

January 2018



## Veterinary Services Staff

### Branch Supervisor/Wildlife

**Veterinarian:** Dr. Mary Wood

### Laboratory Supervisor:

Hank Edwards

### Senior Lab Scientist:

Jessica Jennings-Gaines

### Brucellosis Lab Assistant:

Kylie Sinclair

### Wildlife Disease Specialist:

Terry Creekmore

### TWRC Manager:

Matt Huizenga

### Wildlife Biologist:

Cole Hansen

**Biologist:** Sam Lockwood



# Veterinary Services Newsletter

## January 2018

## Thorne/Williams Wildlife Research Center (TWRC)

### Facility Renovations and Winterizing

Winter temps and snow have finally hit Sybille Canyon. Time was spent at the beginning of the month checking and repairing heaters in our automatic waterers. We also checked and serviced all of the furnaces on the facility. A little preventative maintenance now saves a lot of time working on frozen waterers and pipes later in the winter in less than ideal conditions.

The renovations in our bunkhouse and conference room continued this month. A local flooring company came in and removed all the aged, cracking tile and installed new vinyl flooring throughout the building. With the new flooring and a fresh coat of paint on everything, the building is looking great!



*Conference room before renovations.*



*Conference room after renovations*



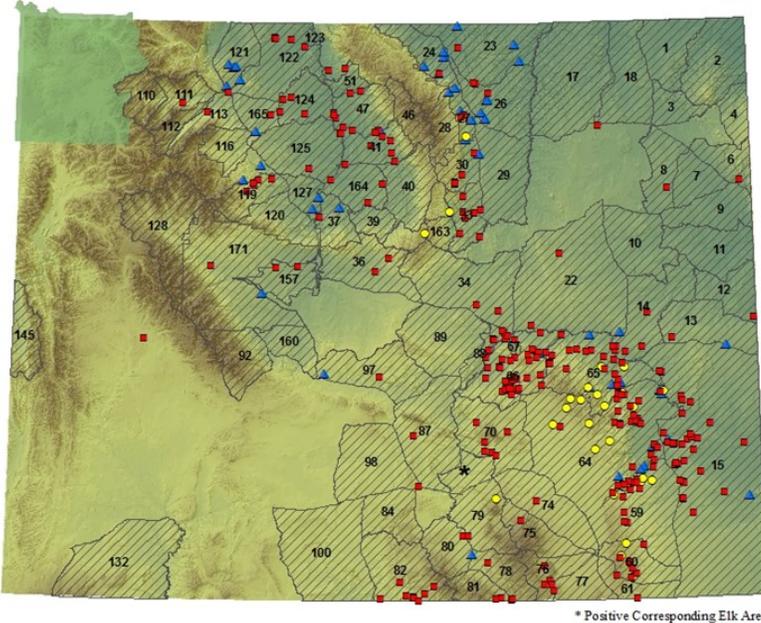
*A captive elk investigates our camera during monthly observations.*

### Animal Handling and Sampling

We also had the opportunity for a little animal handling work this month. We brought in all of our cow elk for physical evaluation, behavioral observation, and weighing. This is a monthly extended observation with clinical scoring to closely examine and document body condition and behavior of our captive elk. We also took the opportunity to travel to Lovell to assist with sampling Devil's canyon sheep prior to transplant.

## Wildlife Health Laboratory

### Wyoming Chronic Wasting Disease (CWD) 2017 Positive by Species



Wyoming Game and Fish Department  
Wildlife Health Lab  
January 2018

- Positive Elk
- Positive Mule Deer
- ▲ Positive White-tailed Deer
- CWD Endemic Deer\* Hunt Areas 2016

**CWD Surveillance:** CWD surveillance for the 2017 season is complete! Laboratory staff are now working on data quality control by checking all database entries against the information that was presented on the head-tag. Within the next few weeks all data checking should be complete and we can start compiling statistics. Preliminary results show that a total of 3,751 samples have been tested since the beginning of the year, with 333 of those testing positive. Of the positive samples identified this year, 258 were mule deer, 48 white-tailed deer and 27 elk; no positive moose were identified in 2017. Final survey totals and statistics may be available by February 2018

**Bighorn Sheep Surveillance:** On December fourth, twenty bighorn sheep were captured from Devil's Canyon for translocation to the Ferris Mountains. All animals were sampled for general health as well as for respiratory pathogens prior to translocation. This herd has been sampled and tested several times over the past several years and just as in previous surveys, was found to be free of *Mycoplasma ovipneumoniae*. Other potential respiratory pathogens have been detected this herd including leukotoxigenic *Bibersteinia trehalosi*, *Pasteurella multocida*, and *Mannheimia haemolytica/glucoisida*, indicating that respiratory disease may be possible given the right circumstances/conditions.

**Other Happenings:** Eight candidates were selected for interview for the vacant Senior Laboratory Scientist position. From the eight, three individuals declined and the remaining five candidates are scheduled for interviews on January 19.



Kylie Sinclair and Rachel Fanelli sample a bighorn sheep for respiratory pathogens prior to transplant. Sheep are given a mild tranquilizer to reduce stress during sampling and transplant.

## Disease of the Month

### Disease of the Month: Lead Poisoning

Lead poisoning has long been recognized as a cause of mortality in birds. Waterfowl ingest spent lead shot while foraging and raptors can ingest shot or bullet fragments from animals killed using lead bullets. Fish eating birds sometimes ingest lead fishing tackle such as sinkers and lead jigs.

Once ingested, lead is slowly worn down by mechanical abrasion and the acidic environment of the digestive tract. Digested lead enters the blood stream, where it has devastating effects on virtually all body systems, especially the nervous, and digestive systems. Affected waterfowl are often emaciated, unable to fly, have a bright green-stained vent, and may have impacted food in their esophagus. Lead shot is typically seen in the gizzards of the majority of these birds.



*Lead shot in Canada goose gizzard. Photo credit: USGS National Wildlife Health Center*

Bald and Golden eagles are the raptors most frequently affected by lead poisoning, and may show signs of difficulty breathing, holding their head at odd angles, or have convulsions or leg paralysis. Unlike waterfowl, raptors typically have an empty stomach with no evidence of ingested lead. Lead poisoning is a chronic disease and individual mortalities are usually seen rather than large die-offs. Waterfowl and raptors are highly mobile and the ingestion of lead may occur many miles, or several states, away from where the bird succumbs to the disease. In Wyoming, historical data indicate that bald eagles are more likely to be poisoned by lead than are Golden eagles, and lead poisoned eagles have been identified in 16 of Wyoming's counties.

If you find sick or dead eagles, fish eating birds, or waterfowl, please contact the WGFDD Wildlife Health Laboratory to arrange submission of samples.

## Wildlife Necropsy Summary

**Four diagnostic cases were submitted for necropsy during October. Two additional cases are pending.**

Species	Date Received	County	Diagnosis
Moose	12/1/2017	Park	Keratitis
Mule deer	12/6/2017	Teton	Meningitis
Mountain goat	12/12/2017	Teton	Capture myopathy
Bighorn sheep	12/14/2017	Park	Undetermined