

New Mexico

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Wildlife

A close-up photograph of a bird, likely a woodpecker, with a prominent crest and a long, straight beak. The bird is holding a small lizard in its beak. The background is a soft-focus natural setting with tree branches and green foliage.

Supporting conservation in our state

Also: Raising Rio Grande cutthroat trout at Seven Springs ■ Tips for hunting ibex in the Floridas ■ The origin story of the Department logo

Annual Survey Reports Stable Bighorn Population in Rio Grande Gorge

About 400 Rocky Mountain bighorn sheep reside in and around the Rio Grande Gorge, according to an annual survey conducted by the Department of Game and Fish in December 2019. Biologists and participants counted a total of 296 rams, ewes and lambs; the population estimate remains stable at 375 to 420 animals.

The survey was conducted by personnel from the Department, the Bureau of Land Management and volunteers registered with the Department including the New Mexico Chapter of the Wild Sheep Foundation. Crews covered the Rio Grande Gorge from Embudo to the Wild and Scenic Rivers Recreational Area north of the Red River confluence.

The Department issued ewe licenses starting in 2018 to stabilize this growing population and limit the potential for disease transmission between domestic sheep flocks in the area and a burgeoning herd, said Caitlin Ruhl, bighorn sheep biologist with the Department.

“Ewe hunts in 2018 and 2019 appear to have helped slow the growth of the Gorge herd as this is the first year the population estimate hasn’t increased since their reintroduction in 2006,” Ruhl explained.



Ewe with lamb at the Rio Grande del Norte gorge survey in 2017. Department photo by Jeremy Lane.

Rocky Mountain bighorn sheep were extirpated from New Mexico by the early 1900s. Decades of restoration work has brought the Rocky Mountain bighorn sheep back to the New Mexico landscape.

Bighorn sheep were absent from the gorge until 2006, when the Taos Pueblo released 23 onto the landscape. The Department followed with the release of 25 additional sheep the following year.

Donate part of your state tax refund to help wildlife

Want to help wildlife in need of conservation? It’s as easy as filling 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 nonprofit 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 projects, especially species with little information. 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 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 3 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 from the Motor Vehicle Division. Be on the lookout for a new license plate coming later in 2020 featuring New Mexico’s state bird, the greater roadrunner. 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.



Top: The new Share with Wildlife license plate will feature the greater roadrunner and will be available later in 2020.

Bottom: Share with Wildlife license plates available at MVD.

**Support
New Mexico's
Wildlife**

with a Share with Wildlife license plate!

When you select a Share with Wildlife license plate, \$15 of the initial fee and \$10 from each renewal go directly to wildlife.

Thank you for supporting New Mexico's Wildlife.

MVD **Share with Wildlife**
New Mexico Department of Game and Fish
Conserving New Mexico's Wildlife for Future Generations



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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Important Telephone Numbers

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Cover: The greater roadrunner is New Mexico's state bird. It will be featured on the soon-to-be-released new Share with Wildlife license plate. The roadrunner in this photo was found at Bosque del Apache National Wildlife Refuge. Department photo by Mark Watson.

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It's time to take the Trout Challenge

By: Ross Morgan



Anglers in New Mexico are very fortunate to have such diverse fishing opportunities, especially when it comes to trout. With five different trout species all within a few hours of each other, catching part or all of them can be quite the challenge.

In January 2020, the Department of Game and Fish launched the New Mexico Trout Challenge. This challenge, which is the first of its kind for New Mexico, encourages anglers in our state to catch five of New Mexico's trout species. The five trout species that anglers will be challenged to catch are the Rio Grande cutthroat trout, Gila trout, brown trout, brook trout and rainbow trout.

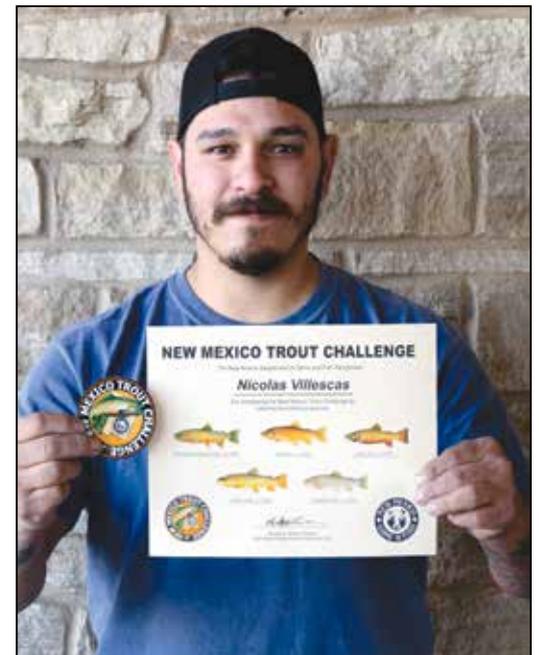
Anglers who choose to participate in the challenge will need to download an application on their smart phone or tablet to track their progress. Information such as the lake or stream where the fish was caught, how much the fish weighs along with a picture of the fish are just a few examples of what will be required

from anglers. For anglers who do not have a smart phone or tablet, there will be alternative ways to enter this information such as calling the information center or by submitting the information via email or regular mail.

There is no time limit to complete the challenge and every angler that completes the challenge will receive a New Mexico Trout Challenge coin for bragging rights.

"This challenge will not only test the fishing abilities of trout anglers across the state, it will be a great way for fellow anglers to have some friendly fishing competition for bragging rights," said Kirk Patten, chief of fisheries management for the Department.

Check out the New Mexico Trout Challenge website for the official rules of the New Mexico Trout Challenge and see if you can be the first of your friends and family to complete it.



A huge shoutout and congratulations to Nicolas Villescás for being the first person to complete the New Mexico Trout Challenge.



Left: Rainbow trout. Department photo by Ross Morgan.

Ross Morgan is the Department of Game and Fish public information officer for the northwest area.





Returning Rio Grande cutthroat trout to New Mexico's waters

By Alexa J. Henry and Tristanna Bickford

Have you ever wondered why Rio Grande cutthroat trout conservation is important? Rio Grande cutthroat trout are not only New Mexico's state fish, they are also native only to northern New Mexico and southern Colorado.

The presence and abundance of native trout on the landscape helps maintain a healthy and balanced ecosystem. Rio Grande cutthroat trout provide a unique angling experience and are popular with anglers. Department survey data suggests that approximately 30 percent of New Mexico anglers prefer Rio Grande cutthroat trout (RGCT) over other cold-water species.

Rio Grande cutthroat trout occupy about 450 miles of stream in New Mexico. The species, *Oncorhynchus clarkii virginalis*, is the southernmost occurring subspecies of cutthroat trout.

The Department raises Rio Grande cutthroat trout exclusively at Seven Springs Hatchery, and for good reason, said Tony Jacobson, hatchery manager at Seven Springs. Broodstock kept at Seven Springs are genetically pure cutthroat trout sourced from wild populations.

"Primarily, our main focus is on recovery of the species," said Jacobson. "They're going into areas where all of the nonnative trout have been removed. In a lot of cases barriers have been put in place to prevent the nonnatives from getting back in there.

We don't want to raise a rainbow trout alongside a cutthroat in case there's some mixing... you would just lose a lot of work in one restocking event."

Raising wild fish at hatcheries takes special care, Jacobson said. The growth rate of Rio Grande cutthroat is slow when compared to rainbow trout. The hatcheries source water, from deep springs, remains at a constant 48 degrees year-round.

Anytime you're working with wild strains of native stocks of fish there are unique challenges.

"A lot of the fish raised in hatcheries today are from domesticated strains," he said. "They might be triploids (three sets of chromosomes), for example. Our hatchery populations are all wild strains, some first generation in hatchery straight out of the stream."

Fish raised from wild strains tend not to tolerate real high densities that domesticated fish could, he explained. The hatchery raises cutthroat at low densities to ensure their survival and best obtainable health.

The Department releases an average of 300,000 cutthroat—mostly small fry—per year, Jacobson noted. About 10,000 cutthroat trout will be stocked in the Rio Grande later this year during the Department's annual Rio Grande gorge stocking event.

Left: Jeff Laskie, assistant hatchery manager at Seven Springs, shows off a Rio Grande cutthroat trout. Department photo by Martin Perea.



Alexa Henry is the editor of New Mexico Wildlife.



Tristanna Bickford is the communications director with the Department of Game and Fish.

More about Rio Grande cutthroat trout

A Q&A with Tucker Brauer, Rio Grande cutthroat biologist



In an interview with *New Mexico Wildlife*, Tucker Brauer, Rio Grande cutthroat biologist with the Department of Game and Fish, talked about the reintroduction of this important species to our state. Brauer, who is originally from Idaho, received an associate's degree in aquaculture from College of Southern Idaho and bachelor's and master's degrees in fish science from the University of Idaho.

Prior to his current position, he worked extensively with the Idaho Department of Fish and Game and the Idaho Cooperative Fish and Wildlife Research Unit where he focused on fisheries research and management.

Where can anglers currently fish for Rio Grande cutthroat trout (RGCT)?

The majority of opportunity lies in the northern part of the state throughout the Rio Grande basin and Pecos River basin. Popular areas for fishing include the Rio Costilla and upper Pecos River.

Many RGCT populations in New Mexico are managed as "Special Trout Waters." Certain RGCT conservation populations are catch-and-release only and the remaining populations are protected by a bag limit of two fish per day.

Where else do you plan to reintroduce Rio Grande cutthroat trout in our state?

There are a lot of streams currently being considered for RGCT reintroduction. We are currently planning reintroductions into Capulin Creek and Peralta Creek, both of which were affected by the Las Conchas wildfire.

In addition to post fire repatriation, we are planning to begin a RGCT restoration project on Rio Costilla in Fall 2020. This project will restore RGCT to an additional 25 miles of their historical distribution.

How does wildfire impact RGCT?

Wildfire itself generally doesn't kill fish. Instead, monsoon rainfalls following wildfire often wash away unstable soils that often occur after wildfires and can cause high debris flow into streams. These debris flows can effectively "choke-out" the stream and make conditions uninhabitable for fish.

Wildfire has the potential to significantly impact the conservation status of RGCT in our state. Wildfire risk assessments completed in 2013 found that 86 percent of RGCT populations exist in high wildfire

risk areas. The Department is continually working to duplicate at-risk RGCT populations on the landscape through fish transfers and wild-spawning efforts. By duplicating important RGCT populations, the risk of wildfires wiping out entire genetic strains of RGCT is reduced.

Can you describe the impact of the Las Conchas fire in 2011 on RGCT?

The wildfire devastated some populations of RGCT in that area. However, there was a benefit in that the fire cleared many streams of nonnative fish populations. This has provided multiple opportunities to reintroduce native RGCT throughout the affected area.

Should anglers be aware of any restrictions on streams the Department is repatriating with RGCT?

All these wildfire repatriation streams will be managed under our statewide cutthroat regulations. That means only two Rio Grande Cutthroat can be harvested per day with no tackle restrictions. If we designate a recovery stream as a Special Trout Water, then there will be additional tackle and harvest restrictions specific to that stream. For more information, visit:

<http://www.wildlife.state.nm.us/fishing/game-fish/>

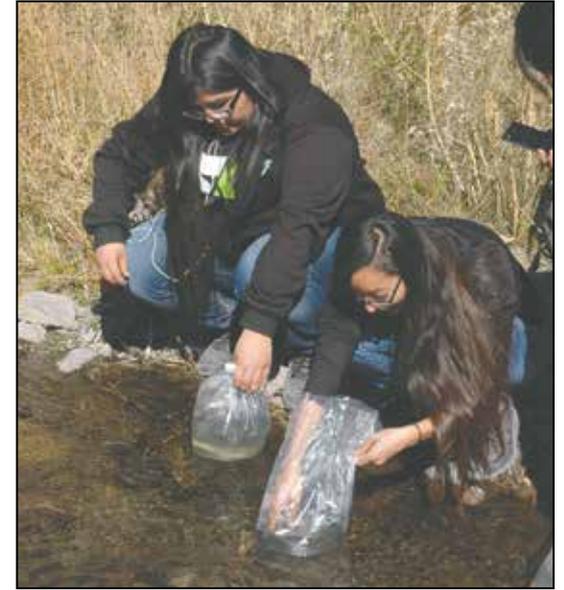


Left: Rio Grande cutthroat trout. Photo by Craig Springer, U.S. Fish and Wildlife Service.

Tucker Brauer is the Rio Grande cutthroat biologist with the Department of Game and Fish.

Trout in a Tote

By James W. Pitman



Have you ever seen trout swimming in a backpack? It sounds odd but on a recent trip with the Department's Rio Grande cutthroat trout biologist, Tucker Brauer, that's exactly what I saw – several hundred cutthroat trout swimming in dozens of backpacks.

It's a stocking technique utilized by fisheries biologists to release fish in wilderness and other hard-to-reach streams where more conventional stocking methods are not possible. A tanker truck, full of wild-caught fish from a healthy population, is driven as close as possible to the nearest access point. In our case it is a trailhead that is the start of a several mile hike down to the Rito de Los Frijoles below. The fish will have to be backpacked to their new home from here.

The cutthroats are removed from the tanker truck with nets and are placed in large plastic bags filled with water. As biologists bag the fish, a Passive Integrated Transponder, or PIT, tag reader is used to scan a 'barcode' that provides a unique identification number for that tag. The tags are small electronic microchips enclosed in biocompatible glass that were previously inserted under the fish's skin. Automated PIT tag readers can be placed along different stretches of the stream that will log these identification numbers when the fish swim over the monitoring systems. These systems can provide valuable information to biologists on the released fish's survival and movements.

Now that the fish are in the bags, a hose is inserted to add oxygen and the bags are clamped shut. The extra oxygen helps the fish remain healthy on the hike in to their new habitat. The bags are gently placed in the backpacks of Department staff and volunteers and the hike begins.

On this particular outing, Department biologists and the National Park Service are joined by dozens of volunteers from Trout Unlimited and Santa Fe Indian School. Each person packs several Rio Grande cutthroat trout down into a rugged canyon on Bandelier National Monument. As we hike down the canyon, Brauer explains the uniqueness of the situation that allowed cutthroats to be stocked here. This area was burned as part of the Las Conchas Fire in 2011, which resulted in a total loss of fish and a reduction in fish habitat. However, after several years of recovery, this empty fishery created the perfect opportunity for the restocking of native Rio Grande cutthroat trout without the risk of competition from non-native trout species.

When we finally reach Los Frijoles, the bags are removed from the backpacks and the fish are inspected. All the fish made the hike just fine. The bags are placed in the edge of the stream to allow the fish to become accustomed to the temperature change in the cool running water. After about 15 minutes, the bags are opened and the fish are released by hand in their new homes. This is the second backpack-

stocking of cutthroats since the Las Conchas Fire, with the initial stocking occurring in 2018. Due to the efforts of biologists, and with the assistance of volunteers, Rio Grande cutthroat trout swim once more in a place where their ancestors swam hundreds of years ago. And I can now say I have seen trout swimming in a tote!

For additional information on the initial stocking of Rio Grande cutthroats in 2018, check out Ross Morgan's article "Putting Rio Grande Cutthroat Trout in the Rito de Los Frijoles after the Las Conchas Fire" here: <http://magazine.wildlife.state.nm.us/putting-rio-grande-cutthroat-trout-in-the-rito-de-los-frijoles-after-the-las-conchas-fire/>.

Top (left to right): Biologists prepare a bag of trout for a volunteer; Volunteers hike bags of fish to the river; Volunteers release trout into the Rito de Los Frijoles. Department photos by James Pitman.



James W. Pitman is the assistant chief of information for the Department of Game and Fish.

A Growing Pack of Mexican Wolf Recovery Partners

By Aislinn Maestas

Mexican wolf recovery in New Mexico received a boost last fall when the New Mexico State Game Commission voted unanimously to once again become a lead cooperating agency in the Mexican Wolf Recovery Program.

“It is only appropriate for the New Mexico Department of Game and Fish to have a seat at the table for this issue,” said Joanna Prukop, former chair of the New Mexico State Game Commission. “This allows us to have both influence and input into Mexican wolf recovery. The Commission fully supports this program and wants it to be as meaningful and well-managed as possible.”

Earlier this year, the Mexican Wolf Interagency Field Team (IFT), a task force comprising federal, state, tribal and international partners, found that the wild population of wolves continues to grow at a healthy pace. The recent Mexican wolf count shows the population of Mexican wolves has increased by 24 percent since last year, raising the total number of wolves in the wild to a minimum of 163 animals.

“The count shows we have more wolves, more breeding pairs and more pups born in the wild than ever before,” said Amy Lueders, regional director for the U.S. Fish and Wildlife Service in Albuquerque. “This is the second year we have seen a significant increase in the wild population of Mexican wolves, a success that is directly tied to the science-based, on-the-ground management efforts of the Interagency Field Team.”

In November 2019, the Commission and the New Mexico Department of Game and Fish signed a formal Memorandum of Understanding (MOU) with the U.S. Fish and Wildlife Service. The MOU establishes a framework for collaboration that enables the signatory agencies to implement a long-term, scientifically based program to reintroduce and manage Mexican wolves in Arizona and New Mexico to contribute toward the recovery of this endangered subspecies, in accordance with the Mexican Wolf Recovery Plan, First Revision.

By becoming a cooperating agency in the Mexican Wolf Recovery Program, the Department will once again play a significant role in the management of New Mexico’s wild population of wolves. They will join the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, White Mountain Apache Tribe, USDA Forest Service, USDA Animal and Plant Health Inspection Service – Wildlife Services, U.S. Bureau of Land Management, U.S. National Park Service and several participating counties in approving and carrying out wolf management activities in the southwest.

The decision by the commission to rejoin the Mexican Wolf Recovery Program comes at a critical time. With the recently approved Recovery Plan in place, members of the cooperative effort are working to meet criteria needed to remove Endangered Species Act protections for the Mexican wolf.

“We all share the same goal with this program, which is to achieve recovery and turn management of Mexican wolves over to the states,” said Lueders last fall. “This is a program built on strong partnerships and trust. We are excited to have New Mexico Department of Game and Fish as a cooperating partner and look forward to the expertise and support they bring to the table.”

At the end of 2018, surveys counted a minimum of 131 Mexican wolves in the wild in Arizona and New Mexico. The survey results confirmed there are a minimum of 32 packs of wolves (two or more animals), 18 of which had pups. Mexico began reintroducing wolves in 2011, and approximately 30 Mexican wolves now roam the wild south of the border. In addition, over 300 additional wolves are being held in various captive-breeding facilities located throughout the United States and Mexico.

The Service is currently tracking progress toward its first Mexican wolf recovery evaluation, as recommended in the Recovery Plan: the Five-Year Status Review. This review will be based on release and translocation data from 2015-2022 and on the annual population count for 2022.

The Mexican wolf, commonly referred to as the lobo, is the smallest and the rarest subspecies of gray wolf. The Mexican wolf once roamed throughout portions of Arizona, New Mexico, Texas, and Mexico. As human settlement intensified across the southwest in the early 1900s, wolves increasingly came into conflict with livestock operations. Extermination campaigns were waged against the wolf and by the 1970s, the Mexican wolf had been all but eliminated from the United States and Mexico.



Learn More

The Service provides regular updates, recent location information and management documents for Mexican wolves on its website at <https://www.fws.gov/southwest/es/mexicanwolf>.

Above: Captive-born pups are cross-fostered into wild dens each spring in New Mexico and Arizona.

Background: A Mangas pack Mexican wolf pup captured on camera in 2018.

Photos courtesy of Interagency Field Team.



Aislinn Maestas is a public affairs specialist with the U.S. Fish and Wildlife Service in Albuquerque.

85 years of wearing "the bear head" The origin story of the Department logo

By James W. Pitman



Top: A newly-found Smokey Bear on the Department plane. Note "the bear head" insignia on the fuselage.

Right: Elliot Barker, Judge Colin Neblett and R. B. Coombs.

Photos from Department archives.



Like many New Mexico Department of Game and Fish personnel before me, I have always been proud to wear the insignia of the Department. And while the exact style of the emblem has changed through the years, the concept has remained the same – a circle-shaped outline with the name of the Department curved around the inner edge and the majestic head of a black bear in the middle.

I have often wondered about the origins of "the bear head." I have heard a story told many times that this black bear represents Smokey Bear. At first glance, this story may sound plausible. After all, it was New Mexico Department of Game and Fish that, in 1950, flew the young orphaned cub to Santa Fe from the Capitan Mountains to treat its wounds after a wildfire, and later offered the cub to the U.S. Forest Service for its conservation and wildfire prevention campaign. However, in one of the most iconic pictures of Smokey Bear, the newly-found cub is standing on the Department plane and there on the fuselage is the Department insignia with that well-known black bear face. So, this particular black bear is obviously even older than the famous Smokey Bear.

To get the full origin story of the bear head we must travel back to 1914 when an artist named William Herbert "Buck" Dunton moved to Taos. A founder of the Taos Society of Artists, Dunton became well known for his paintings of the American southwest. Today, his paintings can be found in museums across the country, with many of his works having estimated values in the \$250,000 to \$500,000 range. In addition to being a renowned artist, Dunton was

an avid outdoorsman. He had grown up exploring the Maine woods and, since moving to Taos in 1914, was a hunting companion of Elliot S. Barker, the future director of the New Mexico Department of Game and Fish.

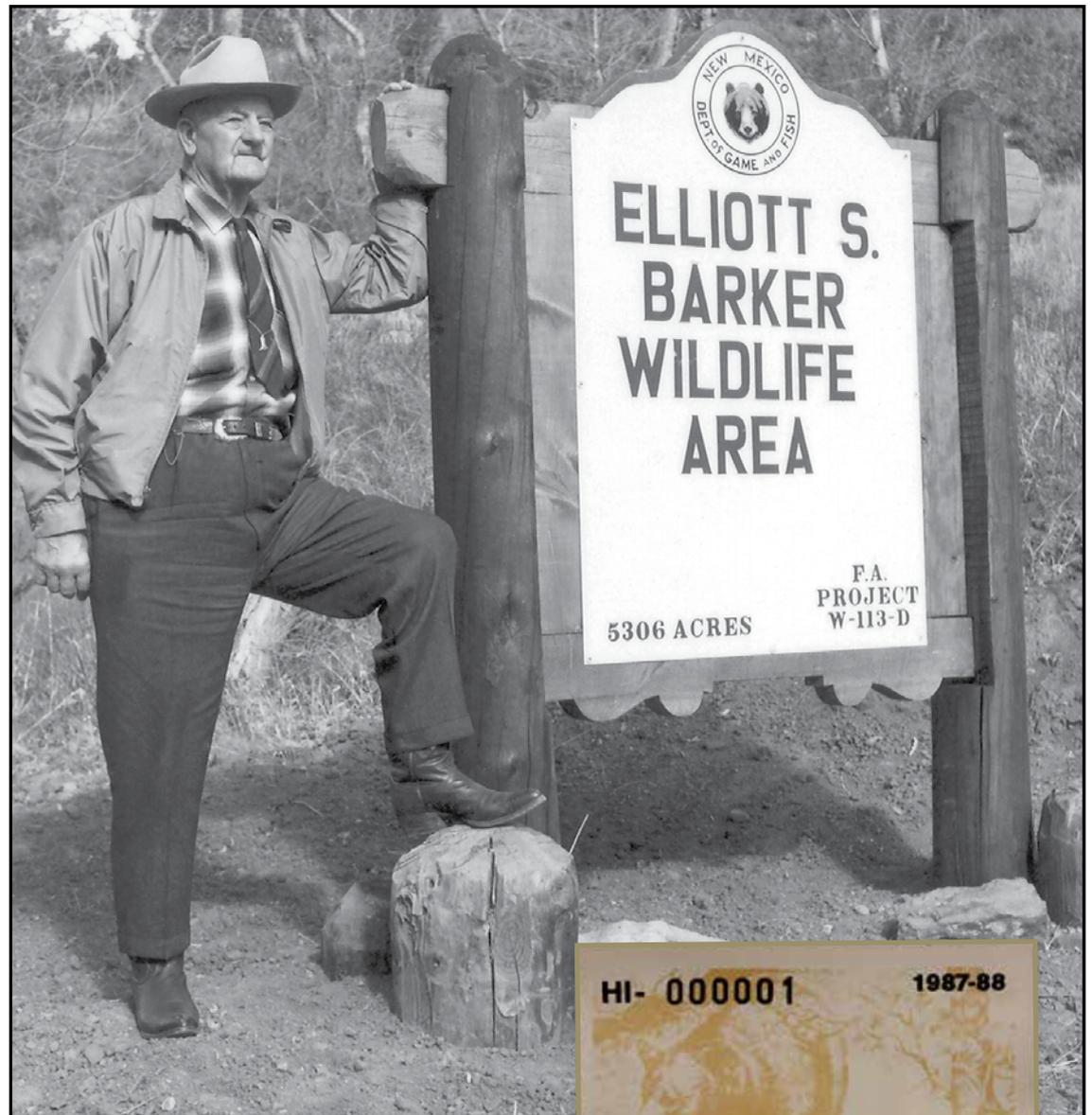
Barker became director of the Department on April 1, 1931 and in August of 1935 he attended a meeting of the State Game Commission where one of the agenda items was “the law...that each state car must have an insignia on it...designating to which department it belongs.”

Barker did not come to this meeting ill prepared, having with him several sketches of insignia ideas from his old friend and hunting partner “Buck” Dunton.

The Commission agreed to pay Dunton the grand total of \$100 to create the insignia and then set out on the task of deciding which image to use. Dunton’s original sketches had included various wildlife including deer and trout. Barker was directed to further consult Mr. Dunton on additional ideas and the matter would be discussed further at the October meeting.

The chairman of the Commission, a lawyer from Virginia who had opened up shop in the New Mexico Territory in Silver City in 1898, served as a New Mexico district judge from 1912 to 1916 and was appointed as a federal judge February 5, 1917, was Judge Colin Neblett. Neblett had been a member of the New Mexico Game Protection Association, a forerunner to today’s New Mexico Wildlife Federation, and had previously pushed to have the black bear included in state law as a protected species. While the listing of the black bear as a protected species with controlled hunting did occur, it wasn’t until 1927, a mere eight years prior to this insignia discussion.

Perhaps the newly protected status of the black bear was on the minds of the commissioners as they made their final decision in December 1935. The minutes read, “It was finally decided that the black bear should be used as an insignia for the Game Department cars” and Dunton went to work on finalizing the image. “Mr. Dunton designed a handsome head of the black bear...with a light muzzle...against a white background, the full-face view of the massive head stood out impressively...surrounded by the legend... Dept. of Game and Fish.”



Since that time, “the bear head” logo has been proudly displayed on Department vehicles, clothing, publications and an endless list of other objects. The year 2020 marks the 85th anniversary of the creation of this Department insignia. It is amazing to me to think of the New Mexico heritage and history that this image represents and all of the hundreds of men and women who have worn this insignia through the decades.

Top: Elliot Barker poses by the Elliot S. Barker WMA sign sporting the Department logo.



The 1987–1988 Wildlife and Habitat Improvement Stamp featured a black bear and displayed the Department insignia.



James W. Pitman is the assistant chief of information with the Department of Game and Fish.

Pursuing the Impossible Goat

By Jared M. Burns

For the outdoorsman, New Mexico offers several excursions to partake in, especially when it comes to big game hunting. Every year, tens of thousands of hunters across the country apply for the annual New Mexico big game draw, and every year in April, those hunters are hoping, dreaming and praying to see the color green and the word “successful” on their applications.



Above: A mature billy watching the helicopter hover during the Department's annual aerial survey. Department photo by Nicole Tatman.

Opposite: Ibex moving across cliff face. This cliff is nearly vertical. Department photo by Nicole Tatman.

Background: Florida Mountains. Department photo by Jeremy Lane.

There are several species of big game to pursue in New Mexico including trophy quality elk, antelope, deer, black bear and bighorn sheep. However, New Mexico is also the only state in the country that offers free-ranging exotic big game without special advantages for the hunter including high fences or feeders.

The three species of exotic game within New Mexico are African gemsbok, commonly known as oryx, Barbary sheep (also called aoudad sheep) and Persian ibex.

Of the three species, one is gaining popularity due to the absolute challenge it offers hunters in pursuing it.

The Persian ibex (*Capra aegagrus*) inhabits the nearly impossible-to-scale Florida Mountains of southwest New Mexico. The ibex's adaptations, combined with the challenge offered by the terrain, make ibex a trophy that is truly earned. Known to some in the archery community as the “Toughest Hunt in North America,” ibex hunting with a bow carries a success rate between one to seven percent on average. This is one of the most abandoned hunts in North America, meaning more hunters give up and quit due to the extreme challenge the hunt offers.

Ibex are an exotic big game animal that came to inhabit the Florida Mountains back in 1970 when the Department of Game and Fish imported 15 ibex from Iran. Shortly after, an additional 27 were released. By 1974, the Department held its first ibex hunt for the public. Ever since then, hunts have been conducted in the fall. As the hunting industry has grown in popularity, and filming has become more common, the demand for ibex tags has increased.

With New Mexico being the only place where a hunter can find free ranging ibex within the Western Hemisphere, ibex hunting is quickly and rapidly growing in popularity. This is absolutely one of the toughest hunts in North America, whether using a firearm or a bow. The reason more people quit this hunt is, shortly after beginning, they realize that they truly have bit off way more than they could ever hope to handle. Those select few hunters who are successful harvesting an ibex with a bow join a very elite club of hunters.

Located just south of the small town of Deming, with steep peaks jutting from the Chihuahuan desert floor and extending towards the heavens, are the legendary Florida Mountains. The base of this 12-mile long mountain range, nicknamed “The Rock” by the locals, sits at approximately 4,300 feet. The peaks of the mountains range between 5,000 to 7,500 feet. The Floridas are split into two separate ranges. The main mountains are known as the Florida Mountains, but to the east is a smaller range known as the “Little Floridas.” This smaller range is not as tall as its counterpart, and there is a road that hunters can access to get on top of the Little Floridas.

Only firsthand witnesses can attest to The Rock and the challenges it puts forth to anyone who wishes to climb it. The mountains are littered with steep canyons, vertical cliffs and loose rocks that make climbing and walking a challenge all its own. The average time it takes to hike to the top is between two to four hours, if the person is an experienced hiker. For people who do not know the terrain, the

mountains are very deceiving. Hunters will often start on a path, believing it will take them to the top, and will find the trail will dead-end by an unseen obstacle. They are forced to back-track and look for another way to the top.

Roads in and around the Floridas are rough at best, unmaintained and littered with washouts that deepen each year from wind and rain. There are no roads that take hunters to the top of the mountains. Hunters are strongly encouraged to have a good four-wheel drive vehicle or an off-highway vehicle (OHV). Mesquite surrounds the mountains and will puncture a tire in a heartbeat. Along with a four-wheel drive vehicle, hunters also need a spare tire.

Combine all of these factors with the fact that the mountains are covered with cacti, mesquite and other plants that sting and poke—and are an absolute haven for rattlesnakes—hunters have a very daunting task when pursuing ibex in the Florida Mountains. During my climbs of the Floridas, I have found it difficult at best. I had to keep pushing myself to continue as each step slid on the loose rocks. Once I reached the top, I felt a sense of enlightenment and astonishment as I gazed at the magnificent view that was before me.

Strategies for hunting ibex are few and far between. Glassing is the first crucial step. Spotting ibex can be a challenge at first, until a hunter learns what and where to look. Even when the billys have a white coat, they can still blend in perfectly with the mountain. The minimum glass a hunter needs is a good spotting scope, preferably 20x60, and a good

pair of binoculars, minimum of 12x. After spotting a group, hunters need to establish a game plan before heading up the mountain. That game plan includes several factors such as: number of ibex in the group, general direction of travel, time of day, terrain, how to get into position and so on.

Then, before going up the mountain, it is also strongly encouraged to shoot your weapon and make sure it is sighted in. One of the worst feelings is putting on a stalk for several hours on a billy of a lifetime and coming up short because of an inaccurate shot.



Having your weapon sighted in and ready to shoot seems elementary, but there are some hunters who have missed shots because something was wrong with their weapon or they did not prepare properly. Hunters are encouraged to not only sight their weapon in, but practice in the right conditions: windy, cross winds and steep angles.

Most successful ibex hunters are successful because they work with a team. A team will make the hunt easier, more enjoyable and a team can provide encouragement. A minimum team consists of the hunter, one person to climb the mountain with and one person who stays below and glasses for the hunter. Ibex can move very quickly on the mountain.



You'll glass them in one spot, and when you get into position, the ibex have already moved over the mountain. A spotter can give the hunter updates on the movements of the ibex. Also, hunters cannot see what is above or below them sometimes due to the steep angles. This is when a spotter comes in most handy to relay to the hunter the position of the ibex. Hunters using a spotter need to trust their spotter and listen to them. The spotter can see what you can't.

The teammate that is on the mountain with the hunter is great for helping with glassing, but they're even better after the ibex is down, from taking great field photos, field dressing to finally packing the animal out. Ibex may not weigh much compared to other species, but with the rough terrain, it is wise to split the load for the climb down. Most of the teams I have encountered have four to six members.

A guide once told me, "You can't deer hunt ibex, you've got to ibex hunt ibex." What he means by this is ibex are their own animal, they do not share behavioral characteristics with any other animal in North America, so hunters shouldn't try hunting ibex like other animals. So when it comes to attempting to sit over water or a natural mineral deposit, it can be hit or miss. Ibex do need water, but they can get it from several sources on the mountain. If a hunter is going to attempt sitting on water or a mineral deposit, the hunter needs to do their homework with trail cameras and glassing to see if ibex frequently visit a certain water source or mineral deposit. Once the hunter has established that the ibex visit a certain place, they can build a natural blind to wait for a shot opportunity.

Some hunters attempt to save their legs the strain of constantly climbing The Rock day in and day out by camping on the mountain. This is a great strategy, but

it should be combined with a spotter below to relay ibex positions up to the hunters. Before attempting this, hunters need to consider the supplies they will need while camped out. One of the main things is water. Hunters are still in the desert and water is an important factor that they need. Hunters will have to pack in enough water to sustain them throughout their stay atop the mountain, and that much water can be very heavy.

Ibex hunting is not only challenging, but it can also be very dangerous. Aside from the possibility of falling to your death on a steep cliff, there are many more dangers lurking on The Rock. As mentioned before, rattlesnakes are common during the October hunt. A hunter can expect to see, if not almost step on, one to three rattlesnakes per day! Another danger is the sun and heat. Hunter who do not stay properly hydrated won't last long. Staying hydrated not only means replenishing water, but keeping your electrolytes balanced. During the 2019 October archery hunt, two experienced hunters became dehydrated, and had to be rescued by Border Patrol Agents. The hunters drank plenty of water, but due to the heat, humidity, and amount of water lost through sweat, they became dehydrated. Weather in the desert can change in an instant, and hunters need to be prepared for rain, cold winds and even snow. If a hunter does not have the proper equipment, they will succumb to hyperthermia. Hunters need to prepare for the unexpected, because in the Florida Mountains, help is almost never close by. This hunt is not for lone beginners. Experience can be the difference between life and death on this mountain, and it should not be taken for granted - another great reason to hunt with others. Some great sources of information on ibex hunting are the internet, videos or calling the local conservation officer.

Ibex are a truly magnificent animal to behold, and an even more magnificent animal to hunt. They're not an easy animal to pursue, but at the end of the hunt, everyone finds a whole new perspective of tough hunting. Some return for more adventures, others are one and done. No matter the outcome, The Rock is a memorable experience that will test a hunter's fortitude and persistence in pursuing the impossible goat. For the successful applicants this season, and future applicants to come, I hope this sheds some light on the mystery surrounding the Florida Mountains and ibex hunting.

One of the most difficult hunts in North America

There are two archery hunts offered that occur in October and January. Both hunts are 15 days in length. The two archery hunts are known as some of the most difficult hunts with a bow in North America. The average success rate is between one to seven percent each year. Shots can range anywhere from 20 to 120 yards. Hunters are strongly encouraged to practice shooting in high winds, cross winds and steep angles to prepare them for the Florida Mountains. Ibex hunting with a bow is an uphill battle.

Florida Mountains

The name of the mountains, which is pronounced as Floor-ee-da, is Spanish for “flowery.” Spaniards in the 1700s named the mountains after they saw the large expanse of flowers that grow on them during the spring.

Ibex Facts

- Ibex stand approximately 30 inches to the top of the shoulders.
- Adult males are called “billies” and can weigh between 100–150 pounds.
- Adult females, or “nannies,” are smaller and usually weigh about 90 pounds.
- Both sexes possess horns.
- Any ibex is a trophy that is truly earned, but most hunters seeking a “trophy” ibex are looking for a billy with horn lengths of 36” or larger.
- During the summer and early fall, both sexes are light brown in color. This coloration allows them to blend in perfectly with the mountains. Once the winter months arrive, the mating season begins and mature billies undergo a drastic change of color. Their coats change from light brown to a light cream color, sometimes even to snow white.



Jared M. Burns is the Deming District Officer with the Department of Game and Fish.



A billy moving quickly upslope. Department photo by Nicole Tatman.

To view more ibex photos from Department big game program manager Nicole Tatman, visit <http://magazine.wildlife.state.nm.us/a-rare-glimpse-persian-ibex-in-the-floridas/>.

Mexican poppies bloom in the south

Article and photos by Jeremy Lane and Ross Morgan



If you're planning a visit to southern New Mexico this spring, you may be lucky enough to see the foothills of the San Andres mountains blanketed in orange. That's the vibrant color of the Mexican poppy, an annual wildflower that can seemingly cover an area in certain years.

Why don't we see Mexican poppy blooms every year? The answer — the same to most questions about life in the desert — is precipitation. Specifically, the timing of rains is crucial. Mexican poppy requires a good (around 1-inch) rain in the fall to trigger their germination. It looks like they received what they needed this year, but it won't happen every year, making these large bloom events more special.

And have you ever wondered why they're called "poppies?" What exactly is "popping" about them? Once they mature, Mexican poppy will produce a small, elongated fruit called a capsule. When "ripe," that capsule will split longitudinally down the middle and can fling its many, black seeds as far as six feet away. No wonder it can spread over areas easily!

While its hillside coverage can provide cover for small birds, Mexican poppy's biggest benefit is to pollinators, especially bees. That is, apart from the psychological benefit provided to those who stop to observe this desert beauty.

My colleague Ross Morgan and I had the opportunity to view and photograph the poppies last year. These photos were taken on the northside of Hwy. 70 just below San Augstin Peak.

— *Jeremy Lane*



Jeremy Lane is the southwest public information officer for the Department.



Ross Morgan is the northwest public information officer for the Department.

Becoming a conservation officer

A Q&A with Lieutenant Brady Griffith

The Department of Game and Fish is always on the lookout for qualified men and women to become New Mexico conservation officers. Lieutenant Brady Griffith, who started out as an officer with the Department 14 years ago, is responsible for recruiting and training conservation officers who work tirelessly to protect and conserve New Mexico's wildlife and natural resources.



While on the job, conservation officers participate in a variety of projects in addition to law enforcement tasks. These include wildlife and fisheries management projects and community outreach and education. In the photo above, conservation officer Stephan Apodaca teaches a student proper shooting techniques and firearm safety. Department photo by Jessica Fisher.

“Not only are conservation officers responsible for enforcing our game and fish laws, they also play a key part in educating the public about wildlife and participate in wildlife conservation efforts, including wildlife surveys and relocations,” said Griffith.

In the following Q&A, Griffith answers common questions about the officer recruitment process.

What degrees are required to become a conservation officer?

Applicants must possess a bachelor's degree from an accredited college or university in Biology, Fisheries Science/Management, Wildlife Science/Management, Animal Science, Forestry, Forestry Management, Range Science/Management, Agricultural Science, Environmental Science, Wildlife Law Enforcement, Resource Economics, Ecology, Natural Resource Management, Zoology or Criminal Justice.

Should you already have experience as a police officer, or military experience, before becoming a conservation officer?

Prior law enforcement or military experience is not required; however, previous experience can assist candidates while they are training at the law enforcement academy. In addition to possessing a bachelor's degree in a related field, you must also pass psychological and medical exams, a background investigation and fitness and drug tests.

Can you explain the district assignment process once you become an officer?

New Mexico is a large state with nearly 70 officers. Conservation officers primarily work alone in remote, rural regions of the state. The Department attempts to accommodate new officers by allowing them to choose their duty locations based on districts that are open only after other officers with more seniority are offered lateral transfer opportunities.

How often do you recruit new officers and what does that process look like?

While there is no set schedule for officer hiring, the Department usually opens for applications once or twice a year. Interested persons can submit applications through the State Personal Office (<https://www.spo.state.nm.us/>). Applicants are reviewed by SPO and the Department's Law Enforcement Division to ensure that they meet minimum qualifications.

The Department then sets a date to complete physical assessments and complete a wildlife exam. The physical assessment requires each applicant to complete a certain amount of sit ups and push-ups in a set amount of time. Men and women must complete 27 sit-ups in one minute and 15 push-ups in one minute (yes, the same standards apply to both males and females). This may sound easy, but you are required to completely lay down on the mat and rise to your knees for a sit up to count and push-ups require you to completely straiten your arms and lower yourself to the mat...its harder than it sounds. This is followed by a 300-meter dash that must be completed in 71 seconds and a mile and a half run that must be completed in 15 minutes and 54 seconds.

Everyone passing the physical assessments must then take and pass the written exam with a minimum score of 70%. This test focuses on New Mexico Game and Fish laws, regulations, policy, general information about the Department and wildlife identification.

After passing the physical assessment and written test, individuals are invited to the Santa Fe office the following day for in-person interviews. If the hiring panel believes a candidate is a potential fit for the job after in-person interviews, they will be invited back to the Santa Fe office to complete psychological and medical testing before being offered a position.

Can you describe the on-the-job training officers must complete before working alone in the field?

New hires will work with wildlife management and fisheries divisions to learn more about the Department and its mission to conserve wildlife for the next generation. Recruits will then attend firearms training where they will learn how to handle weapons as part of their official duties. After firearms training, recruits will attend the 16-week law enforcement academy where they will receive police officer certification in the State of New Mexico.

After the academy the Department takes over trainings. Recruits will spend a month attending an in-depth training on New Mexico wildlife laws and regulations, reality-based training and learning how to work wildlife cases from getting an Operation Game Thief tip to executing the investigation, interviewing witnesses and suspects and preparing for trial.

New officers then spend approximately 14 weeks with a Field Training Officer learning hands-on and applying what they learned to working on-the-ground cases, providing educational courses and working with New Mexico hunters, anglers and wildlife enthusiasts.

What is the typical career path of an officer?

New Mexico is one of the only states that allows for regular progression opportunities for officers. The Department is made up of four regions; within each region lies four supervisor districts and 16 officer districts. Just within the Law Enforcement Division there are multiple layers of duties:

District Officer: Manages New Mexico's wildlife by enforcing wildlife laws and performing related biological wildlife management duties.

Corporal: Manages all district officer duties in the assigned district. The position also serves as a field training officer and handles all tasks associated with training new recruits.

Sergeant: Provides sound, positive, professional supervision and leadership to conservation officers.

Lieutenant: Responsible for recruiting, hiring and training recruit officers for the Department.

Captain: Accountable for the success of the Area Operations through the direct supervision of personnel and coordination of activities by division staff.

Major: Ensure division employees meet the goals, objectives and performance measures set by the Department, state legislature, commission and governor.

Colonel: Oversees and administers all law enforcement operational field activities in the state.

Conservation officers have also moved into other divisions including fisheries management, wildlife management and information and education divisions.

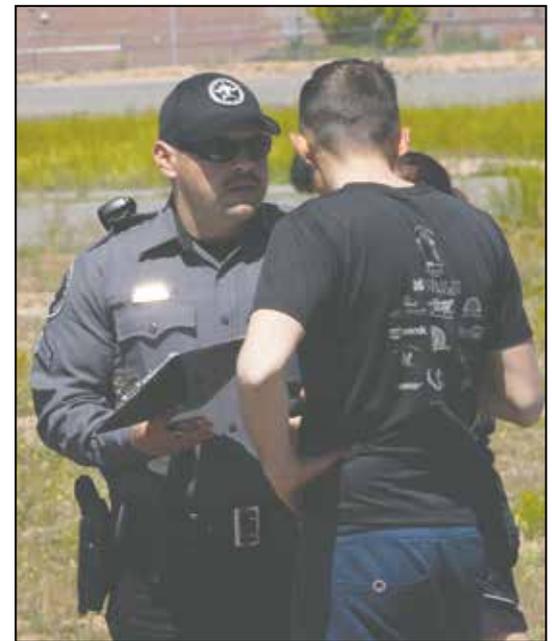
Opportunities for diverse careers and promotions are frequent and encouraged within New Mexico's conservation officers. Conservation officers have moved through the ranks to become directors.

When is the next hiring process and how does someone get more information?

The Department does not currently have the conservation officer application period open, but keep an eye on our Facebook page to stay informed about the Department and when we open for applications. You can also read more about our officer recruit program at <http://www.wildlife.state.nm.us/enforcement/career-advancement/>.



Brady Griffith was a lieutenant with the Department of Game and Fish.



Top: Sergeant Marcelino Peralta checks on a potential conservation officer at a 2019 testing. Department photo by Tristanna Bickford

Center: Potential conservation officers completing the 300-meter dash at a 2019 testing. Derek Ridgeway, in the white shirt, went on to become a conservation officer. Department photo by Tristanna Bickford

Bottom: Corporal Stephen Apodaca teaches this youth firearm safety with a .22 rifle. Department photo by Jessica Fisher.

A black bear is the central focus of the image, standing amidst tall, green grass. The bear's fur is dark and appears slightly damp. It is looking directly at the camera with a neutral expression. The background is a dense field of similar grass, creating a natural, outdoor setting.

Black bear travels from northern New Mexico to Colorado Springs – and back

Rick Winslow, bear and cougar biologist with the Department of Game and Fish, shares his thoughts on the map and the possible reasons for a black bear to travel so far—and then return to the area where it's trek began months earlier:

While it's impossible to say exactly why this bear made such a long-distance trek over the course of one year, there are several main reasons it could have.

The first reason is that it started moving during mating season, which is normal for male bears. It is probable it was looking for mating opportunities outside of its normal range. Since it moved continuously from June 2011 through August 2011, it was probably looking for mates. Black bears typically breed from May to August annually. Additionally, this was a very dry year in New Mexico and there may not have been much food available in its normal home range.

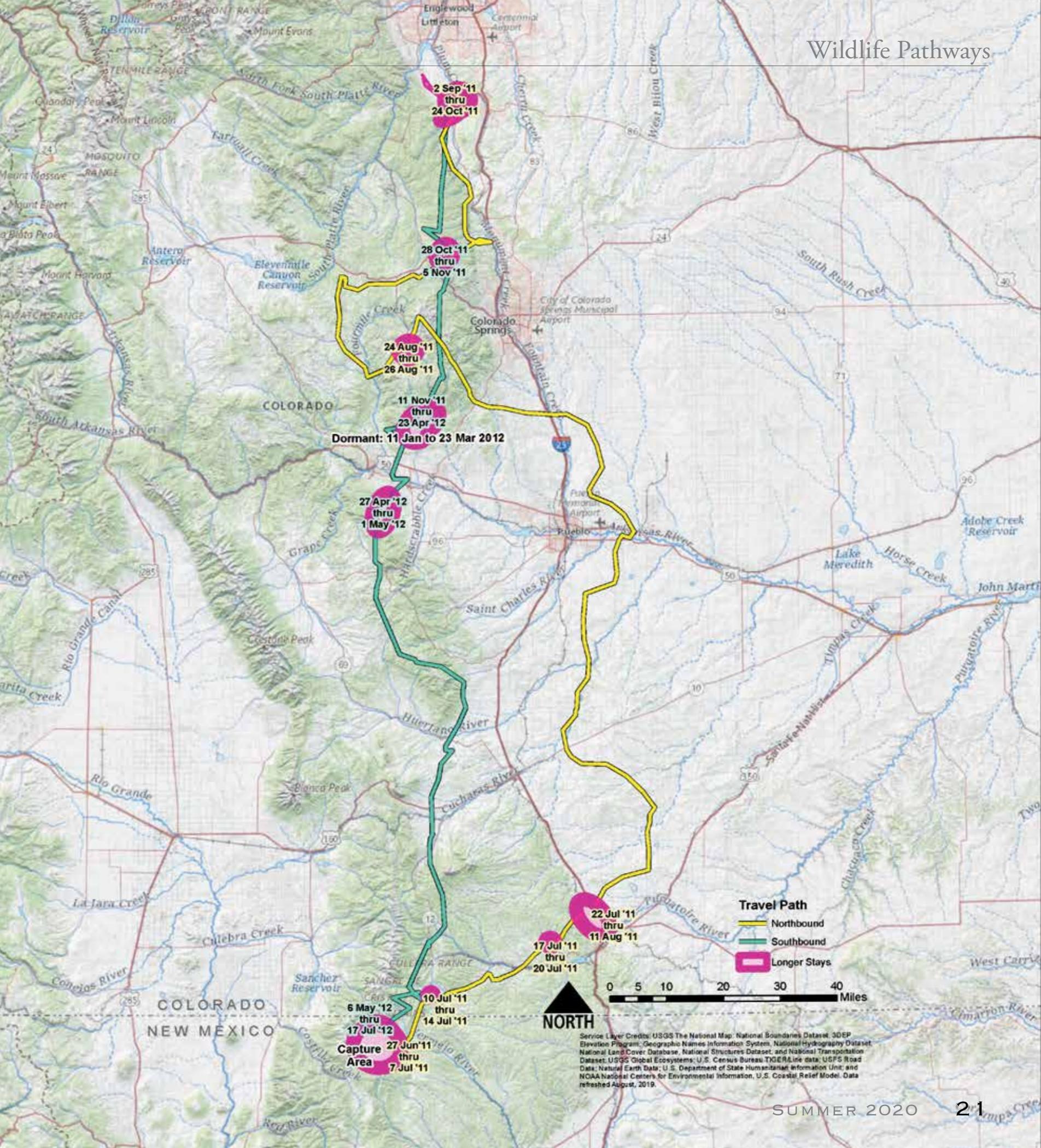
After the mating period the bear settled down a bit and didn't travel quite as far. It stayed in areas that have decent bear habitat with plenty of food (primarily acorns, service berries and juniper berries) so it was probably preparing for hibernation. It then hibernated in typical bear habitat from November 2011 through April 2012.

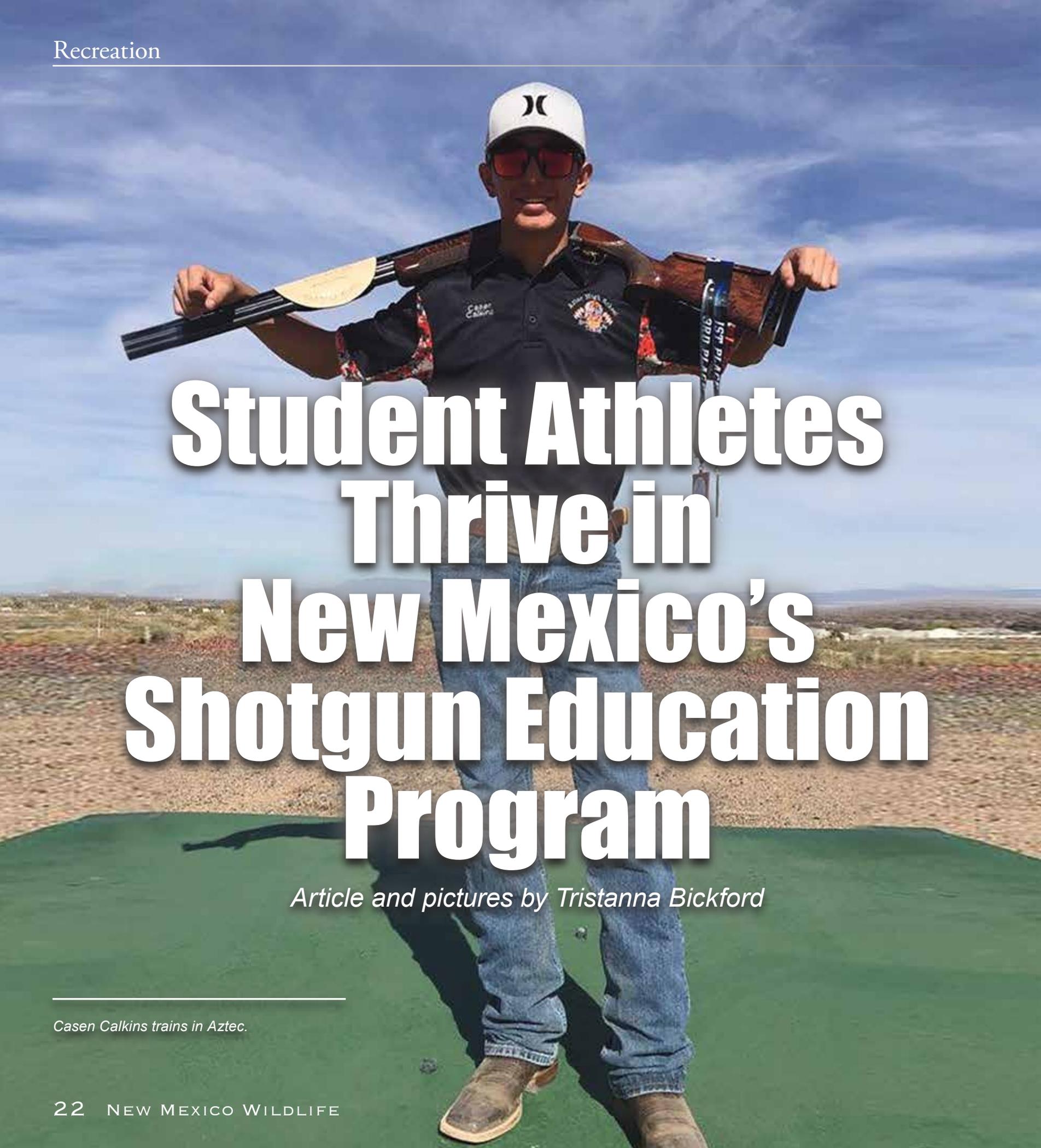
After this it seems to have made a quick bee-line directly home. It was probably searching for mating opportunities along the way, but it was headed home.

*Liley, S. G., and R. Walker. 2015. Extreme movement by an American black bear in New Mexico and Colorado. *Ursus* 26:1-6.

Left: Black bear. Department photo.

Opposite: Several years ago, a black bear made one of the longest documented migrations made by a single black bear in New Mexico and Colorado. The map depicts the 282 km journey made in 304 days from July 2011 to May 2012. Department map by Lance Tyson.





Student Athletes Thrive in New Mexico's Shotgun Education Program

Article and pictures by Tristanna Bickford

Casen Calkins trains in Aztec.

To many people, the warm and sunny day in mid-May 2015 might have seemed like just another day in Roswell. The air held a slight breeze, just enough to keep everyone comfortable in short sleeve shirts. Most people were thinking about upcoming graduations, summer plans, vacations, tasks that needed to be done at the ranch and a million other things that cross one's mind.

But for 30 youth, their families and coaches, it was not just another day. The true impact of what started that day, would not be known for many years.

To look at it now, in 2020, one knows that we are still just seeing the tip of the iceberg.

Families came from small farming and ranching communities across southeast New Mexico; the youth gathered, shotguns in hand, to try their hand at trap shooting. As if shooting singles were not enough, the youth took on the challenge, a few steps back and tried their skills at shooting handicap.

Students from Artesia, Clovis, Melrose, Roswell and Texico might have attended the first competition but student athletes from Los Alamos, Aztec, Portales and Rio Rancho also had fledging High School Shooting Sports Programs. These teams started practicing, hosting practices, participating in satellite shoots and pushing coaches to host an in-person competition held in conjunction with New Mexico 4-H Shooting Sports Competition at the NRA's Whittington Center in Raton.

It was at this shoot that coaches stepped up again, adding to the stack of volunteer hats on their heads. Somehow, adult volunteers found more time in their busy schedules to form a board, create a handbook and start creating more opportunities for youth to attend competitions across New Mexico.

And just like that the New Mexico High School Clay Target Association (NMHSCTA) was fledged and soon began to soar.

NMHSCTA clubs across the state were quick to join New Mexico Department of Game and Fish's Responsible Hunter Program. The Responsible Hunter Program provides an opportunity to cultivate fundamental hunting and shooting skills; expose youth to competitive shooting events; teach the fundamental outdoor skills such as orienteering, wildlife identification, hunting and environmental ethics; teach hunting skills such as tracking, game calling, care of game and game habitat management. The program will instill leadership and team spirit

through group involvement and cooperation. The goal of the program is to establish a foundation of trustworthiness, respect, responsibility, fairness, caring and citizenship in youth hunters and shooters in New Mexico.

Clubs who sign up with the Responsible Hunter Program receive the opportunity to use firearms provided by the Department as well as \$100 per youth athlete per year to purchase consumable items such as ammunition, targets, eye protection and hearing protection.

The association is committed to hosting six in-person competitions over the next three years and a state championship each year. Competitions have grown to include singles, handicaps and doubles. The board worked hard to combine the program with the Scholastic Clay Target Program (SCTP) and the Amateur Trapshooting Association (ATA), allowing athletes' scores to count for both programs and encourage opportunities for the athletes to continue their shooting careers.

Through the program, four students have been offered college scholarships, and three have accepted them.

The year 2019 gave way, and more of the iceberg was revealed. Ninety youth athletes from 48 schools, including 22 senior athletes, have grown with the program, becoming close friends, responsible firearm owners, competitive athletes, role-models to younger athletes and all-around good people.

Can these positive qualities all be attributed to a youth athlete shotgun program?

Probably not 100% attributed...but there is a fair percentage that can be attributed to the program. You don't find groups of over 100 youth with these manners just anywhere.

While only a few people may remember the inaugural champions, Mackenzie Perkins and Carson Holt, several hundred student athletes have felt the impact of that warm day in Roswell.

And our guess...hundreds more New Mexico youth, and their families will feel the positive impacts of this program in the years to come.



Top: The Albuquerque trap team at the 2019 State Shoot in Raton.

Center: From Albuquerque, Tristan shot at the 2019 New Mexico NMHSCTA state shoot.

Bottom: Participants at the Northern New Mexico Youth Clay Target Challenge in Los Alamos.



Tristanna Bickford is the Communications Director for the New Mexico Department of Game and Fish.



Last season I harvested a fork-antlered mule deer. After gutting it, I carefully bagged the liver and heart. I immediately placed these on ice inside my cooler. Before harvesting my deer, I spoke to four other hunters who were skinning bucks hanging in trees. None of these hunters had kept the liver or heart from their deer. After having checked countless hunters in the field, as a conservation officer, I would say these four are in the majority of all hunters.

If you are a big-game hunter, I ask that you reconsider keeping your game's heart and liver. A deer-sized liver or heart will feed two people and an elk sized liver or heart four or more. As with any game meat, if the heart or liver appear to be off colored, with cysts, or in otherwise poor condition they should be discarded with the rest of the gut pile.

When prepared correctly, these organs are delicious and contain very little to none of the iron taste they are known for. Not only do they taste good, they are good for you as well. The meat is lean and high in protein. Organ meat from wild animals are packed with healthy fats, B vitamins, minerals, high-quality amino acids, CoQ10 and vitamins A, D, E and K. Liver, in particular, is packed with iron, vitamin A, the B vitamins, choline, folic acid, purines and zinc. It is one of the most nutritionally valuable foods you can eat and that's why predatory animals eat the liver first.

A heart is best eaten fresh. You can refrigerate it for up to a couple of days. When ready to cook, run cold water over the heart while pumping it. This will remove all the pooled blood from the ventricles and atriums. It is best to cut away and discard all fat, arteries, veins and blood vessels. Discard any parts of the heart damaged by the bullet or broadhead used to harvest the deer. The heart can be cut into ¼" to ½"

Don't overlook those organ meats

By John Martsh

cubes before cooking. There are a ton of big-game heart recipes you could find online. Just make sure you don't overcook it because it will be as tough as leather. You are looking to undercook it a little, to a nice medium doneness.

The liver can be frozen. I usually put it inside a freezer bag without rinsing, removing all the air, sealing and storing inside the freezer. It will keep up to a month, but I wouldn't keep it frozen longer than that. A day before cooking, I will thaw it and let it soak under cold water in a bowl in the refrigerator for 24 hours. I change the water every eight hours, and then give it a final rinse before cutting into ½" slices. The water changes will remove the blood and keep the liver from tasting like iron. There are a number of different recipes to cook deer liver, or any other big-game liver, but my favorite way is the traditional preparation - fried with an onion and shallot gravy.

Fried deer liver with onion and shallot gravy recipe

Ingredients:

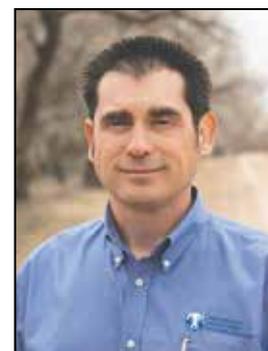
Deer liver
1.5 cups flour
2 tablespoons salt
2 tablespoons dry mustard
2 tablespoons garlic powder
1 tablespoon pepper
1 tablespoon lemon pepper
1 tablespoon paprika
1 shallot
1 large white onion
4 tablespoons clarified butter (ghee)
12 ounces chicken broth/stock

Instructions:

Rinse liver well and put in a large bowl. Cover with cold water. Refrigerate and soak for 24 hours. Change water every eight hours. Once liver has soaked, cut into ½ inch-thick slices. Heat five tablespoons of ghee over medium-high heat in a frying pan. Mix all the spices into the flour and dip the liver slices so they are completely covered. Place three or four slices into the hot butter and fry for four minutes per side or until golden brown. While the liver is frying, thinly slice the onion and shallot.

Once you have cooked all the liver, drain all but two tablespoons of the ghee and add the thinly sliced onion and shallot and cook six minutes or until they are slightly brown. Pour three tablespoons of the flour mixture over them and stir well. Cook until the flour begins to brown, another five minutes. Pour in 12 ounces of chicken broth/stock and bring to a boil. Once it begins to boil, reduce heat and stir while simmering until the gravy thickens. Plate the liver and bury under the onion and shallot gravy.

Above left: Plated liver and onions and side salad. Department photo by John Martsh.



John Martsh is the recruitment, retention and reactivation program manager and a conservation officer with the Department of Game and Fish.

Maple Glazed Smoked Salmon

Article and pictures by *Tristanna Bickford*

New Mexico may be a landlocked state, but we do offer the opportunity to fish for salmon, a species that brings to mind the icy waters of coastal Alaska or the northern Atlantic. Kokanee is the only salmon species available to catch in New Mexico but it can be served in a variety of tasty ways, including smoked. The recipe below can be used with any type of salmon including our very own kokanee.

Instructions:

Brine: Mix 1/4 cup kosher salt, one cup maple syrup, 1/4 cup dry rub (for this recipe I did equal parts black powder, sea salt, Cajun seasoning) and four cups water. Stir well. Put salmon filets and mixture into gallon baggies and place in fridge overnight (at least six hours).

In the morning pull salmon out of the baggies and set on rack in the refrigerator to dry for an hour or two.

Place in smoker for four to six hours, or until the salmon internal temperature reaches 140 degrees.

Glaze: Mix 3/4 maple syrup, two tablespoons of dry rub and a squeeze of lemon juice. Add glaze to salmon and place back in smoker for 10-15 minutes to allow glaze to start caramelizing. Add more glaze before eating.

If you don't have a smoker, this can easily be duplicated on a grill using a small grill smoking box.

Makes enough for approximately two pounds of salmon.

Enjoy!

Tristanna Bickford is the communications director for the Department of Game and Fish.



Cool Jobs at Game and Fish

Meet Jack Young, Archeologist



Jack Young is an archeologist at the Department of Game and Fish. In an interview with Kids Tracks, Jack talked about his work as an archeologist.

“We spend more time in the library than we do outside sometimes,” he said about his job.

He also likes to remind people that archeologists don't look for dinosaurs. “We don't dig up dinosaurs,” he said. “Only paleontologists do.”

What is your typical day like?

Sometimes I work at a computer. I work on reports and maps and looking at the next job we're going to go to. When we're out in the field, we're walking all day long looking for cool stuff such as arrowheads, pottery shards, metates, old barbwire and purple glass.



Sunlight turns the glass purple.

This glass was made in Germany in the 1870s and imported to the United States during World War I.

Have you always wanted to become an archeologist?

Not really. I originally wanted to be a cowboy or veterinarian. And then I went and got a history degree in European early modern history. My minor was in anthropology. When I graduated from the University of New Mexico with my first degree, I went to University at Durham in England for archeology.

What do you need to do to become an archeologist?

You have to go to lots of school and walk a lot outside finding stuff to learn what's out there. You have to have a bachelor's degree at least for a technician job. A master's is preferred. You have to really like history or the past. You should major in history or anthropology.

What do you like most about your job?

I feel like I'm preserving something for future generations and I really like understanding the past. The best thing I like is teaching younger archeologists the practical, in the field experience.

Why does the Department of Game and Fish have an archeologist?

In order for us to get money from the government for our projects at the Department we have to have to make sure we are not disturbing important cultural sites.

What advice do you have for someone who wants to become an archeologist?

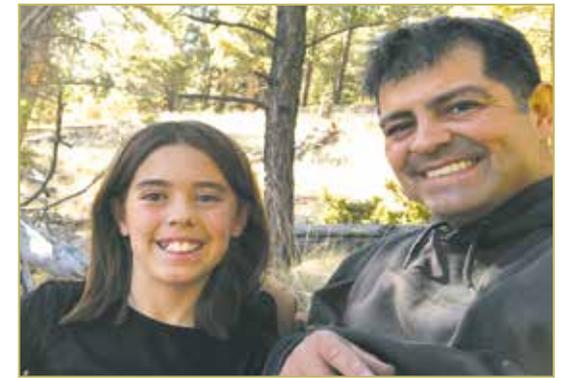
Read a lot about the past, watch how people make things and use tools.

Above left: Jack Young is the Department's archeologist and tribal liaison. Department photo by Martin Perea.

Right: James Dominguez with his son Aidric. James is the Aquatic Invasive Species (AIS) coordinator with the Department of Game and Fish. Photo by James Dominguez.

A Dad's Perspective

By James Dominguez



I will admit that when my son asked to take the hunter education course so he could apply for a big-game tag, I was nervous.

How am I going to teach my son how to hunt? I wondered. I had never gone big-game hunting.

For many years, I had mentioned applying for a tag, but had never drawn anything. As it turned out, so many of our friends are avid hunters and were so willing to provide advice and loan gear. I learned so much about hunting but equally I learned so much about my son. I watched him practice safe firearm techniques and make ethical hunting decisions, not once letting the thrill of the hunt overtake what was the right thing to do. I watched him carry his gear and rifle up mountain slopes, not once complaining that it was too steep or too cold. I watched him climb into his sleeping bag each night dead tired but eager to get started again the next morning. I watched my son grow up in a way I had never seen.

As parents, I feel that we think that we always need to be the teachers and our children are the students. In many instances, that is certainly the case. As it turns out though, I didn't need to worry about teaching my son to hunt, he had the heart to learn from others and experiences presented. In fact, I would admit that I was the student and my 10-year-old son was the teacher - pushing me to get out of my comfort zone and try something new.

Read about the hunt from James' son's view in Aidric's article “My First Hunt” at <http://magazine.wildlife.state.nm.us/>.

Where do wildlife go during the winter months?

by Jeremy Lane



If you stepped outside on a particularly cold day this past winter, you may have been greeted with shivers, numb fingers and toes and an overwhelming urge to run back inside, crank the thermostat up and hunker down with your favorite wildlife magazine.

Wild animals, of course, don't have those kinds of options. Instead, they have many different strategies for surviving leaner months.

Everyone knows bear hibernate during winter. If the black bear, one of the largest mammals in the state, hibernates (or enters long states of inactivity similar to sleep), any furry critter smaller than a bear must do that too, right?

Not necessarily. Many are active year-round, even when the ground is covered with a few inches—or a few feet—of snow.

Black-tailed prairie dogs are a member of the rodent family, but unlike some of their smaller mouse and rat kin that hibernate, you can find them standing guard in their "towns," clusters of underground colonies, even during winter. When it is especially cold, they may sleep for several days in a row, when an extra layer of body fat they have put on during the year provides them with nutrients to survive.

Prairie dog burrows also provide shelter from extreme temperatures to more than just themselves. Barred tiger salamander, burrowing owl, Great Plains toad, and dozens and dozens of others mammals, reptiles, amphibians, birds and insects live in unoccupied prairie dog borrows throughout the year.

American pika—the smallest member of the rabbit order—are another mammal who are right at home in cold weather, thanks to their Siberian ancestors. Although they do not hibernate, pika can still be hard to observe during winter, spending most of the time in their dens. There, they have stored grasses to eat during leaner months. They can still be spotted outside eating on warmer days. Pika are plenty tough, spending their entire lives above the tree line.

You might know that many bird species fly south for the winter and back north for warmer months, but you might be surprised by just how far some of those migrations are.

Swainson's hawk, for instance, may travel further in migration than any other raptor species in North America. Though they breed on prairies across the western United States, Mexico and Canada, they travel to South America for winter in the areas of Brazil, Argentina, Chile and some neighboring countries. During this trip, some Swainson's hawk will cover over 7,000 miles.

Other birds do not migrate for winter and are right at home in our snowy mountains. American kestrels - another raptor - brave the winter months, as well as many common winter birdfeeder visitors like Steller's jay, white-crowned sparrows and dark-eyed juncos.

How do fragile butterflies survive harsh winters? We know they head south to warmer climates in the fall, like many of our birds, but where they go exactly is still a mystery for some less-studied species. One of our best-known species is the monarch butterfly, and we know monarchs west of the Rocky Mountains head further west to the sunny coast of California. Ask someone scraping a car windshield free of ice on a frigid day and they might agree a vacation to the California coasts sounds pretty enticing.

There are fewer leaves on the trees and a lot of animal activity slows down, but this doesn't always mean that New Mexico wildlife can't be observed during winter. For those of us not headed to sunnier climates, bundle up, grab your binoculars and see how many animals you can spot next winter season.

Facebook Post...

What animals do you see in the photos below? Is it a pronghorn? Or a bighorn? It isn't always very easy to know for sure what animals ancient people were drawing. Can you identify the petroglyphs in the photos below? Tell us what you think. Go to the Department's Facebook page on Friday, August 7 and share your ideas.



Department photos by Alexa J. Henry and Casey Cardinal.

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