

# ROLLING PLAINS WILDLIFE NEWS

Winter 2012

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## INSIDE THIS ISSUE

Operation Idiopathic Decline	1
Quail	1
Bucks and Antlers	2
EHD in Deer	3
Yucca	4
Texas Tasmanian Devil	5
Youth Shooting Event	6

## Operation

### Idiopathic Decline

Interested in quail and what may be contributing to their decline? So are a lot of other researchers, including Texas Tech and Texas A&M

Agrilife Research Center at San Angelo, both are investigating diseases that may be affecting quail populations including: West Nile Virus and Newcastle Disease. If you have noticed or found quail that are underweight, have unusual looking livers or are dead from unknown reasons, put specimens in a plastic bag and put birds on ice or refrigerate it. Do not FREEZE it. Then call or email Dr. Dale Rollins at (325)653-4576 or [d-rollins@tamu.edu](mailto:d-rollins@tamu.edu), he will provide instructions for sending the bird to the Texas Veterinary Medical Diagnostic Lab.



Quail hung on a barbed wire fence.

When you find a freshly dead or sick bird, take a picture of how you found the bird and location. Take note if it is near a road, fence or power line, could the bird have been injured or killed when it flew into the bumper of a F-150 pickup or a wire on a fence. See photo to the right, this bobwhite quail's leg was impaled by a barb on a barbed wire fence, probably when it tried to fly between the wires, didn't quite get her landing gear up high enough. Look for other causes of death, besides a disease, before sending in a bird that was just involved in an accident.

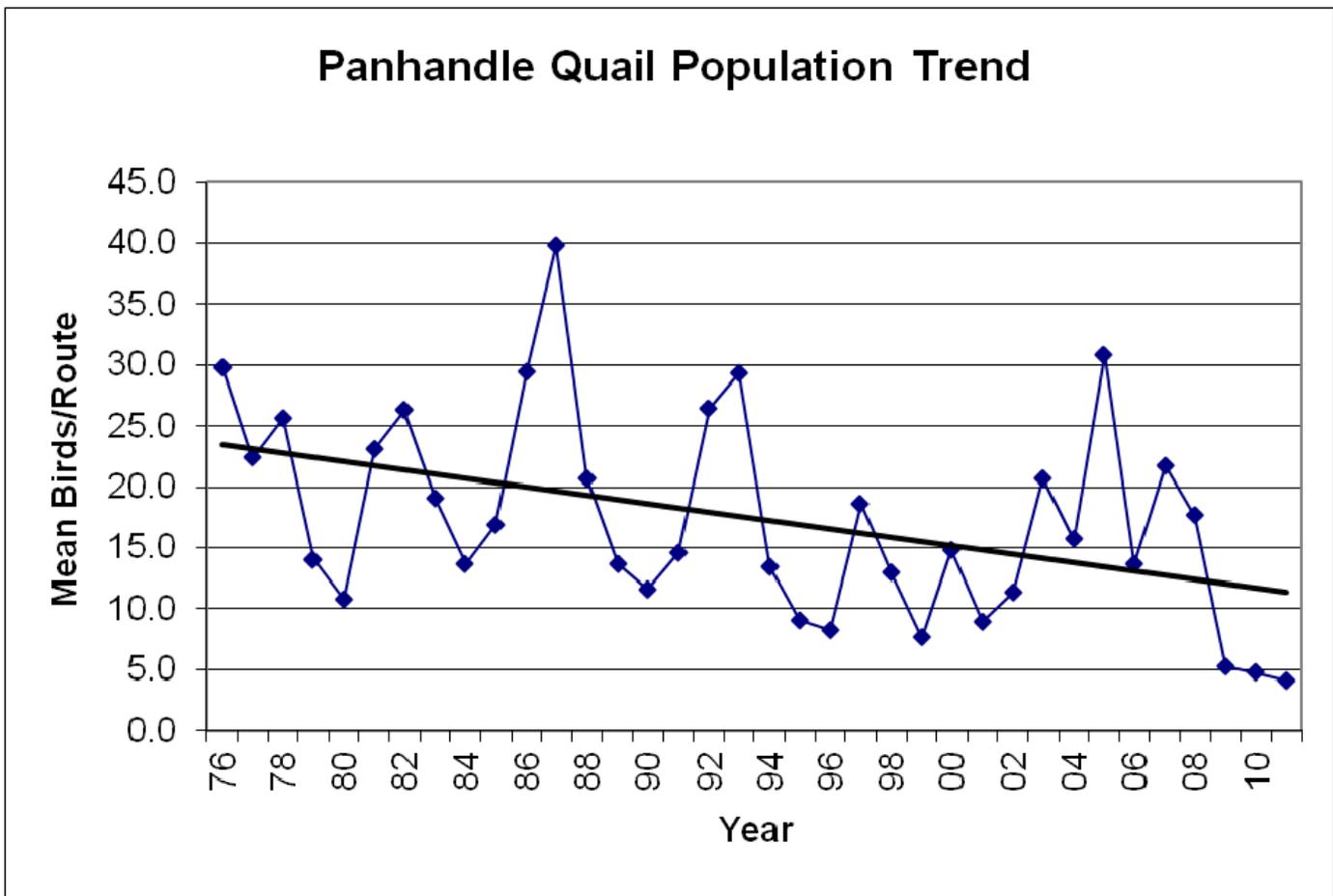
## Quail

I probably don't have to tell you that we have had a dismal year for quail. Texas Parks & Wildlife Biologists conduct annual roadside quail surveys across Texas during the first two weeks of August. These surveys are used to monitor population trends. The surveys are conducted along randomly chosen, 20 mile routes using county roads and/or highways. The same routes are driven every year. The survey is conducted at sunrise or

1-hour before sunset. The observer drives 20 mph along these routes recording the number of quail observed and then classifies the quail observed as singles, pairs, coveys and size of birds in a covey (1/4, 1/2, 3/4 or full grown birds). The data is then reported as birds seen per mile. Texas broke several records this year, including lowest quail count on record. In the Texas Panhandle (56 counties from Dalhart to Anson) we saw an average of 4.1 birds per route; the long term average is 17.4 birds per route (some routes have been counted for 36 years).

The Panhandle has experienced dry conditions since the fall of 2010, this accompanied with extreme temperatures during the summer of 2011 set the stage for poor nesting conditions and lack of forage for birds. Virtually no spring or summer rainfall prevented rangeland from growing adequate nesting cover, weeds needed for forage and seed production and insects which provide critical nourishment for growing chicks.

You can visit the Texas Parks and Wildlife Department website to see results of quail surveys by ecological region: [http://www.tpwd.state.tx.us/huntwild/hunt/planning/quail\\_forecast/forecast/](http://www.tpwd.state.tx.us/huntwild/hunt/planning/quail_forecast/forecast/)



### Bucks and Antlers

People are fascinated by antlers and they truly are an amazing phenomenon of nature. *Antlerogenesis* is the term that describes the cycle of antler growth in deer. Both buck and doe fawns are born with the ability to grow antlers, but it's the presence of the hormone testosterone that ultimately controls the growth of

antlers. When a buck fawn is about 4 months old, he will experience a rise in testosterone that causes the formation of the pedicle on the skull, giving us the term “nubbing buck”.

The pedicles form the base from which antlers will eventually grow from. If a buck fawn is castrated before he is 4 months old, he will never grow the pedicle and will be antlerless the rest of his life.

A buck fawn doesn't actually start growing his first set of antlers until he is about 9 months old. Testosterone is necessary to grow the pedicles, but not so much for the actual growth of antlers (that's why a buck, castrated after he's grown the



**This is a picture of a buck in King County that had already shed his antlers by December 18th.**

pedicles can still grow antlers, even though they may not go through the full cycle of shedding the velvet, hardening of antlers and annual shedding of antlers). Testosterone levels fluctuate throughout the year and are at their lowest during the spring. As the antler begins to grow from the pedicle, it is a firm tissue composed primarily of protein (80%). This protein matrix is filled with blood vessels. Blood vessels are both inside the antler and in the velvet lining. The visible grooves on the hardened antlers are actually impressions left by the blood vessels in the velvet. The growing antlers contain a network of nerves that make the velvet antlers sensitive to touch which help protect the soft growing antlers from damage.

Antlers can grow at a rate of over 1/2 inch per day in some cases. As the antlers reach full size in August, an increase in testosterone and other hormonal changes, cause the antlers to start to harden. The increase in testosterone causes the drying and loss of velvet in late September and early October. Once the stripping of velvet has started, it is usually completed within 48 hours. Blood in the velvet and tannins in tree bark actually stain the antlers a brown color.

Testosterone levels peak during the breeding season and then decline after the rut. This post rut decrease in testosterone triggers osteoclast that erodes the base of the antler at the pedicle causing the antlers to fall off. There are individual variations causing some bucks to shed their antlers earlier than others. Young bucks tend to shed their antlers later because of the less dramatic decrease in testosterone levels and because their antlers are smaller.

Overall, the antler cycle is controlled by day length, otherwise known as photoperiod. Deer have a biological clock that is regulated by the number of hours of daylight each day. Bucks placed indoors under controlled lighting have been able to produce up to 4 sets of antlers in a 12 month period. Antlers are an amazing thing that we will never fully understand.

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## **EHD in Deer**

*Epizootic hemorrhagic disease* or EHD is a disease found in deer. EHD is sometimes referred to as blue tongue; however, blue tongue is the form of the disease that occurs in livestock such as sheep, goats and

cattle. EHD is transmitted to deer by midges, tiny gnat-like flies called *culicoides*. These midges occur around water, mud holes, and manure piles or in just mud. These flies are only 1/8" long, travel less than 1 1/2 miles and live only a few weeks. However, their bites are quite uncomfortable to humans and can spread EHD to deer. The disease is only contagious to deer and does not affect people or livestock. EHD is most prevalent in very warm temperatures following a rain, most cases in Texas occur in August and September, but can occur into December with the right conditions.

Wild, native deer in Texas are for the most part resistant to EHD and have evolved over the years to develop immunity to the disease. Research has indicated that up 65% of the deer in Texas have EHD antibodies, showing at one time they had been exposed to it. Deer in high density areas, deer in enclosures and deer with more than 25% northern genetics are at greatest risk of contracting EHD.

In 2011, Texas had 108 confirmed cases of EHD from 30 counties, that's twice the number from 2010. Most of the confirmed cases came from captive deer. It is more difficult to find dead deer in the wild to be tested for EHD, they are often not found because of vegetation and the carcass decomposes before a sample can be taken to determine cause of death. Most deer mortalities are found around watering holes, where deer go to quench their extreme thirst, a symptom of EHD.

Symptoms of EHD include: extensive hemorrhaging, drooling, nasal discharge, swollen lower jaw, swollen tongue, lesions around the hoof, on the tongue and on the roof of the mouth, and internal organs will be red because of the hemorrhaging.

There is no cure for EHD, a vaccine is available, it's expensive and they don't know for sure it will work.

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## Yucca

Yucca, sometimes referred to as bare-grass, is a member of the Lily Family. It can be beneficial to wildlife or it can be a nuisance depending on how much you have in your pastures. Too much yucca can limit forage production of some more desirable species of native grasses and forbs that livestock and wildlife depend on. Yuccas bloom from May to July producing white flowers that are readily eaten by deer and livestock. The plants themselves can provide cover for small mammals, reptiles and birds. Quail have been known to build a nest up under those sharp spikes. I have noticed some animals chewing the leaves of the yucca, but would not think that it had much value as forage.

Yucca can be found on a variety of range sites, from sandy soils to tight soils. If you have determined you have more yucca than you need or have it in some undesirable areas, here is one method of controlling it with chemical.

**Herbicide + Oil Whorl Spray:** This works on both smooth barked mesquite (young trees) and yucca, best used during the spring or summer, and you will need some type of sprayer. Use a mixture of Remedy herbicide and diesel fuel or vegetable oil. The oil/diesel ensures that the herbicide will



Yucca Plant

cover the plant thoroughly and be absorbed by the plant. The recommended mixture is 15% Remedy and 85% diesel fuel or vegetable oil. When mixing Remedy with oil, pour the needed amount of Remedy into sprayer, then add the oil, shake to mix. One ounce of Hi-Light blue spray-marking dye can be added for each gallon of spray mix to help you identify the plants you have sprayed. Spray plants in the center of each whorl for at least 2 seconds. Do not spray when plants are wet from a rain or heavy dew. Diesel fuel is cheaper than vegetable oil and there is a pre-mixed chemical (Remedy RTU) available, but it will be even more expensive.

Herbicide	%Herbicide	Amount of Remedy/Gallons Mixed		
		1 gallon	5 gallons	10 gallons
Remedy	15%	19 oz.	3 qt.	1.5 gal.

## Texas Tasmanian Devil

Okay, we don't have a Tasmanian Devil in Texas, but we do have the American Badger, which may be a close second in temperament. The American Badger (*Taxidea taxus*) is a member of the Family Mustelidae. The Mustelid family includes weasels, ferrets, minks, wolverines and otters. They are all carnivores, have short legs, small ears and most have scent glands (except for otters), used to mark territories and for mating purposes.

The badger can be found throughout most of Texas, except for the eastern part of the State. They tend to prefer open rangeland, where there is an abundance of prairie dogs and ground squirrels, their favorite meal. However, they will eat all types of rodents, rabbits, birds, eggs, lizards and insects. While trapping doves this summer, I observed badgers eating my sunflower seed that I was using for bait.

Badgers are excellent diggers, with large front claws, they are able to dig up all sorts of prey food (gophers, prairie dogs, etc.) and create an elaborate network of tunnels called "setts". These tunnels are used for escape cover and nesting for the birth of baby badgers referred to as kits or cubs. Badgers mate in late summer or early fall; however implantation is delayed until winter, so that kits are born in the spring, March and April. Litter size ranges from 1-5, with an average of 3 kits per litter; they are born lightly haired and blind. The kits will be weaned at 8 weeks of age, but stay with the mother until fall.



**American Badger**

Badgers do not hibernate, however they may sleep for several days in their tunnel during bad weather. They have few natural enemies and can be very aggressive defending themselves from potential predators, thus their reputation of having a "bad attitude". They can fluff their hair up to make themselves appear larger, bare teeth and hiss and growl at potential predators, warning them to stay back. Badger's short legs make it impossible for them to outrun most predators, so they stick with the tough guy attitude.

## Youth Shooting Event

By Matt Poole, Wildlife Biologist at Matador WMA

The Matador Wildlife Management Area (WMA), 8 miles north of Paducah, will be hosting its 8<sup>th</sup> Annual Youth Shooting Sports Event tentatively scheduled for May 1–2, 2012 on the Matador WMA. Over the past 7 years we have had more than 700 kids participate in this event, and this year we anticipate 100–125 students from surrounding schools. Students are given a presentation on wildlife ecology, conservation and hunter safety, as well as, participate in various shooting sports such as archery, sporting clays, .22 rimfire rifle, .22 rimfire pistol, and muzzleloader.

Students are divided into small groups, transported to the field and rotate through 6 shooting stations which included archery, muzzleloader, .22 rifle, .22 handgun, sporting clays, and trap & skeet. Volunteers from around the panhandle instruct each student on safe handling procedures, sighting techniques, and helpful shooting tips with emphasis on firearm safety. Students hone their shooting skills on clay pigeons (moving and stationary), paper targets, and metal silhouettes. Targets range from 20 – 100 yards.

This event is not designed to be a competition but rather designed to introduce and promote the shooting sports to our youth regardless of their previous shooting experience. This event exposes students to the shooting sports in a safe, controlled environment. For some students it gives them the opportunity to shoot a firearm for the first time. Fun is had by all students and volunteers, and the Matador WMA staff looks forward to the upcoming 8<sup>th</sup> Annual Youth Shooting Sports Event in 2012.

Texas Parks and Wildlife Department would not be able to host such an event without the help of area volunteers, sponsors, schools, parents and donations of money and equipment. The support from past donors and our loyal volunteers has been essential to the success of these events. If interested in making a donation, our current needs are for Archery equipment, a .20 gauge shotgun, ammunition and various shooting targets. Monetary donations should be made payable to: Texas Parks and Wildlife with “Matador WMA Youth Shooting Sports Fund” noted in the Memo section. Please mail checks or donated items to Matador WMA; 3036 FM 3256; Paducah, TX 79248.



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