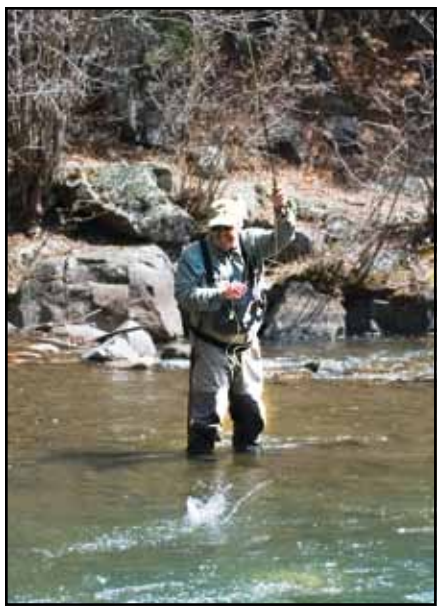


Photo: Dan Williams

Pecos Canyon facelift

Improvements to fishing and camping areas make for safer, more enjoyable outings in Pecos Canyon.

Please see Page 6.

New Mexico **wildlife**

www.wildlife.state.nm.us

VOL. 56, NO. 2 — Summer 2011

Garter country

New Mexico is home to eight species of garter snakes. At left is a checkered garter snake.

Familiar snakes introduce youths to herpetology

Stories by Leland Pierce
Photos by Charlie Painter

It's a time-honored tradition among boys everywhere. Boy goes fishing, catches a snake and then does what comes naturally: He takes it home and scares his mother silly.

Very often, that snake is a garter.

"Throughout North America, numerous school kids have grown up catching garter snakes as their first introduction to herpetology," said Charlie Painter, herpetologist with the New Mexico Department of Game and Fish. "Many moms and dads were horrified by an unexplained fascination with this common and attractive group of snakes, but thankfully they bit their tongue and allowed these fascinating reptiles into the home and classroom."

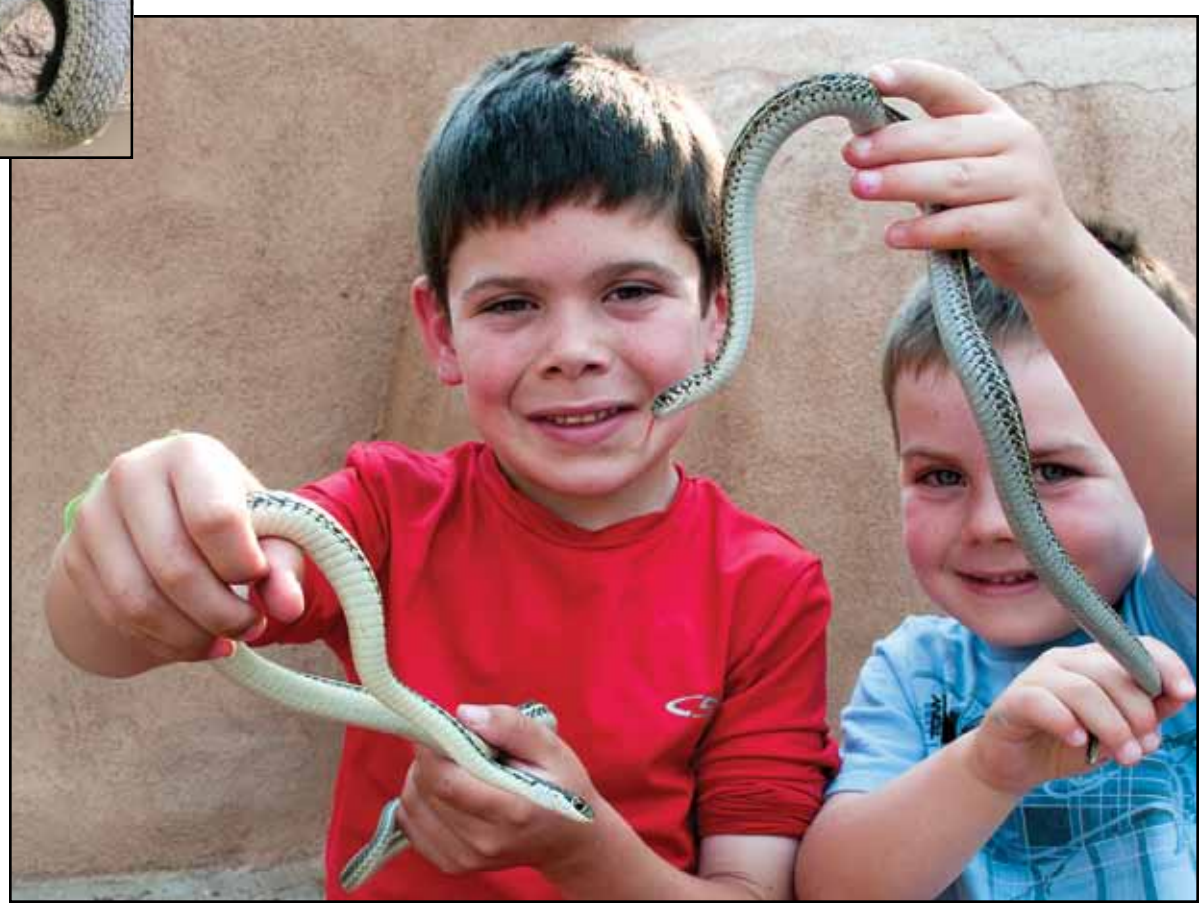
Garter snakes are seen perhaps more often than other snakes, as they are endemic to the wetland and riparian zones around our streams and rivers where we fish and hike. Though arid, New Mexico is tied with California as states having the most garter snakes -- with eight.

Garter 101

Garter snakes belong to the genus *Thamnophis,* and are found in North and Central America. The garters of New Mexico, with one notable exception, have the "classic" snake body, long and slender, with large eyes and a smooth, straight head with a round nose. All but one of our garters have a stripe down their back and stripes on their sides. The stripes can be white, yellow, orange, cream, red, blue, and green.

Garter snakes in general are wide-ranging and often prolific. Some species, such as the common garter snake and eastern ribbonsnake, have enormous ranges, covering large swaths of North America. Some, like

... continued on Page 11



Whether it's a rare species such as the narrow-headed garter snake, above, or more common species held by 7-year-old Colin Farley, left, and his brother Gavin, 5, garter snakes seem to fascinate youngsters. Colin's and Gavin's father, Matt Farley, incorporates garter snakes in his zoology classes at Rio Rancho High School.

Photos: Charlie Painter, above; Dan Williams, right.

In this issue:

A publication devoted to the enjoyment and appreciation of New Mexico wildlife.

Published by The New Mexico Department of Game and Fish

Search keyword: NMDGF

Commission opts out of wolf program

The New Mexico Game Commission voted unanimously June 9 to suspend Department of Game and Fish participation in the Mexican Wolf Reintroduction Program.

The decision came at the Commission meeting in Las Cruces after more than three hours of testimony from Department officials and public comments at the meeting and through phone calls and emails since the agenda item was posted on the Department website more than a month before.

The Department has participated in the program, directed by the U.S. Fish and Wildlife Service, since 1999. Department participation officially ended June 30.

The program began in 1998 with a goal of having 100 wolves in the Blue Range Wolf Recovery Area of eastern Arizona and western New Mexico. This year, surveys indicate there are fewer than 50 wolves in the wild.

The Department of Game and Fish has spent $1.9 million on the program since 1999, with $507,645 of that coming from state funds and the rest from federal funds. The Department currently employs two people to participate in the controversial program. Administrative costs have been significant and are in addition to the $1.9 million figure.

The Department's withdrawal will have little significant impact on the program, which is led by the U.S. Fish and Wildlife Service. The Commission directed the Department to continue to fulfill its obligations under the State Wildlife Conservation Act by reviewing the species status every two years and providing law enforcement support if there are violations of laws protecting the wolf as an endangered species.

Espanola wins state archery tournament

Vincent Jaugan and Caitlyn Mullally were right on-target this year, taking first place in their divisions to lead Espanola's Carlos F. Vigil Middle School to the championship of the Third Annual New Mexico Archery Shootout, a National Archery in the Schools event.

Jaugan scored 286 out of a perfect 300 to win the boys division of the event, in which student archers from elementary through high school teams shot 15 arrows at targets 10 meters away and 15 arrows at targets 15 meters away. Teammates Erik Gutierrez and Sammy Miner took second and third places to help the team finish first with a score of 3,161. Koogler Middle School of Aztec finished second with 2,978 points, and Albuquerque Institute of Math and Science, a charter school, finished third with 2,863.

Team standings were determined by combining the individual scores of boys and girls on each team. Altogether, 569 students competed in the "virtual" tournament, in which archers competed at their home schools in late April and submitted scores online.

In the individual girls standings, Mullally scored 277 to edge out second-place Shelby Walker of Des Moines High School with 271. Angelica Avila of Garfield Middle School was third with 256 and Guadalupe Salinas of Carlos Vigil Middle School was fourth with 251.

The first-place winners in the boys and girls competition received compound bows. The first three finishers in the team standings received trophies and the top 10 finishers from each of the 18 competing teams received T-shirts. The Northern New Mexico Chapter of Safari Club International donated the bows and T-shirts. Shotokan Karate supplied the trophies.

Courtesy photo

Young archers from Carlos F. Vigil Middle School in Espanola outscored 17 other teams competing in this year's National Archery in the Schools annual New Mexico Archery Shootout.

Complete individual and team standings from the New Mexico Archery Shootout can be found at nasptournaments.org.

This is the third year the Department of Game and Fish has coordinated the National Archery in the Schools program in New Mexico. This year, teams from 47 schools were eligible for the tournament.

It costs about $3,000 to outfit a school or organization with bows, targets, backstops and other equipment to get a program started. The Department splits the initial cost with participants and provides training for archery instructors. Many schools incorporate the program into existing physical education classes.

Schools or organizations interested in participating in the National Archery in the Schools program can find more information by contacting Brian Guzman, (505) 231-4375 or brian.guzman@state.nm.us.

Boats must be cleaned at Sumner Lake

Sumner Lake was reopened for boating June 17, but all boats will be required to be decontaminated when they leave the water to prevent the spread of quagga mussel larvae to other waters.

The Department of Game and Fish and State Parks closed the lake to all watercraft May 27 after laboratory tests found indications of quagga mussel veligers (larvae).

Quagga and zebra mussels originally were introduced to U.S. waters from Europe. They are now found in waters nationwide, having spread rapidly across the country by hitching rides on boats, motors and equipment. The microscopic to two-inch long mussels can ruin motors, clog waterworks and cut hands with their razor sharp shells. Once established, the mussels are impossible to remove.

New boating hours at Sumner Lake are 7 a.m. to 5:30 p.m. All watercraft leaving the water will be required to go through a decontamination process that will include pressure spray and engine flush. The procedure normally is completed in 15 minutes, but can vary according to boat size and complexity of the decontamination.

Once boats are decontaminated, owners will be given a certificate that may be required to launch the boat on other waters.

Whether using Sumner or other lakes, boaters can help prevent the spread of zebra and quagga mussels by thoroughly inspecting and cleaning their boats and equipment, draining all water and drying everything, including motors and trailers, before entering another water.

The invasive mussels have been found in all states bordering New Mexico. In an effort to slow or prevent the mussels from entering other New Mexico waters, the state has launched an aggressive educational and inspection campaign with partners at State Parks, the U.S. Army Corps of Engineers and the U.S. Bureau of Reclamation.

Volume 56, Number 2

"New Mexico Wildlife" is published by the Public Information and Outreach Division, N.M. Department of Game and Fish.

Printed in the United States under contract with the State of New Mexico.

Dan J. Williams
Editor

Lance Cherry
Chief of Publications

Letters may be sent to:
New Mexico Wildlife
P.O. Box 25112
Santa Fe, NM 87504-5112
Telephone (505) 476-8004
dan.williams@state.nm.us

Please visit our Web site, www.wildlife.state.nm.us

Photo: Samantha Barnwell

Robert Barnwell shot his Safari Club International No. 1-ranked Texas-class nontypical white-tailed deer Jan. 4 with a bow in southeastern New Mexico.

Hobbs archer harvests record white-tailed deer in New Mexico

Who says the biggest white-tailed deer grow up in Texas?

Robert Barnwell knows different. He pulled off what many hunters would say was the impossible this past January when he successfully stalked and harvested Safari Club International No. 1-ranked Texas-class nontypical white-tail with a bow-and-arrow.

Barnwell's trophy buck scored 184 2/8 inches according to SCI standards.

Barnwell, of Hobbs, was hunting in the shinnery oak country of southeastern New Mexico during the January bow hunt when he spotted the big buck. He spent four days trying to get close enough for a shot.

"On the fourth day, I just got lucky," he said. "He was out feeding with a mule deer buck and I was able to put a stalk on him. I really didn't expect to see a big white-tail out there. Maybe he was there for the acorns."

Barnwell was able to stalk the deer by using the sand hills for cover in the mostly flat, high-plains desert country. He took his shot from 50 yards when the buck stopped to rub a tree.

"I never dreamed I'd shoot that caliber of white-tail, especially on my first desert hunt," he said. I'm just really proud that New Mexico could grow a white-tail like that."

Photo: Marty Frentzel

Mike Rowe, center, star of the television show "Dirty Jobs" gets a few tips on how to squeeze fish from Department Southeast Area Fisheries Biologist Shawn Denny.

Dirty deeds and "Dirty Jobs" accompany spring walleye spawn

Gathering walleye spawn is a rite of spring for the New Mexico Department of Game and Fish. Crews gather millions of eggs at lakes across northeast New Mexico, creating the next generation of this popular sport fish.

This spring, the annual fisheries management task conducted at several lakes received a lot of attention, both good and bad.

Someone stole spawning walleye from nets in Stubblefield Lake, damaging Department equipment in the process. An investigation led conservation officers to the subjects and charges have been filed in Magistrate Court.

On the positive side, this spring the annual walleye operation caught the attention of the Discovery Channel's "Dirty Jobs" program. Mike Rowe showed up at Santa Rosa Lake to learn how to pick walleye out of gill nets, massage eggs and milt out of the fish, and prevent disease and decay in the hatchery.

In all, Rowe helped collect 600,000 eggs for propagation. The program should be broadcast sometime in the fall.

This year's walleye operation gathered more than 8 million eggs.

Get involved

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

Sportsmen for Fish & Wildlife: A conservation organization organized to promote the protection and enhancement of wildlife habitat, the quality of wildlife management programs and America's family heritage of hunting and fishing. (505) 486-4921.

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

Rocky Mountain Elk Foundation: A large national organization dedicated to ensuring the future of elk, other wildlife and their habitat. The organization actively supports efforts to protect and enhance elk country, conservation education and to restore elk herds. New Mexico information: (505) 892-1250, www.rmef.org.

New Mexico Muskies, Inc.: A group of anglers interested in fishing for tiger muskies in Bluewater and Quemado lakes formed this organization in 2008 as a chapter of Muskies, Inc. Information: Matt Pelletier, (505) 264-2999, www.newmexicomuskiesinc.org.

Friends of the Bosque del Apache National Wildlife Refuge: An organization of about 1,000 members supporting the Bosque del Apache National Wildlife Refuge and promoting appreciation and conservation of wildlife and habitat through environmental education. (575) 878-2320, www.friendsofthebosque.org.

Albuquerque Wildlife Federation: A volunteer organization focused on New Mexico's wildlife and habitat resources. It offers monthly meetings with guest speakers, in-the-field habitat restoration projects and a monthly newsletter. (505) 281-4609, http://abq.nmwildlife.org.

Southwest Environmental Center: Works to reverse the accelerating loss of species worldwide by protecting and restoring native wildlife and their habitats in the Southwestern borderlands, through grassroots advocacy, public education and on-the-ground restoration projects. (575) 522-5552, www.wildmesquite.org.

Southwest Consolidated Sportsmen: An organization representing at least 15 sporting and conservation groups of diverse interests. The group's three primary objectives are to "disseminate wildlife and habitat information, participate in habitat maintenance projects, and review and comment on proposals involving wildlife habitat." (575) 526-5056.

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

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

New Mexico Trout: Dedicated to the preservation and enhancement of trout fishing in New Mexico's waters through protection and restoration of riparian habitats and through educating the public about trout fishing and the ecological and social value of trout habitats. newmexicotrout@gmail.com, www.newmexicotrout.org.

Safari Club International: Promotes wildlife conservation worldwide while protecting the hunting heritage and supporting many education and humanitarian projects. Southern New Mexico Chapter: LTC R.A. "Pancho" Maples, pancho1@plateautel.net. Northern New Mexico Chapter: Brian Payne, b_payne10@msn.com.

New Mexico Chapter, Wild Sheep Foundation: Formerly the Foundation for North American Wild Sheep, the organization's goal is "putting more sheep on the mountain." Members work with the Department of Game and Fish to increase populations of desert and Rocky Mountain bighorn sheep in New Mexico. Lanny Rominger, (505) 821-5064.

Ducks Unlimited, New Mexico: More than 1,500 members support the organization's mission to restore and manage wetlands and habitats for North American waterfowl. Cindy Wolfe, cjwolfe@gilanet.com, (575) 854-3365.

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

Southeast New Mexico Wildlife, Inc.: A conservation organization (formerly Quail Unlimited) dedicated to preserving and enhancing wildlife habitat, especially quail habitat, in southeastern New Mexico. (575) 393-2895.

Ross Morgan

Fishing access for all

Facilities put handicapped on the water

By Ross Morgan

Access to great fishing was easy for me as a kid growing up in Alaska. I lived right at the edge of the dock, and as soon as school was out, I would put on my life vest and off I would go. I never wondered why there was a ramp on the side of the steps with a peculiar looking blue symbol on it. All I knew was the ramp made it a whole lot easier for me to get down there.

These days, as a conservation officer, I pay more attention to the special ramps and other facilities that make it possible for people with physical challenges to fish. Perhaps that's because government agencies and others are providing more access – and fishing opportunities – for the handicapped.

Today, people in wheelchairs and others who have difficulties moving around can find access to many fishing spots. Boat docks have been modified, shorelines paved and ramps extended to put more people near the water where they can wet a line and catch a few fish.

If you have a disability and aren't sure if the lake or river you would like to fish is accessible to you, try contacting New Mexico State Parks, (888) 667-2757. Many parks can accommodate anglers with various disabilities.

Northwestern New Mexico has a couple good opportunities for handicapped anglers.

Fenton Lake, in the Jemez Mountains, has concrete platforms along the shoreline, and an area around the campground shoreline with railroad ties that form a flat surface that offers easy access to fishing spots.

Farther north, the quality section of the famous San Juan River has four new fishing piers designed specifically for wheelchairs. Smooth concrete walkways take anglers from the parking lot at Texas Hole to piers that hang over the river, giving handicapped anglers access to the trophy trout that flourish there.

State Parks and the U.S. Bureau of Reclamation paid for the new piers. Doug McKim, a superintendent at Navajo Lake State Park, said more piers are planned for the Cottonwood campground area downstream.


Photo: Dan Williams

Four new piers installed over the quality water section of the San Juan River below Navajo Dam give handicapped anglers a chance to fish for trophy-sized trout.

Cochiti Lake is another good spot that offers access for the handicapped. Two docks accommodate wheelchairs.

In south-central New Mexico, Elephant Butte and Caballo lakes have wheelchair-accessible fishing platforms where anglers can comfortably cast for bass, catfish, crappie and other warm-water species. Caballo Lake State Park also offers a wheelchair-accessible "SuperDeck" east of the dam.

If you are an angler who requires easier access to good fishing but don't know where to go, please contact your local conservation officer or state park. They also can provide information about other facilities such as restrooms, showers and camping areas.

Ross Morgan is the New Mexico Department of Game and Fish public information officer for the Northwest Area. He can be reached at (505) 222-4707 or ross.morgan@state.nm.us.

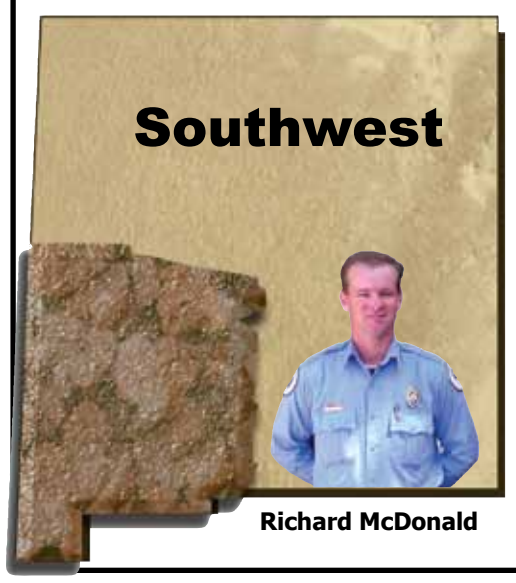
Fires can destroy, improve wildlife habitat

By Richard McDonald

As you venture outdoors this summer and fall, remember to practice fire safety. A flick of a cigarette, an unattended campfire or a faulty spark arrestor can start a chain reaction of intense landscape destruction.

Wildfire, in combination with strong winds and dry underbrush, can burn many acres in a relatively short time, often consuming everything in its path. Wildfire can have immediate impact on fish, birds, and other wildlife. It displaces wildlife into less suitable habitat, making it harder for species to survive. Annually, more than 100,000 wildfires burn almost 5 million acres of land in the United States.

This year has been an almost constant battle against wildfires in New Mexico and Arizona. By mid-June, New Mexico had seen more than 400 fires that burned more than 600 square miles. The majority of fires this season have been human caused, with a handful started by lightning.



Richard McDonald

The three main conditions that must be present for fire include fuel, oxygen and a heat source. This year's extremely dry, windy conditions have made the Southwest an ideal fire environment.

Ryan Whitaker, fuels management specialist for U.S. Fish and Wildlife Service, says wildfire can have an immediate and drastic impact on the landscape. About 70 percent of that impact can be positive, and it is important to react to fires quickly and to establish a plan with the goal of recovery in mind.

After a significant burn, a landscape habitat can take 10 years or more to return to its potential. Some methods used to help speed up that process include seeding, use of straw waddles, and even tires to help stabilize steep slopes and other areas of critical concern. While firefighters, volunteers and others will work months and even years to help restore critical landscapes, the biggest factor leading to recovery is rain -- and lots of it.

Fire can be used as a good wildlife management tool if done in a responsible manner by wildlife biologists and trained technicians. When wildfire burns through thick canopies and brushy undergrowth, sunlight reaches the forest floor. This allows a new generation of seedlings to grow, which are full of nutrients for wildlife. Wildfire also can help renew the soil by burning dead or decaying matter. Wildfire also acts as a disinfectant, removing disease-ridden plants and harmful insects from the ecosystem.


Photo: Clint Henson

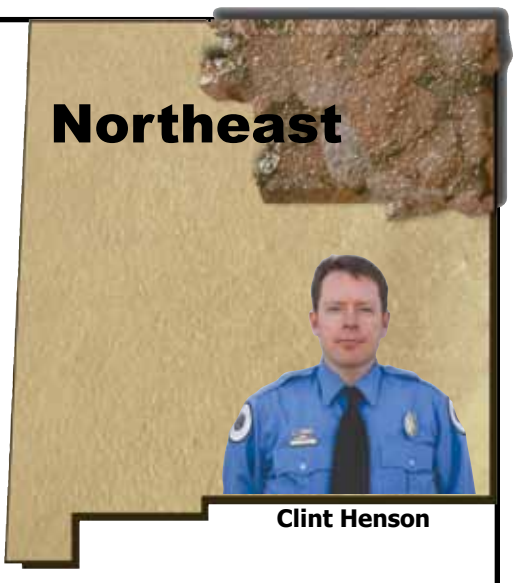
The Track Fire threatened Raton and stopped traffic on Interstate 25 in mid-June.

How do we prevent wildfires? Here are some tips to help keep you safe:

- Always contact 911, and or your local fire department immediately if you see an unattended fire.
- Never leave any campfire unattended. Completely extinguish any fire by dousing it with large amounts of water and stirring the ashes until cold.
- When outdoors, use extreme caution when using lanterns, stoves, and or heaters.
- Never toss cigarettes, matches, or any other smoking materials from a moving vehicle or while walking.
- Always follow local ordinances when burning any type of yard waste. Keep water, a shovel, and a fire retardant nearby to keep fires in check.
- Make sure your chain saw, OHV or ATV has an approved spark arrestor before using.
- If using fireworks, please use caution, especially around forested areas, or close to homes.
- Remember to check with your local Forest Service or land management agency for fire restrictions prior to heading outdoors for the weekend.

Richard McDonald is a conservation officer for the Department of Game and Fish. He can be reached in Las Cruces at (575) 532-2100 or richard.mcdonald@state.nm.us.

Real-life game warden CSI



Clint Henson

By Clint Henson

I recently noticed that the television show "CSI" was about to air its 250th episode. The show is in its 11th season and has had several spin-offs. To be honest, I think I have watched one episode. All I remember from the show is one of the investigators found a hair in the desert, quite a distance from the murder scene, which ended up linking the suspect to the crime. I thought it was an impossible find and decided to pick another television show to waste my time on.

I found a couple game-warden television shows, such as National Geographic's "Wild Justice," that show conservation officers at work, but nothing as scripted and studio-produced as CSI. The real world that shows like CSI are based on is fascinating, and the work that your local conservation officer does on a daily basis to solve wildlife crimes might surprise you.

On television, street officers respond to a crime and then call the investigators. The investigators collect evidence and then send everything to the lab for analysis. Then the case is turned over to the district attorney, and like magic the bad guys go to jail.

In the real world of game-warden work, officers respond to, or find crime scenes, then investigate the case. Then it is their responsibility to prosecute the suspect in court. The officer handles the case from beginning to end.

Some wildlife crimes are called-in by hunters or reported to the Operation Game Thief hotline, but it is more common for game wardens to find crime scenes. They often notice things that are out of the ordinary and often will follow crows or vultures to an illegal kill. Wildlife crimes are considered victimless crimes. No one ever calls

File photo

Conservation officer Mike Perry shows tagged evidence in a deer poaching case.

about a missing deer. Once a kill is discovered, the officer has to determine if a crime occurred. Many hours can be spent collecting evidence only to discover the kill was a legal harvest.

If the officer believes a crime has been committed, he or she will collect evidence that can range from shoe prints, vehicle tracks, spent rifle casings, bullets in the animal, trash that may contain fingerprints, and DNA from wildlife parts found at the crime scene.

The most important thing about any evidence is that it must be comparable evidence, meaning that it must compare to something belonging to the suspect. Shoe prints will match up to the suspect shoes, DNA will match to the meat in the freezer, and bullets will match the gun. It does no good to collect DNA if an animal was just shot and left in the field, untouched. There is nothing to compare it to.

If a suspect is found and evidence is collected through a search warrant or permission granted by the suspect, that evidence must be collected and locked in an evidence locker. Usually, only DNA evidence is sent away to a lab to compare the samples. Most other evidence can be used in court with sufficient certainty that it was in fact proof of the crime.

After the crime scene investigation, and the process of the evidence, the conservation officer will file criminal charges in magistrate court. Court dates are scheduled and the case is heard by the presiding judge. The officer must know the rules of evidence and how to prosecute the case. Many hours of preparation are required to be ready for trial and it is the point at which all the hard work comes together. Sometimes you win and sometimes you lose, but I have heard from many judges that conservation officers do a better job on an illegal harvest case than prosecutors on some homicide cases they have heard. Officers also may file a civil complaint for wildlife that are taken illegally, and that's another trial and requires separate preparation.

So the next time you watch CSI or your favorite crime show, look at all the people involved in the case and remember: Game wardens do that all the time – all by themselves.

If you ever have information about a wildlife crime, please call Operation Game Thief toll-free at (800) 432-4263. And remember, give the most detailed information you can. It will be used to find and identify the suspects.

Clint Henson is a conservation officer and public information officer for the Department of Game and Fish. He can be reached in Raton at (575) 445-2311 or clint.henson@state.nm.us.

Sometimes bears show up the darnedest places

Photo: Mark Madsen

Dogs helped tree a bear in a Roswell pecan orchard this spring.

By Mark Madsen

Black bears tend to show up in some really unusual locations on occasion. Bears showing up in urban areas are a pretty common occurrence in places like Raton or Ruidoso. Bears are continually in the news in places like Albuquerque and Bernalillo. All of those cities are in or in close proximity to good bear habitat. But what about Roswell?

Recently two young black bears showed up just outside the city limits of Roswell, one west of town and one north of town. As you probably have guessed, bears normally don't call Roswell home. The closest bear habitat to Roswell would be the Capitan or White mountains at least 50 miles away.

Given the extremely dry conditions throughout southeastern New Mexico, it's not too hard to figure out how those bears ended up in Roswell. They just kept moving east until they found something green -- in this case pecan trees. The dry conditions have resulted in very little forage for bears and wildlife in general. Bears tend to feed on new green grass and other vegetation during the spring and early summer, all of which is lacking this year.

Both of the Roswell bears were young males about 1 ½ years old and most likely had been kicked out by their mother sometime within the last few months. Given the timeframe, there is a good possibility that the two bears were litter mates. Young male bears can have a really tough time when they have been forced to leave their protective mothers. They now have to compete for a new territory -- one that isn't occupied by another adult male. The dry conditions further add to that difficulty due to very limited food supply.

Both bears were successfully treed (Actually one was "bushed" due to no trees being in the general area.) by a local houndman who was contacted by the Department of Game and Fish to assist. The bears were darted with immobilization drugs by a district wildlife officer and then successfully relocated back to the White Mountains south of Carrizozo.

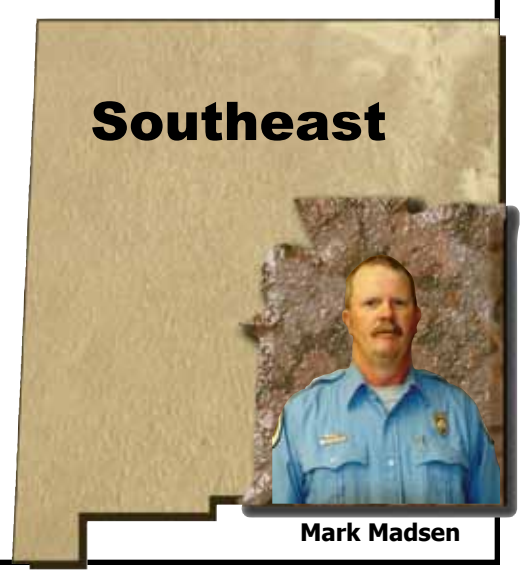
The first bear showed up west of Roswell just past 6-Mile Hill in a housing development. The Chaves County Sheriff's Department and Roswell Game and Fish office received more than 30 calls from residents who reported seeing the bear. That bear was treed in a pecan orchard, where he was drugged and relocated without any problems.

The second bear showed up a few days later just north of the Roswell Wal-Mart along Pine Lodge Road. That bear was seen moving east toward U.S. 285, actually crossing the playground at Berrendo Elementary School.

Conservation officers and sheriff's deputies chased the bear back to the west, at which time he ran through the playground again. This time, the entire student body was standing outside watching. The bear was successfully drugged and relocated.

People sometimes forget that bears and wildlife in general can be dangerous and should be treated with caution. If you see a bear or a seemingly harmless animal, leave it alone and certainly don't approach it. If you find a bear in your yard or standing on your front porch, stay in the house and report it to your local wildlife conservation officer or Game and Fish office.

Mark Madsen is the Department of Game and Fish public information officer for the Southeast Area. He can be reached in Roswell at (575) 624-6135 or mark.madsen@state.nm.us.



Mark Madsen

Fishing, camping areas get welcome facelifts in Pecos Canyon

By Dan Williams

Visitors to Pecos Canyon this summer noticed some improvements to popular fishing and camping areas that will continue to make their outdoor experiences cleaner and more comfortable.

This year, the Department of Game and Fish put the finishing touches on improvements to two popular fishing and camping access points along the Pecos River. Roads were graded, campsites were improved, bear-proof trash bins were installed and state-of-the-art vault toilets were built at the Bert Clancy and Terrero areas. The price tag: about $200,000, courtesy of the state's hunters and anglers through the sale of hunting and fishing licenses.

"We're confident visitors will enjoy these improvements in the canyon," said Mike Gustin, the Department's assistant chief of habitat and lands. "We also hope the cleaner environment and new facilities will inspire people to respect the beauty of one of our state's most popular fishing and camping areas."

The Department hired an employee to remove trash and perform maintenance on several properties between Pecos and Cowles owned by the State Game Commission. A volunteer also will help with trash cleanup. Management of the properties eventually may be turned over the State Parks Division, as suggested by the 2010 State Legislature in a House Joint Memorial.

This year's improvements were designed with the help of State Parks and focused on the Bert Clancy and Terrero areas. Future work is planned at the Mora campground and Jamie Koch recreation area at Willow Creek.

At the Bert Clancy area, Department crews defined nine RV campsites with large boulders, spread 2,000 tons of base course on pads and access roads, and installed 3,000 feet of pipe fencing to keep vehicles out of the river. Bear-proof trash bins were installed, and a large vault toilet with separate facilities for men and women is one of the best in the canyon.

The Terrero site, one of the most popular in the canyon, was improved with trash bins and a new vault toilet. The access road over runoff from a natural spring was improved with about 300 tons of rock and 150 tons of base course.

Pecos Canyon traditionally has been one of New Mexico's finest and most popular fishing and camping areas. Local residents and visitors from around the state and country enjoy the scenery, clean air and the fishing. Each year, the Department of Game and Fish stocks more than 53,000 rainbow trout in the river from the town of Pecos to Cowles. The river also contains a healthy population of brown trout, which haven't been stocked since 1980 and are believed to be reproducing naturally.

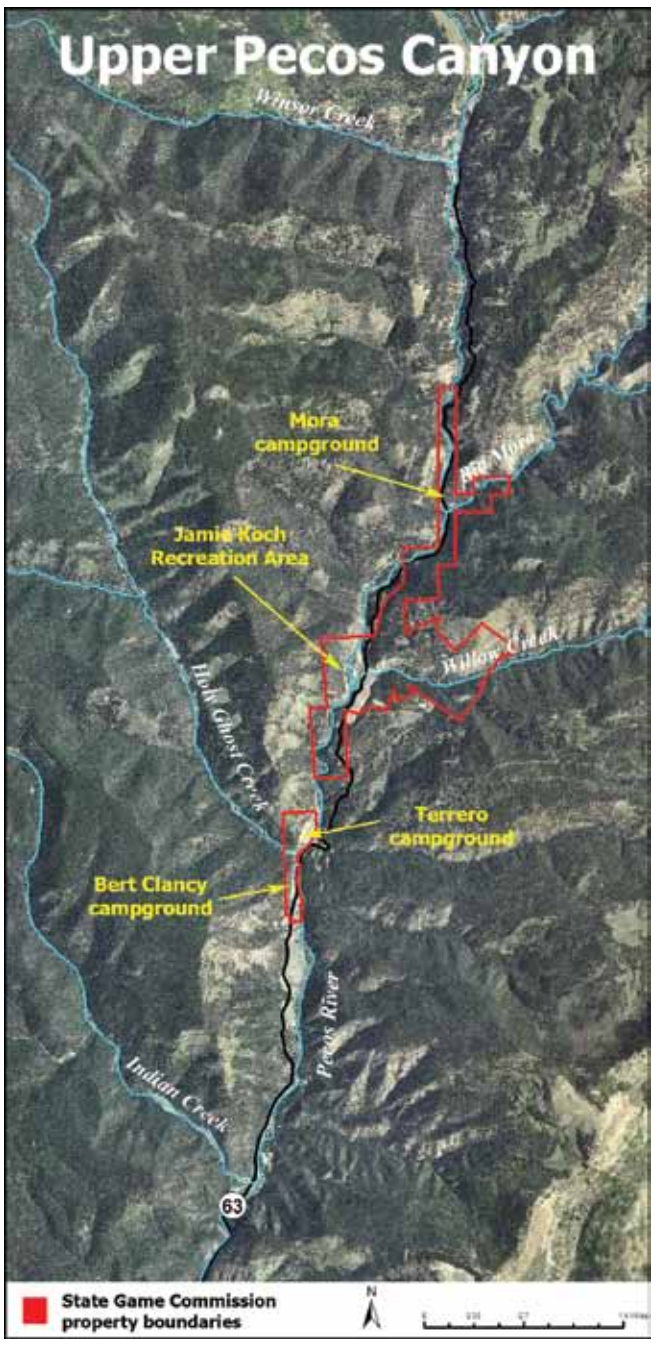
That popularity has led to some problems over the years. Finding river access for fishing and camping has become increasingly difficult as private landowners have posted their property. Today, only 5 of the 17 miles of Pecos River from Monastery Lake to Jack's Creek are accessible to the public. That has put increasing pressure on public fishing areas.

Commission-owned properties in the canyon have been especially popular with anglers and campers. Use of the properties was free until 2006, when the Gaining Access Into Nature Program (GAIN) began requiring fees. Free, mostly unrestricted access led to problems, including an abundance of trash and outhouses that could not accommodate the numbers of people using them.

Today, GAIN requires visitors ages 18 or older to have either a GAIN permit or a current hunting or fishing license, and a Habitat Management and Access Validation. Licenses and permits are available at license vendors statewide, online at www.wildlife.state.nm.us, and at Department offices in Santa Fe, Albuquerque, Raton, Roswell and Las Cruces.

So far, the fee requirements and the improved camping and toilet facilities have made the properties cleaner and more environmentally friendly.

"Our objective is to make these properties places people will want to keep clean – and to protect fragile stream banks from overuse and erosion," Gustin said. "After Memorial Day weekend, we were very pleased to find very little trash in the improved areas – and no vandalism."



The Commission purchased the properties in several tracts beginning in 1950 from the American Metal Company of New Mexico, which operated a mine and mill in the canyon. The total price for about 2,000 acres was $90,506. The Department since has been involved in the cleanup of the sites to provide recreation and protect the river from contamination from mine wastes and tailings.

The Department of Game and Fish recently completed the first phase of improvements to State Game Commission properties in Pecos Canyon. They include better designed camping sites, new vault toilets, bearproof trash bins and barriers to prevent vehicles from driving into the river.

Photos: Dan Williams

Youth Shotgun Program a real blast

By Mark Gruber

It was a hot, dusty day last summer on the West Mesa outside of Albuquerque. Squads of kids, each with the support of parents and coaches, huddled in the protective shade of the gleaming white tent, not daring to venture beyond the edge of the shadow. All were focused on the competition unfolding in front of them.

Pull ... bang! Pull ... bang! Pull ... bang!

The hard-to-forget smell of burnt gunpowder wafted through the afternoon air, but it was not the mountain breeze everyone hoped for, but more of a giant hairdryer blast. Turkey vultures circled above, following the thermals into the distance.

And so it began last summer for the start of a new, badly-needed program. The New Mexico Department of Game and Fish officially started a Youth Shotgun Program designed to introduce a new generation of young people to shotgun shooting sports. Those who know their way around the smoothbores are well aware of the fact that this is a sport mostly enjoyed by those gray-of-beard.

It does not take a great leap of faith to realize what is desperately needed is a new crop of young shooters to re-energize the shotgun shooting sports industry.

Trap shooting can be traced back to the 1790s when they used real birds. Skeet is a rather newcomer, becoming popular in the 1920s. Range operators will tell you skeet is fading. Trap is only hanging on and sporting clays is the only venue evidencing growth.

Clay shooting is a fun venue for young shooters. It takes something exciting to overcome the urge for a young kid to grab an X-Box controller and hunker down on the sofa to mow down digitized villains.

There is growing support for a Youth Shotgun Program and it is exhilarating to see the kids, the parents and coaches cheer and exchange high-fives when their youngster absolutely "smokes" a clay target. This is where Dad realizes Junior just did something he probably could not do himself.

The praises are welcome for the new program. The Department offered four NRA Shotgun Level 1 Certification classes for those interested in becoming coaches. As a result, 60 volunteers from across the state became certified instructors.

File photo

Young shooters were all smiles during the 2010 statewide shooting competition at the Outdoor EXPO in Albuquerque.

These hard-working folks help school kids between the ages of 9 and 17 learn firearms safety, proper shooting techniques and most importantly, how to have fun with a shotgun. Kids are introduced to trap, skeet and sporting clays and the Department picks up part of the tab for the training.

Those certified to participate in the Youth Shotgun Program are eligible to receive shotgun ammunition, eye and hearing protection and shot shell pouches.

In August, 2010, the Youth Shotgun Program hosted a statewide shooting competition at the Outdoor EXPO in Albuquerque. That competition featured teams shooting two rounds of ATA Trap. Seven teams stepped up to the firing line. Nearly 100 visitors were in attendance to cheer on their teams.

The Department plans to host another shooting competition later this year, once again providing ammunition and clay targets, which is encouraging news to coaches as they involve their teams in this exciting event. This may be the first real competition for most of the youngsters.

There are teams expanding in Aztec, Albuquerque, Belen, Los Alamos, Las Cruces, Alamogordo, Raton, Gallup, Farmington and Deming. While shotgun shooting programs may not yet be a welcome sport on primary education campuses, colleges and universities across the United States have embraced the sport; some even offer scholarship aid.

One of the most appealing things about shotgun sports is you can "kill" clay targets without any inherent feelings of remorse. Since hunting is now recreation and no longer just for those who hunt to survive, clay shooting offers an enjoyable alternative. It is available year-round, not just during hunting seasons.

I will paraphrase Jay Leno from a commercial, "Shoot all you want. We'll just make more." Crushing clays is a heck of a lot more fun than punching little holes in a paper target.

Pull! ..... bang! ..... Great shot!

If you want to try your hand at shooting clay targets, attend the Department's Outdoor Expo. The EXPO is free and open to the public. It will be Aug. 20-21 from 10 a.m. to 4 p.m. at the Albuquerque Shooting Range Park.

For more information about the Department's Youth Shotgun Program or to find a certified instructor in your area, please contact Mark Gruber at mgruber@state.nm.us.

Mexican bighorns join Red Rock herd

After months of quarantine, desert bighorn sheep from Mexico were successfully released to join the existing herd at the Red Rock Wildlife Area. The 10 rams will supply new genes to a herd that began at Red Rock in the 1970s.

The newly introduced rams appear to be in good shape and the Department of Game and Fish is excited to see the outcome of years of collaborative efforts and wildlife roundups come to fruition with the release of these young sheep.

"It's nice to see that they all survived and they're doing really well," bighorn sheep biologist Elise Goldstein said. "They're feisty and I think they're going to be some good sturdy rams to add to the stock."

The state of New Mexico received the rams in exchange for pronghorn antelope that were moved to three wildlife management areas in Mexico over the last two years.

Desert bighorn sheep propagation began with just five ewes from Mexico and one ram from the San Andres National Wildlife Refuge on the White Sands Missile Range in 1972.

Photo: Eric Rominger

These 10 desert bighorn sheep from Mexico will supply new genes to New Mexico herds.

The Red Rock herd's offspring has helped restore desert bighorns across New Mexico's desert mountain ranges. Over the next decade, offspring from the Mexican rams will be used to augment desert bighorn populations across the state.

In 1980, desert bighorn sheep were listed as a state endangered species when the population was estimated at fewer than 70. Today, through management efforts including releases, selective predator control and support from numerous wildlife conservation groups, the population estimate is more than 565. This number exceeds delisting criteria as defined by the recovery plan for the species and desert bighorns are currently being reviewed as candidates for delisting.

The Department will conduct public meetings Sept. 6 regarding the recommendation to delist desert bighorn sheep (*Ovis canadensis mexicana*) from the New Mexico threatened and endangered species list, pursuant to the Wildlife Conservation Act, Sections 17-2-37 through 17-2-46, NMSA 1978.

The meetings:

- 6 p.m. Sept. 6, Truth or Consequences, Civic Center Chambers, 400 W. 4th St.
- 6 p.m. Sept. 6, Deming, Special Events Center, 2300 E. Pine St.

A merry chase for willow flycatchers

The Lower Gila Box along the Gila River northwest of Lordsburg is an important riparian habitat for the endangered southwestern willow flycatcher.

Photos: Marti Niman, left; Hira Walker, above.

By Marti Niman

Cached deep in the heart of the Chihuahuan Desert lies a true oasis that shelters at least 170 bird species among its dense thickets of native cottonwood, seep willow, Goodding's willow and coyote willow.

The Lower Gila Box, about 20 parched desert miles northwest of Lordsburg, boasts one of the highest bird diversities in New Mexico and is a significant breeding ground for the elusive southwestern willow flycatcher (*Empidonax traillii extimus*), one of the four recognized subspecies of the willow flycatcher. The bird's state and federal endangered status has garnered near movie-star status for the flycatcher, despite its tiny size and drab coloring.

Photo: Hira Wlker

Last year, field biologists with the New Mexico State Land Office began to survey flycatcher populations in the Lower Gila Box.

"The BLM (Bureau of Land Management) biologists have been doing surveys for years, but there was a gap in their data where state land is located," said Shawn Knox, assistant director of Field Operations for the State Land Office. Most of the Lower Gila Box is managed by the BLM except for a one-mile stretch of the Gila River that crosses state trust land.

In that stretch, biologists Knox, Clay Bowers and Mark Meyers stalked the tiny bird armed with two-way radios, tape players, binoculars and field notebooks during this year's first survey in mid-May. Willow flycatchers are extremely difficult to distinguish except by their buzzy "fitz-bew" and their "whit," "britt," and "wheeoo" calls. Heard amid the cacophony of morning bird song along the river, from cooing doves to squawking ravens and the twitters and trills of countless songbird species, survey work requires intense focus aided by portable tape players to broadcast the flycatcher's signature calls.

Photo: Marti Niman

Willow flycatchers are very difficult to spot and identify in their thick riparian habitat. Biologist Clay Bowers uses recorded calls to lure the elusive birds out of cover so they can be counted.

Those calls serve to locate and identify the presence of willow flycatchers. The diminutive birds are close to invisible, their drab coloring blending into the dense understory of their habitat. The broadcast calls literally bring them out of the woodwork to defend their territory against other intruding flycatchers. By locating the birds during at least three separate periods during the breeding season, biologists can distinguish migrants from those that likely are nesting within the surveyed area. Only the southwestern subspecies breeds in the area, while other subspecies can be found during migration.

Photo: Hira Walker

"That's a super-aggressive male; he came right in," said Bowers, watching a flycatcher zip close in response to a taped "fitz-bew" call. The biologists worked both sides of the river and communicated via radio to assure they were not counting the same bird. The team slowly made its way upriver, slogging through snarled branches and leaf litter, and sidestepping jutting cliffs by wading into ankle-deep water. They infiltrated tangled vegetation to listen and play the recorded calls where the birds were most likely to respond.

"It's nice when they are already singing and I don't have to use the tape," Bowers said.

Southwestern willow flycatchers require jungle-like riparian habitat for breeding – a rare-enough environment in this land of little rain, even in the best of circumstances. Given the impact on these rare oases by human development as well as drought, it's no surprise that the population of these flycatchers is sparsely and widely scattered across its range in the desert Southwest. About 40 percent of the total population occurs in New Mexico.

"Southwestern willow flycatchers are riparian obligates – they require riparian habitats also required by other species," said Hira Walker, ornithologist for the New Mexico Department of Game and Fish. "Therefore, they can be considered 'umbrella' species; conservation efforts for this species can benefit many other riparian obligate wildlife and plant species."

Other species that use riparian habitat include Bell's vireo, yellow-billed cuckoo, Lucy's warbler, yellow-breasted chat, common yellowthroat, common black-hawk, vermilion flycatcher and Gila woodpecker – all of which have been found in the Lower Gila Box. Mammals such as black bears, cougars, bobcats, javelina, and even the unusual coati also make the Box their home.

"Last year I came across about 35 coatis playing around like monkeys in one of these washes," said Bowers. "One of them got a wild hair and climbed up a willow to knock another one out of the tree. They were hanging off the branches and hitting each other like cartoon characters."

The Lower Gila Box is one of the increasingly rare areas in New Mexico that still retains a relatively intact native riparian ecosystem, with lentic or slow-moving water, overbank flooding and dense multistory vegetation. Once immersed in the Lower Box, the threats and concerns of the world beyond seem almost unreal.

"Last year Clay (Bowers) radioed to say, 'These birds aren't endangered! They're packed in here!'" said Knox, adding that the Gila is not dammed upstream – one of the major factors that contributes to the healthy functioning of the ecosystem. The Lower Gila Box hosts the third largest population of Southwestern willow flycatchers in New Mexico, after the Cliff-Gila and San Marcial populations, according to Walker.

"All the features of the riparian habitat are in there and these birds seek it out and find it," Knox said. State Land Office biologists monitor this and other sites to assure that the agency is managing the resource to sustain its productivity into the future.

"The idea is to identify any concerns that are present on lease sites relative to biota, erosion, pollution and conflicts of interest," Knox said. "Oftentimes, endangered species are indicator species that highlight other problems in the ecosystem where they live. Monitoring the populations can provide insight about the overall health of those systems."

Marti Niman is a public information officer for the New Mexico State Land Office. She can be reached at mniman@slo.state.nm.us. Visit the State Land Office website, www.nmstatelands.org.

Bighorns beating the train

Biologists, railroad work to prevent deadly collisions

By Mark Watson

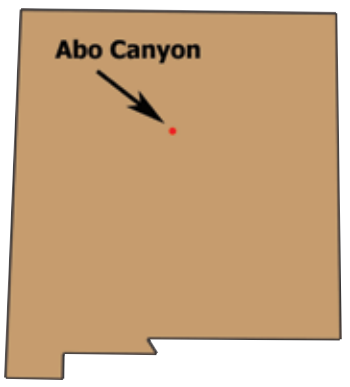
The Department of Game and Fish and Burlington-Northern Santa Fe Railroad have worked together to construct an 8-foot tall wildlife-proof fence to help prevent collisions between wildlife and the trains that travel double tracks through Abo Canyon about every 20 minutes.

Photos: Mark Watson

Abo Canyon lies at the geographic center of New Mexico, along the central mountain chain, juxtaposed between the Manzano Mountains to the north, Los Pinos Mountains to the south, short-grass prairie ecoregion to the east, and Chihuahuan Desert and Rio Grande Valley to the west. Abo Arroyo, a spring-fed perennial stream, winds through the canyon, providing water, food and cover for wildlife, including Rocky Mountain bighorn sheep, mule deer, black bears and cougars.

At the upper end of Abo Canyon lies Abo Pass, which was first mentioned in the historic record by Major J.H. Carleton in 1853. Abo Canyon and Abo Pass have functioned for millennia as a crossroads and travel corridor for wildlife, ancient indigenous people and modern travelers. Abo Pass recently has been identified as an important north-south wildlife corridor during several landscape-scale wildlife habitat planning efforts. It also has been the site of numerous fatal collisions between wildlife and trains, and recently the site of a cooperative effort to prevent those collisions.

Rocky Mountain bighorn sheep (*Ovis canadensis canadensis*), which now occur in Abo Canyon, are not believed to have ever been widespread in New Mexico. Historical evidence exists for just four populations: Wheeler Peak, the Pecos Wilderness, White Rock Canyon below Los Alamos, and the Manzano and Los Pinos Mountains. Bighorn sheep were reported by Aldo Leopold to have persisted in the Manzano and Los Pinos Mountains until the 1880s, but were extirpated likely due to commercial overhunting and pneumonia spread by domestic sheep.



To re-establish a metapopulation of Rocky Mountain bighorn sheep across their historic range, the New Mexico Department of Game and Fish in 1977 transplanted a herd of 16 bighorns from the Pecos Wilderness into Monte Largo Canyon in the Manzano Mountains, and farther south near the junction of Sand and Abo Canyons. Additional augmentations of 16 and 28 sheep occurred in 1978 and 1998.

However, the bighorns never established in the Manzanos, but instead preferred the Abo Canyon area. The bighorns presumably selected Abo Canyon over the higher elevation and more densely vegetated Manzanos because of the availability of water in Abo Canyon, and perhaps because of reduced predation pressure. A century of fire suppression has increased brush and tree encroachment in the Manzanos, reducing escape cover for the sheep and increasing hiding cover for cougars. Today, this small but resilient bighorn herd spends much of its time in Abo Canyon, and may actually lamb there.

In addition to the bighorn sheep, mule deer and black bears that regularly use Abo Canyon, Burlington-Northern Santa Fe Railroad (BNSF) runs cargo trains through the canyon about every 20 minutes, 24 hours a day. This month construction was completed on a second set of tracks that allow the trains to run in both directions.

Unfortunately, wildlife have not learned to recognize danger from loitering near or on railroad tracks, and may actually be attracted to the tracks because of grain that leaks out of train cars, or to minerals such as salts that may be left behind.

Bighorn sheep, mule deer, black bears and cattle have been struck and killed by trains in Abo Canyon for years. In 2005, during the planning period for construction of the new set of tracks, Department wildlife biologists and BNSF personnel recognized an opportunity to reduce the collisions. Since then, New Mexico Department of Game and Fish and BNSF, through their construction contractor TranSystems Corporation, have worked together to greatly reduce wildlife mortalities from train strikes by constructing an 8-foot tall, woven wire, wildlife-proof fence along the outer side of both tracks, old and new, to exclude wildlife from the tracks.

Approximately 40,000 linear feet of 8-foot woven wire game fence has been constructed around the tracks through Abo Canyon. Twenty-one wildlife escape ramps have been constructed within the fenced area to allow wildlife that manage to slip inside the fence to jump out of the track right-of-way and escape. Double-wide cattle guards were installed at vehicle maintenance access gates along the fence to discourage wildlife from jumping over a single-wide cattle guard into the right-of-way.

Importantly, north-south habitat connectivity between the Los Pinos Mountains to the Manzano Mountains and access to water by wildlife will be maintained at seven large train trestles throughout the Canyon. These high and wide bridges over Abo Arroyo provide plenty of open space for bighorn sheep, mule deer and other wildlife to comfortably move beneath the tracks and access water at multiple locations. The wire fence wraps around the abutments of the bridges, leaving wide gaps for wildlife to move through, and yet provides continuous protection to wildlife by precluding access to the tracks.

The total costs of materials and construction for the wildlife and livestock mitigation component of the larger project will approach $300,000. This is indeed a lot of money; however, the total construction cost for installation of the new track will approach $90 million, due in large part to the more than 1.6 million cubic yards of rock and dirt that had to be blasted and removed to install the second track.

The wildlife and livestock mitigation component of the project will end up costing approximately 3.5 percent of the total cost of the second track construction project. That amount is not unreasonable when compared to wildlife safe passage projects across highways. For example, wildlife exclusion fencing, escape ramps and several overland wildlife crossings with warning signals along old Route 66 and Interstate 40 in Tijeras Canyon east of Albuquerque cost about 2 percent of the total cost of the larger highway widening project.

A primary difference of wildlife safe passage projects across highways, as compared to Abo Canyon, is that wildlife-vehicle collisions cost human lives as well as wildlife, and billions of dollars annually in vehicle repair costs.

The significant investment by Burlington-Northern Santa Fe Railroad in Abo Canyon acknowledges the value of maintaining important wildlife populations and habitat connectivity, while developing human transportation and shipping networks.

Mark Watson is a terrestrial habitat specialist with the Department of Game and Fish. He can be reached at (505) 476-8115 or mark.watson@state.nm.us.

Garter snakes of New Mexico

Black-necked garter snake

Just south of Elephant Butte Reservoir in southwestern New Mexico is Percha Dam State Park, where one might see as many as three species of garter snakes in the grassy borders by the river and around the lawns. The New Mexico garter snake, the checkered garter snake, and the black-necked garter snake, *Thamnophis cyrtopsis*.

An adult black-necked garter snake is up to 28 inches long, with an olive-gray to dark brown body and a gray head. The vertebral stripe on this species is white or yellow-orange, while the lateral stripes are white with the stripe on the second and third scale rows. These garters are named for the black crescents found on each side of the back of its head.

Found throughout much of the state, these garters are often found near quiet and rocky pools of water. Black-necked garter snakes will dive into the water if approached, and will vent their musk glands if handled.

They feed upon amphibians, as well as fish. They have been reported to float in algae mats and prey upon frogs that swim by.

New Mexico (common) garter snake

The Rio Grande south of Belen at the Ladd S. Gordon Waterfowl Management Area is home to three garters, the black-necked, checkered and the New Mexico garter snake, *Thamnophis sirtalis dorsalis*.

The New Mexico garter snake is a subspecies of the common garter snake, a wide-ranging species found throughout much of North America. A normal-sized adult New Mexico garter snake is up to 35 inches long, making it the longest of the garter snakes in our state. Its vertebral and lateral stripes vary among tan, gray, yellow, orange, green and blue, and the spots between those stripes are usually black on a red or orange background.

The New Mexico garter snake is found in a wide variety of habitats, but, like the other garter snakes, it is most often found around water and moist riparian habitats. If caught, the New Mexico garter snake will bite, striking repeatedly.

This garter also feeds on amphibians, as well as earthworms, lizards, other snakes, birds, bird eggs and small mammals.

Male common garters emerge from the winter den before the females, ready to mate. It is common to see many, many males courting each female as she emerges, often forming balls of male snakes around her.

Terrestrial garter snake

Two species of garter snakes are found around Heron and Abiquiu lakes, and at the Rio Chama Wildlife Area in northern New Mexico. One is the black-necked garter; the other is the terrestrial garter snake, *Thamnophis elegans*. This is one of the most commonly seen of all snakes in New Mexico and is most often found in our mountains and high river valleys.

Adult length for the species is up to 30 inches. Terrestrial garter snakes have white vertebral stripes, while the lateral stripes are pale or even washed out. The background for these snakes ranges from dark brown, green brown, tan, to gray, with two rows of dark spots between the vertebral and lateral stripes. Like the black-necked garter snake, the terrestrial garter snake sometimes can have black crescents behind its head, but its crescents are paler than those of the black-neck.

Wide-ranging, the terrestrial garter snake occupies many habitats and it can be spotted well away from water and wetlands. One unique aspect of this species is that it occurs above 10,500 feet.

This garter will bite if handled, but is not as pugnacious as some garters in our state.

An active hunter that makes use of many habitats, the terrestrial garter snake has a variable diet composed of invertebrates, slugs, earthworms, tadpoles, adult amphibians, lizards, birds, mice, shrews and chipmunks.

Plains garter snake

Clayton Lake State Park in northeastern New Mexico is where one of the widest ranging species of garter snake in North America, the plains garter snake, *Thamnophis radix*, reaches its southernmost limit. Other species of garter snake potentially found at Clayton Lake State Park include black-necked, checkered and terrestrial.

The length of a normal adult plains garter snake can be up to 28 inches. Stripes on this species are striking, yellow to orange for the vertebral stripe, green or blue for the lateral stripes. Its lateral stripes are found on the third and fourth scale rows, which is a key difference between this garter snake species and the terrestrial and New Mexico garters, which have the stripe on the second scale row. Between stripes, the back is variable from greenish-gray to olive, brown, or even red.

Found throughout the prairies of the midwestern United States, the plains garter snake can be found far away from riparian habitat. More often than not, however, it is seen by bodies of water such as lakes and playas.

Its preferred defense is escape, often into water or high grasses, but the plains garter snake will bite if cornered.

The species is known to eat earthworms, amphibians, small mammals and even carrion.

Checkered garter snake

Santa Rosa Lake State Park along the Pecos River just north of Interstate 40 is one place to look for the checkered garter snake, *Thamnophis marcianus*. The park is also home to the black-necked garter snake, the western ribbon snake, and potentially the plains garter snake.

Adults reach up to 24 inches and have a very distinctive checkered pattern of black spots along their body. The vertebral stripe, cream colored, is distinctive and is often intruded upon by the checkered black spots. The lateral stripes are narrow and white, found only on the third scale row, which distinguishes the checkered garter snake from the plains garter snake. This species has black crescents behind its head like the black-necked garter snake, but has 21 scale rows at mid-body to the black-necked garter's 19, as well as the distinctive checkered pattern.

Checkered garter snakes are a lowland species found mostly in Mexico. New Mexico and Arizona represent the northernmost portion of its range. The checkered garter snake prefers wet habitats near ponds, rivers, streams and ditches, and is reported to be expanding north by using agricultural fields as well as stock tanks and other water developments.

This garter doesn't seem to be as prone to biting as other garter snakes in New Mexico.

Fish are a primary component of its diet, along with earthworms, tadpoles, amphibian adults and small mammals.

Western ribbon snake

The western ribbon snake, *Thamnophis proximus*, can be found on the W.S. Huey Waterfowl Area near Artesia. It is common throughout eastern and central North America, but it is rare in New Mexico, at the very western edge of its range.

A long, slender garter snake, normal adults of this species may reach 34 inches and have proportionally longer tails than the other garters of New Mexico. The vertebral stripe is orange while the lateral stripes are narrow and dark with an olive-gray to olive-green background.

This is a very aquatic snake, hunting around deep pools of permanent water and quick to escape into the water. The snake feeds primarily on amphibians.

Narrow-headed garter snake

The Department's Heart Bar Wildlife Management Area abutting the Gila Wilderness is home to the state's only garter snake that does not have stripes, the narrow-headed garter snake, *Thamnophis rufipunctatus*.

The narrow-headed garter's head is laterally compressed and its eyes, smaller than other garter snakes, are closer to the top of that head. The placement of the eyes and the shape of the head make the snake more hydrodynamic and improves its chances of catching fish in swift-flowing streams. This species can be found much of the time in the water, hunting in and out of the crevices between large rocks in streams. It will even anchor its tail in those crevices and then ambush passing fish.

The length for a normal adult narrow-headed garter snake is 28 inches. The snake is olive-brown with black spots.

This garter is found in Arizona and New Mexico, with most of its overall range in Mexico. Recent genetic work suggests that the form in the United States may be a unique species. Due to its rarity, the narrow-headed garter snake was listed by New Mexico as threatened.

Mexican garter snake

The rarest of eight garter snakes of New Mexico is found in southwestern New Mexico, but there is no specific locality to give as an example of its habitat. That's because the Mexican garter snake, *Thamnophis eques*, hasn't been seen in New Mexico since 2002.

The normal length for this garter is unknown in New Mexico, but like other garter snakes, it probably is about 30 inches. The pale vertebral stripe is lined with black borders while the lateral stripes, on the third and fourth scale rows, are much brighter. Between the stripes, the background is brown with olive spotting. This snake has white crescents behind each side of its mouth.

Mexican garter snakes can be found near cienegas. They are active foragers and will strike repeatedly when caught.

Their prey base is diverse, ranging from invertebrates to amphibians, lizards and small mammals.

Due to its extreme rarity in New Mexico, the Mexican garter snake is listed by the state as endangered. The species has also shown dramatic declines in Arizona.

Garter country

. . . continued from Page 1

the checkered garter snake, appear to be expanding into North America from Mexico. Others, like the Mexican garter snake, are disappearing.

Garters make use of a great variety of habitats but all are usually found near water.

In New Mexico, the activity period for these snakes is from March to October. Garters tend to be seen in the day, but, when it gets too hot the snakes will shift their activity period to the nighttime. They aggregate over the winter in snake dens, often in large numbers, although they may hibernate alone . Mating often occurs soon after emergence from the den in spring, and all garter snakes are live-bearers.

Garter snakes are not venomous. If handled, they will bite and they will expel a foul-smelling musk from their anal glands

Garter snakes are often abundant in select aquatic habitats and they play an important role in the predator/prey ecology of select wetland habitats.

"Many, many animals make use of such habitat, despite the fact that wetlands and riparian zones compromise only 1 percent of the overall land cover of New Mexico," Painter said. "The presence of water and accompanying plants and insects provide basics of life that often are not found anywhere else. Unfortunately, humans are imposing a tremendous toll on such precious resources, with up to 90 percent of historic wetland and riparian habitat in Arizona and New Mexico now gone."

Within the wetlands and riparian zones that do remain, life continues and garters are integral to the food webs in those zones, preying on many organisms and are in turn preyed upon by others. As Aldo Leopold noted in his essay, "The Last Stand," (ecological) "Communities are like clocks: they tick best while possessed with all their cogs and wheels."

Leland Pierce is the terrestrial species recovery coordinator for the Department of Game and Fish. He can be reached at (505) 476-8094 or Leland.pierce@state.nm.us.

Hard times for garters

Four of the eight species of garter snake found in New Mexico are of conservation concern to the Department of Game and Fish. Loss of habitat is the primary issue, along with other concerns such as invasive species.

New Mexico garter

The New Mexico Garter snake is one of 452 "Species of Greatest Conservation Need," defined in the state's Comprehensive Wildlife Conservation Strategy for New Mexico. While this species is not imperiled, its presence is considered an indication of a healthy wetland or riparian habitat. For more, see the Comprehensive Wildlife Conservation Strategy for New Mexico (http://wildlife.state.nm.us/conservation/comp_wildlife_cons_strategy/index.htm).

Western ribbon snake

The Department lists this species as "threatened," meaning it is rare enough in the state that, should populations decline, it could become "endangered." "Endangered" is a status given to species in peril of becoming extinct within the state. As a whole, the species is doing fine in North America, but in arid New Mexico, loss of habitat, such as draining of wetlands, threatens the overall presence of the species here.

Narrow-headed garter snake and Mexican garter snake

By far our most imperiled garters are from southwestern New Mexico. The Department lists the narrow-headed garter snake as "threatened," and the Mexican garter snake as "endangered." Each species has shown such dramatic declines in North American that both have been considered by the U.S. Fish and Wildlife Service for protection under the federal Endangered Species Act. A review by the agency indicated that protection for the Mexican garter snake was not warranted at this time. The status of the narrow-headed garter snake is under consideration.

The states of Arizona, New Mexico and California are working to restore these species, having formed a 30-member Garter Snake Conservation Working Group, whose purpose is to act before federal listing becomes necessary.

The narrow-headed garter snake and the Mexican garter snake face many challenges. Along with habitat loss, non-native species such as bullfrogs are preying upon young snakes. Non-native fish such as bass and catfish have displaced garter snakes, and non-native crayfish alter the habitat the snakes favor and will prey upon young garters.

All these pressures may make the snakes vulnerable to disease, and in the case of the narrow-headed garter snake, one population in New Mexico may have gone extinct simply by being unable able to hunt because crevices between boulders in streams were filled with silt from upstream fires.

Do you know New Mexico's state fish?

Answer below

Clues:

- A major state river is in its name.
- Its lower jaw has orange slash markings.

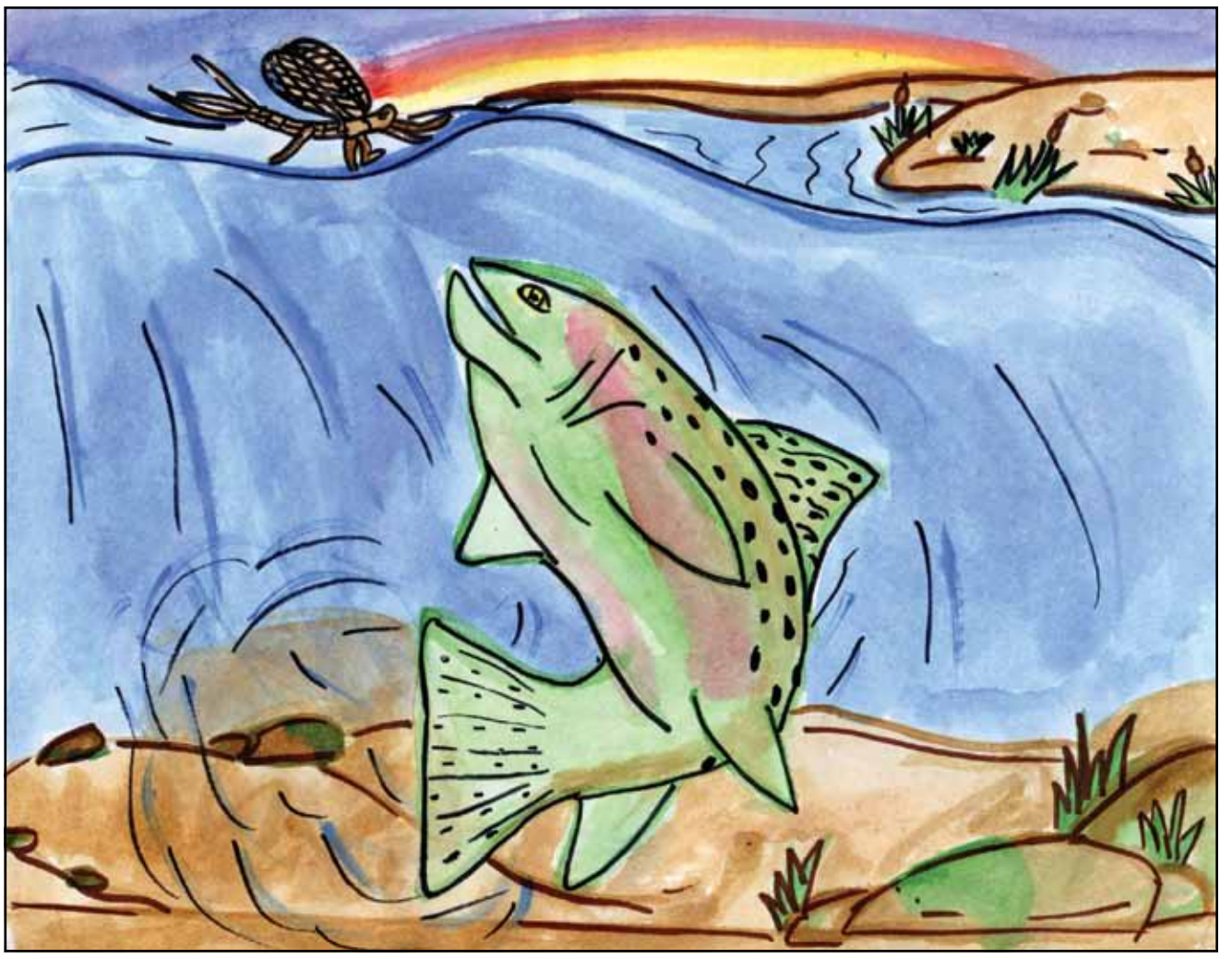
State fish inspire young artists

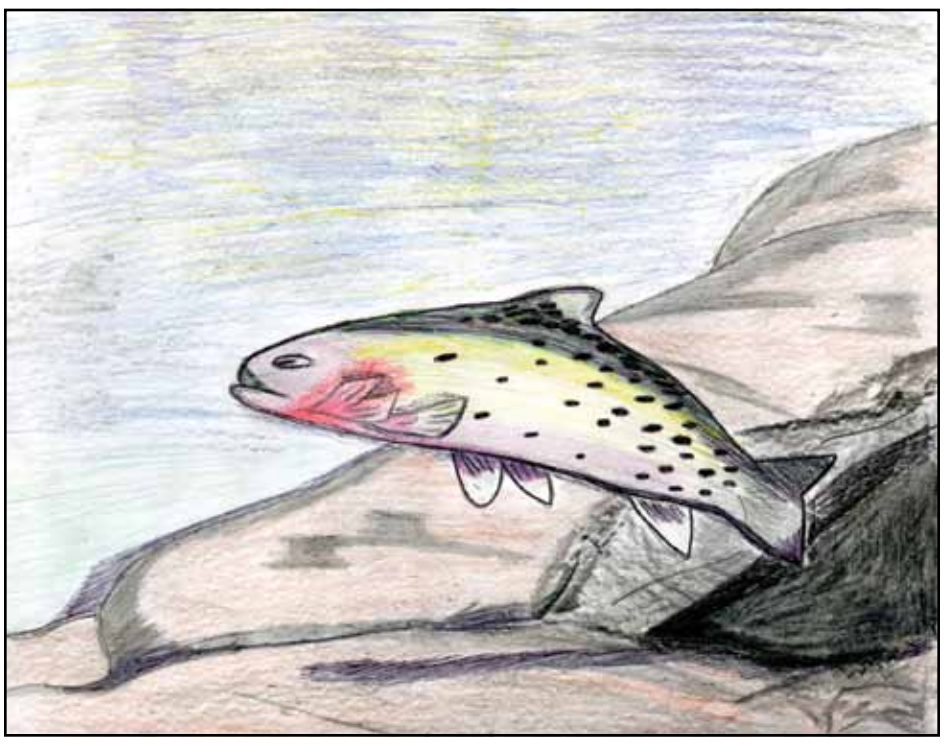
Gallup area kids among nationwide contest winners

By Colleen Welch

Hey kids! You are invited to draw and paint your way toward winning national prizes.

Wildlife Forever hosts a State-Fish Art Contest for kids all over the United States. Your fish painting or drawing needs to be submitted to Wildlife Forever by March 31. Each year a single student's winning fish art is chosen to be placed on a conservation stamp. Wildlife Forever offers students several opportunities to win prizes. Winners in several grade groups attend an art EXPO and receive prizes such as art supplies, goodie bags and fishing gear from Rapala.





Savannah Lee of Mexican Springs, above art, and Ty Stevens of Gallup, left, were the New Mexico winners of the 2011 State-Fish Art Contest sponsored by Wildlife Forever. Lee's painting won the grades 10-12 division and Stevens won the grades 7-9 division.

New Mexico winners

New Mexico's 2011 winners are Ty Stevens from Gallup, who won in the grades 7-9 group, and Savannah Lee from Mexican Springs, who won in the grades 10-12 group. Both winners live in small communities along the Chuska Mountains north of Gallup. Ty's art teacher encouraged him to enter the fish art contest.

"I like fishing and so I thought it would be cool to enter," Ty said. "I fish at Chuska Lake. I spent about two weeks on my picture. I wanted to get the fish just right coming out of its cave."

You can go to the Wildlife Forever Fish Art Contest website to see more winning paintings and to learn how to enter.

The website for Wildlife Forever State Fish Art Contest is www.statefishart.info.

Learn about your state fish

The State-Fish Art Contest began in 1996 when fifth-grader Kate Di Leo and her dad, Sal, discovered that information about state fish was scarce. Kate and her dad helped create a fish art contest that educates kids, teachers and parents. The very first art contest was in 1999 and hundreds of kids entered their fish art from 40 states. Students entering the contest also had to write essays about their particular state fish. Today, through Wildlife Forever, the State Fish Art Contest offers an array of information to help kids and teachers learn about state fish. Every year, thousands of kids participate by drawing, coloring, or painting original fish art and essays to enter in the contest.

Awards

The winners of the contest are honored at the State-Fish Art EXPO. This year's EXPO will be June 24 and 25 at the Texas Freshwater Fisheries Center in Athens, Texas. Prizes and awards are given to every child entering the contest. A Certificate of Recognition is given to each child and entries are grouped into grades 4-6, grades 7-9 and grades 10-12. Other special recognition includes a best-of-show award, an art of conservation award that becomes a conservation stamp, the people's choice award and a "smile" award.

Cool stuff for teachers

The Wildlife Forever State Fish Art Contest website has "Fish On" lessons for teachers. "Fish On" gives educators background information to teach about types of fish and fish characteristics as well as fish adaptations used for survival. The lessons include vocabulary and glossary, color fish illustrations by Joseph Tomelleri, extension activities, student worksheets and assessment options.

An educator of the year award is given out to a teacher that has spent time teaching kids about conservation and protecting aquatic habitats.

Colleen Welch is co-coordinator for conservation education and Project WILD for the New Mexico Department of Game and Fish. She can be reached at (505) 476-8119 or colleen.welch@state.nm.us.

Answer: New Mexico's state fish is the Rio Grande cutthroat trout.