



# Wyoming Game and Fish Department

## Jackson Region

## December 2015 Newsletter



### Working for Healthy Bighorns

The Wyoming Game and Fish Department is continuing its multi-year research project on bighorn sheep in the Jackson Region. In December, 11 female bighorn sheep were captured for disease sampling and fitted with radio collars in an effort to learn more about their survival and migration patterns. Samples were collected to test for respiratory pathogens that can cause pneumonia. In addition, researchers from the Wyoming Cooperative Fish and Wildlife Research Unit performed an ultrasound on each animal to measure body fat. This is a three-year study evaluating how body condition is related to pneumonia outbreaks. Since 2011, a total of 48 bighorn ewes have been collared with 27 of those currently still alive.

The Jackson herd, which typically numbers approximately 500 animals, has experienced two significant die-offs in recent years. In 2002, it was estimated that as many as 50 percent was lost due to a pneumonia outbreak and another estimated 30 percent lost again in 2011. It is estimated that the herd has climbed back to around 400 animals currently. Near Dubois, the Whiskey Basin herd in the Wind River Range has struggled through several pneumonia outbreaks as well. Other bighorn sheep herds across the Rocky Mountains have also experienced significant declines in population due to pneumonia in recent years.



(Photos clockwise from top left) Two bighorn ewes are brought in to be processed 2) North Jackson Game Warden Jon Stephens helps carry a ewe to be processed 3) Bighorn released! 4) Wildlife Disease Specialist Hank Edwards gets a tonsil swab 5) G&F Commissioner Charles Price takes measurements.





# Jackson Region Monthly Newsletter

December 2015

*Conserving Wildlife, Serving People*



## Elk Traffic Control

Wyoming is blessed with abundant big game populations and November and December is a time when many big game animals are headed for traditional wintering areas at the lower elevations. This often puts animals in harms way, crossing roadways. On this day in early December, North Jackson Game Warden Jon Stephens and Regional Information and Education Specialist Mark Gocke worked to stop traffic on Highway 89 just north of Jackson long enough to get a large group of elk to use the elk jumps (lower left) into the National Elk Refuge.



## Goats Stop Traffic

There are many other problem areas throughout the region, including mountain goats in Snake River Canyon near Alpine. South Jackson Wildlife Biologist Gary Fralick and game wardens Kyle Lash and Jordan Winter all worked to keep the goats off the road. Unfortunately, one young goat was still hit and killed. Discussions with WY-DOT resulted in an electronic warning sign being put up along the roadside.





### Welcome Warden Winter

Alpine Game Warden Jordan Winter was welcomed to the Jackson Region in November and hit the ground running. Warden Winter worked the end of the elk season in Hunt Area 90. Many hunters were contacted with very few having success harvesting a cow elk. Two hunters reported having found a dead bull elk up a side drainage of the Greys river. Warden Winter followed up on the report, located the trophy bull (right) and found that it had died of scabies. Scabies is a disease that causes animals to lose patches of hair and eventually die of exposure. Winter believed the bull had died the previous night.



### Moose Creek Moose

On November 1, South Jackson Game Warden Kyle Lash rode up Moose Creek on the Westside of the Tetons to investigate a reported dead moose (left). Warden Lash conducted a field necropsy on the moose and was unable to determine cause of death.



Lash collected the moose head for regional disease biologists to examine for *Elaeophora* (carotid artery worm) and other diseases. No conclusions were found as to the cause of death, but Lash thanks the hunters who reported the unusual find.

### A Picture of Hunting Season

Jackson Region Game Wardens report late season big game harvest as relatively low this year and consequently violations have been fewer as well. However, specimens are piling up in the evidence freezer at the Jackson office. Not all specimens are the result of a violation, but many are. Most of the meat is donated to local families in need. Fall is a busy time for all Game and Fish personnel. Office Managers address the constant flow of hunters in the office while biologists and wardens are contacting just as many out in the field each day. And when the final season ends (Bison on January 15) everyone takes a deep breath.





A professional wildlife capture crew shoots a net over a mule deer near LaBarge.

### Wyoming Range Deer Project

The Wyoming Cooperative Fish and Wildlife Research Unit and Wyoming Game and Fish Department, along with many other partners, continued the Wyoming Range Mule Deer Project initiated during the winter of 2012-2013.

The overarching goal of the project is to investigate the nutritional relationships between mule deer populations, energy development, habitat conditions, and climate.

The first helicopter capture occurred in March 2013 with the capture of 70 adult females, 35 in the northern (Big Piney / La Barge) and 35 in the southern (Kemmerer / Evanston) winter ranges. Each deer has been fitted with a GPS collar to be worn for two years. An ultrasound is performed on each animal to determine percent body fat and pregnancy. Animals are recaptured each December and March to evaluate change in body condition between seasons.

This December marked the successful completion of the fourth capture/recapture of collared deer so far.

Additionally, the deer are monitored each autumn to determine fawn production and survival. Productivity of individual animals combined with their body condition and forage production data will be used to determine the habitat's "nutritional carrying capacity". Ultimately, this information will allow wildlife managers to assess whether the Wyoming Range deer herd is reaching its reproductive capacity based on current available habitat. This research, the results of the hunting seasons and habitat work will all be discussed at upcoming public meetings for the WY Range Mule Deer Initiative. **Public meetings are planned for January 5 in Pinedale, January 6 in Marbleton and January 7 in Thayne.**

*(Left) A mule deer doe is released by University of Wyoming Graduate Student Samantha Dwinell while State Legislator Fred Baldwin from Kemmerer looks on.*

*(Right) A processed mule deer doe bounds back to its winter range near LaBarge.*



South Jackson Wildlife Biologist Gary Fralick takes measurements on a mule deer doe.





### New Mule Deer Disease...or is it?

South Jackson Wildlife Biologist Gary Fralick submitted five fawns from Star Valley to the Game and Fish's Wildlife Health Laboratory. Adenovirus Hemorrhagic Disease (AHD) was found to be the cause of death of each fawn. Although this disease has been documented in Wyoming, diagnostic tests for this disease were poor and many cases were likely missed. Between 1999 and 2014, only sixteen animals were diagnosed with AHD (13 mule deer, 1 white-tailed deer, 2 moose). This level of mortality was not alarming and AHD was considered a somewhat obscure fringe disease in Wyoming.



That all changed in August of 2015 when Dr. Myrna Miller of the Wyoming State Veterinary Laboratory developed a new diagnostic test for AHD using polymerase chain reaction (PCR). Since then, 16 mule deer and one pronghorn have been diagnosed. Juvenile animals appear to be more susceptible than yearling or adult animals, but mortality has been documented in all age classes. These preliminary results indicate that AHD may be a more significant mortality factor in juvenile mule deer than was previously considered; however, there is still much we do not know about



this disease in Wyoming. Some of the big questions include: Is the increase in adenovirus cases related to better diagnostics or an increased incidence of AHD? Is occurrence of AHD cyclic? Are there management actions we should consider?

One approach to answering these questions will require development of a serologic test to identify AHD in blood samples. The Game and Fish Wildlife Health Laboratory maintains an extensive serum bank spanning 40 years. Serologic testing may provide an indication of the historical distribution and prevalence of AHD in Wyoming.

### CWD Work

As the Game and Fish Department rolled out its updated Chronic Wasting Disease (CWD) management plan to the public in November, department disease personnel were busy collecting CWD samples from road-killed deer, moose and hunter-harvested elk, as has been done for many years. Juliann Terry, the National Elk Refuge CWD technician, was busy collecting samples from successful hunters' elk as snowstorms in late November initiated migrations to the refuge.



A lymph node is collected from a cow elk.



# Jackson Region Monthly Newsletter

December 2015

Conserving Wildlife, Serving People



## Moose Goes to School

A cow moose showed up at the Wilson Elementary School earlier this fall. It rebelliously parked in the fire lane for a bit, but then pushed on, captivating the attention of a student before class. Regional Information & Education Specialist Mark Gocke made sure the young students were aware and gave it a wide berth.



## Salt River Stuff

Eight trout in the eastside diversion of the Salt River were implanted with radio transmitters and released back to the canal. The intent of this tagging was to determine if these stranded fish could be flushed from the canal and back to the Salt River. The canal company agreed to flush the canal between October 21 and November 13. On November 13, a total of 1,321 fish were salvaged from the canal, 848 of which were trout. All eight tagged fish were located in the canal using a telemetry receiver. It did not appear that the canal company completed the flush or the flush was unsuccessful.

Also, the Habitat & Access crew spent several days installing new signs at several Public Access Areas on the Salt River, such as this one at the Perkes PAA. There are several Public Access Areas on private lands along the Salt that provide good waterfowl hunting and angling for big brown and cut-throat trout. Get out and enjoy them!

