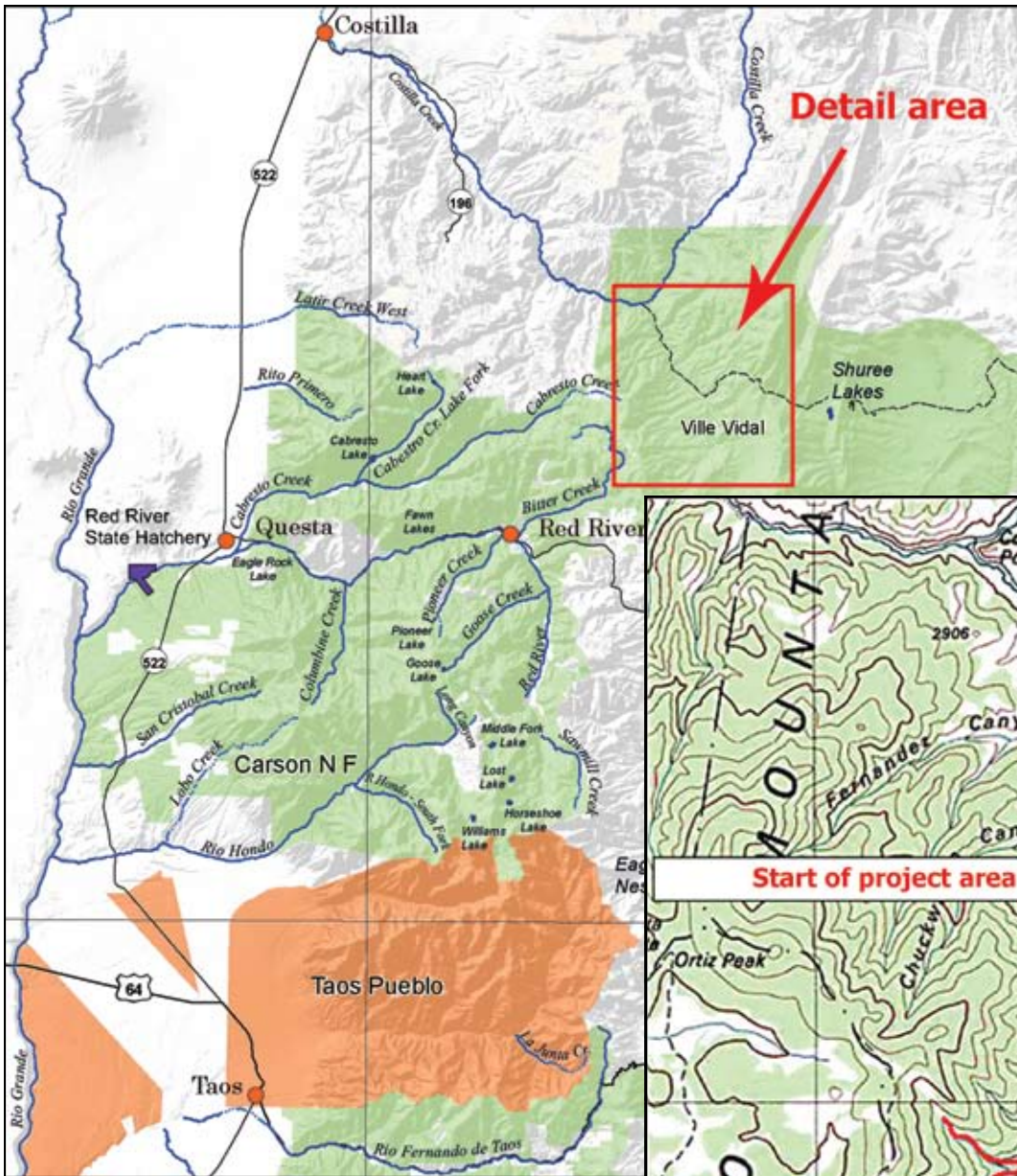
are the primary causes of decline. Because of the small size and isolation of Rio Grande cutthroat streams, most remnant populations are also vulnerable to environmental perturbations, such as drought, fire, or freezing temperatures, and problems associated with small population size, such as loss of genetic diversity and random fluctuations in

population size.

**Current population status:** Pure populations of the Rio Grande cutthroat trout have been reduced to 84 tiny headwater streams, occupying roughly 11 percent of the subspecies’ historic range in New Mexico.

**Of interest:** The Rio Grande cutthroat was the first North American trout observed by Europeans. In 1541, Pedro de Castañedade Najera, a member of Coronado’s expedition, described “a little stream which abounds in excellent trout and otter.” This stream is believed to be Glorieta Creek, southeast of present day Santa Fe, which is now a barren, ephemeral wash for most of its length.





**More than 20 miles of streams in the Valle Vidal Unit of the Carson National Forest were treated in July to make way for pure-strain Rio Grande cutthroat trout, Rio Grande suckers and Rio Grande chubs.**

rainbow-cutthroat hybrids, and about 2,500 white suckers. The rainbow trout needed to be removed from the streams because they interbreed with the cutthroats.

This past fall, electroshocking surveys found one small section of stream that still contained live trout. Patten did not rule out a need to retreat the streams.

“Weather conditions can be unpredictable during application, which requires us to make constant adjustments according to stream flow,” he said. “It’s not unusual to have to go back and retreat streams.”

Creating and maintaining a watershed with a pure strain of Rio Grande cutthroat trout will protect the state fish and help keep the species off state and federal endangered lists, which will prevent watershed-use restrictions that go along with those listings.

Keeping the fish off the lists also will allow anglers to enjoy catching them. That is a big reason the Truchas Chapter of Trout Unlimited got involved in the project.

“It’s important that we preserve the gene pool so we can continue to enjoy our native fish in a number of ways,” Truchas Chapter member Arnold Atkins said. His organization contributed significantly to the project by acquiring a National Fish and Wildlife Foundation grant to install a fish passage barrier on Comanche Creek. The barrier will prevent non-native fish from going upstream.

Most of the pure-strain cutthroat trout that are restocked in the Rio Costilla will come from the Department’s Seven Springs Hatchery in the Jemez Mountains.

# Cutthroat project facts

## Streams reclaimed

More than 20 miles of streams were cleared last summer to make way for stockings of pure-strain Rio Grande cutthroat trout, native Rio Grande suckers and native Rio Grande chubs sometime next year. Streams included Comanche Creek and most of its tributaries in the Valle Vidal Unit of the Carson National Forest.

## Non-natives removed

The project used electroshocking, relaxed fishing regulations and, finally, pesticide treatment to remove more than 20,000 non-native fish from the Comanche Creek watershed. Most of those fish were non-native white suckers.

## Trout saved

More than 2,000 trout were salvaged by electroshocking before the treatment process. Most of those trout were moved downstream to the Rio Costilla, where they will provide angling opportunities.

## What is rotenone?

Rotenone is a naturally occurring substance derived from the roots of tropical plants in the bean family

Leguminosae. It is classified as an organic pesticide. The EPA has concluded that its use for fish control does not present a risk of unreasonable adverse effects to humans and the environment.

## How safe is the water after treatment?

The hazard associated with drinking water containing rotenone is very small because of the low concentration of rotenone used and its rapid breakdown. A 160-pound person would have to drink more than 23,000 gallons of water treated at 0.25 mg of rotenone per liter of water (highest allowable treatment rate for fish) at one sitting to receive a lethal dose. A bird weighing ¼ pound would have to consume 100 quarts of treated water or more than 40 pounds of fish and invertebrates within 24 hours to receive a lethal dose. This same bird would normally consume 0.2 ounces of water and 0.32 ounces of food daily.

## Gone within hours

Tests conducted during and following treatment of the streams showed no traces of rotenone or other inert ingredients in the water because of its rapid degradation and neutralization procedures.





# Birds of Bernardo

## New blinds, decks perfect for viewing cranes, waterfowl

By Tom Chilton

Just in time for the winter migration of waterfowl to the Rio Grande Valley, viewing blinds have been built at the Ladd S. Gordon Waterfowl Complex. From the blinds and elevated platforms, visitors can watch and photograph birds from dawn to dusk.

The blinds are among many recent improvements in the waterfowl complex's Bernardo Area south of Belen, just north of U.S. 60, an easy stop off Interstate 25. Three elevated observation decks, built several years ago, now have roofs and screening that provide shelter from the elements without sacrificing viewing space. A three-mile auto loop and two short hiking trails also give visitors views of birds in fields and ponds.

Thousands of sandhill cranes and snow geese gather daily in the area's cultivated, dry fields. More than a dozen species of ducks rest and feed in flooded fields and ponds, taking to the air in the early mornings and late evenings. Visitors often see hundreds, sometimes thousands of cranes, geese and ducks in the air as they fly from one field or pond to another. The best times for birding are from mid-November to early February. Most years, more than 12,000 sandhill cranes and 25,000 snow geese find food and refuge at Bernardo. That's a lot of quacking, honking and action for bird lovers of all ages.



Photos: Dan Williams

**About 200 acres of corn are grown every year at the Bernardo Wildlife Area to provide food for as many as 12,000 sandhill cranes and 25,000 snow geese that visit the area every winter. Feeding the birds helps keep them off farmers' fields in the Rio Grande Valley.**

### Planting for wildlife

Bernardo is one of three working farms in the Middle Rio Grande Valley that are managed by the Department of Game and Fish. Of the 1,700 acres at Bernardo, about 450 acres are cultivated annually to provide winter feed for migratory and upland birds. Several fields are flooded during the fall to provide resting areas for migrating waterfowl. Because the landscape is a mixture of open water, fields and dense woods, it also attracts mule deer, coyotes, raccoons, pheasants, hawks, owls, quail and songbirds.

Corn is the most important crop at Bernardo because of its high nutritional value to waterfowl. About 200 acres of corn are planted in mid-May. Although corn is an ideal food for the birds, it cannot be planted year after year in the same field. If this were done, the soil would be depleted of nitrogen and the corn production would decline. To prevent this, alfalfa is planted every other year, because this plant, in combination with bacteria in the soil, replaces nitrogen absorbed by the corn. About 400 acres of alfalfa are planted in the middle of April. Hay from this crop is harvested four to five times from the middle of May to the first freeze in October. Smaller acreages of milo and millet are also planted.

In the fall, corn stalks are mowed down so that birds can easily get to the grain. However, some corn rows are knocked with a pole so that the stalks are leaning over. In this position the corn is available mostly to the tall cranes and not to the shorter geese.

### Sandhill cranes

Sandhill cranes are a big winter attraction at Bernardo. With a wingspan of 5 to 6 ½ feet and weights ranging from 6 to 16 pounds, these cranes are the largest flocking bird you will see at Bernardo. Their large size ensures that photographers will have frame-filling fun. The birds mate in the spring in the northern United States, Canada, Alaska and Siberia. The mating pairs will tilt their heads back and call together, singing a kind of duet. Throughout the year they also



Photo: Marty Frentzel

**Covered blinds give visitors to Bernardo Wildlife Area protection from wind and snow along with excellent views of the cranes and migrating waterfowl that use the area.**



dance, run, and leap high in the air. They use their large wings to slow down and make parachute-like landings, which are enjoyable to watch and easy to photograph. The average lifespan of a sandhill crane in the wild is 20 years.

Snow geese

Each fall more than 6 million snow geese migrate from northern Canada to marshes, bays, fields and wet grasslands in the western United States. Up to 60,000 of these birds come to this part of New Mexico to spend about three months in the croplands and wetlands along the Rio Grande. They travel up to 3,000 miles in huge, honking flocks – a snowstorm of big, white birds with five-foot wingspans. From a distance, snow geese appear to be all white. However, their black wingtips are easy to see when they fly.

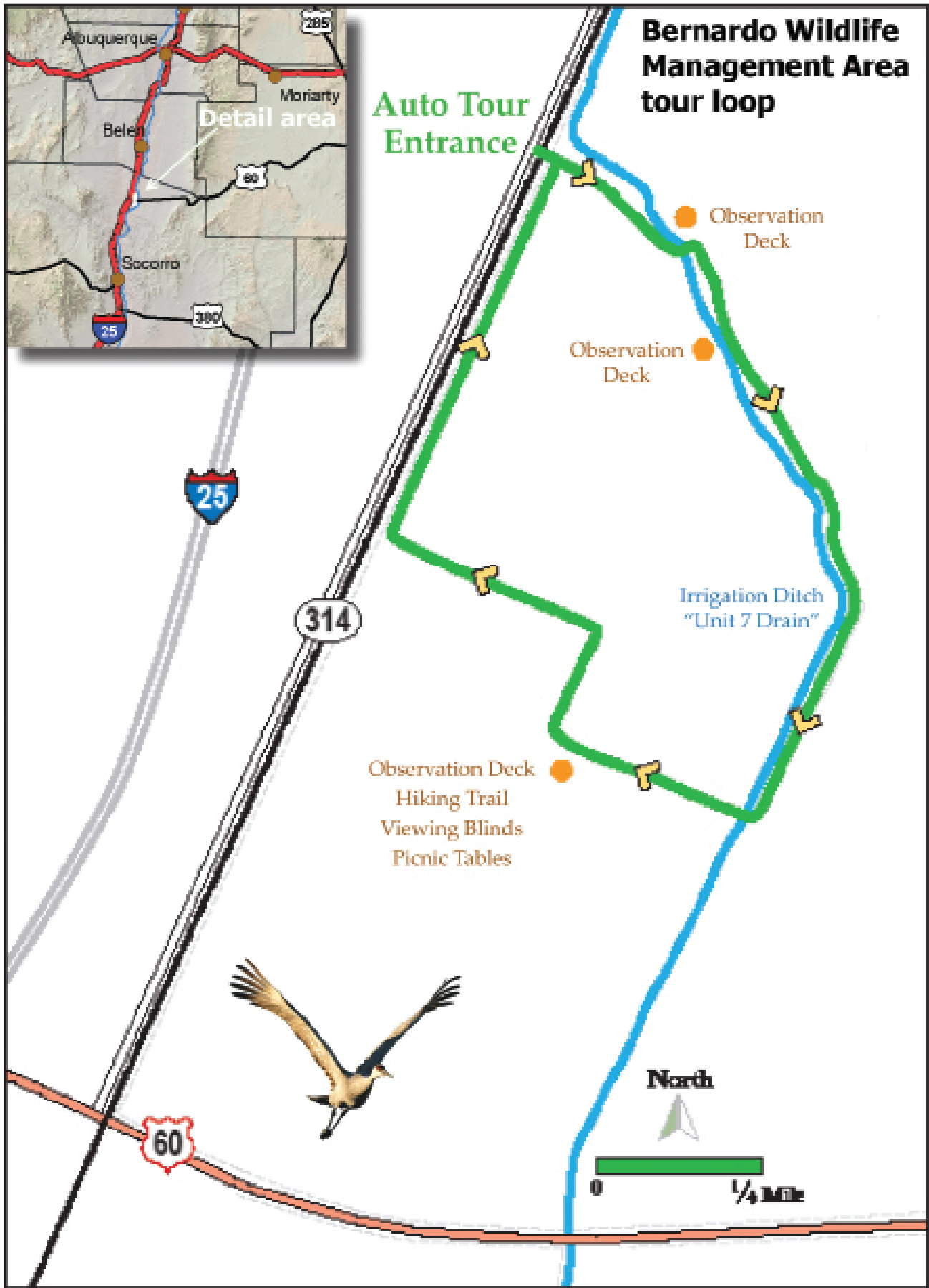
A feeding flock of several thousand geese may look like chaos, but family groups and pairs stay together, moving through the flock as distinct units. You can see this behavior most easily from one of the elevated platforms at Bernardo. Each group keeps an area around it clear of other geese so that competition for food is reduced. The adult male makes sure that other geese do not come too close.

In early February, the geese begin their return trip north, where they will gather and breed in colonies that have between 1,000 and 150,000 pairs. The majority of the snow and Ross’s geese migrating from New Mexico breed on Bank’s Island and the Queen Maud Gulf region in north-central Canada.

Watchable wildlife

The observation platforms are excellent places to view all kinds of wildlife, especially shy animals that are more active at dawn and dusk. Watch along the edge of the woods. In most ecosystems, an edge between two habitats is where you will see the most wildlife. As the sun goes down, animals such as mule deer leave the woods to graze on grain in the fields. Coyotes emerge to scout the crop furrows for rodents. Listen for the flutter of wings, the drumming of a woodpecker or the call of a coyote.

Tracks are easy to find in the mud along the pond edges and in the soft dirt of the birding tour road. There are other clues to wildlife if you look closely. Look for droppings, feathers, bones, eggshells and little bits of fur. Bernardo’s two short hiking



trails go through deep woods where you may see nests and other wildlife signs.

Water for waterfowl

Most of the water in the ditches and ponds at Bernardo comes from the Rio Grande. Near Isleta, about 30 miles north of Bernardo, water is diverted from the Rio Grande into a network of canals and ditches that are accessed by farmers and ranchers throughout the Rio Grande Valley. The

primary irrigation channel in this network flows from Isleta, through Bernardo, down to Socorro, where it rejoins the Rio Grande.

Starting in mid-September of each year, water is diverted from this channel to create 17 ponds at Bernardo that cover about 700 acres. Water depths vary from a few inches to four feet. These ponds, in combination with the seed crops planted for wildlife, provide ideal wintering habitat for migrating waterfowl.



Photos: Dan Williams, above, Marty Frentzel, right

Platforms overlooking cultivated fields of corn and milo are perfect spots to watch as many as 25,000 snow geese that visit the Bernardo Wildlife Area south of Belen every winter.





Photo: Clint Henson

## Get involved

Many organizations in New Mexico are dedicated to wildlife conservation, habitat improvement and wildlife-related recreation. Whether you are interested in birding, wildlife watching, hunting, fishing or trapping, chances are there is an outfit you'll deem worth supporting. Here are a few of them:

**New Mexico Wildlife Federation:** Founded by Aldo Leopold in 1914, the diverse organization is a strong lobbyist in the New Mexico Legislature, "dedicated to protecting New Mexico's wildlife, habitat, and outdoor way of life." (505) 299-5404, [www.nmwildlife.org](http://www.nmwildlife.org).

**Audubon New Mexico:** Devoted to the protection, preservation, and enjoyment of the environment, with a particular emphasis on birds. The organization has chapters statewide, with headquarters at the Randall Davey Audubon Center in Santa Fe. (505) 983-4609, <http://nm.audubon.org>.

**Rocky Mountain Elk Foundation:** A large national organization dedicated to ensuring the future of elk, other wildlife and their habitat. The organization actively supports efforts to protect and enhance elk country, conservation education and to restore elk herds. New Mexico information: (505) 454-9390. National website: [www.rmef.org](http://www.rmef.org).

**Southwest Environmental Center:** "Works to reverse the accelerating loss of species worldwide by protecting and restoring native wildlife and their habitats in the Southwestern borderlands, through grassroots advocacy, public education and on-the-ground restoration projects. (505) 522-5552, [www.wildmesquite.org](http://www.wildmesquite.org).

**Southwest Consolidated Sportsmen:** An organization representing at least 15 sporting and conservation groups of diverse interests. The group's three primary objectives are to "disseminate wildlife and habitat information, participate in habitat maintenance projects, and review and comment on proposals involving wildlife habitat. (505) 526-5056.

**Trout Unlimited, New Mexico:** Dedicated to the restoration, protection and conservation of all coldwater fisheries, their tributaries and watersheds and the fish that inhabit them in the State of New Mexico. (505) 470-4878, [www.newmexicotu.org](http://www.newmexicotu.org).

**New Mexico Wild Turkey Federation:** Supports scientific wildlife management on public, private and corporate lands as well as wild turkey hunting as a traditional North American sport. (505) 869-3837, [www.nwtf.org](http://www.nwtf.org).

# State wildlife areas often overlooked

...Continued from Page 1

to the tiny Picacho Bosque Area, now part of Mesilla Valley Bosque State Park near Las Cruces. The Department carefully controls public access to the properties to protect the wildlife while also providing wildlife-related recreation.

Over the years, the Department has purchased 165,947 acres outright and currently leases 50,511. Most of the areas were purchased with federal funding derived from an 11 percent excise tax on sporting arms, ammunition, archery equipment, a 10 percent tax on handguns, and other excise taxes on fishing equipment and motorboat fuel. The federal funding rules require that the lands and water are managed to the benefit of the fish and wildlife.

Historically, hunters and anglers were the ones who paid for and used Department lands most often. Today, land managers are seeing more diverse recreational interests in the properties.

"More and more, we're getting requests and inquiries from people who want to use wildlife areas for hiking, photography or just wildlife watching," said Mike Gustin, a Department lands specialist. "Our challenge is to find ways to open the gates to many wildlife-related uses

without straying from our primary objective of protecting the wildlife."

The Department's Gaining Access Into Nature (GAIN) program is a first step to providing more wildlife-related recreational opportunities. Participants are selected in drawings for guided tours for deer, elk and bighorn sheep viewing, and to occasionally help biologists with fish surveys and big-game trapping operations. Because only a few people get to participate in the current GAIN program, the Department plans to expand it soon.

"People are very familiar with many of our properties, such as Eagle Nest Lake, Fenton Lake, the Ladd S. Gordon Waterfowl Complex and some of the more popular fishing and hunting destinations," Gustin said. "Other properties are not as well-known, or people don't know they can use them, so we rarely see visitors."

To help the public discover these wildlife areas, the Department plans to launch an expanded GAIN program that will allow limited public use on the areas as long as those uses are wildlife-related. Permits may be required for modest weekly or annual fees. Stay tuned to the Department website, [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us) for more details.

## Popular wildlife management areas

The New Mexico Department of Game and Fish owns 67 and leases 28 properties across the state for wildlife protection, population enhancement and wildlife-associated recreation. Here are some of those areas, including details about size, wildlife and access. A complete list and maps of Department-owned and leased lands is available on the Department website, [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us).



Photo: Dan Williams

**The prime habitat for deer and elk makes for spectacular scenery at the Sargent Wildlife Area.**

### Northwest area

#### Jackson Lake Wildlife Area

**Location:** Straddles N.M. 170 about 5 miles northwest of Farmington.  
**Purchased:** 1947 for \$46,793 to provide food and resting habitat for wintering waterfowl.  
**Land and water:** 840 acres, including a 60-acre lake, agricultural fields and riparian habitat along the La Plata River.  
**Wildlife, fish:** Waterfowl, songbirds, raptors, dove, quail, pheasants, deer and other wildlife. The lake contains trout, catfish, bluegill and bass.  
**Activities allowed:** Waterfowl and dove hunting, fishing, other recreational activities west of N.M. 170.  
**Restrictions, closures:** Property east of the N.M. 170 currently is closed to the public, but plans are in the works for some wildlife-related recreational activities.

#### Edward Sargent Wildlife Area

**Location:** Just north of Chama.  
**Purchased:** 1975 for \$2.2 million to provide excellent elk habitat and increase hunting opportunity.  
**Land and water:** 20,208 acres of prime elk and deer habitat, including 1.5-acre Nabor Lake, and a riparian area along the Rio Chamita and Chama River.  
**Wildlife, fish:** Elk, deer, bears, predators, raptors,

songbirds and various other wildlife. The lake and streams contain cutthroat, rainbow and brown trout.  
**Activities allowed:** Hunting, fishing, hiking, horseback riding.  
**Restrictions, closures:** Limited seasonal closures during hunting seasons and during calving and fawning seasons for elk and deer.

#### Rio Chama Wildlife and Fishing Area

**Location:** Approximately 15 miles southwest of Chama between El Vado and Heron lakes, bordered by N.M. 112 on the southeast and the Rio Chama on the northwest.  
**Purchased:** Original purchase in 1954 with additional land purchases through 1989 for a total of \$103,500 to provide deer and elk habitat and increase hunting and fishing opportunities.  
**Land and water:** 13,239 acres, including access to more than 12 miles of the Rio Chama and 4.5 miles of El Vado Reservoir shoreline. A portion of the property is leased to the State Parks and Recreation Division for camping and boating facilities.  
**Wildlife, fish:** Deer, elk, many species of birds and other wildlife. Rainbow and brown trout in the river and lake. The lake also contains some kokanee salmon.  
**Activities allowed:** Hunting, fishing, hiking and horseback riding. Camping in designated areas and at El Vado and Heron state parks.



**Restrictions, closures:** Limited seasonal closures. Only licensed hunters allowed during hunting seasons.

**William A. Humphries Wildlife Area**

**Location:** 10 miles west of Chama on the Continental Divide off U.S. 64.  
**Purchased:** Original purchase in 1966, with additional land acquisitions through 1980 to provide habitat for elk, deer, bear and turkeys.  
**Land and water:** Formerly the Roque Wildlife Area, it includes 10,950 acres of prime deer and elk habitat and is a key migration route for elk.  
**Wildlife, fish:** Deer, elk, black bears, turkeys and many other species of birds.  
**Activities allowed:** Hunting, hiking, horseback riding.  
**Restrictions, closures:** Limited seasonal closures. Only licensed hunters allowed during hunting seasons.

**Ladd S. Gordon Waterfowl Complex**

**Location:** The complex consists of four wildlife areas in the Middle Rio Grande Valley. Belen Waterfowl Area, 2 miles south of Belen; Casa Colorada Waterfowl Area, 7 miles south of Belen; Bernardo Wildlife Area, halfway between Belen and Socorro; La Joya Waterfowl Area, 7 miles south of Bernardo.  
**Purchased:** Properties were acquired in numerous land purchases. Original purchases and total purchase prices were: La Joya, 1928, \$8,454; Belen, 1959, \$104,955; Bernardo, 1971, \$174,092; Casa Colorada 1981, \$1,582,726.  
**Land and water:** All four areas contain ponds, ditches and irrigation canals managed to provide waterfowl resting areas during the fall and winter; and irrigated cropland to provide food for the birds. Total acres: Belen, 255; Bernardo, 1,676; Casa Colorada, 423; La Joya, 3,405.  
**Wildlife, fish:** Waterfowl, upland birds; songbirds, deer, various other wildlife species.  
**Activities allowed:** Hunting, fishing, wildlife watching, hiking in designated areas and seasons.  
**Restrictions, closures:** Limited seasonal closures for some activities during hunting seasons and to protect migrating waterfowl.

**Northeast area**

**Charette Lakes Fishing Area**

**Location:** 23 miles southwest of Springer.  
**Purchased:** Original acquisition in 1949; subsequent land purchases through 1959 to provide fishing opportunity and resting habitat for migratory waterfowl. Total purchase price: \$70,247.  
**Land and water:** 1,900 total acres, including two lakes, one 110 acres and the other 300 acres.  
**Wildlife, fish:** Rainbow trout, yellow perch, migrating waterfowl.  
**Activities allowed:** Fishing, camping picnicking.  
**Restrictions, closures:** Season is March 1 through Oct. 31.

**Clayton Lake Fishing Area**

**Location:** 15 miles north of Clayton.  
**Purchased:** 1954-55 for \$44,482 to provide fishing opportunities and waterfowl habitat.  
**Land and water:** 402 total acres, including a 175-acre lake.  
**Wildlife, fish:** Largemouth bass, walleye, sunfish. Waterfowl in fall and winter.  
**Activities allowed:** Fishing, camping. Fishing season is March 1 through Oct. 31. The area is leased to the State Parks Division, which provides camping and boating facilities.  
**Restrictions, closures:** Fishing and boating is allowed only March 1 through Oct. 31 to protect waterfowl.

**Colin Neblett Wildlife Area**

**Location:** 2 miles east of Eagle Nest.  
**Purchased:** 1949 for \$374,532 to provide quality habitat for deer, elk, turkey and numerous other species -- with no competition from livestock.  
**Land and water:** At 33,116 acres, it is the state’s largest wildlife area. It includes 8 miles of the Cimarron River.  
**Wildlife, fish:** Deer, elk, turkeys, bears and numerous birds and other wildlife species. The river contains stocked rainbow trout and stream-bred brown trout.  
**Activities allowed:** Hunting, fishing, hiking, horseback riding, wildlife viewing and camping. The State Parks Division manages developed campgrounds in Cimarron Canyon under a contract with the Department.  
**Restrictions, closures:** Seasonal closures in some areas during hunting seasons.



Photo: Dan Williams

**Wildlife areas protect elk during the winters and calving seasons when they are vulnerable.**

**Uracca Wildlife Area**

**Location:** 12 miles north of Questa.  
**Purchased:** 1966 for \$250,000 to provide big-game habitat, primarily winter feeding grounds for deer and elk without competition from livestock.  
**Land and water:** 13,304 acres.  
**Wildlife, fish:** Deer, elk, bears, turkeys, grouse and many other species of mammals and birds.  
**Activities allowed:** Hunting, hiking, horseback riding.  
**Restrictions, closures:** Seasonal closures to protect wintering deer and elk. Limited vehicle access.

**Elliott Barker Wildlife Area**

**Location:** 15 miles northwest of Cimarron.  
**Purchased:** 1965 for \$250,000 as big-game habitat.  
**Land and water:** 5,416 acres, including Ponil Creek.  
**Wildlife, fish:** Deer, elk, turkeys, bears and many other species. The creek contains Rio Grande cutthroat trout.  
**Activities allowed:** Hunting, fishing, wildlife viewing, hiking, horseback riding.  
**Restrictions, closures:** Seasonal closures during hunting seasons, limited vehicle access.



Photo: Dan Williams

**More than 20,000 acres are set aside to re-store populations of lesser prairie chickens.**

**Southeast area**

**Lesser Prairie Chicken Areas**

**Location:** Various locations in Roosevelt, Chaves, DeBaca and Lea counties in southeastern New Mexico. Most are in Roosevelt County south of Portales.  
**Purchased:** 1939-1950 for a combined purchase price of approximately \$78,425 to restore populations of the lesser prairie chicken.  
**Land and water:** Approximately 20,670 acres in more than 20 separate locations, the largest being the Gallina Wells area at 4,708 acres.  
**Wildlife, fish:** Lesser prairie chickens, quail, deer, antelope, many other species.  
**Activities allowed:** Hunting of species other than lesser prairie chickens, wildlife viewing. Areas around Milnesand are used during the annual Lesser Prairie Chicken Festival, a three-day event limited to about 100 participants who are given tours to leks during the spring mating season.

**William S. Huey Waterfowl Area**

**Location:** 2 miles northeast of Artesia.  
**Purchased:** 1963-67 for \$70,060 to provide food and habitat for waterfowl.  
**Land and water:** 640 acres of cultivated farmland straddling the Pecos River.  
**Wildlife, fish:** Waterfowl, sandhill cranes, pheasants, quail, dove, antelope, deer, furbearers and other species. The farm provides feed for snow geese, cranes, ducks and Canada geese.  
**Activities allowed:** Hunting, fishing, wildlife watching.

**Seven Rivers Wildlife Area**

**Location:** 20 miles north of Carlsbad.  
**Purchased:** Under 25-year lease from the U.S. Bureau of Reclamation since 1994.  
**Land and water:** About 1,800 acres in farming area and 48,000 acres in the Brantley Wildlife Area, including part of the old Lake McMillan and the Pecos River.  
**Wildlife, fish:** Pheasants, quail, waterfowl and other species.  
**Activities allowed:** Hunting, fishing, wildlife watching, hiking.

**Southwest area**

**Lake Roberts Fishing Area**

**Location:** 35 miles north of Silver City.  
**Purchased:** Land purchased in 1962 for \$11,035. Lake and dam built in 1963 for \$140,000 in memory of Austin A. Roberts, a Department pilot who died in the line of duty in 1960.  
**Land and water:** 79 acres, including 71-acre lake.  
**Wildlife, fish:** Rainbow trout, catfish.  
**Activities allowed:** Fishing, camping in a U.S. Forest Service campground.  
**Restrictions, closures:** Boat use restricted to oars or electric motors.

**Bill Evans Lake**

**Location:** 8 miles south of Cliff.  
**Purchased:** 1972 for \$127,000 to provide fishing opportunities.  
**Land and water:** 300 acres, including a 62-acre lake with water pumped 300 feet uphill from the Gila River.  
**Wildlife, fish:** Largemouth bass, crappie, bluegill, catfish and winter rainbow trout.  
**Activities allowed:** Fishing.  
**Restrictions, closures:** No trotlines. Boat use restricted to oars or electric motors.

**Red Rock Wildlife Area**

**Location:** 26 miles north of Lordsburg.  
**Purchased:** 1960-74, total price \$83,680, originally as a holding site for exotic ungulates such as oryx, ibex and Barbary sheep being evaluated for release into the wild. It is now devoted to captive breeding of desert bighorn sheep.  
**Land and water:** 1,529 acres, plus 480 adjacent acres leased from the State Land Office.  
**Wildlife, fish:** Desert bighorn sheep, javelina, quail, other species.  
**Activities allowed:** Special Gaining Access Into Nature participants are allowed inside the sheep paddocks for guided tours.  
**Restrictions, closures:** Restricted to public access to protect the sheep and limit their contact with humans so they can be relocated to wild areas in the state.



