



PHOTO: KATE ERNST

Hunting companions
A good bird dog
can make a hunt complete.

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Learn how fish see, hear, taste and smell – and become a better angler.

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FERRET FARM

Experimental 'nursery' aids recovery of endangered black-footed ferrets

STORY AND PHOTOS BY DAN WILLIAMS

Dustin Long likes to give his visitors a close-up, personal experience with the endangered black-footed ferrets he raises on the Vermejo Park Ranch southwest of Maxwell.

"Catch a whiff of this," Long said, raising a caged female ferret within smelling range of his latest victim. "You won't forget it."



(above)
An endangered black-footed ferret makes a rare daytime appearance from her burrow at Vermejo Park Ranch.

(right)
Black-tailed prairie dogs provide black-footed ferrets with food and shelter.

MOST PEOPLE ARE REPELLED by the pungent, musky odor from ferrets' scent glands—used to mark territory, attract mates and identify family members in the dark. "You don't want to get any of it on you," Long said.

Unpleasant as it is—black-footed ferrets are in the same family as skunks—that memorable odor was sweet for Long this past summer. It was another sign that his groundbreaking experiment to help save the rarest mammal in North America was working. He released 15 ferrets into the wild for the first time in New Mexico and recaptured 14 of them two months later. "I guess I'd have to say it was excellent year for us," he said.

Long, a biologist with the Turner Endangered Species Fund, has been working with black-footed ferrets and prairie dogs since 1998 on a 10,000-acre section of Ted Turner's 600,000-acre Vermejo Park Ranch in northern New Mexico. State and federal funding support his research, which is part of the U.S. Fish and Wildlife Service's nationwide Black-footed Ferret Recovery Program.

Until this year, Long's research primarily consisted of a captive breeding program. In seven years, he has raised more than 200 ferrets, feeding them prairie dogs and making sure they had very little human contact before sending them to release sites in other states. The idea is to improve ferrets' chances

of surviving on their own in the wild. This year, he took the program up a notch by giving the ferrets some real-life experience. In a first-of-its-kind experiment nationwide, Long released nine female ferrets and six kits into a prairie dog colony where he could monitor their progress for a couple months, then recapture them for release elsewhere.

"This is very exciting—an important step to show there is a usefulness in using smaller prairie dog towns as nursery sites," said Paul Marinari, a biologist with the U.S. Fish and Wildlife Service in Colorado. "Those ferrets are now in a larger release site in Wyoming—doing what ferrets do. We expect their survivorship to be higher than animals we have released from pens."

Black-footed ferrets were thought to be extinct until 1981, when a population of 129 was discovered in Wyoming. Five years later, disease cut that population to 18. The remaining ferrets were captured and placed into a captive breeding program in an effort to save the species. Since then, more than 3,000 ferrets have been bred in captivity and an estimated 500 are living in the wild at release sites in Wyoming, South Dakota, Colorado, Utah, Montana, Arizona and Mexico.

...continued on page 14



Governor Richardson joins posse opposing drilling in Valle Vidal

The members of the New Mexico Wildlife Federation believe the Valle Vidal Unit of the Carson National Forest is something worth fighting for. To show their support, the organization had a rally on the Valle Vidal in August.

What's got the membership up in arms is the potential drilling for coal-methane gas on the eastern 40,000 acres of the 100,000-acre addition to the Carson National Forest. Pennzoil transferred the property to the people of the United States in the 1980s. It has been managed for quality trout fishing and elk hunting for more than two decades. It is the only once-in-lifetime elk hunting area in New Mexico.

Governor Bill Richardson was among the rally participants, along with U.S. Rep. Tom Udall and U.S. Rep. Heather Wilson.

Governor Richardson further expressed his support by instructing the New Mexico Department of Game and Fish, the Environment Department and the Energy, Minerals and Natural Resources Department to prepare a petition to list the waters of the Valle Vidal as Outstanding National Resource Waters.

If approved by the state's Water Quality Control Commission, the designation would prevent reductions in water quality on any stream in the Valle Vidal. Those include the Rio Costilla and its tributaries, waters that are being considered for a major restoration project for the Rio Grande cutthroat trout. It also would cover the streams and lakes on the eastern side of the property, including McCrystal Creek, Beatty Lakes and Whitman Vega. Those waters are



New Mexico Governor Bill Richardson and a posse of supporters rallied at the Valle Vidal in August, vowing to protect the area's waters and oppose oil and gas drilling.

PHOTO: MARTY FRENTZEL

important to the elk herd and also are home to some of the state's more rare species of fairy shrimp such as the knob-lipped and Packard's.

Municipalities, irrigators and those who recreate in northeastern New Mexico all use the water that comes off the Valle Vidal.

The State Water Quality Control Commission is expected to act on the petition in December. For more information visit the Department of Game and Fish Web site: www.wildlife.state.nm.us. ■

Turning in harvest surveys pays off for lucky hunters

Nine New Mexico deer and elk hunters who returned their harvest survey forms or brought their harvested animal's head in for testing during the 2004-2005 seasons were rewarded with quality elk and oryx permits in the Department of Game and Fish special "incentive drawing."

Two of the 22,433 hunters who returned surveys won elk hunting permits for the Valle Vidal, hunts that are once-in-a-lifetime opportunities for hunters who participate in the regular drawing. Five hunters won oryx permits on White Sands Missile Range, also considered once-in-a-lifetime hunts for the regular drawing. Only about 25 percent of New Mexico's deer and elk hunters returned their harvest surveys for 2004-2005.

Odds were better for hunters who brought in their harvested deer or elk heads to be tested for Chronic Wasting Disease. Of the 74 hunters who participated, Peter Sandoval of Los Alamos won a Valle Vidal elk hunt, and Daniel Sanchez of Santa Fe won an oryx hunt.

The drawing winners for survey returns were: Joshua Campos of Albuquerque and Steven Loros of Costa Mesa, Calif., for the Valle Vidal elk hunts; and David Coffelt of Las Cruces, Stuart Polen of Milan, Charles Trask III of Los Alamos, Christopher Woodall of Ruidoso, and Claude R. Downs of Truth or Consequences for the oryx hunts.

Details of the Department's ongoing testing program and incentive drawing can be seen in the Big Game & Furbearer Information Booklet or on the Department web site, www.wildlife.state.nm.us. ■

Bighorns find new homes in Arizona, Gila Country

Thirty-two Rocky Mountain bighorn sheep have new homes in Arizona and five joined an existing herd at Turkey Creek in New Mexico's Gila National Forest following a successful trapping and relocation projects in the Pecos and Latir wilderness areas.

Both trapping operations were accomplished at altitudes exceeding 12,000 feet. Sheep were transported by helicopter to staging areas below, where they were trucked to their new homes. The operations involved dozens of workers from Game and Fish departments in New Mexico and Arizona, and the U.S. Forest Service.

The Pecos Wilderness sheep were traded to Arizona for an equal number of desert bighorn sheep. The Latir sheep augmented a small Turkey Creek herd that had become stagnant.

"It's really a win-win situation for everyone," bighorn sheep biologist Elise Goldstein said. "Arizona needs more Rocky Mountain bighorns and we need to thin out our herds, and Arizona can provide us with more desert bighorns, which we need to build up our herds."

Goldstein said the Pecos bighorn herd is estimated at 275 to 300 animals and was outgrowing its range. Statewide, there are approximately 850 to 930 Rocky Mountain bighorn sheep, and about 230 to 250 desert bighorn sheep in New Mexico, she said.

Both projects were funded through federal excise taxes on hunting and ammunition, with a 25 percent match through a raffle and an auction of two bighorn sheep permits donated by the state Game Commission to the Foundation for North American Wild Sheep. ■

Plan would return endangered falcons to NM skies

A proposal to return aplomado falcons to their native skies above New Mexico is nearing its final stages as the U.S. Fish and Wildlife Service evaluates public comments.

The proposal calls for as many as 150 captive-raised northern aplomado falcons to be released annually in New Mexico for 10 or more years, until a self-sustaining population is established. The program would be part of a larger recovery effort underway in Texas that has been very successful.



Under the proposed program, aplomado falcons found within New Mexico would be considered a nonessential, experimental population, which allows for more flexible environmental regulations. That status places no requirements on private landowners and asks federal agencies to confer with the U.S. Fish and Wildlife Service on activities that might impact the birds.

The northern aplomado falcon was listed as endangered in 1986 under the Endangered Species Act. Sporadic sightings have occurred in New Mexico, most recently Aug. 27, 2005. A breeding pair in Luna County successfully hatched three chicks in 2002, but no nest has been documented since then. ■

PHOTO: JENNIFER ATCHLEY



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New Mexico's monster bull elk bring high prices in fund-raisers

New Mexico's bull elk are gaining a reputation as some of the most impressive trophies in the world, and they're also commanding some high prices when hunting permits are offered through the Rocky Mountain Elk Foundation's annual auction and raffle.

This year was no exception, as the foundation's New Mexico Governor's tags sold for \$79,000 in the auction and \$35,320 in the raffle.

Bill Metcalfe of Clinton, Md., bought this year's auction tag and took a very impressive bull off the Rocky Mountain Elk Foundation's Double-H Ranch near Datil. The elk was the biggest ever taken off the ranch, initially scoring a whopping 423 inches.

Carlos Gonzales of Newbury Park, Calif., paid \$20 for his chance to win the raffle tag. After he won, he turned down a \$50,000 offer for his tag and went hunting instead. He selected a very nice trophy after seeing 16 big bulls during a two-day hunt near Reserve.

The New Mexico Game Commission began providing the two tags to the Rocky Mountain Elk Foundation in 2000. Since then, the foundation has raised more than \$526,278.90 from the tags, with 90 percent of the proceeds going into elk conservation and research. ■

Bill Metcalfe shot this monster bull elk on the Double-H Ranch. He bid \$79,000 for the New Mexico Governor's Tag in the Rocky Mountain Elk Foundation's annual auction.

PHOTO: COURTESY OF
ROCKY MOUNTAIN ELK FOUNDATION



Fatality highlights need for firearms safety classes

Hunting fatalities are always tragic—and almost always can be avoided.

No one will ever know whether taking a hunter safety course would have saved a 9-year-old boy who was hunting near Roswell this past September. Would he have been more careful when he held two rifles in the back of a pickup? Would he have checked to make sure they were unloaded? Would he have better controlled the muzzles? Those are safety rules that are emphasized—over and over—in hunter education classes.

According to Department of Game and Fish records, the youngster who held those rifles had not passed an approved hunter education class in New

Mexico, although since 1976 state law has required everyone under age 18 to have passed such a class before hunting with a firearm in the state.

The police report said the boy holding the rifles lost his balance and fell, causing one of the rifles to discharge when it hit the bed of the truck. The bullet struck the boy in the head, making him New Mexico's first hunting-related firearms fatality since September 2003.

The New Mexico Department of Game and Fish encourages people of all ages to take an approved hunter safety course—whether they hunt or not. Knowing the basics of firearms safety can save lives. ■

Game Commission
adopts new
elk-landowner
license system

New Mexico now has an improved, more efficient and equitable way to manage the state's elk population on public and private lands with the adoption of a new private lands elk license allocation system.

The new system, called Elk – Private Lands Use System, or E-PLUS, was approved by the State Game Commission in September 2005 after months of research, consultation with other states and landowners, and dozens of public meetings across New Mexico.

The intent of the new system was to create a program that is more equitable to landowners with small or large property holdings. The new system is more flexible and easier to understand, with priorities placed on properties that have significant benefits to elk. The new system also clearly defines the distinction between the Department's Wildlife Depredation Program and the annual allocation of elk hunting authorizations to landowners for sport harvest. Unlike the old system, depredation considerations will not be resolved with the new system, which will go into effect for the 2006-2007 hunting seasons.

The New Mexico Department of Game and Fish issued more than 40,000 elk licenses and authorizations in 2005-2006. Of those, about 25,112 licenses went to hunters through public drawings, and 15,824 authorizations were distributed to 2,605 landowners statewide. ■

Know the basics
of hunter safety

Safe handling of firearms begins with four basic rules:

- 1. Assume every gun to be loaded.** Check any firearm you hold. You need to know!
- 2. Control the muzzle—always point the firearm in a safe direction.** Never point a firearm at yourself or others and keep it under control.
- 3. Keep your finger off the trigger until ready to fire.** The natural in-stinct when picking up a firearm is to put your finger in the trigger guard. DON'T!
- 4. Be sure of your target and what lies beyond it.** Never point your firearm at something you do not intend to shoot. Make sure you positively identify what you are shooting at and know what lies in front of and beyond it. Do not use telescopic sights as a substitute for binoculars when identifying per-sons, animals or objects.

Be safe, take a class

New Mexico law requires anyone under the age of 18 to have successfully passed an approved hunter education class to legally hunt with a firearm. To find a class in your area:

- Call (505) 222-4731. It's a good idea to sign up well before application deadlines for hunting seasons—as classes fill early.
- Visit the Game and Fish Web site, www.wildlife.state.nm.us and click on the education tab for a list of statewide classes and contact information for instructors.
- Duplicate hunter education certificates are available on the web site.

Volunteer hunter education instructors are always needed to meet the growing demands of young hunters and hunters who need certification to hunt in other states. To volunteer, call (505) 222-4722.



Down and birdy

Trained dogs bring companionship, conservation to bird hunting

Watching a trained dog work is part of the thrill of upland bird hunting.

PHOTO: MARK GRUBER

BY KAREN MEADOWS

EAGER HUNTERS SURGE INTO BIRD HABITAT, kicking brush, breathing hard, watching for sign. It's quail season. Some human hunters follow trained dogs into the field. Their dogs point the birds, flush the birds, and after the shots, retrieve the birds.



With the help of a trusty retriever, few birds are lost in the field.

PHOTO: KATE ERNST



Pudelpointers, a cross between poodles and pointers, are considered by some hunters to be the best upland bird dogs.

PHOTO: PAUL EVANS

Carlsbad biologist Doug Lynn explains, "Regardless what you're hunting, dogs are the best conservation tool. Hunting with dogs reduces the likelihood of losing birds, including wounded birds. If I'm hunting birds I will not go to the field without a bird dog."

Lynn's 10 hunting dogs include English pointers, English setters, Labrador retrievers and a golden retriever, with the recent addition of nine lab pups.

Bill Dunn recently stepped from New Mexico Department of Game and Fish game bird management into University of New Mexico doctoral studies. He owns a vizsla (Hungarian pointer), a German shorthaired pointer/English pointer mix, and a vizsla/English pointer puppy.

For Dunn, "Watching the dogs is part of the whole process [of hunting]."

He confesses, "I plan to spend an inordinate amount of time over Thanksgiving and Christmas vacation on the eastern plains hunting quail."

"A wonderful challenge"

Pointers, setters, vizslas and pudel-pointers represent "versatile" breeds—defined by the North American Versatile Hunting Dog Association (NAVHDA) as, "the dog that is bred and trained to dependably hunt and point game, to retrieve on both land and water, and to track wounded game on both land and water."

Lynn elaborates on what trained dogs add to bird hunting: "Quail are a tremendous game bird, a wonderful challenge," he says. "When you get into an area where you suspect there may be birds, the likelihood of finding them is significantly greater with dogs. Dogs cover more ground than a man on foot, plus have the ability to smell game—making them a factor of 10 more efficient than man."

He follows that scientific explanation with thoughts on the bond between hunter and dog:

"You get excited when you see an old veteran have a great day, or a young one have its first success. If people knew how much they could increase the quality of the hunt by having a dog, they would never hunt birds any other way."

He recites names and breeds of all 10 of his bird dogs, from Jake to Clifford to Hickory.

"There's a breed of hunting dog for every style of hunting and every personality, and you'll never regret owning one."

Lynn says training is a matter of personal preference. He recommends that occasional hunters get one dog that suits them, and find training books and videos that give them a prescription to develop a dog that fits them like a glove. He cautions hunters to pick one training style and stick to it. He believes that a patient person can make any dog a good hunting companion in no more than 10 minutes a day.

Praise for pudlepointers

Former New Mexico Game Commission Chairman Jamie Koch has three German pudelpointers, a cross between poodles and pointers bred since the 1800s and introduced into North America in 1956. Koch says he trains smart dogs that are his friends, live in his house and go hunting when he does.

"It was the grouse of the Pecos... that seduced me into a lifetime avocation of breeding and training hunting dogs for my own use," he wrote for Gun Dog magazine in 1998.

Koch hunted with Brittanies, labs, German shorthairs and Chesapeakes until he found the pudelpointer. He and others consider pudelpointers the most talented versatile hunting dog. Koch adopted his first pudelpointer in 1980, and dove into the breed's history, international connections and unique qualities. He specializes in German-registered pudelpointers, and his dogs, Caesar, Darth and Juana, have pedigrees going back 60 years.





Trained bird dogs allow hunters to flush game within gun range every time.

PHOTO: MARK GRUBER

Pudelpointers are bred for hunting ability, and they also are gentle, friendly companions, Koch says. His dogs’ training involves a huge time investment. When not hunting, he runs them during the week and rides horseback for miles every weekend while the dogs chase rabbits and point birds.

“Do your homework,” he warns. “Find out about a dog’s parents and grandparents and what the dog has done. Otherwise it’s a shake of the dice. There are associations for every breed that inform potential owners and provide opportunities for dog training.”

Birdy bloodlines

All agree that a dog has to be “birdy.”

Dunn proposes, “The foundational lesson for getting a good bird dog is to get a puppy that’s birdy and comes from a good bloodline. Training is controlling and directing natural instinct and abilities—which they have to have.”

He says puppies with birding instinct have insatiable curiosity about and desire for things that fly. They will point on moths and butterflies. Beyond instinct, his dogs are so well bonded with him that they want to do what’s right. That makes them easy to direct and train.

“Gently nudge them along,” he says. “Heavily praise them for what they do correctly; and gently admonish them when they make mistakes.”

Dunn trains Annie, Milnesand (named after the eastern New Mexico ranching town the dog came from) and Luke, 5 to 10 minutes every evening, five nights a week. He meets with other dog owners to train on weekends. Dunn advocates repetition and patience, and working with experienced dog handlers.

“Go hunting with someone who has a trained dog,” he suggests. “There’s a multitude of dog clubs that take owners and dogs out for training.”

He joined NAVHDA’s New Mexico chapter, headquartered in Albuquerque.

New Mexico NAVHDA representative Mark Krueger agrees that, “Hunting with dogs makes the whole experience a lot more enjoyable and is a responsible way to hunt.”

Krueger says he has built great friendships with other dog trainers, which led to great hunting trips.

“You’re not sitting in a blind being quiet,” he reminisces. “With dogs along there’s camaraderie among the hunters.”

New Mexico NAVHDA has monthly meetings and dog training for members every Sunday.



Jamie Koch, an avid bird hunter and former New Mexico Game Commissioner, takes a shot over one of his three pudelpointers.

PHOTO: PAUL EVANS



A “soft bite” is an instinctive trait of good retrievers.

PHOTO: MARK GRUBER

Conservation matters

Highlighting the big picture for quail hunters, Dunn reveals that only New Mexico and Texas offer hunters the Grand Slam of Quail—bobwhite, scaled (also known as Texas blue or cotton-top), Gambel’s and Montezuma (Mearn’s).

As an ecologist, Dunn’s underlying target is the health of New Mexico’s landscape and animal life.

“We all need to work toward common ground,” Dunn says. “I enjoy hunting and know people who don’t. The bottom line is that there’s wildlife and wild lands for future generations to enjoy.”

Trained bird dogs may help. Dunn and Lynn are members of a stakeholders’ group working to protect and restore populations of another game bird, the lesser prairie chicken. Lesser prairie chickens are a “species of concern” on New Mexico’s eastern plains, not currently hunted.

In 2004, Lynn was asked to take his dogs into historic prairie chicken territory to help establish their range and distribution.

“Lo and behold,” he says, “my dogs pointed 18 birds where humans thought that population had blinked out.”

Without Lynn’s dogs, those birds would not have been found.

KAREN MEADOWS is a writer and educator who loves dogs and lives in Santa Fe.

Learn more about hunting dogs

- Join New Mexico NAVHDA. Call Mark Krueger, (505) 269-4693, or visit www.zianavhda.com.
- Find organizations representing breeds you’re interested in.
- Check Internet sites such as www.fielddog.com, www.akc.org, or www.gundogmag.com.



No limits on fishing, fillets, and fun

Hatcheries open raceways for public trout-fishing frenzy

BY LANCE CHERRY
PHOTOS BY DAN WILLIAMS



Big rainbow trout inspired big smiles Sept. 24, when Parkview Hatchery opened its runways for one day of public fishing.

The cliché goes, “A bad day fishing is better than a good day working,” but there is no cliché for an amazing day of fishing. Gigantic stringers of rainbow trout and a lift on fishing license regulations were the catches of the day at the Parkview Fish Hatchery on Sept. 24.

In an effort by the Department of Game and Fish to make good use of the hatchery’s whirling disease-positive fish, Parkview staff opened the raceways and allowed the masses to fulfill many anglers’ greatest dreams: unlimited fishing, and unlimited fish.

A similar event at the Lisboa Fish Hatchery yielded similar results and a multitude of smiles for that hatchery staff. Both hatcheries will undergo a rigorous cleaning process and renovations to improve environmental control. They should return to normal operation sometime next year.

“I’m catching a fish like every 3 seconds,” one girl yelled at her mother at Parkview. “I wish fishing was like this all the time!”

By day’s end, more than 1,500 fish were filleted and more than 150 children and adults participated. Most of the fish ranged from 12 to 16 inches long, but a few reached lunker status – up to eight pounds. The Parkview crew worked nonstop keeping the nets swimming and lines wet.

“We just couldn’t see dumping a load of fish in a landfill when the fish still had value to the public,” said Mike Sloane, Chief of Fisheries for the Department. “Other states offered the fish to the public and we thought we would try it, too.”

Participants at the event where encouraged to catch, fillet and cart off as many fish as they desired. The only restriction was that all the bones stay at the hatchery so the Department could control the disease source.

“I’m going to have to call some family to come help,” Los Ojos resident Gilbert Martinez said. “My son Christopher has pulled them in all day. I have enough fish to last all winter.”

Even though a small percentage of the 15,000 fish at Parkview had confirmed whirling disease, the department determined it was necessary to remove all of the fish from the stocking program and work to protect the state’s watershed from the continued spread of the disease.

“It’s all kind of bitter-sweet,” said Billy Sands, Fisheries Specialist. “I’ve poured my heart and soul into raising these trout, only to have to start from scratch. At least the smiles on the kids faces help make it easier.”

Whirling disease is caused when the parasite, *Myxobolus Cerebralis*, attacks the cartilage in young trout and salmon. As the parasite reproduces it damages the cartilage in the skeletal system causing deformities and neurological damage. The injuries create an appearance of a “whirl” or spin in the fish when they swim. The disease, thought to be carried by birds that have eaten infected fish, is transmitted through spores. ■

One problem with trout fishing is that sometimes you have to touch what you catch!



Action was nonstop Sept. 24 at Parkview Hatchery in Los Ojos, where about 150 adults and children caught and filleted more than 1,500 trout.

LANCE CHERRY is assistant chief of the Public Information and Outreach Division of the New Mexico Department of Game and Fish.



Making Tracks

A Century of Wildlife Management

Part 9: Bringing back the game

Ambitious, innovative actions restore and protect wildlife

By John Crenshaw



The New Mexico Department of Game and Fish was the first state agency in the nation to use wing traps to capture large numbers of antelope.

PHOTO: DON MACCARTER

“Realizing the importance of stocking our forests with these superb animals and recognizing the natural conditions so manifest here, I purchased with monies derived from the game protection fund, 12 head of 3-year-old elk, in Routt County, Colorado.”

—State Game Warden Thomas Gable, report of 1909-1911.

WHEN Warden Gable kicked the gate open to release those elk into the wild, he kicked off a century of big game management practices that grew far beyond the early game managers’ triad of law enforcement, predator control and game refuges. As years passed, the tiny territorial game and fish agency’s successors worked incessantly to restore and replenish big game mammals and birds. Along the way, they pioneered some techniques that made the agency an innovative leader in wildlife management, learning through trial and error, sharing and borrowing ideas and methods from other state agencies.

Among the tools the agency developed were wing traps to capture large numbers of antelope, drive nets for trapping deer and elk in substantive numbers, and use of tranquilizer darts fired from helicopters to capture individual animals. It introduced the use of net guns fired from helicopters, a method developed in Australia, and was a pioneering user of radio tracking telemetry and computer modeling.

Significantly, Gable funded his elk project by revenues from hunting licenses, first required in 1909 and a core funding source for the self-supported game department and its wildlife projects ever since. The license buyers themselves lent the social and political impetus to that project and the host of others that brought creatures such as elk and Rocky Mountain bighorn sheep, both completely eliminated from New Mexico, back into the state.

Although not extirpated from New Mexico, other native species such as antelope, desert bighorn sheep, turkey, quail, prairie chickens, ducks and geese, black bear, javelina, beaver, even cougar, also benefited from the funding and management mandates dating to the late 1800s. The

wildlife agency and private landowners also set about bringing in species altogether new to New Mexico—exotic big game animals such as Barbary sheep, ibex and oryx in mid-century, but game birds from other parts of the country and world early on.

Upland game birds

Warden Gable, in his 1909-1911 report, writes about some of those early attempts to establish new game birds in the state. Game bird hunters clamored for pheasants, for instance, and he tried to accommodate them. Although blanching at prices of \$40 a pair for Mongolian pheasants, \$5 for English imports, Gable “by way of experiment” purchased 31 pheasants and gave them to a deputy game warden, Captain M. S. Murray of Roswell, to tend to. Murray reported back that all the birds were alive and in good health, and had produced 50 young, but required more range than he had available in his pens.

He suggesting turning them loose in “the mountain country, as feed is abundant and shelter good.”

New Mexico’s mountains may not have been the best choice. Rancher William French of Cimarron, around 1900, freed 50 pheasants into bottomlands along the Cimarron River and Ponil Creek. Ten years later, he wrote to Gable, “There are still quite a number around this neighborhood... Of course, they have a great many enemies, both human as well as wild animals, but they have done well enough to show that when they are protected for a time they will increase and do well in this country.”

Subsequent releases into river bottoms and

croplands eventually built a small population of pheasants in the state, and the state had its first public hunt in 1936.

Perhaps most significant was how Gable acquired the birds. His swap of scaled quail for bobwhites unveiled another key management tool for cash-strapped wildlife agencies—wildlife trades between the states quickly became and remain commonplace, often forming the core of restoration efforts.

Waterfowl and shore birds

“It must be admitted that many of our migratory birds are fast disappearing, some of them being almost extinct. Among these are the wild goose, canvass back duck and snipe, of which there are numerous varieties. There should be a national law enacted, protecting all migratory birds during their mating and nesting time, with a closed season, on some of them. This, I believe, will be eventually accomplished,” wrote Warden Gable in his report of 1909-1911.

It was, and with refinement and modification as conditions changed and science improved, the Migratory Bird Treaty Act of 1934 protects and helps propagate waterfowl and shorebirds to this date.

Earlier laws afforded some protections, but habitat, as with all wildlife, is the key.

The Pittman-Robertson Act and Migratory Waterfowl Hunting Stamp (duck stamp) pumped money into habitat salvage and restoration. New Mexico’s most visible contribution is its string of waterfowl management areas—wetlands and farms that shelter and feed wintering waterfowl—along the Rio Grande and Pecos River valleys.

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Elk

The last Rocky Mountain elk in northern New Mexico was down by 1910, perhaps earlier. The southern herd, comprised of the Merriam’s subspecies, had gone extinct a decade earlier. The state felt the loss, although its early, ineffectual efforts to stop the market and subsistence hunting that brought it about came too late. The only way to bring them back was to bring them in from elsewhere and turn them loose.

It worked. Gable’s 1911 operation was New Mexico’s first government-sponsored elk restocking project. It was one in a series of similar projects by public agencies and private landowners, such as the Bartlett Ranch (now Vermejo Park), which stocked 15 head that same year; the herd grew to some 500 in just 15 years.

The State Game Commission commissioned J. Stokley Ligon, a pioneering game biologist with the U.S. Biological Survey and conservationist Aldo Leopold’s highly respected peer, to research and report on the status of New Mexico’s game or potential game species. A highly valuable book, “Wild Life of New Mexico, Its Conservation and Management, 1926-1927,” was the benchmark result. In it, Ligon estimated the state’s elk population at 712 in 1926.

Gable had split his tiny herd into thirds—one bull and three cows—and released them in Red River Canyon (present-day Canadian River) northwest of Raton, Gallinas Canyon west of Las Vegas, and on the Urraca Ranch in Cimarron Canyon west of Cimarron.

The Gallinas stocking failed, but the others took, establishing what today is one of New Mexico’s most outstanding recreational and economical resources.

Former Game and Fish Department Director Bill Huey, then an assistant director, picked up the pace markedly in the 1960s.

“I was fascinated by the availability of elk and how it fit the demands of our hunters,” Huey said. “We had a good little elk population and had drawings for a few elk licenses. Then I found out I could go up to South Dakota, pay rent on a truck, and they’d bring them down to us. We planted elk in the Gila, in the Capitans. We backed trucks up to a snow bank and kicked elk out at Los Alamos Ski Area; now they’re estimating 4,000 to 7,000 head in the Valle Grande. And all we needed was just enough money to rent a truck,” he recalled.

The hunting public fully backed the restocking efforts, looking forward to a hunt, and the agency successfully encouraged U.S. Forest Service logging practices that favored the species, said Dan Sutcliffe, former chief of the Game Management Division.

“The Forest Service made changes in timber and grazing management in the ’60s and early ’70s, with us egging them on, that favored elk more than deer, and it worked. The department pushed them to do habitat manipulations, to do (logging) cuts to benefit elk. The changes really started kicking in in the late ’70s and ’80s, and the numbers really started increasing.”

Rocky Mountain Elk, gone from New Mexico around 1910, have been restored to a healthy population of more than 70,000.

PHOTOS: DON MACCARTER

As the elk population increased, proposals for liberalizing seasons met resistance.

But against some opposition, the State Game Commission opened the Pecos high country to the first elk season in 1934. Now, different configurations of weapons types, season dates, bag limits, units, subunits, public land and private land hunts produce an astonishing number of hunt choices.

With an elk population now estimated at 72,000 head, a reputation for trophy bulls and high hunter success rates, New Mexico’s citizenry continues to reap rewards while the state and private landowners work on ways to bal-

Mexico, but because of exposure to their most fatal enemy, civilized man, they have been shamefully destroyed.”

He pinned the blame on homesteaders, “confronted with extreme poverty but with an excess of idleness,” for eliminating most of the state’s pronghorn population. A few remnant herds remained, however, mostly on large private ranches where the owners protected them. His population estimate was 2,957 head, “a sufficient number of antelope so distributed that re-establishment of the species is possible.”

Capturing the antelope and moving them to suitable grasslands around the state was the



Although the state’s deer herd has declined in recent years, the statewide population, estimated at between 50,000 and 90,000, still exceeds that of the 1920s.

PHOTO: DON MACCARTER

ance profits with proper wildlife management.

“Today, our vast amounts of public land, along with landowners who appreciate elk as a natural and financial resource has made New Mexico the best state in the country to hunt trophy elk,” said Steve Kohlmann, the Department’s chief elk biologist. “Where else in the country can someone draw a permit on public land to hunt record-book trophies like ours? Because of that, everyone profits—the wildlife, the hunters, the landowners and the communities.”

From license and equipment sales to guide and landowner fees, lodging, food and other expenses, elk hunting contributes more than \$100 million a year to New Mexico’s economy, according to one recent study. Non-hunting activities involving elk, primarily wildlife viewing, injects another \$1 million or so into mostly rural coffers each year.

Antelope

This is a uniquely American species, “the fleetest and among the most interesting inhabitants of the North American plains,” wrote Ligon in *Wild Life of New Mexico*.

“Formerly antelope were abundant on practically all of the open plains country of New

logical thing to do, but no one had ever done it on any sizeable scale and a decade passed before anyone did.

New Mexico was the first.

As Elliott Barker related it, the State Game Commission Chairman, Judge Colin Neblett, told him to trap and move pronghorns to restock depleted ranges. Barker told him it couldn’t be done, and Judge Neblett told him to find a way.

Barker cheerfully admitted delegating the task to Paul Russell, who adapted wild horse hunters’ techniques, and in 1937 the New Mexico Game and Fish Department became the first state agency to trap and restock antelope in substantive numbers. Although the whop-whop of helicopter blades has replaced the whoops of early horsemen, the basics remain. The game department’s trapping and moving of more than 1,000 head in one massive operation in the early 1990s stands as testimony to that.

Because it is a highly visible plains species, antelope are relatively easy to manage—aerial counts and fawn crop surveys provide solid base numbers, and managers set hunting license numbers according to the data.





Pheasants were first released in New Mexico in the early 1900s.

PHOTOS: DON MACCARTER



A captive herd of desert bighorn sheep at the Red Rock Wildlife Area has helped restore wild herds in southern New Mexico.

Mule deer

“Taking New Mexico as a whole, mule deer are by far the most important big game at the present time,” was Ligon’s assessment. The popularity and rapidly growing elk population notwithstanding, his statement is arguably still true. Although mule deer numbers in New Mexico and throughout the Rocky Mountain west have continued to decline for several decades, even now the state holds more mule deer than it did in Ligon’s day and quite possibly more than in pre-European times.

Working with U.S. Forest Service, Biological Survey staff, Game and Fish Department officers and others, Ligon estimated the mule deer population then at 41,000 head in 1926. Today, it is estimated at somewhere between 50,000 and 90,000.

Early European explorers in the West, including New Mexico, often remarked on the scarcity of deer, which they found in pockets but not in widespread abundance. Closed seasons, law enforcement, game refuges and natural process of plant habitat succession that followed fires and logging helped the population grow during the first half of the century.

Then a combination of factors created an astoundingly large jump in the West’s, and New Mexico’s, mule deer populations after the end of World War II, an irruption that still colors the public’s and managers’ perception of what the deer population should be but which, it becomes increasingly clear, was an anomaly unlikely to be repeated.

Former game department director Bill Huey was in the early wave of college-educated wildlife biology majors to join the agency, and came on just as the deer population growth was becoming fully apparent in the late 1940s and early ‘50s.

“We had a super abundance of deer at that time; why, I don’t know and I don’t suppose anybody else did either. They did find a serious problem of over population in the herds, though, and the only way to address that was through either-sex hunting, to cut down the excess pressure on the forage supply,” he said.

Intensive predator control was also a factor in the population growth, he said, although not widely acknowledged at the time.

“We all resisted the effects of coyotes, but during that period there weren’t any coyotes to speak of,” he said, attributing that to the widespread use of Compound 1080 (sodium fluoroacetate) a highly effective and easy-to-use pesticide introduced into the United States in 1945.

“I couldn’t say that that was the primary reason for the increase in the deer population, but it contributed to it. We were also in a rich period of high-quality forage production,” he said.

Tightening or loosening bag limits, seasons and hunter pressure can be effective when game populations are burgeoning but can be frustratingly inadequate when populations decline for reasons outside of an agency’s, or even humans’, control.

Dan Sutcliffe, a former Game Management Division chief with the agency, empathizes with today’s managers.

“The real power for managing any of those deer herds is habitat management, which we (game managers) have very little control over. Our end of it was pretty limited; we can deal with time frames, the numbers of hunters we let out there, harvest levels and those types of things. But if you really want to grow the deer, you’ve got to work with the habitat,” he said.

Bighorn sheep

The post-Civil War rush to New Mexico doomed the bighorn sheep throughout the West. Stokley Ligon attributed the extirpation to hunting, but diseases transferred from domestic sheep to wild bighorn sheep may have played an even larger role in the wild sheep’s decline. Presence of domestic sheep also stalled later reintroduction efforts.

Elliott Barker wrote that the last Rocky Mountain bighorn in New Mexico was killed in 1902 near Lake Katherine, east of Santa Fe Baldy.

“My first restoration project (as State Game Warden) was to try to re-establish Rocky Mountain bighorns in the timberline country of what is now the Pecos Wilderness,” he wrote in *Ramblings in the Field of Conservation*.

After considerable searching, he finagled two rams and four ewes from Banff, Alberta National Park in Canada and released them in the Pecos Baldy/Truchas Peaks area. They lived for several years, “then mysteriously disappeared,” Barker wrote. The sheep likely were killed by diseases transmitted from domestic sheep grazing in the area.

Barker had seeded a small herd in the Sandia Mountains near Albuquerque by 1941, and a second transplant from Banff into the Pecos in the late 1960s also succeeded. The Pecos herd is thriving and has enough sheep for limited hunting and to furnish a supply for transplanting to other areas, such as the Wheeler Peak-Latir area, Manzano Mountains and the Gila National Forest. The Sandia herd eventually succumbed, probably to pressure from mountain lions, people, feral dogs and other hazards of being near the state’s largest city.

Today, the desert bighorn herd contained and protected in the 2.5-square-mile Red Rock area has provided brood stock to help restore the state-endangered desert bighorn herds in the Big Hatchets, Peloncillo and Alamo Hueco Mountains in New Mexico’s boot heel area, and in the Sierra Ladron near Socorro.

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(left)
The New Mexico Legislature gave the mountain lion status as a protected game animal in 1971.

PHOTO: SCOTT BROWN

(below)
A \$3 bounty was offered for every coyote killed in Catron County in 1941.

PHOTO: DON MACCARTER



(below)
Oryx, an African antelope, were brought to New Mexico and released at White Sands Missile Range in the 1960s and early 1970s.

PHOTO: DON MACCARTER

Predators

However controversial elk and deer management may be, predatory animals stir even greater emotions. As humans, we haven’t been able to reach consensus on them at all.

Early on, perhaps, there was more clarity of purpose: Kill them. The first wildlife-related laws in New Mexico were not about preserving bison or elk or deer, but provided for bounties on the heads of predatory animals that did or just might prey on livestock. Killing predators to protect prey species, such as deer, elk or big-horns, was an afterthought at first but later took on significant importance and commanded substantial resources.

An early sign of changing attitudes came in 1971, when the New Mexico Legislature, at the behest of then-State Representative and later State Game Commission Chairman Jamie Koch, gave the mountain lion status as a protected game animal. That removed its varmint status and gave the commission authority to limit take through closed seasons, bag limits and restrictions against traps and poisons.

The Mexican wolf restoration project now underway in southeastern Arizona and southwestern New Mexico is an even more vivid sign of evolving perceptions about large predators. Although still strongly opposed by stockmen and some hunters, a much more urbanized citizenry as a whole supports the action. The current State Game Commission voted last year to support the effort, as well.

A few wildlife advocates suggest a similar project for grizzly bears. That would be even more controversial. Grizzly bears, whose aggressiveness and livestock depredations were not tolerated, were gone in the early 1930s; the last one was taken out of the Black Range.

Lobos and grizzlies were eliminated, and the federal government, state wildlife agency, ranchers, farmers and hunters kept the pressure on mountain lions, coyotes, bobcats and golden eagles. Predator bounties were common, and the state agency employed or contracted with trappers and hunters to pursue predators.

The agency’s 1941 annual report is typical: It lists 29 mountain lions, 464 bobcats, 1,745 coyotes, 439 skunks, 113 foxes, 168 eagles, 161 hawks, 52 owls, and 388 “miscellaneous” as taken by employees and contractors during the fiscal year.

“The outstanding feature of our predator control work was the payment of a \$3.00 bounty on coyotes and a \$2.00 bounty on bobcats taken in Catron County and a part of Sierra and Socorro Counties,” Warden Barker wrote.

Mountain lions nonetheless survived in remote areas, and coyotes were never endangered by the trapping and shooting—there are in fact by far more of the opportunistic canines across



a much wider range than in pre-European times.

Predator control was part of virtually all transplants and restocking efforts through most of the agency’s history. It fell out of favor temporarily in the 1980s, but has now been reinstated under limited circumstances. Mountain lion depredation on 31 desert sheep stocked in the Ladron Mountains in 1992-93 accounted for a dozen of 16 documented deaths among the sheep. The choice was to abandon the restoration project or remove lions, and the agency chose the latter. A high, almost predator-proof fence protects the desert sheep at Red Rock, and any mountain lion or coyote that works its way into the enclosure will be killed.

Predator control’s use as a tool, however, is limited, focused, monitored and reviewed; prevailing public and agency attitudes would not allow a reversion to the broadcast approach of the past.

Exotic big game

New Mexico’s varied experiences with imported “exotic” game species began in the 1950s, when Elliott Barker traded a dozen pronghorn antelope for a dozen Barbary sheep from southeastern New Mexico rancher Joe McKnight’s private game park and turned them out in the Canadian River Canyon near Roy. Supplemented by subsequent plantings, the Barbary sheep did fairly well and are still hunted, but they also got into places where they are unwelcome. Their presence in the Guadalupe Mountains, for instance, precluded restocking of native desert bighorns in that area.

Although Barker met little resistance at the

time, a subsequent and larger-scale project spearheaded by Dr. Frank Hibben, chairman of the State Game Commission, created quite a firestorm in the 1960s and early 1970s.

Some of the resistance came from agency biologists, but Hibben over-ruled them, said Bill Huey, assistant director at the time.

“If we (the staff) had had the prerogative, we never would have had them, but Frank’s the one that had that prerogative. He ordered them and bought them, and when they got here it became our responsibility to identify what effect they would have on other native wildlife and what effect they would have on domestic livestock on privately owned land,” Huey said.

The department evaluated seven species—oryx, Persian ibex, Siberian ibex, greater kudu, Armenian red sheep, markhor, and gazelle—at the Red Rock Wildlife area.

“We discarded the kudu. They couldn’t accommodate the cold. We discarded the Armenian red sheep because of the potentially adverse effect it would have on other sheep,” Huey said. Markhor and gazelle were also unsuitable.

Ultimately, the department released oryx on White Sands Missile Range, Persian (Iranian) ibex in the Florida Mountains and Siberian ibex in the Canadian River Canyon near Roy. The Siberians apparently died out; the other two species thrived.

Both species, Huey believes, still provide challenging sport and can be contained and controlled through sport hunting.

JOHN CRENSHAW is a writer, outdoorsman, and retired chief of the Department of Game and Fish Public Information and Outreach Division.



Have a javelina...

Peculiar peccaries are fun to hunt, good to eat

BY STEVE SHOUP

When I was growing up in Silver City in the 1970s, some kids there would brag about going far away into the desert brush of the Bootheel to hunt javelinas. Now, because the kids made the critters sound like fast, short-tempered man-killers, and because I'd never seen one, I figured javelinas were mythical, sort of like those snipes some guys tried to get me to hunt once.

Well, javelinas are real, but many of the tales are not.

"They won't charge you on sight. That's a myth. The killer boar, that's a myth," said Pat Mathis, southwest area game manager for the New Mexico Department of Game and Fish. "They're lots of fun to hunt."

"Most of the time they're trying to get away from you," said Gary Webb, a guide and outfitter at Lake Roberts, north of Silver City. "People think there are wild pigs out here in New Mexico. They're not even pigs, not in the same family."

A few years ago, when javelinas tramped through my parent's land on the north end of Silver City, and when I darn near ran over some while driving through the Black Range, I learned they had lousy eyesight and were increasingly common across the state.

"Through exaggerated tales of the peccary's (a.k.a. javelina's) ferociousness, it has been charged that peccaries will kill or injure dogs and that they are a menace to deer hunters in the dense brush," the "Mammals of Texas" said. "It is true that encounters between peccaries and untrained dogs usually end with dead or crippled dogs, but it is also true that in these battles the dog is always the aggressor, and any animal will defend its life to the best of its ability when attacked. The peccary is absolutely harmless to the range, to livestock and to people."

Some gardeners and ranchers around Silver City and Portales might dispute whether they're harmless, because javelinas do root up gardens sometimes.

Scientists, hunters and guides have said javelinas are spreading northward and higher into the mountains. That's good news for hunters, because more javelinas means more opportunities to hunt them with bows, rifles and handguns. Javelina hunting is growing in popularity because hunts usually are successful, and because the javelina season is during the off-season for other game. Guides say finding them is tricky but stalking them is easy.

Looks like a pig, acts like a pig, but...

Now, javelinas do have big, spear-like canine teeth or tusks, hence their name, and they do look like skinny, furry pigs. But they are not pigs. Javelinas are commonly known as collared peccary, and scientifically known as *Tayassu tajacu*. The most obvious differences between a javelina and a pig are that a javelina has three toes on its hind foot, while a pig has four; it has straight canine teeth while a pig has curved ones; and it has a scent gland while a pig does not. Javelinas and pigs also have a different number of teeth, different kinds of stomachs; and unlike pigs, javelinas don't sweat. According to the National Park Service, an adult javelina weighs between 40 and 60 pounds and its coat is a grayish black, except for a whitish collar over the mane and shoulders. Males



Lora Federici hiked and glassed for several hours before making a perfect shot to bag her javelina in southwestern New Mexico.

PHOTO: DAN WILLIAMS

and females are about the same size and color.

Javelinas eat mostly plants, such as roots, fruit, cactus pads, acorns, grasses and other greens. They will eat small animals if the opportunity arises, according to some reports. They eat prickly pear cacti for water until rain falls or other water is available.

Javelinas can breed anytime, but most often give birth around the rainy season, in May, June or July. Twins are common, but broods vary from one to five. They run in loose herds of six or more, and each herd has its own territory of a few hundred acres. Like many hot-climate animals, javelinas start browsing about daybreak, seek shade in canyons or in brush as the day heats up, then search for food again as the sun sinks. In the worst heat, they may feed at night.

Javelinas communicate with barks to bring the herd together, woofs to alert the herd to danger, grunts to their young, and grumbles and teeth-clicks in fights or aggression.

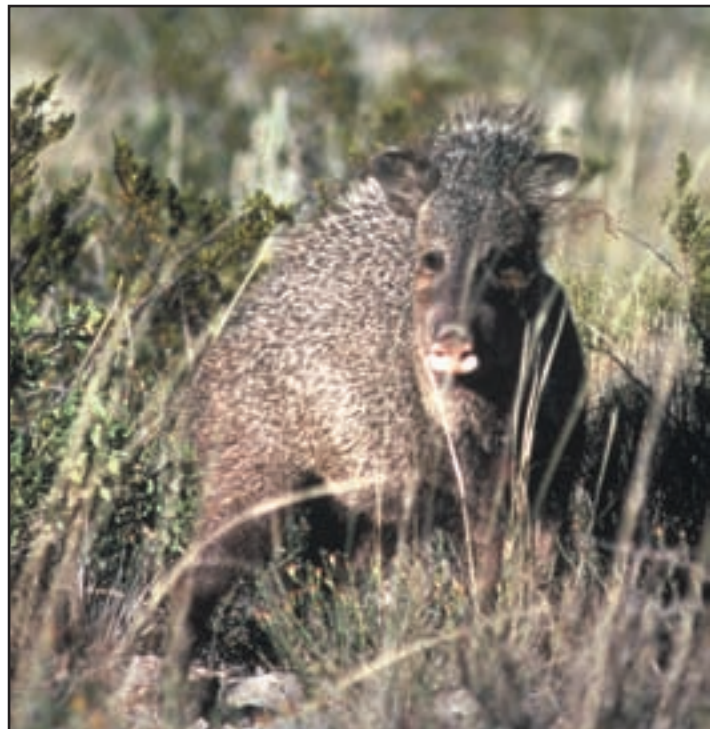
"I heard them approaching several minutes before they appeared at the (stock) tank," an observer in Arizona wrote in 1956, "their grunting and clicking of hooves on the trail carrying for a great distance." Seventeen of the critters appeared at the tank, according to the observer's report in *The Mammals of Arizona*. "Some

went to drink while others went for the salt lick, and still others kept watch. Drinking and salting seemed to be an orderly activity, whereas the individuals feeding in the environs of the tank were often quarrelsome and fights were frequent though of short duration. The sight and sound of javelina drinking, gnawing salt, rooting, crunching and rubbing against trees reminded me of domestic hogs in a barnyard."

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If a javelina's hair is standing on end, it is either angry or startled.

PHOTO:
ANDREW
SANDOVAL





(above)
Javelinas occasionally will feed at night, especially during the hot summer months.

PHOTO: CHARLIE PAINTER

(right)
Javelinas move around in family groups, looking for roots, bulbs, grasses, and cacti to eat.

PHOTO: WHITNEY SHOUP

Range expanding north

Javelinas live all over Mexico and Central America and as far south as Argentina. For a long time, the northern limit of their range was believed to be southern Arizona, southwestern New Mexico with a patch near Hobbs, and within a hundred or so miles of the Rio Grande in Texas. Evidence suggests their range has been expanding north since about the time Europeans arrived in the Southwest. Studies of archeological sites and Native American stories show no evidence of javelinas in Arizona until about the 1700s, according to the Web site, JavelinaHunter.com. Some evidence places the javelina in a few spots in Texas in the 1600s, but they didn't become common until the 1700s.

Now scientists say the critter has spread over the Texas line into Oklahoma, and up the western side of New Mexico, with repeated sightings and even carcasses found on the Zuni Indian Reservation in McKinley County, according to the December issue of the Southwest Naturalist.

State game officials and hunting guides also say the range has expanded. The Department of Game and Fish has received reports of javelinas around Quemado, near Roswell and just south of Portales, said Jim Stuart, a department mammalogist in Santa Fe. A rancher near Clovis reported javelinas tearing up land there early last year, but that could have been a feral pig causing the trouble. Escaped pet or farm pigs have been reported in nearby Texas, but javelinas may be around there, too.

"They seem to be on the move," Stuart said. "I think that's the interesting aspect of it. They may be occupying more and more of New Mexico just over the last decade or so. It looks like they are at least occurring intermittently across the eastern part of the state."

Stuart said a department employee reported finding a road-kill javelina near Emory Pass, which is more than 8,000 feet high along the Sierra-Grant county line. That's not far from where I saw a couple a few years ago in the fairly high-up pinon-juniper-ponderosa transition near Gallinas Canyon.

Webb, down in the Gila National Forest, said he found javelinas in his chicken coop once. They didn't get any chickens but, "They're kind of tough on gardens. They root like a pig."

"They keep getting farther and farther north and higher in elevation with all these mild winters we've been having," Webb said. "You see them in places you didn't see them 10 years ago. We've seen them up in the aspens just in the last couple of years."

By the way, if a javelina is causing trouble on your land, you can't shoot it as you can a destructive coyote, Stuart said. It's a regulated game animal, so contact your local game officer to handle a nuisance critter.

Fun to hunt, good to eat

Hunters find javelinas to be challenging game that also can be good eating. Bagging a javelina can be a bit tricky, but a weekend or three-day hunt usually pays off.

"They're actually easy to hunt because they have real poor eyesight. But they have a good nose," said Tom Klumker, owner of San Francisco River Outfitters near Glenwood. The groups he's guided have close to a 100 percent success rate over three days, he said. Even kids have good luck.

"It's gotten more popular. We're seeing a big increase in the number of people wanting to hunt," Klumker said. "We had an 11-year-old boy who shot one with a bow, basically at point-blank range."

Klumker said it's best to aim for the chest. A well-placed shot can drop a javelina in its tracks, but one that's a bit off can mean a hike to retrieve your trophy. The javelina the boy hit with an arrow ran about 80 yards before dropping, while another one hit by an arrow went 120 yards.

"We've taken them with a .22 Magnum handgun, but that's when you get close," Klumker said. "It's a challenge to find them. You have to do a lot of glassing; their numbers are scattered. It takes a lot of hunting."

Some javelina hunters use muzzle-loaders or larger-caliber handguns with success, Mathis said.

Drew Olmsted of Albuquerque is also a bow hunter who has gotten antelope, deer, elk and turkey with arrows over the years, but hasn't dropped a javelina.

"They're not as easy as some people lead you to believe," Olmsted said. "They're starting to become my favorite animal to hunt. They're just intriguing animals. They're constantly bickering at each other, tusking each other. I really enjoy watching them. I think these things survive on blind luck. They run around with their heads down to the ground and they don't pay attention. As long as you don't do anything to startle them, you should be able to get one."

Javelina hunting

All New Mexico javelina hunting licenses are issued by drawing. The application deadline is in early April for hunts scheduled from mid-January through March. This year, 2,871 hunters applied for 2,000 available permits. License fees for 2006 hunts will be \$64 for residents, \$171 for nonresidents. For specific dates and other information, please consult the most current Big Game & Furbearer Rules & Information booklet, or visit www.wildlife.state.nm.us.



Field dressing a javelina is much like dressing any other game mammal, but there’s no need to hang and bleed the carcass as the hunting wound and gutting will drain most of the blood. Watch for the musk gland on the back rear, and don’t cut it to avoid spoiling the meat, hunters said. The gland comes off intact during skinning. Don’t nick the bladder, and be aware that javelinas sometimes carry parasites such as roundworms, tapeworms, lice, ticks, fleas and mites. Take care to avoid contaminating yourself.

Opinions on javelina flavor vary.

“I don’t like to eat it,” Webb said. “Maybe I’m particular. I get a lot of elk meat given to me.”

“To me, it’s marginal,” Klumker said, “but some people like it.”

“I like to barbecue it,” Mathis said. “It makes good stew meat; I like to fry it up. The hams and shoulders are good, but the ribs are so-so.”

This year’s javelina hunting seasons generally occur between Jan. 15 and March 31. The state issued 2,000 licenses, including youth licenses. The deadline for license application was April 9, so if you’re interested, try next year. Meanwhile, there’s nothing stopping you from learning more about the beasts and improving your stalking and weapons skills.

STEVE SHOUP is a hunter, fisherman and outdoor writer living in Albuquerque.



(above)
A full-grown 60-pound peccary is a heavy load through the rocky canyons and hills of New Mexico’s boot heel region.

PHOTO: DAN WILLIAMS

(right)
There are three types of peccaries in North and South America: the collared peccary (above), the white-lipped peccary and the chaco peccary.

PHOTO: NM DEPARTMENT OF GAME AND GISH



Collared peccary – Javelina

Names: Javelina, Spanish for javelin or spear apparently for their razor-sharp tusks, are members of the Tayassuidae family. They also are often called collared peccary or musk hogs. Peccary is believed to be a native Brazilian word meaning “many paths through the woods.”

Description: Adult javelinas weigh 35 to 60 pounds and measure 20 to 24 inches in height and 40 to 60 inches from snout to tail. They have large heads, thin legs and thick, black and gray fur with a whitish “collar” and a mane that extends down the crown of the head to the rump. They have lousy eyesight, good hearing and have been clocked running up to 35 mph.

Not pigs: Although they look similar to pigs, peccaries are classified in their own family, Tayassuidae, while pigs are classified as members of the Suidae family. Peccaries are smaller than pigs and have only three toes on their hind feet, while pigs have four toes. Unlike pigs, peccaries have a potent musk gland on the top of their rump, which they use to mark territory and identify members of their packs.

Food: Agave and prickly pear cacti, roots, fruits, insects, bulbs, beans and berries.

Habitat: Mostly desert country with an abundance of cacti, but they also occur in mountain foothills, canyons and cliffs. In New Mexico, javelinas most commonly are found in the southwestern part of the state. In Central and South America the chaco peccary and white-lipped peccary are found in tropical rainforests.

Behavior: Peccaries normally form herds of six to 12 animals, although herds of as many as 50 have been seen. They can’t avoid overheating by panting, so they tend to feed and travel in cooler times of the day during the summer. They are very territorial and will fend off intruders by clattering their teeth, charging, biting and sometimes locking jaws. The dominant male does all the breeding, which occurs year-round. Females reach sexual maturity at 8 to 14 months and give birth to 1 to 5 young after a gestation period of about 145 days. Main predators are coyotes, mountain lions and bobcats.

Say what? Peccaries snort, squeal, bark, growl and rattle their teeth.





Partners

conserving
endangered
species

FERRET FARM

continued from page 1

Bright green eyes

From April through September, Long spends most of his time at night in the field, living among the prairie dogs, ferrets, foxes, rattlesnakes and other critters that populate the shortgrass prairie of northern New Mexico. His tent overlooks an 800-acre colony of about 10,000 black-tailed prairie dogs guarded by an electric fence powerful enough to discourage a bison and knock a grown man to his knees. “It sort of keeps everything contained,” Long explained as he carefully opened the gate to his experimental ferret “nursery.” “It also helps keep me from getting lost in the dark.”

On this night, Long’s objective was to use a spotlight and an ATV to find the ferrets, which had mysteriously vanished a few days before. Worst-case scenario: a family of swift foxes had been hanging around the area and might be preying on the ferrets—either to eat or to eliminate as competitors.

“Look for bright green eyes,” Long said as he swept his beam over the colony, spotlight in one hand, steering wheel in the other. “The ferrets are hard to miss – if they’re out.” But after a dusk-to-dawn search, the results were discouraging. The only green eyes spotted that night belonged to fast-moving foxes, which also like to ambush prairie dogs in their sleep.

Long inspected a prairie-dog burrow that had been taken over by ferrets a few weeks before and noted that its entrance had been plugged with dirt. “The prairie-dogs do that during the daytime,” he explained. “They don’t like ferrets, so they plug their holes. Usually, the ferrets just dig themselves out at night. Tonight, maybe they decided to stay inside.”

A few nights later, Long found the ferrets a few hundred yards away, “moving around, being ferrets.” For a while, at least, they were the first black-footed ferrets to roam wild and free in New Mexico since 1930, when soon-to-be State Game Warden Elliot Barker trapped one near Castle Rock on the Vermejo Park Ranch.

Ferrets in New Mexico?

With its sprawling 60,000 acres of contiguous shortgrass prairie, Vermejo Park might appear to be an ideal location as a permanent release site. Chuck Hayes, an endangered species biologist with the New Mexico Department of Game and Fish, said such a project could contribute to ferret recovery. The major question is whether even that much property could support enough prairie dogs to accommodate a viable population of ferrets.



Black-tailed prairie dogs comprise 90 percent of ferrets’ diet.

PHOTO: LANCE CHERRY



Biologist Dustin Long inspects a female ferret at the Turner Endangered Species Fund’s captive breeding facility.

sired to sustain ferrets, but recent thinking is that ferrets may be able to persist on smaller colonies.” Vermejo Park currently has 3,000 acres of black-tailed prairie dog colonies on the prairie and about 1,500 acres of Gunnison’s prairie dogs in the mountains.

Long and the Turner Endangered Species Fund are working to change that. Long insists that his main challenge as a ferret biologist is to raise and look after prairie dogs. At Vermejo, he works primarily with black-tailed prairie dogs, once candidates for listing as threatened or endangered under the Endangered Species Act. He catches them to feed to his captive ferrets. He protects them against the plague and other diseases. When he needs more prairie dogs to augment or build colonies, he traps them on neighbors’ property and brings them home. Neighboring ranchers don’t mind at all.

“We’ve allowed Dustin to live-trap prairie dogs for his operation for the past three years now, and we’re happy to have him,” said Roy Sauble of the 5,000-acre SL Ranch. He said Long trapped about 400 prairie dogs last year from three colonies that need thinning out now and then.

“I don’t mind having a few prairie dogs around, but I like to keep everything within reason,” Sauble said. “I’ve had some people out here shooting them, and I have at times done some poisoning. I enjoy seeing them, but we’re also



trying to run a ranch.” The ferrets, he said, don’t worry him much as long as their status as an “experimental” population doesn’t change. That status allows biologists like Long more flexibility in their endangered species research and removes the possibility of harsh restrictions should a ferret turn up in a neighboring rancher’s pasture.

“The challenge for us is to ensure that ferrets can coexist with other land uses and not impose restrictions on landowners,” said Mike Lockhart, the U.S. Fish and Wildlife Service ferret recovery coordinator. “We don’t want ferrets imposing any hardships on landowners who don’t want them. The reality is that the ferret recovery program would never have gotten off the ground without partnerships and cooperation with states and local folks.”



All about prairie dogs

On the Vermejo, prairie dogs are never shot, never poisoned. Long said they are Ted Turner’s favorites, and they share the shortgrass prairie with bison, antelope, deer, elk, burrowing owls and dozens of species of native predators and other wildlife. Long would like to see ferrets added to the mix.

“But really, before you can take care of the ferrets, you have to take care of the prairie dogs,” he said. “They’re the keystone species; they belong out here. They’re good for the soil, the grasses... and just about everything out here eats them. There’s one example now.” He pointed to a ferruginous hawk patiently sitting next to a prairie dog mound. “That’s how most of them hunt,” he explained. “Instead of flying overhead where the prairie dogs can see them and sound the alarm, they just stand there next to the hole. When the prairie dog pokes his head out for a look around, the hawk grabs him.”

Large colonies of prairie dogs are essential to sustain a healthy ferret population. Prairie dogs comprise 90 percent of a ferret’s diet, and provide ferrets with homes. That dependence, Long says, is the greatest threat to the ferrets’ survival as a species. One large outbreak of plague or canine distemper can wipe out entire colonies of prairie dogs – and ferrets along with them.

“Our whole program is touch-and-go, always has been,” Long said.

Ferret biologists hope a new \$8 million Black-footed Ferret Conservation Center, a breeding facility in Wellington, Colo., will help bolster efforts to increase wild ferret populations and eventually take the animals off the endangered species list.

“But we have a long, long way to go,” recovery coordinator Lockhart said. “We’ve made a lot of progress, but we’re running out of suitable habitat in North America. It takes very large tracts of land to sustain viable ferret populations, and we just don’t have the huge expanses of public lands that can be used.”

Lockhart and Marinari said they see potential in large, privately owned properties like Turner’s Vermejo Park Ranch for future ferret releases, but most don’t have enough prairie dogs. For now, Marinari said, Vermejo’s biggest contribution to ferret restoration is Long’s successful experiment.

“Using a small prairie dog town as a nursery site provides a new spark, a new slant on ferret reintroduction,” he said.

(left)
Black-footed ferrets spend 90 percent of their time underground.

(below)
Adult black-footed ferrets are 18 to 24 inches long and weigh about 2 ½ pounds.



(below)
Black-footed ferrets eat one prairie dog about every three days.



Ferret facts

Names: Black-footed ferrets (*Mustela nigripes*) are members of a group of carnivorous mammals known as mustelids. Relatives include the mink, weasel, skunk, badger and otter. All mustelids have scent glands under their tails.

Description: Unlike domestic ferrets, which are of European origin, black-footed ferrets are an endangered species native to North America. They are 18-24 inches long, weight up to 2 ½ pounds and have short, sleek fur that is pale yellow to tan to white, with nearly white faces, black face masks and black feet.

Habitat: Historically, shortgrass prairie from southern Canada to the U.S.-Mexico border, wherever prairie dogs were found. They eat, sleep and raise their young in prairie dog burrows. Today, they have been reintroduced to the wild in Wyoming, South Dakota, Montana, Arizona and Mexico.

Behavior: Ferrets spend 90 percent of their time underground and are primarily nocturnal. They are less active in winter, but do not hibernate. They eat one prairie dog about every three days, can run 5 to 7 mph, and usually only live three to four years in the wild. Their predators include coyotes, foxes, badgers, bobcats, owls, hawks, eagles and rattlesnakes.

Breeding: Black-footed ferret babies, called kits, are born in the spring and stay below ground for two months. By 100 days, they are independent enough to establish their own territories. Male ferrets play no part in raising the litters, which average three to four kits in size.

Say what? Ferrets chatter, bark, hiss and squeak. Male ferrets “chortle” to females during breeding.

Source: Black-footed Ferret Recovery Program, www.blackfootedferret.org.



kidtracks

Sensible fish



*A watery world of sight,
taste, smell, touch and sound*

BY COLLEEN WELCH

LOOK! THE FISH ARE JUMPING. Thinking of the easy catch, you run around, shouting to your friends as you grab your fishing rod and cast a big, juicy worm right into the center of the pond. Fifteen minutes have gone by... 20, 30 minutes. You have not caught a fish after many casts. What is wrong? Why didn't the fish bite? Did the fish see you or hear you?

Want to catch a fish? Knowing how fish see, hear, taste, feel and smell can help you become a better angler—a person who goes fishing. Eyes, ears, nose and mouth—how do fish sense their watery world?

Making sense of fish...

Fishy eyes

Vision is not one of the strongest senses for fish. Most fish are nearsighted and can see only about 10 to 20 feet. Fish may be able to see only a few inches away if the water is murky. The eyes of fish are on the sides of their heads. Their eyes cannot open or close because they have no eyelids. Fish are able to use each eye on its own and can see almost all around them, including above. A good angler will remember this and try not to be seen by the fish. Fish such as bluegill, trout and minnows that feed during the day have fairly good vision and can see a range of colors because there is sunlight in the water. Night feeders such as walleye and crappie can see well when there is not much light, partly because they have very large eyes that can capture more light. However, they cannot see colors.



Crappies' large eyes help them find food at night.

PHOTO ILLUSTRATION: LANCE CHERRY

Hidden ears

Fish have tiny ears that are buried under the skin on both sides of their heads. Fish ears are made up of bones called otoliths. The ear bones vibrate with pressure created by sound waves in the water. The vibrations wiggle small hairs in the fish's ears, sending a sound message to the brain of the fish. Otoliths can be dissected out of a fish and put under a microscope. White rings are visible and the number of rings can tell you how old the fish is.

Something smells fishy!

The sense of smell is very important for fish. Fish nostrils are called nares. Fish have super-sensitive sensors that lie just behind the nares. These sensors can smell even the slightest odor. Fish use smell to find food, to sense danger and to find their way to distant spawning areas, where their eggs are laid and hatched. Millions of smell receptors inside the nostrils pass smell



signals to the brain. Salmon of the Pacific Northwest travel long distances from their birth sites in cold mountain streams to live as adults in the ocean and then return to the same streams of their births. They use their sense of smell to find their way to the same spawning grounds where their lives began.

Tasty bites

Fish can taste using tongues that are covered with taste buds. Some fish have taste buds covering other parts of their bodies, such as fins, faces, even areas near their tails. These fish can taste food before taking it into their mouths. Most fish have taste buds on their mouth, lips and tongues. Walleyes have taste buds in their faces, so they do not have to open their mouths to taste. Snapping or biting at tasty bait is an automatic reflex in most fish. This is because their taste buds are wired to areas of the brain that operate reflexes, or physical responses and movements.

Catfish win the prize for tasting because their bodies are covered from head to tail with taste buds. We could call them swimming tongues. Catfish have whisker-like barbels on their faces that are covered with taste buds. They have 100,000 taste buds, while humans have only 10,000. Catfish drag their barbels along lake bottoms as they search for food. Catfish can find food that is far away even in murky water.

"Magic" touch

Fish have a receptive system called the lateral line that detects vibrations and pressure. Humans can sense things through touch. The lateral line provides a kind of touch sense for fish. The lateral line begins just behind the head and runs along each side of a fish's body. The lateral line is covered with tiny, sensitive hair-like nerve endings known as neuromasts. As fish move through the water, the water is pushed, causing the hairs of the neuromasts to vibrate. A signal is sent to the brain, aiding the fish's sense of hearing. Fish can detect something in their way as the hairs sense underwater sounds, the speed of water currents and pressure waves that build up as the fish moves through the water. The lateral line helps fish travel through murky water, find food, travel at night, stay together in a school, or group, avoid enemies and even sense water depth and temperature.



Catfish "whiskers" or barbels, are sensitive to touch and covered with taste buds.

PHOTO ILLUSTRATION: SCOTT BROWN

Now that you have a sense of fish senses, remember that it is important to be as quiet as possible when fishing. Fish can hear you scrape your tackle box along the deck of a boat. Fish can sense your heavy footsteps along the bank. Some fish can see you and hear you before you even cast your bait out into the water, so be careful where you stand and shout. The fish you want to catch will sense the vibration of the wiggling worm on your hook and just might take a bite. Happy fishing!

COLLEEN WELCH is Co-coordinator for Conservation Education and Project WILD for the Department of Game and Fish.

Project WILD Aquatic activities for teachers and students that correlate to this topic include the following:

- Fishy Who's Who
- Fashion a Fish
- Seeing is Believing!
- Sockeye Scents

For more information on Project WILD workshops, contact Colleen Welch, New Mexico Department of Game and Fish, (505) 476-8119, or Kevin Holladay, (505) 476-8095.

A "lateral line" of sensitive nerve endings along their side helps fish feel their way through murky water, find food, and swim together in schools.



PHOTO ILLUSTRATION: LANCE CHERRY

