



New Director Appointed

Michael Sloane, a 24-year employee of the New Mexico Department of Game and Fish, has been named

the department's new director by the State Game Commission.

As director, Sloane will be responsible for leading the state wildlife agency whose mission is to conserve, regulate, propagate and protect the wildlife and fish within the state of New Mexico. He is managing more than 300 dedicated wildlife employees and an annual budget in excess of \$39 million.

"Throughout his career with our department, Mike has demonstrated a commitment to our agency's mission to conserve our state's wildlife while promoting unique recreational opportunities," said Paul M. Kienzle III, chairman of the State Game Commission.

Sloane previously served as the department's chief of the Fisheries Management Division since 2001. In that role, he was responsible for providing strategic direction and oversight to the statewide fisheries management program.

"Mike sees the future of fish and wildlife management in New Mexico and he recognizes we have a multi-purpose mission of selling hunting and fishing licenses and providing recreational opportunities," said Kirk Patten, chief of fisheries at the department. "However, he also champions the additional conservation purpose of our agency, such as non-game species, healthy forests and how that contributes to the natural resources of New Mexico."

Patten noted that Sloane has an impressive ability to navigate large capital projects critical to conservation.

"He's improved our ability on the biologist side to get large conservation projects on the ground," Patten said. "His largest contribution is his can-do attitude and strong will to get something done. In working with him as assistant chief, we've constantly sought to strike a balance between competing interests among user groups. His approach in doing that will continue to be challenging yet necessary."

Sloane began his career with the department in 1994 as a wildlife culturist at Lisboa Springs Hatchery in Pecos. He has a master's of science in fisheries and allied aquacultures from Auburn University.

Sloane was selected among five candidates considered after a nationwide search that began April 1 and ended June 1.

Red/Green Chile Waters Signs Posted at Trout Waters Around the State

In an effort to enhance the unique, quality angling opportunities available in the state, the New Mexico Department of Game and Fish has established three designations for Special Trout Waters.

Waters designated as "Special Trout Waters" have reduced daily bag limits of two trout per day and/or tackle restrictions. The statewide bag limit is five trout per day in regular trout waters.

The new fishing designations are as follows:



Red Chile Water Catch and release with tackle restrictions.



Green Chile Water Two trout daily bag limit with tackle restrictions.



Xmas Chile Water Two trout daily bag limit with any legal tackle.

Regulations vary for Special Trout Waters; some are managed to produce trophy-size trout, some to improve conservation of native trout and others to enhance the overall trout population structure and density.

The department also designated several Native Trout Conservation waters as Red Chile Waters. Regulations on these waters are catch-and-release for native trout (Rio Grande Cutthroat and Gila), but unlimited harvest on non-native trout (brown, brook and rainbow trout). Non-native trout can out compete or hybridize with native trout and are a significant threat to these species.

"We proposed the new Native Trout Conservation waters to allow anglers to help us suppress non-native trout species," said Eric Frey, the department's sportfish program manager. "By following these regulations anglers help to conserve healthy fisheries in New Mexico and promote high-quality fishing experiences for everyone."

Frey notes that according to our most recent angler surveys, about 75 percent of licensed anglers support reducing bag limits and restricting tackle to improve fisheries. In addition, according to the same survey, about 36 percent of licensed anglers fished in a Special Trout Water last year.

For more information about the program, visit: www.wildlife.state.nm.us/fishing/fishing-news/



Above: The term "Special Trout Water" was first used in 1989. At that time 10 waters were designated as STW which included about 102 stream miles. In 2018, there are 46 waters designated including about 475 miles. Department photo by Sportfish Program Manager Eric Frey.



New Mexico Department of Game and Fish

Conserving New Mexico's Wildlife for Future Generations

It is the mission of the New Mexico Department of Game and Fish to conserve, regulate, propagate and protect the wildlife and fish within the State of New Mexico, using a flexible management system that ensures sustainable use for public food supply, recreation and safety—and to provide for off-highway motor vehicle recreation that recognizes cultural, historic and resource values while ensuring public safety.

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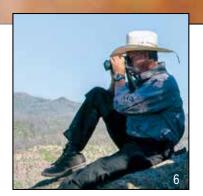
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Cover: Rocky Mountain bighorn ram. Department photo by Martin Perea.

Contents

- 2 News & Information
- 4 License sales continue to increase
- Youth Hunter Education Challenge (YHEC)
- 6 Rocky Mountain bighorn survey
- 10 Habitat: Because wildlife depends on it
- Wetlands and waterfowl hunting opportunities on WMAs
- Winter bird feeding tips
- 14 Help us share with wildlife
- **15** Share with Wildlife: Tale of the cooter
- **16** Outwitting New Mexico's official state fish
- **18** AmeriCorps joins New Mexico Game and Fish for habitat improvement
- **19** Pass It On: Age of hunters and anglers indicates something is missing
- **20** Open Gate: Anglers gain opportunity at Rancho Grande ponds
- 22 Carcass tag implemented for 2018-19 big-game and turkey hunters
- **23** Recruiting new hunters
- Out of range: White-nosed coatis heading north or just heading home?
- **26** Bosque del Apache National Wildlife Refuge
- **30** Sunrise 14,089
- How can I get a turkey license? And other common questions for Game and Fish
- Aiming for the 10 ring: New Mexico's National Archery in Schools Program
- **34** Kids Tracks: Burrowing owls, cool jobs and more
- **36** Department seeking the next generation of conservation officers







License Sales Continue to Increase

While hunting and fishing license sales and revenue are declining in many states across the country, New Mexico is experiencing the opposite trend. Hunting and fishing license sales and draw hunt applications continue to increase in the state.

"It's never been easier to buy a hunting or fishing license in New Mexico," said New Mexico Game and Fish licensing operations manager Chad Nelson. "Customers can purchase licenses online through the department's online licensing system, by phone or in person at one of nearly 150 license vendors or at any department office."

Carcass tags are now required for all big game and turkey hunts and are mailed to customers for draw hunts and online purchases; they are also available at all license vendors and Game and Fish offices.

"New Mexico has a lot to offer anglers and hunters, including some advantages that other states don't have," Nelson said. "New Mexico does not have preference points for our big-game draw like some western states, which means everyone has the same chance to draw each year, subject to the quotas established in state law."

The state's reputation for big-game hunting generates a lot of interest in New Mexico's draw hunts. "We have been seeing increases in draw applications across the board for all drawing pools and big-game species over the past three years," Nelson said. The number of applicants for big-game hunts has jumped from around 175,000 in 2016 to more than 203,000 in 2018. In 2018, approximately 58,000 big-game licenses were available.

"New Mexico has a great reputation for elk and mule deer hunting but is also home to a variety of other big-game species hunters can pursue," said big-game program manager Nicole Tatman. For example, New Mexico offers public draw hunting opportunities for oryx, ibex and Barbary sheep. The Boone and Crockett world record pronghorn was taken in New Mexico in 2013, and the state offers rare hunting opportunities for both desert and Rocky Mountain

bighorn sheep with record-book rams taken every year. New Mexico also offers hunting for both Coues' and Texas whitetail deer.

Fishing license sales are also on the increase, and New Mexico offers a wide range of angling opportunities. Total sales of all licenses that include fishing privileges totaled more than 388,000 for the 2017 license year, up from 371,000 the previous year.

"Reservoirs in New Mexico are very productive and warm-water fishing for largemouth and smallmouth bass, white bass and walleye can be outstanding," said sportfish program manager Eric Frey. Ute and Conchas lakes in eastern New Mexico are popular destinations for nonresident anglers, as is Bluewater Lake in western New Mexico, where visitors have a chance to catch a monster tiger muskie. Elephant Butte, Caballo, Navajo, Sumner and Santa Rosa lakes are also popular fishing destinations.

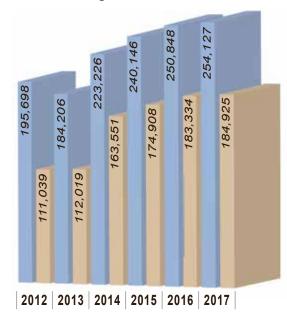
The state also offers fantastic trout fishing in lakes and rivers, especially in northern New Mexico. The crown jewel of New Mexico trout fishing is the San Juan River, which draws visitors from around the country to fish for big rainbow and brown trout.

"New Mexico has made significant progress toward conservation and providing increased angling opportunities through the reintroduction and management of native Rio Grande cutthroat and Gila trout," Frey said.

For more information about hunting and fishing in New Mexico, or to purchase a license, visit the New Mexico Game and Fish website at wildlife.state.nm.us, or call 1-888-248-6866.

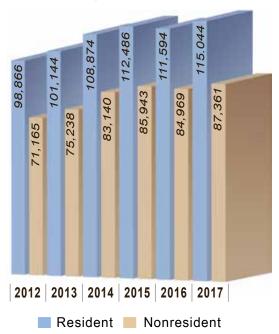
Right: Comparison of resident and nonresident fishing and hunting license sales from 2012 to 2017.

Fishing License Sales



Hunting License Sales

Resident Nonresident



Youth Hunter Education Challenge (YHEC) Blast from the Past

By Tristanna Bickford

Imagine a world where everyone waves as they drive past each other, no music blaring, youth acknowledge others with a yes ma'am or no ma'am, people of all ages shake your hand and look you in the eye, kids cheer each other on as the competition gets fierce and families extended beyond the traditional boarders; everyone is family.

This probably draws up images of The Andy Griffith Show, dirt roads with dust getting kicked up and the show pausing as the audience laughs.

If you are like me, you are probably thinking those were the 'good ole days' (insert sigh here). They don't exist anymore, but now, in 2019 . . . they do exist . . . at the New Mexico's Youth Hunter Education Challenge.

The annual New Mexico Youth Hunter Education Challenge (YHEC) is held each year at the NRA Whittington Center near Raton. Over 180 youth descend on the center in June. Youth come from all corners of New Mexico and bring along coaches, siblings, parents, grandparents, family friends and anyone else that they can fit into a car, or two. Arriving Thursday, they prepare for two full days competing in skills and shooting events.

The event has been in New Mexico for many years when it was adapted from the National YHEC program created by the National Rifle Association.

New Mexico's YHEC program consists of eight areas of competition:

- 1. Wildlife identification challenge Participants walk through a pre-designed course, in a natural setting, while identifying wildlife from across North America. Do you think this sounds easy? Try identifying a duck by just one wing or decide the difference between a white-tailed deer and mule deer using just the skull.
- 2. Orienteering skills challenge –Map and compass experts can test their skills on the courses designed to route you across the field using just a compass. Participants must first take a written test identifying their knowledge of a topographical map. No GPS units are allowed on the course.

- 3. Safety trail challenge Participants walk through a predetermined course designed to simulate actual hunting conditions and situations. Scenarios can include firearms safety, shoot/don't shoot situations, identifying game and distance to game, landowner relationships, regulations knowledge and other situations that a hunter may face in the field.
- 4. Responsibility exam This 50-question test assesses the participants' knowledge of hunting in New Mexico and could contain questions about current regulations, knowledge garnered in hunter education classes and information provided in the NRA Hunter's Guide and Hunting Skills Handbook.
- **5.** Archery Participants compete in a 3-D target challenge. Targets vary in size, distance, shooting angle and other challenge that could be experienced while hunting.
- 6. Shotgun challenge Designed to simulate different scenarios that a person may experience while hunting. Clay targets are thrown at many different angles that could include left and right crossing, strait up, incoming and outgoing, rabbit and straight up.
- 7. Light hunting rifle challenge (.22 caliber rifle) Participants walk through a field course and encounter different challenges and be required to shoot from different positions.
- 8. Muzzleloading challenge Participants shoot steel knockdown or swinging targets at distances of 20 to 75 yards with the challenge of shooting for standing, sitting and in some cases using supports such as shooting sticks.

Think about the last time you reminisced about the 'good ole days,' take hunter education and. and get involved with New Mexico's Youth Hunter Education Challenge.

Right: Department photo by Tristanna Bickford.

Tristanna Bickford is communications director at the New Mexico Department of Game and Fish.



Department conducts latest

ROCKY Mountain Sighorn Survey

By Alexa J. Henry



Department photos by Martin Perea.

It's a cloudless, moonlit late June morning, shortly after 5 a.m., when Caitlin Ruhl, bighorn sheep biologist with the New Mexico Department of Game and Fish, turns west on NM-502 toward Los Alamos.

The day starts this early because bighorn sheep are easier to locate when the temperature is cooler, Ruhl explained. In about an hour, she will begin the department's annual Rocky Mountain bighorn sheep survey in Cochiti Canyon.

"Once it's hot they bed down," she said. "It's easier to find them when they're up and moving around."

The canyon, located in the Jemez Mountains on U.S. Forest Service land a half-hour south of Los Alamos where the Rio Grande forks, is home to possibly 150 sheep. Ruhl doesn't expect the team to count all of them; she is hopeful they will record the presence of 80, maybe 100, depending on the temperature and how far beyond the canyon area the sheep have roamed.

This is the department's third official Rocky Mountain bighorn sheep survey since moving 45 sheep from Wheeler Peak in 2014 a few years after the 2011 Las Conchas Fire—the largest fire in New Mexico history at the time—that burned over 150,000 acres. In 2017, an additional 33 sheep were relocated from the Questa Mine in the Red River Canyon.

Surveys are conducted on the ground with telemetry receivers that detect the radio-collars attached to the sheep. The herd—referred to by some as the Jemez herd, by others as the Cochiti herd—seems to be thriving in the canyon. Surveys have mostly been conducted on the ground; however, as the population increases, the biologists may need a helicopter.

During the 2017 ground survey, 65 sheep were observed and in considering known mortalities and additions through births and transplants, the team estimated the population to be 105-115, Ruhl noted.

Passing a security checkpoint in the national laboratory town of Los Alamos, Ruhl takes a Forest Service road to the canyon. At daybreak, herds of elk, another big-game species that thrives in the area, can be seen on both sides of the road.

Ruhl has been with the department for four years, spending most of her time as one of the statewide bighorn biologists. Originally from Wisconsin,

she developed a passion for the outdoors as a child despite growing up within five miles of downtown Milwaukee. Her father toted her along on all of his fishing and camping trips; in fact, she said, the household policy required that summer days were spent outside.

She always had an interest in studying large mammals. Before joining the department, she worked as a wildlife technician at Yellowstone National Park.

"I stand by the notion that I must have one of the best jobs in the state, if not beyond," she said. "I enjoy so many components of the work, but especially relish days spent encountering bighorn on the ground."

The annual survey is critical; estimating the bighorn population helps ensure the released herd is thriving in the canyon. The team also needs to detect any signs of disease transmission between domestic and wild sheep, one of a handful of culprits including unregulated hunting that are thought to have eradicated the canyon's sheep population around the turn of the 20th century.

At a U.S. Forest Service gate, Ruhl meets up with her colleague, Eric Rominger, bighorn biologist with the department, and Andre M. Silva, district wildlife biologist with the Forest Service in Jemez.

Rominger has been a wildlife biologist since 1978. For most of the last 40 years he studied two species—federally endangered woodland caribou in the Selkirk Mountains of northern Idaho and southeast British Columbia (the animal is now functionally extinct) and bighorn sheep in New Mexico.

Around 6:30 a.m., the team pulls over at the fork of the canyon. Rominger and Ruhl raise up their telemetry antennas and listen for collars emitting radio signals from nearby sheep. The radio receiver can detect a line of sight signal from many miles away. In the Jemez, radio collars generally have to be in the same canyon and/or within a couple of miles to detect them with telemetry equipment from the ground, though they may be detected from many miles away if unobstructed by terrain.

The team stands on the rim of the east side of the canyon surrounded by scorched ponderosa pine trees, one with old lightning scars. Precipitation conditions are worse than they were in 2011, Rominger noted.

The threat of another fire has agencies on edge. For the sheep, however, fire means better habitat.

Cleared of trees, the canyon becomes an open habitat, improving visibility for the sheep and helping them evade predators such as mountain lions and coyotes, he explains. Bighorn bed—or sit in place—on open slopes that offer protection.

"It's their defense, having an open space," he explains. "In the short term, fire displaces them but long term, it creates the best habitat for them. You don't sit in a brush pile where bears and coyotes can get you. Sheep bed where they have good visibility."

Also, post-wildfire, the land is left with nutrient-rich soil, perfect for the sprouting of new plants including shrubs and grass for the sheep to consume.

Deep in the canyon, the team spots eight sheep—four ewes and four lambs. "A good ewe-to-lamb ratio," Ruhl said. It's a sign the herd is thriving in the canyon.



As the morning wears on and the air temperature rises, the team moves around the canyon, telemetry equipment and binoculars out, scanning for the recognizable white rumps of bighorns. At another point they spot more sheep, this time five rams bedded together, almost undiscernible against the tan and grey terrain below.

Opposite: Bighorn sheep biologist Caitlin Ruhl scans Cochiti Canyon for sheep during the department's annual sheep survey.

Above: Rocky Mountain bighorn.

Wildlife Management

More than 1,500 Rocky Mountain bighorn sheep currently roam New Mexico from the Gila River in the southwest region of the state to Dry Cimarron in the northeast where a tri-state herd roams Colorado, Oklahoma and New Mexico.

In the southern half of the state, desert bighorn—a subspecies closely related to the Rocky Mountain sheep—have also been reintroduced. The current population is about 1,300.

The department also operates an outdoor captive facility in Red Rock in the southwest corner of the state. The facility, founded in 1972 with 18 desert bighorn from the San Andres Mountains and Mexico, today contains just over 100 animals. It has been paramount to the recovery and reestablishment of wild desert bighorn in New Mexico by providing over 457 desert bighorn sheep for transplant into the wild, Ruhl said.

Throughout the first half of the 20th century, efforts to reintroduce Rocky Mountain bighorn to the state were unsuccessful. The first relocation in New Mexico involved three Rocky Mountain bighorn moved from Canada to the Sandia Mountains in 1939. There were two subsequent relocations in 1940 and 1941, all three involving two ewes and one ram.

The herd grew large enough to support limited hunting and translocations to the Pecos Mountains and San Francisco river area, but it went extinct in the early 1990s. Because none of the animals were collared, the cause is unknown.

Returning the sheep to the canyon—and to the entire state— is a decades long effort for not just the Department of Game and Fish, but partner agencies including the Cochiti pueblo, Forest Service, the National Parks Service and Bureau of Land Management as well as the Wild Sheep Foundation and the New Mexico chapter of the Foundation.

The financial commitment is also significant and comes from a variety of sources. The bighorn program operates on somewhere between half a million and a million dollars annually, Ruhl said. While some resources come from the Big Game Protection Fund, the primary funding source for the bighorn sheep program is the Bighorn Enhancement Fund, which contains monies generated from the annual auction



and raffle of four total bighorn ram permits. Over the past five years, annual gross proceeds derived through the enhancement program has averaged \$470,000.

When considering the reasons for sustaining the program, there are different perspectives to take into account, said Ruhl.

There was an interest in restoring the sheep to the Cochiti canyon area, Ruhl said. The animals were a familiar sight for the local Cochiti people, who wanted to bring the sheep back. In an interview, Kai-T Blue-Sky, a wildlife biologist with the Cochiti Pueblo Department of Natural Resources and Conservation, said he believes the return of bighorn to the canyon will help mend the scars that remain following the 2011 fire.

"The bighorn sheep are an added component to the rejuvenation of the land," he said.

Biologists and ecologists feel responsible for restoring animals to their native range. "As humans we caused this decline," Ruhl noted. "It is our responsibility to ameliorate the situation as best we can."

From the sportsman's perspective, the sheep provide a future potential hunting opportunity, Ruhl said.

At a state game commission meeting in 2018, Stewart Liley, chief of the wildlife management division at the Department of Game and Fish, said the department is still a few years away from permitting a bighorn hunt in Cochiti.

Currently, hunters can draw one Rocky Mountain bighorn license and one desert bighorn license in a lifetime in other areas around the state.

The department most likely won't initiate a full-on hunt in Cochiti until 2023–25, Liley said. Rams are usually harvested at eight years old and older; the Cochiti herd is big enough to permit a hunt but the rams are still too young.

In the future, Liley noted, the Cochiti herd could very well become one of the largest bighorn populations in the state; the habitat could potentially support 500 sheep.

Although this year's survey results were disappointing with only 15 sheep actually observed by the team, the future of the herd appears promising.

Ruhl explained that traditional ground survey methods in the Jemez were less effective this year due to high temperatures early in the day that limited sheep activity, as well as the general expansion of the herd into adjacent habitat that was not searched.

"We were encouraged by the high lamb-to-ewe ratio," said Ruhl. "This, combined with the normal mortality level we've seen on radio-collared animals, leads us to predict this herd is stable to increasing."

Above: Staff from the Department of Game and Fish and U.S. Forest Service use binoculars to locate bighorn.

Rocky Mountain Bighorn versus Desert Bighorn

What's the difference?

A subspecies closely related to the Rocky Mountain sheep, the desert bighorn sheep also neared extinction by the early 1900s.

Like their close relative, desert bighorn can be identified by the characteristic white patch on the rump. The rams are crowned with a large set of horns in contrast to the much smaller horns of ewes, adolescent males and lambs.

Their coats are generally buff brown but the color can vary from pale cream to dark chocolate.

Both Rocky Mountain and desert bighorn require open country with mountains or canyons that provide "escape terrain," or steep cliffs with 60 percent or greater slopes.

Shrubs are the predominant diet, but desert bighorn eat a variety of plants and prefer new grasses and forbs (flowering plants) that sprout during summer and fall rainy seasons.

"The diets of all bighorn, regardless of subspecies, will vary according to what is locally available," said Caitlin Ruhl, bighorn biologist with the Department of Game and Fish.

For example, unlike Rocky Mountain bighorn, a favorite delicacy of the desert bighorn is the pulp of prickly pear cacti, which desert bighorn reap by scraping off the spines with their horns.

Top right: Rocky Mountain bighorn.

Bottom: Desert bighorn. Department photo.



Alexa J. Henry is the editor of New Mexico Wildlife magazine.

Other notable differences between the Rocky Mountain and desert bighorn:

- Perhaps most obvious is the difference in pelage—or hair—with Rockies having a much more dense haircoat able to withstand ambient temperature in excess of -50 degrees and deserts with much less dense haircoats able to like in temperatures in excess of 120 degrees (although the high deserts of New Mexico can have temperatures well below 0 degrees, just when desert bighorn lambs are born...very likely that desert bighorn lambs are occasionally born at lower temperatures than Rocky Mountain bighorn lambs!
- Group sizes can be larger in Rockies with more contiguous forage—occasionally more than 50, whereas in the most xeric desert bighorn sheep habitats groups sizes rarely exceed 10.
- Body weights---Rocky rams have been weighed in excess of 300lbs, whereas desert rams rarely exceed 200lbs.
- Boone and Crockett scores are higher for Rockies with the World's Record (WR) Rocky 216 ³/8 and the WR desert at 205 ¹/8.
- Synchronous lambing in Rockies in cold alpine habitats where nearly all lambs are born within a month window, usually late May until early July.
- Lambing in deserts has been documented during every month of the year although there is generally a pulse between January and March.
- Low elevation Rockies generally exhibit a prolonged lambing period, up to three months (April-June).
- Desert bighorn ewes typically have longer horns than their female Rocky Mountain counterparts.
 This is thought to be an adaptation to heat.





Habitat

Because Wildlife Depends on it . . .

By Ross Morgan



All outdoor enthusiasts love to see a lot of wildlife, whether it's a hunter, hiker or photographer. Habitat improvements are implemented all over the world to benefit wildlife. New Mexico is no exception. These improvements not only play a pivotal role in refining conditions for wildlife; they also provide additional hunting and angling opportunities as well as increased wildlife viewing opportunities.

Without these improvements, wildlife habitat quickly vanish and take years to recover.

"Habitat improvements are one of the most important things we can do when it comes to wildlife management," says Chuck Schultz, Northwest Area Regional Habitat Biologist for the New Mexico Department of Game and Fish.

Habitat improvements can be as basic as a planting a variety of feed crops on a farm for waterfowl, to something more intensive such as a 1,000-acre tree thinning project to benefit deer and elk.

Most habitat improvement projects on state land take a long time for a government agency to complete? due to processes like the National Environmental Policy Act (NEPA). In these cases, the proposed project/improvement is first sent through a coordination and

analysis stage. Once it is determined that there may, or may not, be a significant impact, the proposal is then subject to further scrutiny, through the final planning process.

The far northwest corner of the state, near Farmington, has become a focal point for habitat projects due to the large amount of public land and the number and sheer quality of deer that call it home. Not only does this area have a healthy resident deer population, it also doubles as an important wintering area for hundreds of deer that migrate into New Mexico from Colorado during the winter months.

"Habitat improvements have done and continue to do great things for the deer and elk in the area," said Michael Clifton, an avid hunter and outdoorsman.

During a recent deer hunt on Crowe Mesa, Clifton witnessed just how much wildlife relies on the recently completed habitat improvement project. The areas that had been cleared of juniper and reseeded with bitter brush were like wildlife magnets.

"Habitat improvement projects like these are a winwin for both New Mexico wildlife and New Mexico hunters," said Clifton.

There are currently several ongoing long-term projects that have been implemented on Bureau of Land Management (BLM) and U.S. Forest Service (USFS) lands and come with multi-year funding. These projects are in addition to other habitat improvements that are continually being implemented and completed on New Mexico Game Commissionowned wildlife management areas tand farms.

The department and other partners are involved in several large, multi-year restoration projects in the Northwest quadrant of the state. Major collaborative project areas include: Mertz Ranch and Chivato Mesa on BLM property; Bluewater, Puerco, and Black Mesa landscapes on the Cibola National Forest; and Ojito Mesa and Chaparral project areas on the Santa Fe National Forest.

In addition, the department is engaged in restoration on Game Commission-owned properties such as the Edward Sargent and Rio Chama Wildlife Management Areas. Through selective thinning contracts and prescribed fire operations, these projects strive to return low intensity fire to tens of thousands of acres of fire adapted vegetation communities. Wildlife that use ponderosa pine forests, pinon/juniper woodlands, and grassland habitats should benefit.

Many of these large-scale projects are "phased," meaning that as money is available, the environmental compliance is completed and weather conditions are agreeable, the project will proceed in blocks, from several hundred-to-several thousand acres at a time.

Habitat manipulations and improvements include, but are not limited to, forest thinning, prescription burning, watershed restoration efforts and the seeding of diverse native grasses, forbs (native wildflowers), trees and shrubs.

Top: Game Management Unit 2 shows the vegetative regrowth following a restoration project located in a mountain meadow setting, followed by a native seeding event. The new sagebrush growth contains more available nutrition for wildlife than the old mature sagebrush plants and the emerging grasses, shrubs and forbs (wildflowers) produce food for a variety of wildlife.



Ross Morgan is a wildlife biologist and the New Mexico Department of Game and Fish public information officer for the northwest area.

Improvement

Wetlands and Waterfowl Hunting Opportunities on WMAs

It was an early Saturday morning in mid-May at the Bernardo Wildlife Management Area (WMA) south of Albuquerque. New Mexico Department of Game and Fish staff from the wildlife management and field operations divisions were already hard at work preparing tools and equipment. Eight ambitious volunteers signed up for a workday on Bernardo and La Joya WMAs to help improve hunter access. Opportunity soon joined them.

"New and improved waterfowl hunting opportunities are in high demand by the hunting public," said Ryan Darr, lands program manager for the department. "A growing need exists to conserve wetland ecosystems as available water resources become increasingly scarce."

Last year, the number of migratory bird hunters who obtained a Harvest Information Program (HIP) number increased by almost nine percent, from 42,764 in 2016 to 46,555 in 2017, according to department statistics.

To ensure that these numbers continue rising—and that interested hunters find quality waterfowl hunting opportunities—the department is planning major improvements on these WMAs. Staff have already begun securing water rights, engineering wetland improvements and building partnerships to ensure success across the state.

Top right: Wetlands on La Joya Wildlife Management Area.

Center: Staff and volunteers assemble a youth hunting blind on Bernardo Wildlife Management Area.

Bottom: Staff and volunteers enjoy a well-deserved lunch break during a volunteer workday on Bernardo and La Joya WMAs. Lunch was generously provided by partner organization First In the Field.

Department photos by Ryan Darr.

WMAs targeted for wetland improvements over the next five years include: W.S. Huey WMA (Eddy County), La Joya and Bernardo WMAs (Socorro County), Jackson Lake WMA (San Juan County), Tucumcari Lake WMA (Quay County) and McAllister Lake WMA (San Miguel County). The department plans the following improvements:

- Enhance water-delivery systems and wetland infrastructure to maximize water efficiency.
- Removal of invasive species such as salt cedar from wetlands and restore with native plants to improve wetland habitat.
- Incorporate public access for hunting and outdoor recreation into all design improvements.
- Including new roads, parking areas, access trails and wetland designs more conducive to safe and enjoyable hunting and wildlife viewing experience.

The volunteers were able to install and camouflage youth hunting blinds on Bernardo WMA as well as clear and mark new access trails on La Joya WMA. Department staff and additional volunteers followed up these efforts by installing new parking areas and signage to improve access and opportunity for the 2018-2019 hunting season.

Interested hunters can visit the department website wildlife.state.nm.us for updated access maps for La Joya WMA. Darr noted that, in addition to these improvements for the upcoming season, the department is looking forward to the major wetland and waterfowl hunting improvements and the benefits they will provide for wildlife, hunters, and outdoor recreation across New Mexico.











Bird alert! This is a note of fair warning before proceeding. The activities encouraged in this article could lead to an obsession with birds, feeding birds and identifying birds. Major side effects could result in a severe reduction in time spent staring at screens!

If you already are one of the 59 million Americans feeding and watching birds you may be chuckling, but others may ask what the big deal is and why feed birds? Especially in winter when it is cold outside?

Feeding and inviting birds into our yards is more for our own enjoyment. Birds will almost always do fine without our feeders filled up. However, a bird-friendly yard for resident and migratory birds can make a difference in their survival. Watching birds is fun, reduces stress and connects us with wildlife and other people.

It is relatively easy to begin seeing amazing birds in your backyard. First, purchase or make a basic, hanging feeder that keeps food dry and from spilling out too easily. Second, buy a large plastic shallow bird bath or large potted plant base. Put the bird bath on a stable platform about 4-5 feet off the ground in an open area where birds can see potential predators (like cats, Coopers and Sharp-shinned hawks) and where you can see them. Do the same for the feeder (a shepherd hook works well for open spots) or hang off roof eaves. The main thing is that it is fairly open and that you can see them.

What to feed birds? Your choice depends on where you are and to some extent which birds you want to attract. For over 30 bird species in New Mexico, and for your pocketbook, black oil sunflower seeds attract the widest variety of birds— especially if you don't mind cleaning up fallen shells underneath.



If you live in southern New Mexico and see birds like Gambel Quail, doves, Canyon Towhee or Dark-eyed Junco then milo or millet mixed with black oil sunflower seeds is rewarding. If it is cold enough during the day, hang out suet or peanut butter to attract Downy, Hairy and Ladder-backed Woodpeckers, Northern Flickers, Juniper Titmouse, Bushtit, Mountain Chickadees and Woodhouse's Scrub Jay (formerly Western Scrub Jay).

Peanut hearts are more expensive but they are loved by over 50 species of birds in New Mexico including chickadees, nuthatches, woodpeckers, Mourning Dove, Juniper Titmouse and Spotted Towhee. For many Santa Fe residents, Woodhouse's Scrub Jay seem to prefer peanuts in shell and occasionally suet. Experiment and see what works best for your feeders.

Once you start attracting birds it is important to protect them from our actions. Keep the ground below feeders clean of hulls and soak or scrub feeders regularly. Use a diluted bleach solution, rinse them thoroughly and let them dry before adding bird feed. Prevention is the key to avoiding the spread of disease such as avian pox and salmonellosis. Clean your feeders regularly even when there are no signs of disease.

Providing a clean bird bath in the winter is especially helpful for birds to drink and to clean feathers of dust and grime. Clean feathers allow them to stay fluffed up and warm overnight. Birds you may see at a bird bath but not winter feeders include; American Robin, Curve-billed Thrasher, Canyon Towhee, Yellowrumped Warbler and Western Bluebird.

If you have cats the best for their safety and for birds you attract is to keep them indoors or watch when they are outside. Even well-fed, vaccinated cats will hunt for birds and other wildlife. Recent studies



estimate a minimum of 1.3 billion birds are killed annually by free-roaming cats.

If you observe carefully, you may never tire of your usual visitors. When uncommon or rare birds arrive like Brown Creeper, White-breasted Nuthatch, Bushtits or a flock of Evening Grosbeaks it will be even more exciting.

To learn more about birds and feeding birds, visit the Cornell Lab of Ornithology sponsored websites www. allaboutbirds.org and www.feederwatch.org

Snap pictures of birds and share them on our Facebook page 'NM Game and Fish' or public group 'Birding New Mexico'. Get identification tips, suggestions on attracting birds and what birds your neighbors are seeing. Download the free Merlin Bird ID app for instant help in identifying your photo. For more information about feeding birds and creating bird-friendly yards contact me at kevin.holladay@state.nm.us

Left: Evening Grosbeaks. Department photo by Mark Watson.

Center: White-breasted Nuthatch. Department photo by Brad Ryan.

Right: Curve-billed Thrasher. Department photo by Mark Watson.



Kevin Holladay is the consrvation education coordinator with the department.

Want to help wildlife in need of conservation? It's as easy as filing out a line on your state tax return to donate some of your tax refund to the New Mexico Department of Game and Fish Share with Wildlife program.

Since its inception in 1981, the Share with Wildlife program has funded many projects and organizations. A long-term recipient of funds is the New Mexico Wildlife Center, a non-profit in Española where sick and injured animals receive veterinary care, treatment and rehabilitation before being released back into the wild.

The program also funds research, especially on species lacking information needed in order for species conservation and management efforts to proceed. Focal species for 2019 include the Bendire's thrasher, an elusive bird found in the southwestern corner of the state, and the Peñasco least chipmunk, which is found only in mountain ranges in southeastern New Mexico.

"People who contribute to the Share with Wildlife program make all these wildlife projects possible," said Ginny Seamster, the department's Share with Wildlife program coordinator. Donations to the program are matched by federal dollars to maximize the support for wildlife. More than \$1.7 million dollars has gone to research, habitat enhancement, education and rehabilitation projects in the past 10 years. All donations fund projects, not program administration.

The program is reliant upon donations, especially through tax refund contributions. To donate part of your state tax refund just fill out line two of PIT-D, the voluntary contributions schedule. Visit the state Taxation and Revenue Department at www.tax. newmexico.gov for tax forms and instructions.

Donations also can be made directly to the program or by purchasing a Share with Wildlife license plate. Please visit the department's website at www.wildlife.state.nm.us/share for more information or contact Seamster at (505) 476-8111 or virginia.seamster@state.nm.us.

Help us share with wildlife

Donate some of your tax refund to Share with Wildlife



Share with Wildlife Tale of the Cooter

By Ginny Seamster

The Western River Cooter is a species of turtle that is of particular interest to the department. State-listed as threatened, very little is known about where it is found, what kind of habitat it needs at different life stages, and how it is doing in New Mexico. It is currently undergoing review by U.S. Fish and Wildlife Service to determine whether it should be listed as threatened or endangered at the federal level.

Thus, time is of the essence in terms of answering some fundamental questions about this species and its status in the state. If the cooter were to be federally listed that would dramatically change the management landscape for this species.

Dr. Ivana Mali and both graduate and undergraduate students at Eastern New Mexico University are using funds from the Share with Wildlife program, and other sources, to help fill some of the information gaps about the cooter. During the summer of 2018, Dr. Mali conducted surveys at two sites on the Black River in southeastern New Mexico that she and her team surveyed the past two years in order to provide the foundation for a longer-term dataset on this understudied species.

Based on data from the past two years, this turtle is relatively abundant at both the survey areas. There are many hatchlings, which is potentially good news in terms of the sustainability of the population on the Black River.

However, it isn't possible to know how well the population is really doing and how many of these hatchlings, and older turtles, survive one or more years without collecting multiple years of data.

Long-term data are especially important given the variability of the Black River system. For example, in 2017, the water level at the uppermost survey site was noticeably lower than it was in 2016. This raises questions regarding the impacts this variation in river flow may have on the ability of these turtles to bask, forage and lay eggs. In particular, lower water levels may make it harder for turtles to leave the water, which females must do in order to lay eggs.

Very exciting news early on in the 2018 survey season was that Dr. Mali became aware of cooters being sighted in Chaves County and confirmed the sighting.

There was a questionable historic record of cooters on Bitter Lake National Wildlife Refuge in Chaves County from 1951 and the predated remains of a cooter were discovered on the Refuge in 2008.

The fact that more than one live cooter was observed this year in Chaves County, relatively far north of Brantley Dam, its previously identified northernmost extent, is good news for this species. Very exciting news early on in the 2018 survey season was that Dr. Mali became aware of cooters being sighted in Chaves County and confirmed the sighting.

Thus far for 2018, Dr. Mali's team caught good numbers of turtles, both unmarked and marked individuals. To date, her team has marked 790 unique individuals on the Black River. New this year, they are collaborating with the Desert Willow Wildlife Rehabilitation Center in Carlsbad to X-ray larger turtles. The purpose of the x-rays is twofold: to assess reproductive condition of the females and determine whether individuals of either gender have ingested fish hooks.

As the team analyzes this year's data, it is likely that Dr. Mali and her students will make all kinds of interesting new discoveries and, most importantly, will be adding another year of data to inform our growing knowledge of this species and its status in southeastern New Mexico.



Virginia 'Ginny' Seamster, Ph.D., is the BISON-M/Share with Wildlife Coordinator with the Ecological and Environmental Planning Division of the New

Mexico Department of Game and Fish.

Top: Western river cooter hatchling. Bottom: The Black River. Department photos by Ginny Seamster. Share with Wildlife is a New Mexico Department of Game and Fish program initiated in 1981 that depends on donations from the public. Its mission is to help those species that do not receive funding from any other source. To learn more, visit: www.wildlife.state.nm.us/ conservation/share-with-wildlife/







Outwitting New Mexico's official state fish

Article and photos by Craig Springer, U.S. Fish and Wildlife Service

From nearly anywhere in my Santa Fe County home, I have the most fortunate view of the Sangre de Cristo Mountains. It's where the Rockies start in New Mexico. As I write this, day melds into night, that period when the Muses visit painters and poets.

A towering anvil-headed September storm cloud turns the color of a watermelon over Santa Fe Baldy and Hamilton Mesa. The trailing curved edge of the cloud as it brushes over the mountain tops looks like a sheer lavender curtain moved by wind through an open window.

The moisture wrung out of this moving piece of art strikes the steep dusky mountain slopes, softened by green and blue needles of pines and firs and spruces. The water funnels through gray granite crevices as it trickles downhill. The rain soaks into rivulets and then into ritos with names such as Azul, Padre, Valdez and Chimayosos. These noisy cobbled brooks will soon beget the Pecos proper, but before they do their waters stall in dark pools under the cooling shade of gangly alder trees whose roots knot up the streambank. This is habitat for Rio Grande cutthroat trout.

The Rio Grande cutthroat trout is named for the splash of crimson below its gills, and for the fact it occurs only in its namesake river basin. In the spring of the year, the spawning males are awash in red over their head and chest. It's stunning, as if they are soaked in blood.

Under these September clouds, the fish lie there finning in pools as freshets wash over them under the shadows of ponderosa boles that have fallen into the stream. Or they lay on the edge of a lichen-covered boulder in an eddy just past a chute of frothy water waiting for a grasshopper or caddisfly or a clumsy moth to flit too close.

With a dart and roll, a bug becomes food. That is unless that bug is a look-alike, mere fur and feathers adorning a tiny barbless hook.

A tug and a splash, and in a moment I can see my reflection on a trout's shimmering flank and feel it flex its cold muscles in my wet hand as it slips back into the water with a parting flip of its tail teeming with spots like peppercorns.

It's a persistent longing: outwitting cutthroat trout in the high country, especially with my children, is among my most favorite pastimes. Never do I feel more alive; I'm a participant in nature and not merely an observer. These tiny streams bordered by brush and boulder require stealth and attentiveness and some resolve. The experience hones your senses and is head-clearing, like floss for your psyche. I find myself thinking that I am not thinking at all.

It's physically demanding, too. A friend of mine likened fishing cutthroat waters to doing yoga while casting. It takes some doing to thread a bow-cast beneath overhanging alders from behind a boulder propped on an elbow. Many cutthroat streams in the upper Pecos as elsewhere in New Mexico are typically small and not well visited. You'll make your own trail over deadfall and boulders and through patches of prickly wild raspberries properly colored like a trout's throat.

Trout don't grow large in small waters, but still, when I catch a cutthroat I feel like a man who just found a bag of money. Each fish is uniquely adorned with a constellation of black spots lying on a background from a pallet of paint, borrowed from a September sunrise accessorized with last night's tattered, left-over clouds.

The Rio Grande cutthroat trout is the official state fish of New Mexico and holds the distinction of being the first trout documented in the New World. In 1541, as the Coronado's entrada passed near Pecos Pueblo, one chronicler noted truchas swimming about.

Now, 477 years later, the trout's native range is much reduced, yet still affords remarkable angling opportunities found nowhere else.

Opposite: Photos by Craig Springer.



Craig Springer is a Fish Biologist with the U.S. Fish & Wildlife Service. He and his wife have three young hunters and anglers. If the Rio Grande cutthroat wasn't the state fish, he'd pick the White Sands

pupfish. He wrote a story in New Mexico Wildlife about his pupfish research 22 years ago.

AmeriCorps Joins New Mexico Game and Fish for habitat improvement

By Cody Johnston

Waking up to hear the lesser prairie chickens booming, and possibly being lucky enough to see one is a treat for anyone who ventures out into southeastern New Mexico. However, this bird is elusive. It prefers a habitat without any large trees nearby and takes significant efforts to manage.



The Prairie Chicken Wildlife Management Areas, mostly concentrated in the southeastern part of the state, are large and with only a few people available to assist with habitat improvements and maintenance, the department has to seek out additional help. What better way than a collaborative effort with young adults from AmeriCorps.

AmeriCorps, a national volunteer program, an endeavor resembling the Civilian Conservation Corps of the 1930s that helped young adults make money and support projects at places including national parks and state lands. This particular program, the AmeriCorps NCCC, takes young adults, ages 18-24, who commit to 10 months of team service, and stations them around the country to assist with projects that focus on environmental stewardship and conservation, natural and other disasters, infrastructure improvement, energy conservation and urban and rural development.

This work not only gives back to the communities through civic engagement but offers young adults skills, training, life lessons and even a government stipend that can be used toward college tuition or pay toward student loan debt.

This AmeriCorps team traveled to Milensand to help the New Mexico Department of Game and Fish, with the tasks of improving and maintaining lesser prairie chicken habitat. In approximately one month, they were able to accomplish numerous tasks that would have taken the department months to complete and would have been very costly. The group took down old fences left from the days when the WMAs were privately owned ranches, removed old gates, repaired existing fences, put up new fences and gates, removed mesquite trees and treated the landscape to prevent them from coming back and repaired water catchments that benefit all wildlife in the area. All of this included hard work, long days and some very cold mornings.

The team of 11 young adults arrived in New Mexico in January to begin their volunteer work with the department. Besides just needing help at the Prairie Chicken Wildlife Area, the AmeriCorps team assisted at other department properties, including the Rock Lake Fish Hatchery and the W.S. Huey Wildlife Management Area.

At the Rock Lake State Fish Hatchery, where they lived and worked for over three weeks, the AmeriCorps team installed predator nettings over the brood ponds to protect the fish and removed nonnative trees from the property. While at the hatchery, they received chop-saw training, chainsaw certification and became skilled with setting concrete.

The team also traveled to Artesia where they camped out in canvas tents on the W.S Huey Wildlife Management Area. While at Huey they assisted the department farmworkers with maintenance projects around the property and built large turkey roosting stands.

As a thank you for all the AmeriCorps volunteers hard work, several members of the department's Southeast area office set up an evening to barbecue with hotdogs, burgers, chips and dessert. An archery education trailer was also on-site; some of the AmeriCorps team shot archery until it was dark.

After leaving, the Huey team moved on to other projects working with New Mexico State Parks and the U.S. Fish and Wildlife Service.

According to the team's media relations person, Mike Colores, the group included people from all over the country. The team is based out of Aurora, Colorado and serves eight states in the southwest region. They were based in New Mexico through March 2018.

At the end of their 10 months of service, each team member will have worked 1,700 hours of community service. For Mike, he chose this program as a short break from school and as he put it "a way to take off a year of school and still feel good about what [he] is doing." Others have done this program as a way to explore and figure out what they want to do after high schoola and also to get the opportunity to travel around the country. One of things Mike told me that he really loves about the program is that "no one comes into the program as experts, none of them had built a barbwire fence before."

The department is grateful for all of the amazing hard work these young adults put in to help wildlife and its habitat.

If you would like more information about AmeriCorps programs check out their website at www.nationalservice.gov/programs/americorps.



Cody Johnston is the Department of Game and Fish public information officer for the Southeast Area.

Pass It On

Age of hunters and anglers indicates something is missing

By Jeremy Lane

People taking the time to read a magazine published by a state wildlife agency are likely interested in the outdoors.

Among those people are hunters, anglers and trappers. Perhaps some belong to a sportsmen or conservationist group that keeps a wary eye on political action that could impact their recreational opportunities.

Most take steps to prevent others from developing a poor view of outdoor pastimes, such as leaving areas better than found. They don't need to be reminded to close gates or that pictures of any animal harvested should be respectful.

These outdoor enthusiasts take steps to make sure the privileges enjoyed today remain intact.

But a simple opportunity is missing to help ensure this heritage continues: Take a kid with you.

"A large part of conservation is paid for by hunters and anglers," said Megan Otero, assistant hunter education coordinator for the New Mexico Department of Game and Fish.

"Those dedicated to supporting wildlife management through the purchase of a license and firearms, ammunition and archery equipment are getting older," she continued. "A new generation of conservationists is vital to continuing science-based wildlife management."

The time has come to develop a new generation of conservationists, individuals who believe in the North American Model of Wildlife Conservation and understand the physical and mental benefits of hunting, hiking and enjoying what New Mexico has to offer.

It doesn't matter if you're a parent, grandparent, aunt, uncle, guardian, family friend or neighbor. The next time you head outdoors, take a kid with you.

It might mean a little extra ammo spent at a range, or another lure lost in a tree, but for the youth, memories are made that last a lifetime and a future advocate may be born to protect cherished traditions.

Children under 12 years old do not need a fishing license, so it's easy to get a kid outdoors with no real extra cost.

If the outdoor activity involves a hunt, enroll the youth in a hunter education course, which is required for those under 18 to have access to full hunting

Swapping stories at the campfire shouldn't be allowed to become a footnote of outdoor history.

Share a lifetime of knowledge, passion and stewardship for the land and our wildlife with the next generation. Statistics indicate it's sorely needed.



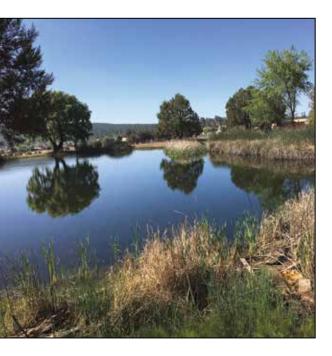
privileges. There are also hunter education camps, which are free and held in different areas of the state on various weekends.

Participants in a hunter education camps complete curriculum geared toward producing safe, ethical hunters. They may also have a chance to try archery, .22 rifle, shotgun and sometimes fishing, depending on the features of the facility.

"By simply inviting the neighbor's kid the next time you head to a city pond to cast a line or head into the field on a hunt, everyone will reap the benefits," Otero said. "It's an amazing experience to watch the face of a child, jaw on the ground, when they hear an elk bugle for the first time."



Jeremy Lane is the Department of Game and Fish public information officer for the Southwest Area.



Open Gate

Anglers gain opportunity at Rancho Grande ponds

By Rex Martensen

This is the first of a series of NM Wildlife features highlighting new Open Gate properties throughout New Mexico.

Opposite and above: Rancho Grande ponds. Department photos by Tristanna Bickford.

Everyone's had that great feeling of finding something they thought was lost.

Whether it's something small or trivial, like a favorite pocket knife, or something more significant, like a diamond wedding ring, getting the item back is a feeling that is hard to compare.

While probably not as significant as finding your wedding ring, having the opportunity to once again fish at the Rancho Grande Estates ponds near Reserve might rank above finding that pocket knife.

After years of being closed, the Rancho Grande ponds are now open to public fishing thanks to an agreement between Jennifer and John Swenson and the New Mexico Department of Game and Fish Open Gate program. The ponds were stocked by the department and public access was granted from the 1960s, until the late 1990s when they were closed due to liability concerns.

Landowners signing an Open Gate agreement have liability protections under New Mexico state law. This provision, along with the prospect of providing a place for outdoor users to recreate, was all the Swensons needed to reopen access to a fishing resource that had long been lost.

"It's really exciting for us and the community," said Jennifer Swenson, who owns the property and the adjacent Adobe Cafe and Bakery and Hidden Springs Inn. "The fishing is a draw for some of our guests."

Open Gate is a private-land lease program designed to pay landowners for allowing access to additional hunting, trapping and fishing opportunities across the state. These leases are funded through the four dollar Habitat Management and Access Validation (HMAV) stamp purchased by hunters, trappers and anglers each year.

"This is another example of how outdoor users support their own interests financially and improve conditions for fish and wildlife without creating funding burdens for others," said Gary Calkins, Open Gate coordinator for the department.

"Having these ponds open for public fishing is a great thing for the people around here," said Sgt. Casey Gehrt, the Reserve district conservation officer. "This is particularly handy for parents who want to take their kids fishing but don't have the time to drive long distances or hike into the backcountry to do it." As part of the Open Gate program agreement, Game and Fish personnel stock Rancho Grande ponds with catchable-sized trout throughout the winter months and bass, bluegill and catfish during the warmer months, meaning the odds of catching a fish are good. In fact, these ponds are considered Special Summer Catfish Waters by the department's fisheries management division, which provides a unique angling opportunity.

"People need to remember to have their fishing license with them in order to use the area and abide by the posted bag limits and other area regulations to make sure the entire experience is a pleasant one," Gehrt said.

Swenson said she is thrilled to provide public access to the ponds; visitors can purchase a fishing license at her nearby cafe.

Abiding by the regulations, picking up trash and respecting the property assures this fishing opportunity will be available for years to come.

"This fishing area is pretty unique in that there is good fishing with easy access, amenities adjacent to the ponds and beautiful scenery surrounding the area provided by the Gila National Forest," Calkins said. "It doesn't get any better than that."

For those looking for an easily accessible location that provides good fishing in the Reserve area, Rancho Grande ponds is worth a visit. Cast your line and enjoy the feeling of a resource that was once lost to public access.

For more information about Rancho Grande ponds, other Open Gate properties or the Open Gate program, call (505) 476-8043 or visit the Game and Fish website at www.wildlife.state.nm.us/hunting/maps/open-gate-program/. Property users are also invited to provide feedback and rate Open Gate properties by clicking "Rate a Property."

If You Go

The Rancho Grande ponds are located approximately seven miles west of Reserve, near the intersection of N.M. 12 and U.S. 180. Four ponds are on the property, but only the two western most waters are part of the Open Gate agreement and provide the best fishing opportunity, with about four surface acres of water fed by Leggett Spring. The lower ponds are not open to fishing and orange markers are posted to show the restricted area.



Hours

Fishing in the ponds is open year-round from a half-hour before sunrise until sunset each day.

Parking: Visitors are encouraged to use the parking lot next to the cafe and access the ponds from the west end of the property.

Rules and Regulations: Fishing from the shore is the only activity allowed on the area under the agreement. No swimming, wading, boats or other floating devices are allowed. Area regulations and fish bag limits are posted in the parking lot next to the Adobe Cafe near the ponds.

Interested in joining the Open Gate program?

Rancho Grande is only one of the 30 Open Gate properties in New Mexico, and many more are expected to become available to hunters, anglers and trappers in the future.

The New Mexico Department of Game and Fish is always on the lookout to add new sites that fit the requirements and can provide residents and visitors to our state with a quality experience.

"This program has value from both the perspective of the hunter gaining access to otherwise inaccessible wildlife resources and the landowner gaining both income and liability protections," said Gary Calkins, Open Gate coordinator at the department. "Any way you look at it, Open Gate is a win-win for hunting, angling and trapping in New Mexico."

The Open Gate program receives dozens of inquiries per year from landowners across the state. However, several hundred acres with a sizable pond is not a guarantee that a property will receive approval, Calkins noted.



Rex Martensen joined the New Mexico Department of Game and Fish in June 2016 as the private land programs manager following a career with Missouri's Conservation Department.

Open Gate Q&A

In a Q & A with New Mexico Wildlife, Calkins cleared up some common questions about how property owners as well as the general public can benefit from this unique program.

Do users need a special permit for accessing Open Gate properties?

Properly-licensed sportspersons may access Open Gate properties during established season dates and times. No additional charge or permit is required to hunt, fish or trap on an Open Gate property. Each property has specific rules and those activities are not a part of the program.

Do I have to ask permission from the landowner to use the property? Should I personally let them know I'm using their land?

Landowner permission is not required to enter Open Gate properties.

Are Open Gate properties open for activities other than hunting, fishing and trapping, such as hiking and bicycling?

Open Gate properties are only available to licensed hunters, anglers and trappers; activities such as hiking, bicycling, photography or wildlife watching are not allowed on Open Gate properties. Open Gate properties are only open for those activities agreed upon by the landowner and are posted at each property's main entrance.

What's in it for the property owner?

The property owner will receive a lease payment and have liability coverage extended to their property.

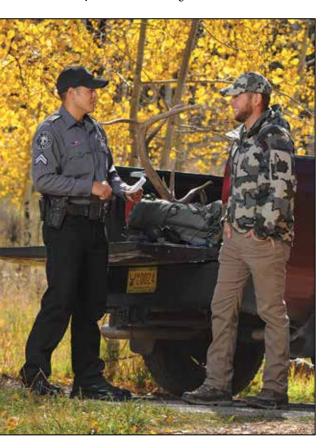
How much can I charge someone to hunt or fish on my land?

With the Open Gate program, the lease rate which is pre-negotiated in contract. If a property owner is not enrolled in Open Gate and wishes to lease their property, that is their prerogative and they can charge what they wish.

Carcass tag implemented

for 2018-19 big-game and turkey hunters

The New Mexico Department of Game and Fish implemented the use of a carcass tag for all big-game and turkey hunters starting in early 2018. This change simplifies the process for conservation officers to check hunters while in the field. Here are some quick hints for 2018-19 big game and turkey hunters to correctly use the carcass tag.



Top 5 FAQs about the new carcass tag

- Carcass tags are issued to every big-game hunter in New Mexico, including: elk, deer, pronghorn antelope, bighorn and Barbary sheep, ibex and oryx, as well as turkey.
- 2. Carcass tags and hunting licenses must have matching numbers; if they don't match, you must print a duplicate license.

- **3.** Carcass tags must remain attached until the biggame animal or turkey arrives at a taxidermist, meat processing facility or place of final storage, or if required, until it is inspected, documented or pelt tagged by a department official.
- **4.** Keep your carcass tag. This authorizes possession of the big-game animal or turkey for one (1) year.
- **5.** Read the back of the carcass tag for use directions.

How to use your carcass tag

- Thoroughly read the tag. It will provide you with all the pertinent information on the left side of the tag. Ensure that your carcass tag number matches your hunting license number and verify the species and sex that you are able to hunt.
- Leave the carcass tag complete until you are ready to tag.
- Upon harvesting your big-game animal or turkey, notch the month and day of the kill
- Completely remove the backing from your carcass tag and attach it to your animal as shown on the back of the tag.

Reporting is mandatory

Remember, whether or not a hunt or harvest occurs, harvest reporting is mandatory for all big-game, turkey and trapper license holders. You can report your harvest either online or by telephone.

If you need assistance

If you need help obtaining a carcass tag or hunting license, or, for further clarification, please contact the department's phone center at 1-888-248-6866 (toll free).

New Shooting Range

The department recently opened the Tres Piedras Primitive Shooting Range located 3 ½ miles west of Tres Piedras on commissioned-owned property. The Tres Piedras Wildlife Management Area is approximately 3,200 acres purchased in 1940 to provide a restoration area for sage grouse and pronghorn.

The department developed a 200-yard, 10 firing-point range on the property to provide area hunters and out-of-state hunters a place to sight-in their rifles before they venture out into the field. The range is open seven days a week from dawn to dusk. It is unmanned; therefore, shooters must coordinate with each other.



Directions

For directions to Tres Piedras Primitive Shooting Range, visit: www.wildlife.state.nm.us/recreation/shooting-ranges/.

Left: Conservation officer Adan Jacquez checks a hunter's license in the field. Department photo by Martin Perea.

Right: Shooting range rules.

Recruiting New Hunters

By John Martsh

I sat on the edge of a cornfield with my son and his friend. White clouds exploded from our mouths with each breath. It was early November, and this sandhill crane hunt would be my son's first hunt. He had drawn a coveted youth permit to hunt cranes on the New Mexico Department of Game and Fish Casa Colorada Wildlife Management Area (WMA) in 2014.¹

A mixture of trepidation and anticipation ran through my mind before sunrise. My son was 13 years old and said he wanted to try hunting after watching me duck hunt alone for a season. He had passed the quiz for the department's mentored-youth hunter program in 2013, since he hadn't taken a hunter education course yet. Would he enjoy the experience enough to do it again? Could this shared outdoor time strengthen our father-son bond and bring us closer together? Would this activity create a lifetime love of the outdoors? Would he get shots at cranes and maybe harvest his bag limit of three²? All these thoughts flew through my head as we waited for the cranes to fly over our meticulously arranged decoys.

My son asked me how hard it was to clean a harvested animal. I told him it wasn't difficult at all, and we could do it together the first few times. He also wanted to know how much to lead (put the front bead on top of the shotgun) a bird in the air. I told him it would depend on the velocity of the bird and that he could practice by shooting clay pigeons at a skeet or trap range.

First time hunters, like my son, will also have a few concerns:

- Will they enjoy the experience? This is dependent on personality, life experience and what transpired on the hunt. All you can do as coach, mentor, family member or friend is make them comfortable and put them in a position to be successful.
- What if I don't harvest an animal? Hunting isn't about harvesting an animal every time; it's about enjoying the out of doors. Enjoy the journey, not the final destination.

A few other concerns that new hunters have include:

- How do I learn how to hunt (equipment, locations, firearm safety, rules)? Take a New Mexico Department of Game and Fish hunter education course, join a specific hunting organization such as Ducks Unlimited, Rocky Mountain Elk Foundation or Mule Deer Foundation, get paired with a mentor from Game and Fish volunteers, take a department hunting skills-based camp, study the Big Game Hunting Rules and Information Booklet.
- What if I want to go hunting but can never draw? New Mexico offers a myriad of small game hunting opportunities. The small game license is over the counter and does not require someone to be lucky in the draw. Small game species include: grouse, quail, dove, waterfowl, squirrel, cranes and turkey.
- Will hunting be an expensive hobby? It can be, but when you boil it down a license, firearm and comfortable clothing are all that are necessary to harvest an animal. All other gear is superfluous.

Nine tips for beginning hunters

- **1.** Tell someone exactly where you are going and when you will be back.
- 2. Don't hunt alone.
- **3.** Do your homework, make phone calls and scout your hunting area ahead of time.
- **4.** Take a Hunter Education course, even if you are older than 18.
- 5. Have first aid and survival kits in your backpack.
- **6.** Bring more food and water than you think you will need.
- 7. Buy a GPS unit and learn how to use it.
- 8. Make sure you have fresh batteries in your GPS.
- **9.** Sight in your firearm or bow before the hunt starts.

I enjoyed watching the crane hunt, my son beaming as new waves of calling cranes flew over. He shot at and missed most, but managed to harvest three large sandhill cranes. His friend, who didn't have a permit, had fun finding the large birds in the tall corn.

As we were cleaning the birds I asked him if he wanted to go hunting again.

His face lit up and he nodded enthusiastically.

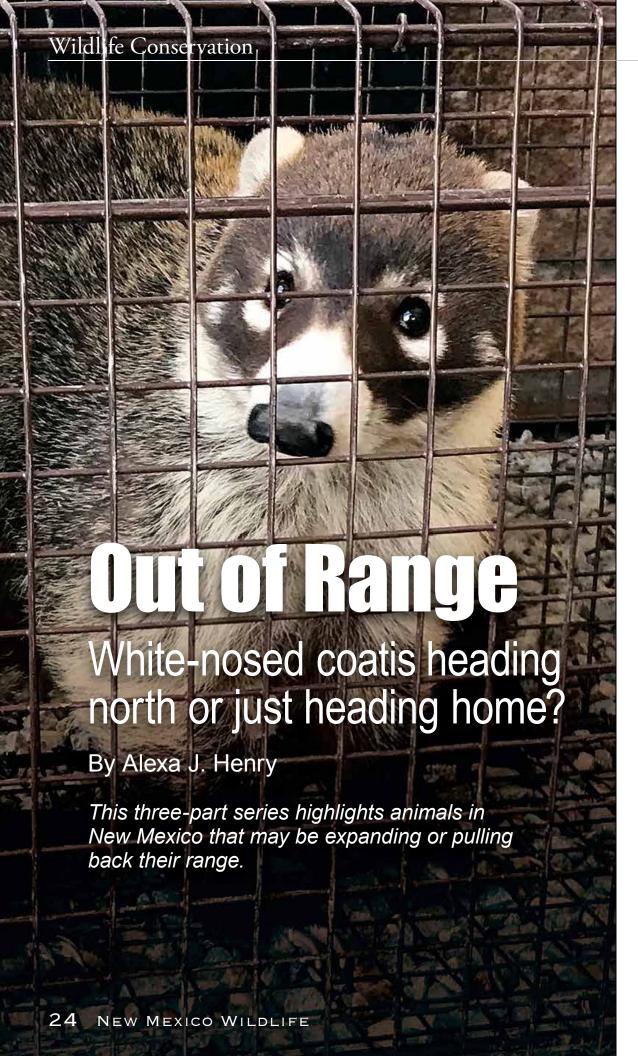
- This WMA is now leased out for farming by a private individual and is not open to public access except for one youth sandhill crane hunt per year.
- ² The limit of three sandhill cranes has since changed to a limit of two.



Right: Sandhill crane decoys. Department photo.



John Martsh is the R-3 program manager and a conservation officer with the New Mexico Department of Game and Fish.



In early April, game wardens in Albuquerque received an unusual call: a white-nosed coati—also known as a coatimundi—was captured by a local pest control company in the village of Corrales situated on the Rio Grande Bosque in Sandoval County.

Corrales—or, really, anywhere far north and east of New Mexico's southwestern region—is well beyond the usual range of the coati. It is uncommon to spot a coati outside of the Gila River area or the "boot heel" of New Mexico, leaving game wardens and biologists wondering if these animals, which are similar in appearance to and can easily be confused with raccoons and ringtails, are finding suitable pockets of habitat further north.

"With their long tails raised in the air, they look like monkeys to some," said Jim Stuart, endangered nongame mammal biologist at the New Mexico Department of Game and Fish, who said he has received calls from people who spotted coatis and describe what sounds like a monkey. "This was the farthest north on record that a coati has ever been captured or spotted. The thought was that this was limited to the southwest part of the state. Perhaps they are rebounding and moving back into areas that they occupied not that long ago."

Around the turn of the century, there were records of coati found in the Gila Mountain and Black Range; more recently they have been showing up in the Rio Grande Valley in southern New Mexico, in the towns of Hatch, Las Cruces and San Acacia. He notes that most of these were all individual animals. Where the species has established populations, they are often seen in large groups, called troops.

Coatis have recently been reported on the Bosque del Apache National Wildlife Refuge. There also have been a couple of records from San Acacia in Socorro County, raising the suspicion that maybe these reports from Bosque del Apache and La Joya Wildlife Management Area are not too far-fetched, Stuart said.

But without the scientific specimens, it's hard to say that for sure, he cautioned. The department has received reports of coati sightings but it's hard to determine a true range using only word-of-mouth reports without photographic evidence.

Jennifer Frey, a professor in the department of Fish, Wildlife and Conservation Ecology at New Mexico State University, cautions that people shouldn't leap to the assumption that an unusual sighting of a coati necessarily means a range expansion, especially when considering factors such as climate change and environmental factors that are changing through land use practices.

Frey, who has conducted research on the geographic range of the coati and is currently writing a chapter on coatis for a book about carnivores in New Mexico, noted that one of the challenges is that New Mexico was colonized by Spain in 1598, making it the first place to be permanently colonized by Europeans in the United States (Jamestown, the first English settlement on the East Coast was in 1607). This exceptionally long period of settlement has resulted in altered environments due to human land uses and altered wildlife communities.

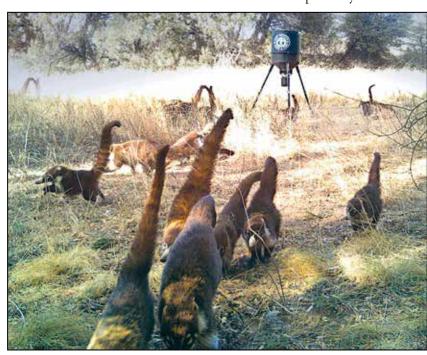
The coati captured in April was not the first one found in the Albuquerque area, according to Frey, who added that its presence doesn't point to a resident coati population in the Albuquerque area.

"Keep in mind, people don't blink an eye

"Keep in mind, people don't blink an eye if a bird is blown off course, but when it's a mammal people react to it in a different way," Frey said. "Male coatis can spend much of the year away from the bands of females and young, during which time they may wander long distances. So, occasional occurrences of solitary males well beyond their normal range are not surprising." Of course, another possibility is that the Corrales animal was an

escaped captive, although keeping coatis as pets in New Mexico is not legal.

The following day, the coati was transported to the Red Rock Wildlife Management Area about 26 miles north of Lordsburg, back home to its familiar habitat, where coatis typically reside.



"Our historical record is based on a landscape that already changed," she noted. "We don't have information about conditions before New Mexico was influenced by Europeans. What people may see as a range expansion may be the species returning to a historical range that had been impacted by humans. Just because we're seeing something in an unusual place today doesn't mean it's unusual for the species."

In fact, she said, coatis may have been more abundant in the past. One hypothesis is that extensive predator control activities that occurred in the 20th century could have decreased the abundance and distribution of coatis in the state. "It seems as though there has been a range expansion when in fact it is probably representing what their natural distribution is," Frey said.

Opposite: This coati was captured in Corrales last April. Department photo by Lance Cherry.

Left: Coatis feeding at a Gould's turkey baiting station along the Geronimo Trail in the Peloncillo Mountains, Coronado National Forest. Department photo by Casey Cardinal.

Right: Coatis are typically found in the southwestern "boot heel" of the state.



About coatis

Coatis are part of the *Procyonidae* family, the same as raccoons and ringtails. Coatis are omnivores and forage for plant, fruit, arthropods and insects. In fact, when the department recently baited for wild turkeys, a pack of coatis showed up to eat the bait. The range of coati extends as far south as South America and currently, at least as far north as southwestern New Mexico and central Arizona.

To learn more about coatis, visit: http://bison-m.org/booklet.aspx?id=050165

If you spot a coati

 Take a photo and record the location information.

You can call the Department of Game and Fish public information number at 1-888-248-6866 to report the possible sighting.

- Do not try to collect it. It is a protected furbearer that isn't trapped. It has full legal protection under New Mexico law.
- Remember: It generally is illegal for New Mexico residents to have a coati as a pet, even if it was acquired outside of New Mexico. While there are some captive coatis in the state, you have to have a special permit to keep one.

Bosque del Apache National Wildlife Refuge is undoubtedly one of the best places in New Mexico and the southwestern United States to photograph large concentrations of waterfowl and other wildlife exhibiting natural behavior. Each fall and winter tens of thousands of ducks, cranes and geese migrate south from their northern breeding grounds and are attracted to the corn, millet and other grain crops grown on the refuge specifically to feed the birds.

Another seasonal migration occurs when hundreds of wildlife photographers from around the world converge on the refuge to capture images of abundant wildlife cast against a background of blue mountains, golden cottonwoods and orange coyote willows. Some lucky photographers manage to capture rare shots of predator—prey interactions such as a coyote pouncing on a snow goose, or a great blue heron spearing a fish. The refuge is literally a world renowned destination for wildlife photographers.

Inevitably, at sunset, the last scene in the refuge before darkness descends is a gaggle of wildlife paparazzi with tripods and telephoto lenses aimed at thousands of cranes and geese gliding to a gentle landing on their night roost ponds. The cacophony of ancient sounds that accompanies the well-fed and happy birds triggers Pleistocene genetic memories.

As the cool weather returns each fall and migratory birds begin moving south, my shutter finger invariably starts twitching, and I begin to visualize scenes or species action shots that I would like to capture this season. However, as many trips to the refuge have taught me, the richest photographic rewards always come from multiple visits to the refuge over years and under a variety of weather conditions, with many hours of observation and waiting patiently for novel wildlife behaviors or interactions to occur.

Opposite: Great blue heron hunting for fish at Bosque del Apache NWR. This species can be found at the refuge year-round.

Opposite inset: Great-tailed grackles flocking at sunset.

Top: Solitary sandhill crane at sunrise.

Bottom: A belted kingfisher scanning for fish at the refuge.

Each fall and winter tens of thousands of ducks, cranes and geese migrate south from their northern breeding grounds and are attracted to the corn, millet and other grain crops grown on the refuge specifically to feed the birds.









Top: A sandhill crane gracefully glides to a landing in a corn field.

Bottom: Sandhill cranes against an orange sunset approach their night roosting pond.

Since the wildlife at the refuge are generally habituated to vehicles, a photographer can use his or her car as a blind and sit within a few feet of the birds without disturbing them. Refuge staff have restored hundreds of acres of non-native tamarisk forest to wetlands and shallow ponds that provide secure night-time roosting and day loafing areas for



the birds. Parking near these concentrations of birds provides the best opportunity for close-ups. The image above of mallards flushing from a cornfield was taken from a vehicle.

In addition to the amazing concentrations of wildlife, the absolute beauty and quality of light at the refuge attracts both amateur and professional wildlife photographers as well. The rarest and most colorful moments are captured during the photographic golden hours of dawn and dusk, when the birds fly out from their nighttime roosting areas or return. Bosque del Apache provides a limitless and ever-changing pallet of gold, red, orange and pink reflections on the water and clouds as a backdrop for the birds, as demonstrated by the image of a roosting sandhill crane on pink water.



After returning from a wildlife photography foray to the refuge, downloading the photos in anticipation and viewing the hopefully fulfilling results, I always count my blessings that New Mexico has been endowed with this gem of a national wildlife refuge and diverse and abundant wildlife populations. I also remind myself that the refuge, and the wildlife that grace it, would not be possible without the legacy of conservation that we have inherited and must continue to support.



Mark Watson is a biologist and habitat specialist with the Ecological and Environmental Planning Division of New Mexico Department of Game and Fish.

Mark has worked for the department for 21 years. He received a Bachelor of Science degree from the University of New Mexico in biology, with emphases in ecology and zoology. In his spare time, Mark loves to hike, hunt, fish, camp and photograph wildlife.





Center: Hundreds of mallards and other duck species take flight from a cornfield at dusk.

Top: A snow goose looks on while a sandhill crane prepares for flight at first light.

Below: Intentionally blurred image of snow geese emphasizes movement in flight.

Sunrise 14,089

By Nathan Wiese

Now a trout biologist, Nathan Wiese muses on the path from his first whitetail hunt as a boy on his grandfather's farm in Wisconsin, to waiting out a pronghorn buck beneath an immense sky on the New Mexico shortgrass prairie. It is said that Homo sapiens will witness approximately 25,000 sunrises in a lifetime. Of course, people don't wake for all of them, but the sun still rises and time ticks along to an eventual end. But some sunrises are special. Yes, every day, the sun rises at a mathematically measured time and place and enlivens an amalgam of stratus, cirrus and cumulus clouds predicted with a relatively degree of certainty.

New Mexico sunrises stand out. Experiencing a sunrise on the broad prairie is a spectacle to witness. Northern New Mexico prairie is truly mile-high country. Perched in the atmosphere, the horizon stretches 86.6 miles wide and the stage is always set to impress.

It's still dark and I'm hunkered in the arid short-grass prairie near the Kiowa National Grasslands with my good friend Andrew Miller. Miller carries his camera and all the accoutrements of an ardent photographer. He makes his living with a lens. I carry my .270 rifle, scarred by years of use. Each autumn I strike adventure to harvest free-range organic meat to feed my family. In my pocket, I have a coveted public-draw pronghorn antelope tag. Last night we watched the sun set into a chorus of monsoon showers and lightning bolts; an image still seared in my mind.

This is Miller's first antelope hunt. We have settled down in the cholla cactus near an old arroyo. The dawn is still inky black, but the tips of our rusty windmill landmark are just showing. The windmill marks a water tank, an oasis on the prairie for cattle and wildlife alike. The centurion steel has long since been retired, the water instead delivered by miles of electrical lines and poly pipe. The spire is now only a landmark—at once a reminder of the past, and maybe a symbol of the future.

Sitting on the prairie, under the blinking stars, stirs memories from 9,000 sunrises ago. It's cold, but not breath-stealing like so many of the cold Wisconsin winters of my childhood. A chill seeps into my toes to remind me of when my mother would slip bread bags over my feet to keep them dry, the only Gore-Tex I knew. I remember my father coming in to wake me, a 12-year-old boy, to his first opening-day deer hunt in the North Country. But I haven't slept all night; I tossed and turned dreaming of a white-tailed deer, the hunt, the excitement, growing up into the tradition. Opening day, always the Saturday before Thanksgiving. A young boy doesn't give much thought about tradition—but I was hurtled into it by envy of fathers and peers.



Half awake, I pack candy bars, hoarded from Halloween bags. I groggily amble to the old Chevrolet. The passenger door is hopelessly mangled, so we slide across the bench seat from the driver's side. The engine groans to life under the strain of subzero mercury. The drive drags on, but it is only 8 miles to my grandfather's farm. Short legs struggle behind an invincible father, but finally we arrive to the woods where we will hunt. I'm small, so I skip the broken block steps in favor of the remaining nail spikes and upward I go into the tree stand. It was a real coming-of-age moment I can see now put me on a trajectory to my contemporary role with Gila trout conservation.

The past begets the future. The past and present conjoin here, surrounded by prickly cholla on the prairie at first light while I mentally chew on the matter of conservation. The North American model of public ownership of wildlife makes this possible—for a kid in the North Country or a grown man in the West.

"There!" Miller hisses in restrained excitement, stirring me back to the present. Antelope mix around us. The inky sky transformed to crimson and blue as the sun starts to bleed over the horizon.

The antelope doe is at only 20 steps, her eyes boring holes in our cholla cover. Miller's shutter snaps don't alert the antelope, but I keep my eyes to the side. There will be a buck. My muscles cramp in the cold. Mere moments stretch into eternities. The sun keeps at its clockwork climb.

Big eyes keep us pinned, motionless on the prairie, waiting. Pronghorn have phenomenal eyesight.

More antelope materialize in bands of sunlight as if from vapors. Time ticks. The horizon is huge, but our vantage, between the cholla, is narrow.

When I see the buck, there isn't time for rangefinders or second guesses. I fire, and the buck stands. I send a second round with practiced quickness and the same result.

Pause. Exhale.

The buck is much closer than my first estimate. I resettle the crosshairs and squeeze off the last round as the golden light of the dawn illuminates the ghost of the prairie.

Sunrise 14,089 has seared a permanent memory.



www.fws.gov/southwest

Nathan Wiese is the manager of the Mora National Fish Hatchery in northeast New Mexico, where he and his crew oversee the captive stocks of Gila trout, a threatened species. See

Andrew Miller is a freelance photographer that started his work in Glorietta, N.M. and more recently in Denver. He is an avid angler and aspiring hunter with both lens and shotgun. His work capturing the outdoor spirit has been showcased in numerous publications.

Photo by Andrew Miller.



How can I get a turkey license?

And other common questions for Game and Fish

Every week, the New Mexico Department of Game and Fish's information center receives hundreds of questions from the public about a wide variety of topics ranging from where hunters can obtain carcass tags, how to print a hunting or fishing license and when the department publishes the weekly fish stocking report.

"The information center does everything possible to get the correct answers to all of the questions people are requesting," said Lisa Brejcha, information center supervisor. The center is staffed with experienced hunters and representatives familiar with department rules and regulations.

During certain times of the year—for example, in March when hunters may need assistance applying for the big game draw—the center stays open extra hours to accommodate the number of calls coming in.

Here is just a sample of the common questions the information center receives throughout the year.

How can I get a turkey license?

A game hunting license, an over-the-counter turkey license with tags, and a Habitat Management & Access Validation (HMAV) (must be purchased and possessed by all hunters 18 years of age or older) are required. HMAV is a once-per-license-year fee used to lease access to private lands for public use; provide public access to landlocked public land; and provide improvement, maintenance, development and operation of State Game Commission property for fish and wildlife habitat management.

A Habitat Stamp is required for hunting on Bureau of Land Management or U.S. Forest Service lands.

Draw permits are required for those hunters lucky enough to draw and want access to a highly sought after location. Resident and nonresident spring or fall over-the-counter turkey licenses are available online, by telephone, at department offices and at license vendors.

Online and telephone purchases must be made at least 14 days prior to hunt start date to allow mailing of tags.

Where are my carcass tags?

If applying for any big game species (deer, elk, antelope, bighorn sheep, Barbary sheep, ibex, oryx and javelina), you will be mailed a tag, and must verify your address when you select your hunt codes. All hunters are responsible for printing their required licenses; only carcass tags will be mailed.

If applying to hunt bear and turkey, you are required to purchase the license if successful in the draw. A tag will be issued with the license.

Online purchases must allow enough time (up to 14 days) to receive the tag in the mail prior to hunting, otherwise, customers may be required to obtain a tag in person at a license vendor or department. Please take note of the specific tagging information and instructions on the back of the tag. The center receives a lot of calls regarding antlerless elk hunts and hunters thinking they can harvest a bull because of the antler/horn tag.

How do I hunt on private property?

New Mexico state law requires sportsmen to obtain written permission prior to hunting, fishing or trapping on posted private property (NMSA 30-14-1). Violation of this statute is a misdemeanor offense and could lead to a revocation of hunting and fishing privileges for up to three years. Ignorance is no excuse; it is your responsibility to know the law and your location at all times.

The department encourages all hunters and anglers to use courtesy cards. By exchanging information on a courtesy card, a positive landowner-sportsman contact is established. Landowners are much more likely to all allow access if they have the names and vehicle descriptions of sportsmen.

Can I use a scope when hunting?

Yes, you can use a scope to help magnify but cannot project light on or at an animal.

Do I need a special permit to go hiking on State Game Commission Lands?

Yes. A group of up to four adults must possess at least one hunting license, fishing license, trapping license or Habitat Management and Access Validation (HMAV), valid for the current license year, which runs from April 1 to March 31. Youth under the age of 18 are exempt from license and validation requirements.

When do you put out the stocking reports?

The department publishes stocking reports every Friday afternoon. You can access the reports on the department website or subscribe to receive the stocking report in your email box.

To contact the Department of Game and Fish information center with your questions, please call: 888-248-6866. The center can also be reached via email at: ispa@state.nm.us.

Information center hours: Monday to Friday, 8 a.m. to 5 p.m. The information center is closed weekends and holidays.



Lisa Brejcha is Information Center Supervisor in the Information and Education Division at the New Mexico Department of Game and Fish.

Aiming for the luring





A record number of young archers from across New Mexico competed in the 2018 National Archery in Schools Program (NASP) New Mexico State Tournament. 906 archers competed surpassing last year's record attendance number of 840.

"Archery is gaining popularity as a competitive sport among New Mexico's students," said John Martsh, R-3 program manager for the New Mexico Department of Game and Fish. "Our department is proud to support young archers and encourage their interest in this challenging extracurricular activity. We are pleased so many kids were eager to demonstrate their skills and sportsmanship."

More than 100 public schools across New Mexico participate in the program that fits youth no matter their popularity, athletic skill, gender, size or academic ability. The department will provide educator training, hosts the state tournament in 2019 and access to archery equipment through the "Archery Loaner Program" including 10 right and 2 left handed Genesis bows, two boxes of arrows, five targets, an arrow curtain, a repair kit and a bow rack.

For more information about the National Archery in the Schools Program and how your school can get involved, contact John Martsh, R-3 program manager at (505) 222-4719 or d.martsh@state.nm.us.

Top: Cipriana Sanchez takes careful aim at her target at the 2018 NASP State Championships. Cipriana competed with the team from Milan Elementary.

Bottom: Cipriana and a NASP volunteer remove arrows from a target.

Department photos by Martin Perea.



Did you know that there is a special bird in our state that uses an underground burrow?

The burrowing owl is the only owl in North America that nests exclusively underground.

These unique owls are less than 10 inches tall. They weigh about as much as a baseball, have brown and white feathers, white "eyebrows" and throats, long legs and bright yellow eyes.

Burrowing owls can be found throughout our state during breeding season (March through October), and some spend the winter in southern New Mexico. They are uncommon but can be found in a variety of open habitat types—grassland, savanna, desert scrub, agricultural and even some urban areas.

How do burrowing owls build their burrows? "The western subspecies of burrowing owls that we have in New Mexico rarely dig their own burrows," said Erin Duvuvuei, nongame avian biologist at the Department of Game and Fish. "They typically use abandoned burrows dug by fossorial (burrowing) mammals, such as prairie dogs, ground and rock squirrels, badgers, foxes and coyotes," she said.

Sometimes, they excavate—or dig—their own burrows by using their beak and feet to dig and scrape soil.

Burrowing owls collect trash, bones, and mammal dung and place at burrow entrances. Some owls line burrows with feathers, grass and dung. At first, researchers thought the dung was used to mask the scent of the eggs and young owls inside the burrow from predators, but this is no longer thought to

be true. The materials at burrow entrances may be used to show that the burrow is occupied, and dung attracts dung beetles, which the owls eat.

Burrowing owls lay seven to 10 white eggs; the female owl incubates the eggs inside the nest chamber for about 30 days, and the male owl brings food to her and the chicks once the eggs hatch. About one to two weeks after the eggs hatch, both the male and female need to hunt and bring back enough food to feed the chicks.

Chicks can be seen standing at the burrow entrance at about two weeks old, and they soon start running, hopping and flapping; some young can fly and leave the burrow at about six weeks old, but it takes longer to become strong flyers and good hunters.

Left: In areas where food is plentiful, burrowing owls can be found in greater densities and are most commonly associated with prairie dog towns. Burrowing owls will use burrows vacated by other animals, but few of those can match the craftsmanship of prairie dogs.

Right: The burrowing owl was nicknamed the "howdy bird" because it seemed to be greeting people by bobbing its head up and down. Although it appeared to be a welcoming gesture, it is actually an act associated with agitation.

Department photos by Dan Williams.



Other interesting facts about burrowing owls

What do they eat? A lot of insects, as well as other arthropods (scorpions and centipedes), mice, voles, ground squirrels, small birds, lizards, snakes, frogs and toads.

How do they catch prey? They catch prey by running, snatching in midair, hovering and swooping from perches.

How high can they fly? During courtship flights, burrowing owls (usually males) are reported to fly up to about 100 feet, hover briefly, and then drop from the air quickly. While hunting, they typically fly low to the ground.

What kind of sounds do burrowing owls make? Burrowing owls are not particularly vocal, but they make a variety of sounds. The most common sound is a two-note "coo-cooo" by males during courtship and defense of their territory. Young owls make an "eep" sound as well as a raspy hissing sound that sounds very similar to a rattlesnake rattle and might scare potential predators away from the burrow.

What else are burrowing owls called?

The scientific name for burrowing owls is *Athene cunicularia*. Burrowing owls often stand at their burrow entrance and bob when approached by humans, so cowboys and pioneers called them "howdy owls" – they thought this behavior looked like a friendly greeting.

What should I do if I see a burrowing owl? Grab some binoculars and watch quietly from a distance. Please don't approach too closely or disturb these unique owls!

Cool Jobs at Game & Fish **Meet Trevor Nygren**

Hello, my name is Trevor Nygren. I am a conservation officer for the New Mexico Department of Game and Fish, currently stationed in Cuba. Although I have only worked for the department for about two years, I have been fortunate enough to be a part of the family my entire life.

My father, Bryan Nygren, retired as the Carlsbad District Sergeant after 25 years of service as a conservation officer. Growing up, some of my best childhood memories were riding along with my dad and assisting him on special projects in the Carlsbad area. Great memories included deer captures and relocations, turkey releases and electro-fishing surveys at Brantley Lake, just to name a few. As a young child growing up, I got to see all the cool things my dad did as a conservation officer. This helped me decide at a very young age that I wanted to be a conservation officer, too.

My favorite subject in high school was math because it was something I was always good at. However, when I attended college at New Mexico State University, majoring in wildlife sciences, I soon realized how much I enjoyed the biology classes. My favorite class was mammalogy, the study of animals such as deer and elk. I not only realized that these classes were challenging, but very interesting and fun at the same time.

While attending college, the department hired my older brother, Travis. Travis is currently a conservation officer stationed in Capitan. Now I not only look up to my dad, but to my brother as well.

A conservation officer job is unique and every day is different. We get to do a lot of different and fun stuff but our main priority is to help conserve and protect wildlife.



Above: Trevor Nygren helps a young angler learn casting skills. Department photo by Tristanna Bickford.

Name the River

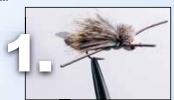
Identify the name of seven New Mexico rivers by matching each with its corresponding number: Canadian River, Gila River, Pecos River, Rio Chama, Rio Grande, San Francisco River and San Juan River.

The answers are listed in the key at the bottom of the page.



Fishing flies

Woolly bugger, Parachute Adams, Elk hair caddis Fishing flies have some pretty strange names. Here are six flies you can use to fish in New Mexico's rivers. Can you match the fishing flies with their correct names? Find the correct answers below this column.













Map answer key: ◑ super hopper ❷ Rio Chama ❸ Rio Grande ❹ Canadian River ❺ Pecos River ❻ Gila River ◙ San Francisco River ਿ midge ∰ suswer key: ◑ super hopper ② Quigley's film critic ③ Beadhead prince ④ Larson's legend gold stone ⑤ psycho prince blue ⑥ midge

Department seeking the

Next Generation of conservation of ficers

SANTA FE – The New Mexico Department of Game and Fish is seeking qualified men and women to join the next generation of conservation officers who protect and conserve the state's wildlife.

Applications for this position will be accepted until Oct. 31. Physical assessments and interviews will take place Dec. 1 in Santa Fe. Candidates who pass the interview may be required to stay in Santa Fe from Dec. 2-7 if they are selected to continue with the process after the physical assessment and written exam.

Prior law enforcement experience is not required but successful applicants must possess a bachelor's degree in a related field such as fisheries or wildlife biology, forestry or criminal justice. Candidates also must pass a psychological exam, medical exam, background investigation and fitness and drug test.

Applicants must also pass a written exam and an oral interview board before being offered a position. If hired, recruits will receive basic training at the law enforcement academy, the department recruit school and one year of on-the-job training before working alone in the field.

Conservation officers enforce New Mexico's game and fish laws, investigate criminal cases and pursue civil cases against offenders. They work primarily alone in the most remote regions of the state and are often stationed in small towns. Officers also educate the public about wildlife and wildlife management, conduct wildlife surveys, capture nuisance wildlife, investigate wildlife damage to crops and property, assist in wildlife relocations and help develop new hunting, fishing and trapping regulations.

Interested applicants can get more information about conservation officer duties, educational and physical requirements, training, and employee benefits by visiting the enforcement page on the department's website.

www.wildlife.state.nm.us/ enforcement/ career-advancement

Department photo by Martin Perea.

