

### Say goodbye to paper license applications

Check out the new rules, fees, and application process for the 2012-2013 hunting seasons.

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appreciation of

New Mexico wildlife.



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# New Mexico Wildlife

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## Hogs gone wild

Research has shown that as much as 60 percent of feral hogs' diet consists of frogs, lizards, snakes, birds and their eggs, and even deer fawns.

Photo: Texas Parks & Wildlife Department



## Invasive pigs threaten wildlife, crops

By Karl Moffatt

eral hogs are invading New Mexico and threaten to damage the environment, spread disease and displace wildlife, according to authorities.

"This is a nightmare in the making," says Ron Jones, wildlife specialist for the Wildlife Services Division of the United States Department of Agriculture's Animal, Plant, Health Inspection Service in Tucumcari. "We have a very slim window of opportunity to get a handle on this."

Jones works on the front lines for the lead agency in the battle against the invasion of feral hogs. "And our biggest problem right now is a lack of manpower and money,"

The problem in New Mexico has grown from the discovery of feral hogs in the Bootheel region of southwestern New Mexico in 1988 to multiple confirmed sightings in 15 counties. There have been reports of feral hogs in several other counties, including the Rio Grande valley, home of Bosque del Apache National Wildlife Refuge.

The hogs in the Bootheel are thought to be remnants of a longtime herd of escaped or released domestic pigs, while most of those in eastern New Mexico are thought to have been intentionally released for hunting purposes, Jones says.



Hog hunting has become a popular pursuit in New Mexico due to its lack of a season, no license requirement and unlimited harvest. But while some hunters welcome the feral hogs as another sporting opportunity, others see them as a serious threat.

In an effort to stem the growth of feral hog hunting as a sport and the problems associated with feral hogs, the state Legislature in 2009 passed a law making it illegal to import, hold, release or sell feral hogs or operate a commercial wild hog hunt.

Hogs that have gone wild are classified as feral domestic livestock by the New Mexico Livestock Board. Because they are not protected wildlife, the Department of Game and Fish has no jurisdiction over the species. Although the Department has an agreement with the Livestock Board to help remove feral pigs that are threatening wildlife, livestock or habitat, most of the on-the-ground control is handled by USDA Wildlife Services.

While some of New Mexico's feral hogs are thought to have migrated into the state along the Pecos and Canadian river corridors from Texas, it has been their importation into the state for hunting that has really fueled their growth here, Jones says.

"These folks apparently don't care about the damage
... continued on Page 10

## Desert bighorns removed from state threatened and endangered species list

This past November, desert bighorn sheep became the first species ever delisted from the New Mexico threatened and endangered species list because of continued restoration efforts by the Department of Game and Fish and its partners.

The State Game Commission officially removed desert bighorns from the threatened species list at its meeting Nov. 1. The delisting was regarded as one of the agency's greatest accomplishments in ongoing efforts to protect and restore the state's at-risk wildlife. It also opened more opportunities for hunting, including 15 more desert bighorn sheep licenses for the 2012-13 seasons.

Desert bighorn sheep were listed as a state endangered species in 1980 when the population was estimated at fewer than 70. Today, through numerous releases, selective predator control and support from numerous wildlife conservation groups, the population estimate is 645 with three herds of more than 100 animals, far exceeding the delisting criteria under the state Wildlife Conservation Act.

Department biologists credit a program of desert bighorn transplants and mountain lion control for the recovery. Since the bighorns were listed in 1980, more than \$5 million has gone into the program.

The Department plans to continue its program to expand desert bighorn sheep herds into suitable habitat across the state through capture-and-

#### San Juan River trophy fishing gets even better

The world-class, trophy trout waters of the San Juan River became hotter than ever this winter as crews completed a \$300,000 project to enhance fish habitat and control sediment.

After a month of construction in a section of the river called "The Braids," anglers returned to find deeper channels, new holes and more fish in the famous stretch of river below Navaio Dam.

"Hundreds of shallow little channels going different directions have been consolidated so most of the water flows into three distinct braids," said Marc Wethington, the San Juan River fisheries biologist for the Department of Game and Fish. "We've increased water depth, established more pools and increased the flow. Fish are piling in there – and so are the fishermen."

Spawned by a management plan in 2005, the project came to fruition this year thanks to an appropriation approved by the state Legislature. Additional funding was provided by an excise tax on fishing and boating equipment through the federal Sport Fish Restoration Program.



Photo: Mark Birkhause

New Mexico's desert bighorn sheep have rebounded from a statewide population of 70 in 1980 to about 645 today.

transplant operations from a captive herd at the Red Rock Wildlife Area and from wild populations.

In November, the Department conducted its first sheep capture operation in a wild herd when 75 sheep were translocated from herds in four mountain ranges and from Red Rock. Bighorns were moved from the Fra Cristobal Mountains to the Big Hatchet and Peloncillo Mountains. Others were captured, collared and released in the San Andres, Fra Cristobal, Little Hatchet and Sierra Ladron mountains.

Twenty pregnant ewes were captured and fitted with vaginal implant transmitters, which will allow biologists to determine where lambs are born.

Much of the money for desert bighorn recovery comes from the annual auction and sale of bighorn hunting licenses. The auction, conducted by the Wild Foundation, has raised as much as \$210,000 in one year. The auction and raffle combined have raised more than \$2 million for the bighorn program since 1990. That money is matched three-to-one by federal funds raised through excise taxes on hunting equipment and ammunition.

Much more information about New Mexico's bighorn sheep restoration program is available on the Department website, www.wildlife.state.us.



Photo: Marc Wethington

Heavy equipment punched through solid rock to create 21 new fishing holes in a trophy trout section of the San Juan River.

"Improving our state's best trout water benefits everyone," said Jim McClintic, chairman of the State Game Commission. "Better fishing brings more fishermen, who in turn bring more money to the region's economy."

Wethington said anglers are excited about the project, which has opened about 3/8 of a mile of good fishing in a stretch where there were very few trout before.

Crews with contractors Albuquerque Underground Inc., Aquatic Consultants Inc., and Riverbend Engineering dug through sandstone bedrock to create 21 new fishing holes ranging from three to five feet deep. Large cottonwood trunks, boulders and faux beaver dams were strategically placed to redirect flows into the pools.

The project included building a sediment retention area at the mouth of Rex Smith Wash, an arroyo that empties into the "Kiddie Hole," a popular fishing spot. Flash-flood events carry silt into the river at that point, damaging trout habitat there and downstream. The retention pond will slow the water flow during floods, catch sediment and redirect clean water hack into the river



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Please visit our Web site,

## Anglers can bag unlimited pike at Eagle Nest Lake

Beginning this month, anglers at Eagle Nest Lake in northern New Mexico are allowed to catch and keep unlimited numbers of northern pike, which were illegally stocked in the lake and now threaten populations of trout and kokanee salmon.

The State Game Commission approved the regulation changes for Eagle Nest at its December meeting in Albuquerque. The new rules are designed to keep pike populations in check by removing as many as possible from the lake. The rule requires anglers to keep or dispose of any pike caught from the lake.

Northeast Area Fisheries Biologist Eric Frey said northern pike feed primarily on large quantities of fish such as rainbow trout fingerlings and kokanee salmon fry. If northern pike become established in Eagle Nest Lake, hopes of a continued quality trout and salmon fishery would be lost. He cited a similar situation at Lake Davis in California, where authorities spent more than \$33 million to remove pike from the lake.

The pikes' presence in Eagle Nest Lake was discovered in November 2010 when a 13-year-old angler from Espanola reported catching one there. Since then, many more have been caught in the lake by anglers and Department staff. Some of the pike have grown to 30 inches or more, Frey said. Recent surveys found pike ranging in size from 16 to 30 inches, indicating the fish have reproduced in the lake for at least four years.

The pike are not the only invasive, nonnative fish in Eagle Nest Lake. In the



Photo: Dan Williams

Northern pike were illegally stocked in Eagle Nest Lake three or four years ago. They have since reproduced and some have grown to 30 inches in size. An aggressive predator, the pike threaten to overtake the lake's populations of trout and kokanee salmon.

mid-1990s, yellow perch were illegally stocking into the lake, most likely by someone dumping a bait bucket, and the population soon exploded. Increased bag limits helped reduce the perch population.

Moving fish from one lake or stream to another is illegal and can cause millions of dollars of damage to a fishery and years of work to try to remove an unwanted species.

Eagle Nest Lake is managed as a quality trout and salmon fishery. The Department stocks about 600,000 fingerling rainbow trout and about 200,000 ko-kanee salmon fry in the lake annually.

#### **Watch Commission meetings online**

Future meetings of the New Mexico Game Commission will be broadcast live over the Internet, a move to bring the commission into alignment with Gov. Susana Martinez's initiative to make state government more accessible and transparent.

The Commission broadcast its first live webcast Dec. 15, 2011, from its meeting in Albuquerque. The next meeting will be Feb. 23, 2012, in Hobbs. The public can access the live webcast from the Governor's website, http://www.governor.state.nm.us/Webcast.aspx. Information about how to view the streaming video is available on the Governor's website.

Video from all meetings will be posted in the website archives.

Meeting agendas, detailed agenda-item briefings and other information are available on the Department of Game and Fish website, www.wildlife.state. m.u.s, or by calling (505) 476-8008. Details of proposed rules, along with the opportunity to comment on proposals, are available on the Department

The State Game Commission is composed of seven members who represent the state's diverse interests in wildlifeassociated recreation and conservation. Members are appointed by the governor and confirmed by the state Senate. Current members are Chairman Jim McClintic, Vice-chairman Thomas "Dick" Salopek, Tom Arvas, Bill Montoya, Scott Bidegain, Robert Hoffman and Robert Espinoza Sr.

#### Youths get more shots at elk hunts

Hunters younger than 18 will have an even better shot at an elk license this coming season by taking advantage of the Department of Game and Fish expanded opportunities for Youth Encouragement Hunts.

The Department will offer about 1,900 licenses for antlerless elk, and this year's eligibility requirements have been changes to allow more young hunters to go afield. The licenses, designed to encourage more young hunters and their families to go hunting, are available only to youths who have successfully passed an approved hunter

safety course. They will be offered for sale – first come, first served – in August on the Department website, www.wild-life.state.nm.us.

This year, resident youth hunters who participated in the regular big-game license drawings and met all application requirements but were unsuccessful in drawing anything will have first-shot at the Youth Encouragement Hunts. Those unsuccessful resident hunters will have 14 days to purchase one of the licenses offered. After 14 days, any remaining licenses will be offered to any eligible resident or nonresident youth hunter.

#### 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:

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 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.

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.

The Nature Conservancy: A national organization dedicated to the preservation of plants, animals and natural communities that represent the diversity of life by protecting the lands and waters they need to survive. In New Mexico, it has worked to preserve 1.4 million acres of landscapes and waterways. www.nature.org/newmexico.

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.

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.

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.

**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.

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://mm.audubon.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.

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.

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.

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

### regional outlook

# Northwest Ross Morgan

## Deer never tasted so good

By Ross Morgan

Every year, hunters spend hours filing harvest reports, filling out license applications, scouting and making sure they have all the gear necessary for a successful hunt. The best hunters also make sure they have the skills and supplies needed to get the meat home or to the butcher before it spoils.

We all know that hunting can be tough, sometimes requiring walking several miles up and down steep and rugged terrain. Although this may seem like the toughest part of the hunt, for must hunters the real work begins once the animal is harvested. There are times when we are lucky enough to harvest an animal close to a road, but there are many times that we aren't, and getting the animal back to the vehicle or camp may require a three- to four-mile pack

Without properly field-dressing your game and getting it to cold storage quickly, chances are the meat will spoil or be tough eating. Proper care of game is important and can make the difference between a good-tasting piece of meat or something so tough and gamey that you can't eat it.

A few things that I like to make sure I have in my pack when I'm hunting are



knives, a three- to four-foot diameter tarp, game bags or pillow cases and some rope. These items don't add very much weight to the pack and can really make your hunting adventure a whole lot easier if you need to quarter an animal in the field and pack it out. Once the animal is field-dressed, I like to quarter the animal, cut off the rib and neck meat, back straps and tenderloins and lav it on the tarp. This allows the meat to stay cleaner and cool quickly, preventing spoilage.

Once the animal is quartered and the meat is laid out on the tarp, I like to put the meat in the game bags or pillow cases. This will prevent dirt from getting on the meat and allows the meat to cool down as it's being transported. Leaving the hide on the animal will increase the risk of spoiling. If the trip requires two or more trips, you can use the rope to hang the meat from a tree to help keep

predators from taking the meat when you are gone.

Once you have all the meat back at camp and the temperature is cool enough, you can hang the meat in a tree for further cooling until you leave. However, having a cooler with ice is the best way to make sure the meat stavs cool and doesn't spoil. Once the meat is cool, it's all downhill. All you have to do is get it to a butcher or cut it up yourself. Cutting up the meat yourself works great and can save you money, but if you don't have time or you don't know how to cut meat, a butcher works just fine.

Being raised in a hunting family, I have eaten all types of wild game prepared in just about every fashion. However, there is one way that I prefer to prepare my deer because it's easy, doesn't take much time and it's very tasty. I like to call it "deer fingers." Although I used to submerse my meat in eggs and milk prior to battering them with a flour, pepper and a garlic nowder mix a friend recently turned me on to a new idea that works even better and adds a little zing.

Ross Morgan is the Department of Game and Fish public information officer for the Northwest Area. He can be reached in Albuquerque at (505) 222-4707 or ross.

### **Deer fingers**

#### Ingredients:

- 1 or 2 pounds of venisonZesty Italian salad dressing All-purpose flour

Cut the deer meat into faiita-size or larger strips. Place the desired amount of strips into a one-gallon Ziploc bag.

Pour one container of zesty Italian salad dressing into the bag with the meat, seal and place in the refrigerator 3-5 hours to marinate.

Batter meat in flour. Cook six to eight fingers at a time in a deep-fat fryer until golden brown. Homemade gravy works great as topping or dipping

## No matter how you cut it, Oryx meat rules

By Richard McDonald

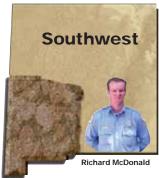
In 1969 the New Mexico Department of Game and Fish, in conjunction with other natural resource partners, introduced orvx to the Tularosa Basin, Since then. oryx have thrived and hunters have been enjoying the bounty of a population that has grown to around 4,000 animals.

Native to South Africa, Orvx (Orvx Gazella) are hearty animals that live in semi-harsh conditions. In New Mexico, they can be found in wide-open spaces in and adjacent to White Sands Missile Range. They also have adapted to nearby rugged mountains. They are extremely tough, enduring extremely cold temperatures in the winter and brutal heat in the summer.

Also known as gemshok, orvx are true antelope. They can survive on sparse vegetation and don't rely on open water, obtaining the liquids they need from the food they eat. Oryx have very muscular necks and shoulders and can weigh up to 600 pounds.

Almost everyone who has harvested an oryx agrees that the meat is some of the finest wild game in the world.

To enjoy 0ryx at the table, proper care



of the meat in the field is vital. There are three elements to avoid after harvesting an animal to ensure maximum flavor: dirt, heat and moisture. I recommend placing your oryx on a tarp or large plastic bag to keep dirt and debris away from the meat while field-dressing. After dressing your animal, remember to wash out the inside cavity with water immediately. After this is done, it is very important to cool all of the edible meat. It is important to get the hide off the animal as soon as possible to allow the heat from the meat to escape. Get that glorious meat on ice and place it into cold storage as soon as possible.

Richard McDonald is a Department of Game and Fish conservation officer in the Southwest Area. He can be reached in Las Cruces at (575) 532-2100.

#### Chicken fried oryx

#### Ingredients:

- Orvx steaks
- Italian salad dressing
- Flour
- Eggs · Salt, pepper, garlic salt
- Olive oil

**Directions:** Place oryx steaks in a container with salad dressing. Refrigerate 12

Place flour, salt, pepper and garlic salt in a small bowl and mix gently. Place several eggs into a separate bowl, add just a touch of milk and

Cover steaks with the flour mixture. and then dip them into the eggs. Repeat this process three times

Place steaks into a large preheated frying pan with olive oil and cook as desired. Do not overcook the



Orvx have adapted well to the climate of southern New Mexico.

## Give kids a taste of wild game

#### By Clint Henson

Getting kids involved in hunting and fishing is what it's all about, right? I have taught a lot of hunter education classes and it's always wonderful to hear kids say that they are excited and ready to go hunting. And when it's your own kid, it is very special.

My son Toby took hunter education a few years ago, but with football, school and all the other activities, we had never gone big-game hunting.

So when I told Toby that a local landowner wanted to take a few antelope does from his property and he was selling his tags for \$50, I was thrilled to see Toby's eyes light up like Christmas

We were excited as we began preparing for the hunt, looking forward to Toby's first big-game hunting experience. We also looked forward to a chance of bringing home some meat for the table, though my wife, Wanda, who grew up on a dairy near Ancho, makes it very clear that she prefers beef and pork to any wild-critter food.

With his first hunting license in hand, we went to the range with a couple different rifles that he could try. My .270 was a little bit too big, but he liked the Browning .204 that I had borrowed from a friend. I had him shoot until he was comfortable with it from different shooting positions and distances. His smile just kept getting bigger and bigger.

On opening morning, we were up and out by dawn and quickly made it to the ranch. which was only about 15 miles from the house. I had talked to one of the ranch managers and he had an area he wanted us to hunt first, so we headed off on the dusty ranch road.

Antelope hunting can be difficult. Most of the country is flat and has very little cover, and antelope are smart. We drove until we saw a small herd, then crept



#### Pronghorn stroganoff

#### Ingredients:

- 1 lb. pronghorn steak
- 2 cans onion soup • 12 oz. sour cream
- 1 can mushrooms

#### Directions:

Cut meat into thin strips, wrap in foil and bake one hour at 350 degrees. Mix soup and sour cream in casserole dish, add meat and bake another 30 minutes. Saute mushrooms in butter and add to mixture before serving over wild rice

out of the Bronco and hiked down a dry gulch. The antelope saw us immediately, and it seemed like every yard we walked, they were five yards farther away. We stopped and waited behind some brush and they circled back to us, but Toby never was in a position for a clean, close

As we walked back to the Bronco, we were warmed by the morning sun, laughing to each other at how the

We drove a little farther and spied another little group of does. Again, we crept out of the truck and crawled to the crest of a little hill. As we poked our heads over for a look, we spooked a doe right over the rise. It scared all of us, really, and she bolted toward the rest of the herd. The stalk would be over in most cases, but this is where antelope hunting can be really fun.

The doe was so curious about what we were that she started to come back to us to get a better look! We crawled behind a big rock and Toby got set up and relaxed.

It seemed like forever, but she came up to about 70 yards. I told Toby to take

the shot whenever he felt comfortable. I scanned his background. It was a downhill shot with no other antelope behind, I felt it was a very safe shot. The doe stopped ... I tried to stop breathing.

Toby's first shot was right on target. She was facing him head-on so it was a tricky shot. She spun around but was unable to run. I told Toby to reload and try to get a broadside shot. The second shot was again right on target, probably unnecessary, but I wanted her to go down as quickly as possible. Toby unloaded, made the rifle safe and we sat for a few moments in the silence.

I have tried to teach Toby that this thing we call hunting is really quite a special adventure. There is no touchdown dance, just thankfulness for what we have been

We field-dressed the doe and loaded it into the back of the Bronco, making sure that the meat stayed clean. We met Wanda, who helped skin and debone all the meat. I had called a friend who had a meat grinder, as the plans were to make most of the meat into hamburger. There is not a lot of meat on an antelope, but it took us most of the day to process it. We



made a few steaks that evening. Toby is a picky eater, but there was still a big smile on his face.

Wanda really enjoyed the meat. It was so lean that it would not form into patties for hamburgers, but we usually have burritos, Frito pies or nachos, so it worked out great. It was as good as any meat I have ever eaten, better because of the experience.

I asked Toby if he wanted to put in for a local youth elk hunt. There was that familiar smile and a rushed, "Yes!" I want to put him in for some youth hunts as they are usually easier to draw. We'll see if Wanda likes cow elk meat next. Soon it will be her turn.

Starting hunting can seem daunting. The equipment is expensive, and figuring out where you're going to hunt can keep some people from pursuing the experience. It doesn't have to be that way. Just get some basic hunter education, borrow some equipment like we did -guns and meat grinders - and try to hunt locally. Most landowners will want to give kids a chance to start hunting. And remember, it's not about the trophy; it's all about the trip.

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

### Barbary sheep tough to hunt, not too tough to eat

#### By Mark Madsen

Barbary sheep hunting can be a real challenge. First you have to find them. Then, you usually have to figure out how to get the meat out of some of the roughest country in the state before it spoils and becomes inedible.

Barbary sheep country is big, and the animals blend into their environment really well. Most successful hunters spend as much time as they can sitting on their derrières behind a good set of optics. Once you spot Barbary sheep preferably before they spot you -- you can come up with a game plan on getting within reasonable rifle range

Once you have a sheep on the ground. you have to determine how you're going to get them back to the truck or camp. In most Barbary sheep hunting areas, the truck will be completely out of sight, often several miles and canyons away And, of course, you always kill Barbary sheep in the deepest, darkest, nastiest canyon on the planet.

Most Barbary sheep hunters end up boning out the meat and then packing it out on a pack frame. Others quarter the animal and pack them out a piece at a time. In rare cases, you can get a portable cart into the kill site and take the sheep

As with any big-game species, the secret to producing the best table fare is to take

#### **Barbary sheep** red chile enchiladas

#### Ingredients:

- 1 to 1.5 lbs ground Barbary sheep
- 2 tbs ground red chile
- All-purpose flour
- Garlic powder
- Onion powder
- Salt, pepper2 cups grated cheddar cheese
- Corn tortillas

Brown the meat in a little vegetable or olive oil in a large skillet. Season with garlic power, onion powder, salt and pepper to taste. Add ground red chile and a little flour to a mason jar; add water and mix thoroughly. Add chile mixture to meat. Add enough water to produce an adequate mount of sauce. Turn heat down to simmer.

Soften corn tortillas in chile sauce or lightly fry in oil. Layer on plate with tortilla, red chile and meat sauce, and grated cheese. Repeat. Top with lettuce, tomato and diced avocado.

Serve with homemade Spanish rice and beans. Enjoy!

care of the meat properly to start with. First and foremost, you need to fielddress the carcass and get the hide off in order to start cooling the meat. Next is to keep the meat clean and protected from moisture. Once you get the meat back to camp or home, clean it by removing any

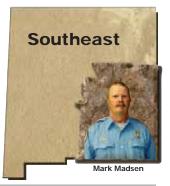
dirt and/or hair that might be left. No matter how meticulous you might be in taking care of the meat, you're going to have to clean it before it's processed

There are certainly many ways to process Barbary sheep whether it's steaks and

roasts, sausage, or in many cases grinding into chile meat or hamburger. Older, mature rams, like any mature male of most big-game species, tend to be tough and gamey tasting; therefore many hunters choose to grind the meat. A lot of hunters grind the meat along with some quality beef fat or even brisket to add flavor and texture to the very lean wild

Once ground, Barbary sheep meat is good in hundreds of recipes. One of our favorites is red chile Barbary sheep enchiladas.

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.



# Conservation classrooms



# Students learn energy's impacts on resources

Story and photos by Marti Niman

"What are some things at your house that stink?"

The fourth-graders thought for a moment, and then 15 hands shot up in the air. "Garbage! Poop!" they replied.

"That's right, boys and girls," replied Miranda Miller, instructional coordinator for the State Land Office, amid hushed giggles from the class. There is nothing like the word poop to catch the attention of a class of fourth-graders.

Miller, known to her students as "Miss Miranda," guides her students into the world of methane, biomass, wind power and other energy sources for the 21st century. The students are right with her, discussing the meanings of more erudite words as hypothesis, congruent and how basic values such as greed and selfishness relate to natural resources.

"She uses authentic vocabulary that makes sense to everyone in the class," said Martha Moses, teacher at S.Y. Jackson Elementary in Albuquerque. "They all understand because she explains it contextually and enthusiastically, so the kids are totally engaged the entire time she is here."

#### Global connections

The education outreach program of the New Mexico State Land Office focuses on energy but addresses far-reaching global perspectives. "In class, they are learning about natural resources and getting the bigger picture about the impacts of energy use," Miller said. "They understand pollution, oil spills, water usage and make those connections on a global basis."

Miller's position began as a new program to teach students about the State Land Office. It evolved into a curriculum about energy sources that integrates



Students at Aspen Community Magnet School in Santa Fe joined Miranda Miller of the State Land Office for some hands-on education about bullsnakes, top, and native plants, above.

state education standards in math, science, language arts and social studies. "Because most of the money made by the State Land Office comes from energy development, it's a perfect fit to teach about the State Land Office and tie that directly to natural resources in New Mexico," she said. "I make the connection between the light bulb and the power plant."

The classes are structured so that Miller visits each class twice, teaching about the agency during the first class as part of a social studies lesson on government and leasing land. The students play a game using petroleum and water to make electricity, playing one round with non-renewable resources and one with renewable, using up all the resources really quickly.

"When they do that activity, I see them grasp the idea of conservation," Miller said. The second time they play, they just take what they need. One teacher told me, I'm so glad you actually used

those terms, greedy and selfish, and you didn't sugarcoat it.' The students give me the words. They are not new to them, but they might be new in the context of natural resources."

"Students are initially puzzled at being told that they can be greedy, and that it is a choice they can make," Moses said. "The first time we play, there is always someone in each group who is greedy, but that changes as they play again."

#### Puzzles and posters

The class is broken into groups and each is assigned an energy source to research and present to the class for Miller's second visit. They design a poster about their assignment – coal, petroleum, wind, solar or biomass – and each member of the group takes turns presenting their findings. Miller occasionally interrupts their presentations to question and clarify certain points. She wants to assure they understand what they are saying and that it is accurate.

"They are so proud of their group and take ownership of their group," Miller said. "Some classes put a lot of effort into their posters and are very artistic. They learn a lot because they enjoy the way they are learning by doing a presentation."

After their poster presentations, the students begin an experiment using a model wind turbine to discover first-hand how to generate electricity from wind. The class again breaks into smaller groups and collectively decides on a design for their blades, with each student assigned a task to complete. Once their blades are formed from cardboard, Miller attaches them to the model wind turbine and voltmeter in front of a fan to see how much electricity each produces. The students learn

Students at Annunciation School in Albuquerque present a solar energy poster to their classmates as part of the State Land Office energy education classroom program.



how to make a hypothesis and how form follows function in design.

"As scientists, the first thing you learned is that bigger blades make more electricity," Miller tells her class. "The next thing you might work on is developing your design to maximize the amount of electricity generated, then keep nitpicking all the details of the design until you get the best one."

Even at this early age, some students may consider these technologies as potential future careers. "I've heard some kids talk about wanting to be wind turbine techs — not so much oil and gas; it's not as sexy anymore," Moses said."A bunch of kids have ideas that they are going to be engineers; most of the talk is about solar energy or working on wind farms."

The program not only teaches concrete subjects such as math and science, it also provides students with skills and intangible concepts that serve them beyond learning facts. Research techniques and resources, analytical thinking and presentation skills are all part of their learning process.

"The activities are well-designed to promote inquiry and critical-thinking skills – very rare," Mary Erwin, Bandelier Elementary School teacher,



wrote in her evaluation. "We had many discussions about the consumption activity and the poster project."

"The students also learn presentation skills," said Colleen Ruiz,

elementary teacher at Annunciation Elementary in Albuquerque. "Some kids are really into the details of research. We like to teach to all learning styles, so this hits on all of them." Ruiz added that Internet research can be daunting but students learn to discern credible resource sites versus those that are blogs.

#### A hands-on laboratory

In addition to the classroom energy program, Miller offers field trips in April and May to a bosque on trust land in Albuquerque's South Valley. The site of an ongoing habitat restoration project by the State Land Office, the bosque serves as a handson laboratory that offers students a cornucopia of activities and the opportunity to interact with State Land Office biologists.

"We rotate different stations that have to do with the ecology of bosque," Miller said. "They do a salinization activity, testing river water, ocean water, Gatorade and also testing the soil for salinity." Students help with plant eradication of trees of heaven and kochia, tree-boring and dating activities and a scavenger hunt. They



A peregrine falcon gave students at Aspen Community Magnet School a good look at its wings during an after-school presentation by The Wildlife Center.

are given some free time to look for what is interesting. There also are plans to develop a bosque monitoring program with area high school students.

"One student found a bird's nest. Kids are good about finding cool stuff," Miller said. It's important for them to have free time to go and explore in addition to the structured activities. Some of the kids from the South Valley have never been to the river before, even though they live within a couple miles. For those kids it was a great experience."

Part of the outdoor experience involves recognizing that natural resources are directly related to how humans use them and that fish and hawks, for example, are as dependent on water as humans. Miller also plans to offer a wind farm tour in the spring. She has initiated an after-school program at Aspen Community Magnet School in Santa Fe, where students enjoyed a visit from the Wildlife Center of Espanola and its live educational birds. State Land Office staff donated money to pay the Wildlife Center for the visit. Miller also leads the students into the Santa Fe River for plant identification activities.

"We collect plants to put into a field guide that I make for them," Miller said. We collect samples of native or non-native plants ... that are limited to an actual environment, so they can recognize them and feel more connected."

Some programs for students offer unique opportunities with specialists in the state, such as a Peregrine Fund aplomado falcon release on State Trust land near White Sands Missile Range. Fifthgrade students from Socorro Elementary saw the birds released from a box on a tower and learned about the organization's partnership with the State Land Office. Miller also uses the Rolling River trailer at the annual Santa Fe Water Fiesta and in area classrooms to teach about watersheds and river modification.

#### Rolling River trailer

"It's a really good hands-on tool to use when we can't go to the river," Miller said. The trailer is filled with recycled plastic sand with a water pump to replicate how water flows into a system, whether it is natural or modified by dams and diversions. "I learned real quickly not to use it in cold or windy weather," Miller said. "The first time I used it was in November and the water froze and we had plastic sand all over us!"

The curriculum and materials for the energy classroom education program are developed by the National Energy Education Development (NEED) project, whose mission is to promote an energy-conscious and educated society through educational collaboration. "Without NEED, this program wouldn't exist; I didn't write the materials," Miller said. "I just put them together in a program and the kids use their books and materials."

"Miranda and her curriculum help the kids add human activity into their understanding of the natural world with some awareness of how they can impact the world through their own activities, maybe by influencing their own family's habits by conserving energy and recycling," Moses said. "Now, turning on a light, watching TV, taking a trip are not isolated from the environment but have impacts on the world around us. These other curricula are excellent sources to build more understanding of the natural world in kids who have limited contact with it"

have limited contact with it."

For more information about the State Land Office classroom outreach programs, contact Miranda Miller at (505) 827-4003 or mmiller@slo.state. nm.us. The class visits generally are scheduled by August and September each year, although field trips and after-school programs still may be available.



Miranda Miller, instructional coordinator for the New Mexico State Land Office, helps fourthgraders at Annunciation Elementary School with their homework assignments.

Marti Niman is a public information officer for the State Land Office. She can be reached at mniman@ slo.state.nm.us.



Photo: Dan Williams

A pair of young burrowing owls cautiously peer from an abandoned prairie dog burrow southeast of Santa Fe while their mother keeps watch.

## Fewer sightings worry owl watchers

# Shrinking habitat may contribute to population drop

By Octavio Cruz-Carretero and Kirsten Cruz-McDonnell

any New Mexicans are fascinated with burrowing owls (Athene cunicularia), a ground-dwelling inhabitant of western grasslands, shrub lands and deserts. The small owls nest throughout much of the state, primarily below 6,500 feet in elevation. These migratory owls retreat from much of the northern half of the state for the winter, while many remain in lower elevations in the south year-round.

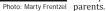
Unfortunately, concerns have been rising over the status of this owl, as declining population numbers have been documented throughout the west.

Known colloquially by several different names, including ground owl, prairie dog owl, rattlesnake owl, howdy owl, cuckoo owl, tunnel owl, gopher

owl and hill owl, these charismatic birds are active during the day as well as at night.

They are most active





As their name suggests, burrowing owls live in underground cavities; however, they usually do not make these hollow spaces themselves. Instead, they rely on other burrowing mammals such as prairie dogs, badgers, squirrels, foxes and coyotes to perform the digging for them.

As a result, burrowing owls in New Mexico are closely associated with prairie dog colonies. In fact, the Zuni Indians historically called this owl "priest of the prairie dogs" because they frequently nest and roost in empty prairie dog burrows.

Burrowing oils also have adapted to human environments and often can be seen around suburbs and towns. They will occupy golf courses, airports, open parks, arroyos and agricultural fields, and will nest in man-made cavities in addition to natural burrows.



Photo: Don MacCarter

Burrowing owls typically nest in existing holes created by other animals. Sometimes they use manmade burrows, such as the owl at left that made its home in a roadside storm drain.

#### **New Mexico status**

Burrowing owls are listed as a "Bird of Conservation Concern" by the U.S. Fish and Wildlife Service in much of the West and Southwest. In New Mexico, they are listed as a species of greatest conservation need by New Mexico Department of Game and Fish, as a sensitive species by U.S. Forest Service, and as a sensitive species by the U.S. Bureau of Land Management.

#### **Conservation concerns**

The decline in burrowing owl numbers may be influenced by human disturbances and natural causes. Intensified land use, primarily the conversion of grasslands for agriculture and urban development, has resulted in widespread loss and fragmentation of suitable habitat. Many burrowdigging mammals, such as prairie dogs and ground squirrels, are considered nuisances and are eliminated by the use of pesticides or by hunting and shooting. As prairie dog towns are eradicated, fewer places with burrows remain for owls to live and raise their young.

Other contributing factors include natural causes, such as extended drought, which lowers the availability of food. Predation rates, which are already high, may be elevated with the decrease in other burrowing mammals in the environment. Migration survival and habitat modification on the wintering grounds are also potential mechanisms involved in the population decline.

#### **Burrowing Owl Working Group**

Due to rising concern over the owls' declining population, the New Mexico Burrowing Owl Working Group formed in 2001 as a means of sharing information among researchers, agencies and the public. The group is a partnership of nonprofit organizations, government agencies, private enterprises and individuals with a common goal of promoting burrowing owl awareness and conservation in our state.

Specialists working within the group are trying to assess the actual status of burrowing owls in New Mexico. In order to accomplish that, information is needed about owl locations throughout the state. The group has gathered information from participating researchers, but more help is needed to determine the exact distribution of burrowing owls in our state.

When more data is collected, it can be used to analyze and identify threats to the owl, determine habitat use, and to examine population abundance, distribution, and status in New Mexico. Such information is also necessary for land managers to implement actions that will protect the owls.

#### You can help

You can help the New Mexico Burrowing Owl Working Group by visiting www.nmburrowingowl.com and reporting your burrowing owl sightings, and by encouraging your friends and family to report their sightings. The idea is that anyone, from a weekend birder to a seasoned ornitholo-



Photo: Dan William

gist, can observe a burrowing owl and fill out an observation form available on the website to be compiled into a statewide database.

The working group also invites researchers with to contribute current and historical data to the group's secured database. Questions about the group, database confidentiality or other issues can be directed to the group coordinator, Carol Finley, (505) 362-3027 or admin@nmburrowingowl.com.

Visitors to www.nmburrowingowl.com can view a state map of owl locations the working group has collected and continues to update. Your observations can improve knowledge of the general distribution and population, and ultimately will help protect burrowing owls in our state.

Octavio Cruz-Carretero and Kirsten Cruz-McDonnell are biologists working for Envirological Services, Inc. (www.enviroinc.org). They can be reached at kmcdonnell@enviroinc.org.



## **GOING PAPERLESS**

New rules, license fees and application methods will require New Mexico hunters to do some homework before planning their hunts for the 2012-13 seasons. Dramatic changes adopted by the State Legislature or approved by the State Game Commission will affect the application process, season dates and how many licenses are reserved for state residents.

The changes were designed to streamline the application and licensing process, provide more hunting opportunities for state residents, and to make drawing results and refunds available much sooner.

#### Going paperless

Say goodbye to paper application forms. Beginning next year, applications for all licenses will be made through the Department's online application system at www.wildlife.state.nm.us.

Hunters who have applied for licenses the past three seasons already are familiar with the system, as they have been required to obtain a Customer ID Number online before applying. Going paperless will simply extend that process. Since the Department first began offering online applications in 2005, the number of online applicants has increased from 54 percent to 82 percent.

Having all applications online will eliminate timeconsuming sorting and counting, further increasing accuracy and speeding up the process considerably. Hunters will know their draw results one month after the deadline, instead of having to wait three months under the old system. Unsuccessful applicants also will receive their refunds much sooner.

License and application fees will be charged at the time of application. Applicants can pay by credit card or electronic check, a new convenience beginning next year. Once an application is complete, it can not be changed, only deleted. Applicants can reapply, and will receive a refund for the deleted application after the draw.

#### First, get your Game-hunting License

New legislation requires everyone who hunts or applies for a license in New Mexico to purchase a Game-hunting License or a combination Game-hunting and Fishing License. The licenses are good for hunting upland game and waterfowl, and will serve as the foundation that allows hunters to apply for public-land deer, elk and other special drawing licenses. They also will be required before purchasing any over-the-counter big-game or turkey license.

Hunters who are unsuccessful in the drawings are encouraged to keep the Game-hunting or Game-hunting and Fishing License and use them throughout the license year, April 1-March 31. If requested, refunds will be available for hunters who purchase a Game Hunting License. Game Hunting and Fishing licenses will not be refundable.

Game-hunting (\$15 for residents, \$65 for nonresidents) and Game-hunting and Fishing licenses (\$30, residents only) will be available online or over the counter from license vendors statewide. Senior and junior hunters, handicapped and some military may be eligible for discounted licenses.

#### Help available

Hunters who need help applying for 2012-13 licenses online can get it from a real person over the telephone or at one of several locations with public computers staffed by Department of Game and Fish representatives.

Paper application forms no longer will be accepted beginning next season, requiring all hunters to apply online by using a Customer Identification Number at www.wildlife.state.nm.us.

Assistance will be available from noon to 8 p.m. MST Feb. 2, 2012, through March 20, 2012, by calling toll-free, (888) 248-6866. The Department also plans to arrange for computer access in public locations statewide for hunters who need access to computers.

Look for more information and updates on the Department website, www.wildlife.state.nm.us.





Photo courtesy USE

Feral hogs compete with wildlife and livestock for food and water, and can transmit diseases such as pseudorables and triphinois

### Hogs gone wild

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they're causing," he says.

Texas is home to an estimated 2.5 million feral hogs that cause an estimated \$52 million dollars in agricultural crop and related damage each year, according to Texas A&M University researchers. Nationally, the feral swine population has grown to an estimated 5 million in 35 states and the hogs are estimated to cause about a \$1 billion in damage each year, according to USDA data. The hogs reproduce rapidly with as many as two litters a year averaging at least six piglets per litter.

Although government agencies encourage hunters and landowners to kill as many feral hogs as possible, the staggering reproduction rates have made hunting inconsequential as a management tool

#### Damage and disease

Feral hogs destroy agricultural crops and often kill newborn livestock. Their capacity for carnage is well-documented on government websites, including Texas A&M's, http://feralhogs.tamu.edu/.

The hogs also damage wildlife habitat, contaminate water supplies, spread disease and displace wildlife due to competition for natural resources.

"Habitat damage may be the bigger issue for us," says Darrel Weybright, acting Wildlife Management Division chief for the New Mexico Department of Game and Fish. He characterizes feral pigs as being the new kids on the block, competing with established native wildlife populations for limited resources.

Feral hogs are known to have a strong preference for some of the same food sources used by deer and bears. They relish acorns, and have been known to have depleted any source above ground and then root out underground caches stashed by ground squirrels, pack rats and other animals.

The loss of such an important food base could have a staggering effect on deer and bear populations, which have limited alternative food sources, Weybright says.

"We certainly need to get moving on this and be smart about our approach in dealing with it," he says. Feral hogs carry numerous diseases, including pseudorabies, an affliction that can be transmitted through casual contact such as the simple touching of noses, says Jones, the federal wildlife specialist. The disease is not believed to be contagious to humans, but can affect cattle, horses, dogs, cats, sheep and goats.

Jones worries about scenarios such as a pack of coyotes, a cougar, bear or other predator killing an infected pig and then contracting and spreading the fatal disease. About 20 feral hogs killed during an eradication operation by wildlife specialists in Quay County in 2009 tested positive for pseudorabies.

Of particular concern to livestock operators is a possible a resurgence of other diseases the industry has worked hard to eradicate, such as brucellosis or bovine tuberculosis, which recently has been eliminated in New Mexico, says Dave Fly, veterinarian for the New Mexico Livestock Board.

"We've spent millions of dollars and over 20 years to become free if that," he says. "We can't afford to jeopardize all that work."

#### Deadly diet

Ravenous, aggressive feral hogs are threatening many species of wildlife, including some that are on threatened and endangered lists.

Research has shown that as much as 60 percent of feral hogs' diet consists of frogs, lizards, snakes, birds and their eggs, and even deer fawns.

In a study at Fort Benning, Ga., the stomach contents of one feral hog revealed 49 spadefoot toads that had been consumed in a single feeding. The study indicated that feral hogs on the U.S. Army post were eating 2.8 million frogs and reptiles a year.

In New Mexico, feral hogs are threatening endangered or threatened species such as the sand dune lizard in the southeast, where the hogs inhabit 100 percent of the lizards' habitat.

#### Bad weeds, bad water

Farmers, ranchers and conservationists are worried about feral hogs spreading invasive weeds such as the pesky cocklebur, which can be poisonous to livestock. The hogs carry the burs in their hide and deposit the seeds in other areas when they wallow, root or rub against trees.

Jones says he has seen pastures where hogs have rooted for grubs, tubers and earthworms become overgrown with weeds. In some cases, the pastures may never return to their native state. The pigs also eat the seeds of many unwanted rangeland plants such as mesquite trees and cholla cactus. Some of those seeds are then passed whole in the pigs' feces and later sprout to further spread those plants.

"It's a vicious cycle," Jones says.

Feral hogs also can contaminate water sources, including riparian areas, stock tanks and even municipal water supplies. Hogs have tested positive for carrying the potentially fatal strain of E-coli and were implicated in the notorious California spinach food poisoning case of 2006. They also have been found to carry dangerous waterborne pathogens such as campylobacter, salmonella, cryptosporidium and giardia.

One constant the feral hogs must have is water. They need to drink it and they wallow in mud to cool their bodies and fend off insect bites – and they are very industrious in acquiring it.

Tom Dominguez, the Quay County Extension Agent for New Mexico State University's Cooperative Extension Service recalled one rancher's account of feral hogs' pursuit of water: The rancher kept finding one of his stock tanks running over but couldn't determine the cause, so he waited at the tank to see what was causing the big mud pit.

A while later, the rancher saw a herd of feral pigs arrive. Then he watched in amazement as one of the lead pigs climbed into the stock tank and found and held down on the tank float to keep the water flowing to create a wallow pit.

"They're pretty innovative," Dominguez said.

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Ron Jones, wildlife specialist for the Wildlife Services Division of the United States Department of Agriculture's Animal, Plant, Health Inspection Service, tracks a collared "Judas pig" that will lead him to a group of feral hogs.

Photo: Karl Moffatt



Photo: Texas Parks & Wildlife Department

A escaped domestic pig can revert to the wild appearance and behavior of its ancestors in a matter of months, according to some studies.

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#### The war is on

It's an early December morning and Jones is driving down a muddy ranch road heading for a high spot overlooking a canyon where he hopes to pick up a radio signal from one of his "Judas pigs."

"It's one of the best tools we have," Jones says as he bounces across a pasture and pull to stop on a butte overlooking a wide valley floor. He pulls out what looks like a television antenna and turns on the bandest

"Nothing," he mumbles before explaining how he suspects a hunter had spooked the herd of feral pigs he had been tracking. He was concerned that his "Judas pig" had been killed and the \$200 radio transmitter attached to it had been discarded.

Feral hogs typically run in groups called "sounders' containing 10 to 20 pigs and led by a dominate female. Male "boars" usually roam alone until visiting a sounder for mating.

The "Judas pig" usually is a female that has been caught along with other members of her group in one of Jones' many traps. Her mates are euthanized but the "Judas pig" is released with an attached transmitter to find another group of feral pigs to run with

Because pigs are highly social animals, the "Judas pig" often leads Jones to the new group. It is a very effective way for Jones and his colleagues to find and eliminate large groups of pigs in a single

outing, often by shooting them from a low-flying airplane.

The shooters spare the "Judas pig," which is fitted with a bright yellow ear tag, so she can lead Jones to another group. Last year, such efforts resulted in the elimination of more than 135 feral hogs, Jones says.

Jones is one of 28 federal wildlife specialists working across the state to handle and reduce conflicts between wildlife and humans. In years past, he spent much of his time dealing with nuisance coyotes, raccoons or skunks, but since his discovery of feral hogs near Tucumcari in 2006, he's been working almost full-time on nothing but feral swine

"These are highly adaptable, intelligent and resourceful animals," Jones says. "It's almost scary how good they are at what they do and that's way too good for us to tolerate."

Jones and other wildlife specialists provide ranchers, landowners and public lands managers with plans for building cost-effective traps to catch feral hogs. The USDA has developed an eradication plan and has met with stakeholders from around the state to generate understanding about the issue. Funding and manpower are the primary hurdles, Jones says.

"We need to get busy if we want to nip this in the bud," he says.

Karl Moffatt is a longtime New Mexico journalist and avid outdoorsman who publishes regularly at www. outdoorsnewmexico.com.



Feral hogs can do a tremendous amount of damage to agricultural fields and even roadsides while they are rooting for food. The rooting also can spread invasive weeds.

Photo courtesy USDA

# Feral hog hunters can pursue game with few restrictions

By Karl Moffatt

Feral hog hunting in New Mexico can be a challenging and rewarding experience that also helps protect wildlife and the environment.

Feral hogs are a non-game, destructive, invasive species and are not subject to regulation and oversight by the New Mexico Department of Game and Fish. There is no hunting license required for state residents or nonresidents, and there's no season or bag limit, says Rick Winslow, the Department's large carnivore and furbearer biologist.

Those interested in hunting feral hogs should always check with the landowner or land-management agency before hunting to make sure they have permission to trespass and are hunting feral hog, not someone's domestic stock. It's also a good idea to check with the local game warden or area Game and Fish office for guidance.

Hunters also should learn to tell the difference between feral hogs and wild javelinas – a protected game species in New Mexico. Javelinas, or collared peccaries, resemble pigs but are actually a different species. They are smaller than feral hogs and have distinct whitish collars

Once afield, feral hog hunters should arm themselves with a 30-caliber or larger firearm to safely and humanely dispatch the hogs, which can grow to 400 pounds or more, Winslow says. A well-placed shot just behind the shoulder to target vital organs should do the trick

Male boars make for good mounts due to their large tusks and ferocious appearance, while the sows and younger pigs make for good eating, producing plenty of chops, hams and tasty ribs, says Winslow, who hunts them himself

Hunters should exercise precautions to avoid direct exposure to parasites, body fluids and potential disease by wearing rubber gloves and perhaps a neckerchief when field-dressing and butchering a pig. Meat for consumption should be thoroughly cooked to kill potentially deadly diseases such as trichinosis, which most feral hogs carry, Winslow says.

Finding pigs to hunt is easy, Winslow says. "Just look for the nastiest, thickest, hardest place to get to and that's where they'll be," he says.

Feral hogs are smart, wary and adept at avoiding humans but they need water daily. Look for them coming or going from water sources usually around dawn or dusk, Winslaw advises

Hunting is only allowed one-half hour before sunrise to one-half-hour after sunset. Use of artificial light is prohibited except on private land by the landowner or an employee, or with a Department-issued permit on private land.

Feral hogs can be found throughout the entire east side of the state, especially along the Pecos and Canadian river basins. Most are on private land and permission is required to

Some public lands in New Mexico harbor feral hogs and hunters can find more information about where, including maps, by visiting U.S. Forest Service and Bureau of Land Management websites.

## kid tracks



# Fish bite in winter, too

## Cold weather doesn't stop fish or anglers

By Colleen Welch

here do the fish hang out in winter? During the cold winter months, we normally do not see fish jumping in lakes. Gradually, ice will begin to form on northern lakes. The rivers start to freeze from their edges and ice "banks" grow from the spots where we stood and fished in the summer. In northern New Mexico, ice on some lakes freezes up to 30 inches

Are the fish sleeping in this deep-freeze? Do they hibernate? Do some die? How do fish make it through a long, cold winter?

Biologists describe how animals survive the winter season when they talk about over-wintering. Fish are cold-blooded. This means that they cannot keep a steady body temperature like humans and other warm-blooded animals. When the water turns icy-cold, the fish slow down and eat less food. Freshwater fish have some amazing abilities that help them survive cold winters.

#### Dive . . . burp . . . dive

During the cold winter, trout like to stay in deeper water, where they can stay warmer. Trout and other fish can stay deep because they are strong and graceful swimmers. Strong tail fins help them swim fast. Their other fins are for turning, diving and balancing. Fish also have a gas bladder that helps them control how deep they swim. Very young trout are heavier than water and can sink, but they swim to the surface and gulp air into their bladder, which swells up like a balloon. This makes trout lighter than the surrounding water and they can float. Trout can burp out some air to sink deeper.

#### To eat or not to eat?

Because winter is a slow time for many fish, they do not eat as much as during the spring and summer. Generally warm-water fish will



Photo: James Dominguez

Kokanee salmon change colors and form large schools along the shorelines of Heron, Navajo, Eagle Nest and El Vado lakes for winter spawning.

continue to search for food throughout the winter. Walleye will feed in the winter. Fish such as bass and bluegill feed only a little during winter. Catfish do not eat at all during winter, not growing and barely moving. Biologists call this behavior

Eric Frey, Northeast Area fisheries manager for the Department of Game and Fish, says that during winter, trout in rivers are more active than those in

"It is a harder life in rivers for trout," Frey says. "Because the water is moving, the trout have to move about more than in a lake."

#### New Mexico fish hatcheries in winter

The Department has six fish hatcheries that operate year-round to provide fish for people to catch in lakes and rivers. Throughout winter, rainbow trout in hatcheries are eating, growing and swimming in their raceways -- long, narrow tanks, usually made of concrete. Hatcheries have many raceways and fish are moved from one to another

as they grow bigger. All of the hatcheries have special indoor rooms for raising baby fish from

#### Winter trout fishing

Every winter, trout raised in the hatcheries are stocked in special winter trout waters - lakes and streams in parts of the state where it is too warm for trout in the summer. Look for a list of winter trout waters in the Fishing Rules and Information booklet. The booklet can be seen on the Department website, www.wildlife.state.nm.us, and can be found at fishing shops.

Some winter trout waters are reserved for kids. They include a pond at Albuquerque's Tingley Beach, and Harry McAdams Park ponds in Hobbs. Lake Van in Dexter, Bill Evans Lake near Silver City and Oasis State Park near Portales are stocked with trout in the winter for anglers of all ages. Red River Fish Hatchery near Questa has a winter trout pond reserved for children younger than 12, people 65 and older and handicapped anglers.

If you like colder-weather fishing, the San Juan River in northwestern New Mexico is fished throughout the year.

If you are interested in ice fishing, Eagle Nest Lake is open once the ice thickness reaches nine inches. Check with Eagle Nest Lake State Park before heading out to catch the hungry trout and tasty yellow perch that live under the ice.

For more information about winter fishing, contact the Department's area offices:

- Northeast Area in Raton, (575) 445-2311.
- Northwest Area in Albuquerque, (505) 222-
- Southwest Area in Las Cruces, (575) 532-2100.
- Southeast Area in Roswell, (575) 624-6136. Main Office in Santa Fe, (505) 476-8000.

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Seven-year-old Adam Vigil of Taos patiently waited for a bite at icecovered Eagle Nest Lake in January 2008. The lake is open for ice fishing when the ice thickness reaches nine inches.

Photo: Karl Moffatt

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