# Montana Fish, Wildlife & Parks

## Region 2 Wildlife Quarterly

September 2019

# CWD UPDATE

*Mule deer on a lawn in the Bitterroot Valley , 2019*

# Technical Bulletin No. 21

# Montana Fish, Wildlife & Parks
# Region 2 Wildlife Quarterly
September 2019

*Region 2, 3201 Spurgin Road, Missoula MT 59804, 406-542-5500*

***Find the Quarterly online at fwp.mt.gov/regions/r2/WildlifeQuarterly***

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The Region 2 Wildlife Quarterly is a product of Montana Fish, Wildlife & Parks; 3201 Spurgin Road; Missoula 59804. Its intent is to provide an outlet for a depth of technical information that normally cannot be accommodated by commercial media, yet we hope to retain a readable product for a wide audience. While we strive for accuracy and integrity, this is not a peer-refereed outlet for original scientific research, and results are preliminary. October 2015 was the inaugural issue.

# Chronic Wasting Disease in Montana

*The disease, surveillance, and planning for future management*

Emily Almberg, Disease Ecologist, FWP Wildlife Health Lab, Bozeman

Montana Fish, Wildlife and Parks CWD Action Team

**Go to FWP's website for CWD updates:**

***Fwp.mt.gov*** **and click on CWD**

## What is Chronic Wasting Disease (CWD)?

CWD is a slow moving, fatal neurological disease of deer, elk, moose and caribou for which there is no known cure. It belongs to a group of diseases called transmissible spongiform encephalopathies, a group which includes mad cow disease in cattle, scrapie in sheep and Creutzfeldt-Jakob disease in humans. The causative agent is an abnormally folded prion protein that causes normal cellular prion proteins found in the body to mis-fold into disease-causing forms. Misfolded prions accumulate in infected animals and cause neuronal cell death that leads to fatal nerve and brain damage.

CWD is named for the symptoms that appear in terminal stages of infection, such as emaciation, excessive salivation, lack of muscle coordination, and carrying head and ears lowered. Affected animals become infectious at 5-7 months, symptomatic at 14-15 months and die within 2 years.

CWD is most commonly transmitted by animal-to-animal contact, but can also be transmitted by contact with a prion-contaminated environment (grass and soil). Infected animals shed prions in saliva, feces and urine for most of the course of their infection, and via bodily tissues and fluids upon death. These prions may remain infectious in the environment for at least two years.

There is no known case of CWD affecting people, pets or livestock. However, the World Health Organization and the Centers for Disease Control and Prevention (CDC) recommend not consuming meat from an animal known to be infected with CWD. The CDC also recommends that hunters have deer tested if they were harvested in areas where CWD is known to be present.

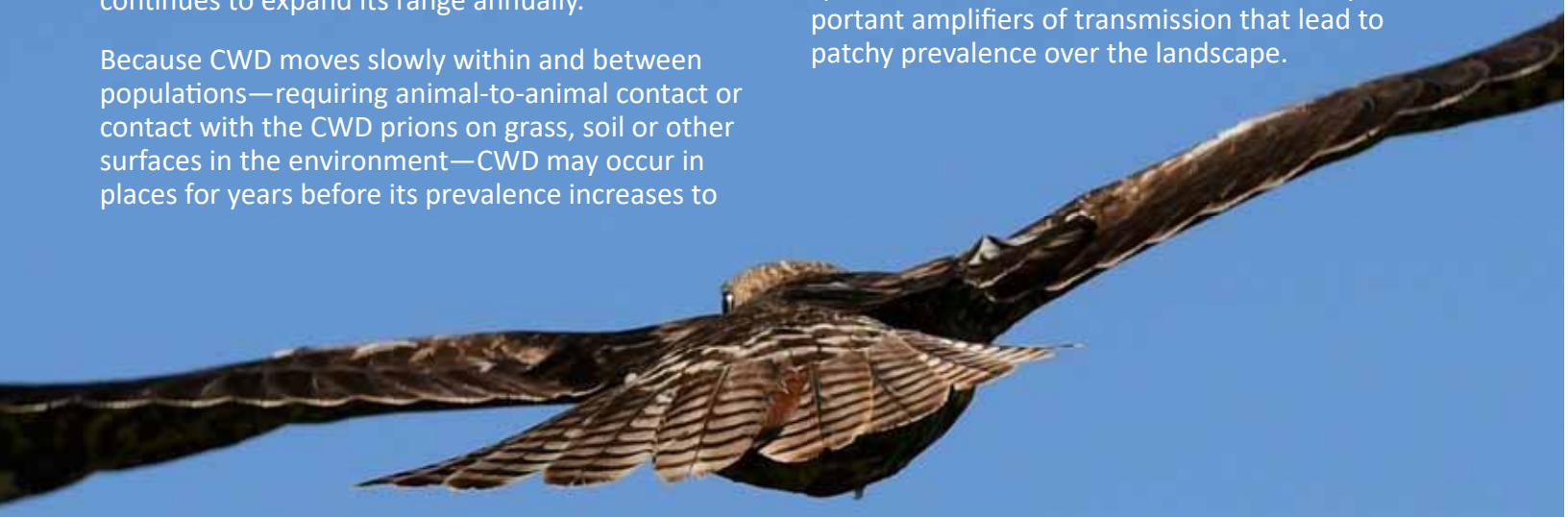
# Where is CWD?

## North America and Beyond

CWD was first identified in 1967 in Colorado. Fifty-one years later, CWD now is known to occur in captive or free-ranging herds in 26 states, 3 Canadian provinces, Norway, Finland and South Korea and continues to expand its range annually.

Because CWD moves slowly within and between populations—requiring animal-to-animal contact or contact with the CWD prions on grass, soil or other surfaces in the environment—CWD may occur in places for years before its prevalence increases to detectable levels. Many U.S. states and Canadian provinces have documented the gradual spread of CWD despite attempts at managing it.

One common observation is the patchy distribution of infections on the landscape. Social, matrilineal or breeding aggregations, habitat refugia, or "hot spots" of environmental contamination may be important amplifiers of transmission that lead to patchy prevalence over the landscape.



## Montana's Wild Cervids

In Montana CWD was detected for the first time in free-ranging mule deer and white-tailed deer in the fall of 2017, from Carbon County, just north of Wyoming. Also in 2017, one mule deer tested positive in northern Liberty County near the Canadian border. Surveillance for CWD from 1996 until these two detection events in 2017 did not detect CWD in wild deer, elk or moose in Montana.

In 2018, FWP detected 26 new cases of CWD among wild deer, including 21 cases along the northern border in every county from Liberty County east to the North Dakota border, and five cases within the CWD-positive area south of Billings. In the spring of 2019, CWD was found in white-tailed deer in Libby.

As of August 2019, CWD has been detected in mule deer and white-tailed deer. At this time, CWD has not been found in elk or moose in Montana.

## Historically in Montana

CWD was detected in farmed elk within a captive facility near Philipsburg in 1999. Upon detection, the infected elk were destroyed, removed, and the site was sterilized to the best of officials' abilities. Wild elk in the vicinity were sampled for CWD and no instances were detected in the initial samples, or in subsequent samples provided by hunters over the years. A game farm has not existed on that site for many years since the CWD detection. The detection in farmed elk in 1999 has been the only detection in FWP Region 2 to the present time, and had been the only CWD detection in Montana prior to 2017.

# Chronic Wasting Disease in North America

Distribution of Chronic Wasting Disease in North America

CWD in free-ranging populations

Known distribution prior to 2000 (free-ranging)

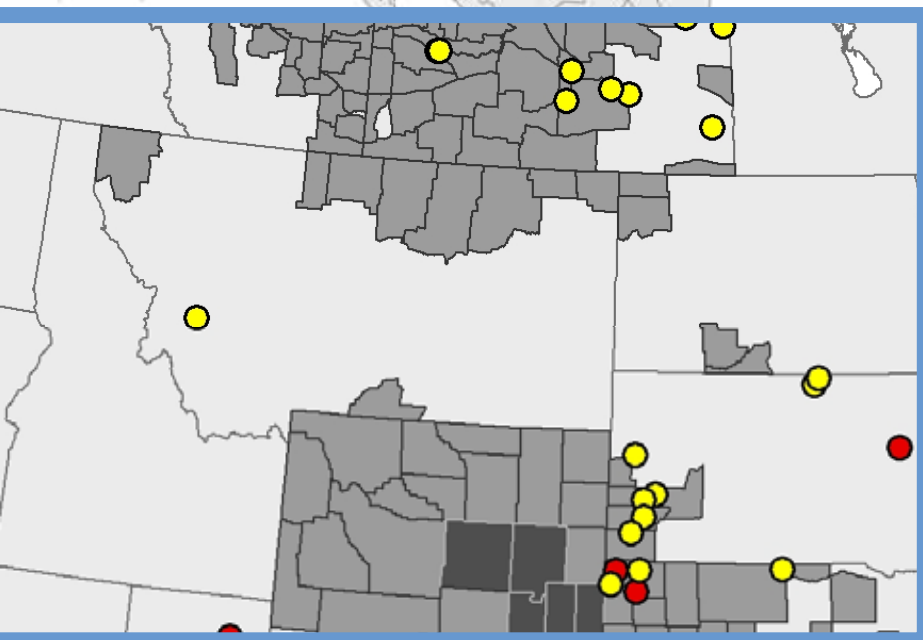
CWD in captive facilities (depopulated)

CWD in captive facilities (current)

USGS
science for a changing world

National Wildlife Health Center
Madison, Wisconsin
Updated July, 2019

All locations are approximations based on best-available information



Enlargement of Montana and Surrounding States and Provinces

# Potential Impact

## Population Declines

Determining the population effects of such a slow-moving disease is difficult; however, several field studies and computer models suggest that populations could be substantially reduced over time. Radio-collaring studies have documented lower survival for deer and elk infected with CWD and some have measured declines in annual population growth rates. Several simulation modeling studies have predicted moderate to dramatic cervid population declines, including local extinction, over long timescales of more than 20 years. With declines in affected populations, and the eventual spread from one population to the next, the opportunity for Montanans to watch and hunt deer, elk and moose would also decline, impacting lifestyles and the economy.

## Other States

Documented CWD-related, herd-level declines in mule deer include a 21% annual decline in Wyoming at 21-27% CWD prevalence, and a 45% decline in Colorado from 1987-2007 with prevalence of up to 41% in males and 20% in females. Among white-tailed deer in Wyoming, a 10% annual decline in population size has been documented where prevalence was 33%, along with a corresponding decline in buck age structure. While uncertainty remains over the size and extent of any future CWD-associated impacts, high prevalence and increased spatial spread of the disease are likely to correspond to population-level declines. Once CWD is present in a wild population it may be practically impossible to eliminate. New York may be the only state to have eliminated a CWD outbreak after its detection. That state responded aggressively to what appears to have been very early in a small outbreak.

# Montana's Plan

**1996** FWP begins annual surveillance to detect CWD, focusing on the collection and testing of symptomatic, wild deer and elk across Montana, as well as targeted surveillance of hunter-harvested deer and elk in selected portions of Montana bordering CWD states and provinces. Surveillance effort varied with funding and availability of personnel.

**2005 & 2013** FWP releases CWD plans and decision notices to the public and reaffirms its commitment to detect and prepare for CWD.

**2014** FWP collaborates to develop a CWD risk model to improve the strategic basis for assigning priority surveillance areas in Montana to offer the highest probability of an early detection, thus preserving future management options.

**2017** FWP forms a CWD Citizens' Advisory Panel, and in concert with FWP's internal CWD Action Team develops updated surveillance and management plans for CWD. The improved and updated CWD surveillance strategy is implemented in Montana in 2017. CWD is detected for the first time in Montana wild deer.

**2018** FWP implements Year Two of its updated surveillance strategy, focusing on the Hi Line and Hunting Districts 210, 212 and 217 near Philipsburg.

**2019** FWP CWD surveillance/monitoring during fall 2019 will be focused in southeastern Montana, around Philipsburg, and along the Hi-Line.

# Prevention . . .
## . . Doesn't Look Like This

However, a person is exempted from the Montana statute prohibiting the supplemental feeding of wildlife when conducting the normal feeding of livestock. Elk attracted to livestock feeding grounds create a hardship for ranchers.

### ♦ Feeding Prohibited

*Feeding of big game animals facilitates the transmission of disease by concentrating and aggregating animals. Baiting and feeding of big game animals is illegal in Montana under MCA § 87-6-216(1)(c), which states, "a person may not provide supplemental food attractants to game animals by purposely or knowingly providing supplemental feed attractants in a manner that results in an artificial concentration of game animals that may potentially contribute to the transmission of a disease or that constitutes a threat to public safety."*

—FWP CWD Action Team, February 8, 2018

### ♦ Game Farms Banned

In 2000, Montana citizens passed an initiative banning new game farms, in part due to the increased opportunity for animals marketed across state lines and held in close quarters to facilitate the spread of diseases. Grandfathered game farms in Montana are subject to regulation by the Department of Livestock.

### ♦ Transport To And From Montana

It is unlawful to transport into Montana from states or Canadian provinces that have experienced CWD a whole carcass, whole head, brain or spinal column from white-tailed deer, mule deer, moose or elk. Those states and provinces include those listed on Page 4 of the 2019 Deer-Elk-Antelope Hunting Regulations. Page 4 of the 2019 Hunting Regulations also describes other regulations involving the transport of deer, elk and moose.

### ♦ Translocation of Cervids

For more than a decade, Montana has adopted a policy that prohibits the translocation of deer and elk from one part of the state to another as a precaution to avoid spreading undetected carriers of CWD and other diseases to naïve herds.

FWP's commitment to avoiding the potential spread of CWD is expressed by its policy prohibiting FWP from receiving and rehabilitating fawns, calves or injured deer and elk from the wild. Similarly, FWP does not consider the translocation of cervids as a viable way to manage low or high densities of wildlife in any given area of the state.

# Prevention (continued) . . .

## ♦ CWD Management Zones

To prevent the spread of CWD from areas in Montana known to be infected to other parts of Montana, certain parts of deer, elk or moose harvested in those areas are not allowed outside of established CWD Management Zones. Management Zones have been drawn to include meat processing and taxidermy services so that the hunter is able to care for harvested animals by using facilities that already exist within the CWD Management Zone.

CWD Management Zones are areas where CWD is known to exist. To prevent the spread of CWD from infected areas of Montana to other parts of the state, **the whole carcass, whole head, brain, or spinal column from any deer, elk, or moose harvested within a CWD Management Zone may NOT be removed from that Management Zone unless the animal has tested negative for CWD.**

Deer, elk or moose parts that CAN be removed from a CWD Management Zone include:

- Meat that is cut and wrapped or meat that has been separated from the bone.
- Quarters or other portions of meat with no part of the spinal column or head attached.
- Hides with no heads attached.
- Skull plates or antlers with no meat or tissue attached.
- Skulls that have been boiled and cleaned to remove all flesh and tissue.
- Upper canine teeth.
- Head, partial body, or whole-body mounts prepared by a taxidermist.

Three CWD Management Zones are established and will be enforced in Montana in 2019-2020, as follows:

**Northern Montana CWD Management Zone -** Hunting Districts 400, 401, 600, 611, 640, 641, and 670 including the communities of Shelby, Havre, Malta, Glasgow, and others that are on the defined boundaries.

**Southern Montana CWD Management Zone –** Hunting Districts 502 and 510, that portion of HD 520 east of Highway 212, that portion of HD 575 north and east of Highway 78, that portion of HD 590 south of Interstate 90, that portion of HD 704 south of Hwy 212, including the communities of Billings, Broadus, and others that are on the defined boundaries.

**Libby CWD Management Zone -** That portion of Lincoln County bounded on N by Barron, Pipe, and Seventeen Mile roads; on W by USFS Libby Ranger District Boundary; on S by Bear and Libby creeks and S boundaries of TWPs T29N, R29W and R30W; on E by Fisher River to Hwy 37, Kootenai River, and Lake Koocanusa.

## ♦ Wildlife Management

*Several studies have predicted that increasing male harvest and reducing male to female sex ratios in cervids may be one of the most effective tools for reducing CWD prevalence*. -Montana CWD Management Plan, page 5

Montana's wildlife management philosophy has long been to manage for a resource which provides the public with a 6-week archery and 5-week general opportunity to hunt deer and elk across Montana. While some hunting districts limit hunter harvest opportunities for the purpose of increasing numbers of older bucks or bulls, Montana's deer and elk populations are generally managed for younger average age structures and higher rates of turnover, which may help temper the spread of CWD.

## ♦ Use or Sale of Cervid Urine

It is illegal to use or sell deer or elk urine to mask human odor if the urine originated in any of the CWD-positive states or provinces listed on page 4 of the 2019 Deer-Elk-Antelope regulations unless the urine originated in a facility that is CWD-free as determined by the Fish and Wildlife Commission. Facilities certified by the Archery Trade Association meet these criteria.

# Surveillance

FWP's CWD surveillance plan will deploy finite staff and funding to maximize our ability to detect CWD in areas where it is not known to exist. This entails:

- continuing to test any sick and symptomatic deer, elk or moose (cervid) statewide;
- focusing systematic surveillance primarily on mule deer—the most susceptible species in Montana;
- employing a weighted surveillance strategy aimed at detecting 1% CWD prevalence in a population with 95% confidence, which rotates among high priority CWD surveillance areas.

High priority surveillance areas are currently defined as those areas within Montana that have both high mule deer densities and are within 60 miles of the nearest known cases of CWD. We will also sample elk, white-tailed deer and moose opportunistically during the course of implementing the plan that targets mule deer.

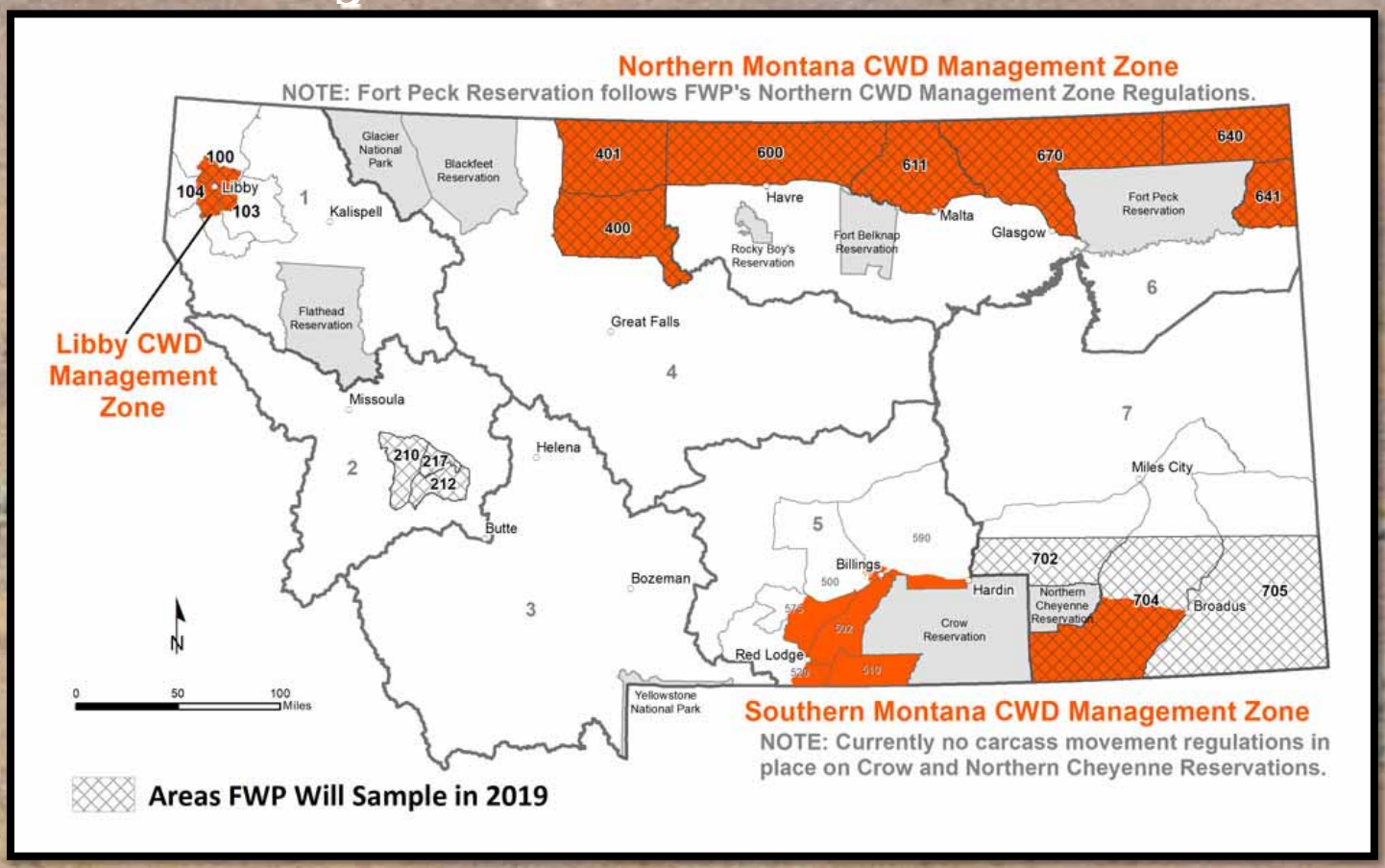
FWP Wildlife Health Program staff and technicians will be primarily responsible for implementing the surveillance program with additional support from FWP regional staff.

FWP Region 2 staff receiving training to sample for CWD in 2018.

Hunters who harvest animals outside of a surveillance area and want to have their animal tested may submit their own samples directly to the FWP Wildlife Health Lab in Bozeman, along with location, species and sex data. During the 5-week general hunting season, FWP will have staff available at regional offices, during regular office hours, to extract samples for you and have them sent to a lab for testing without charge to the hunter. Test results will not be immediately available and may take several weeks, depending on the volume of samples submitted to the lab from Montana and elsewhere. Go to fwp.mt.gov and click on the CWD tag on the home page to find more information.

Dr. Robin Russell and others combined information on distance to the nearest known CWD cases along Montana's borders and relative mule deer densities in Montana to predict the areas within Montana at highest risk of becoming infected through the natural spread of the disease. FWP has used this information to identify high-priority surveillance areas, which also include the area surrounding Philipsburg, where Montana had its only recorded case of CWD at a captive game farm in 1999. Since CWD could be spread by inadvertent or illegal movement of CWD-positive cervid carcasses into the state or from CWD-positive areas within Montana, we will periodically survey other areas of the state as well as priority areas.

# Priority Surveillance Areas

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## 2019

FWP will target its CWD surveillance efforts in 3 broad areas of Montana, as depicted by the cross-hatching on the map above.

The surveillance areas partially overlap the Southern Montana CWD Management Zone and completely overlap the Northern Montana CWD Management Zone.

The third surveillance area for 2019 will again pertain to Hunting Districts 210, 212 and 217 in Region 2. While samples were collected in this area in 2018, and CWD was not detected, FWP will sample harvested deer and elk in this area again in 2019 to augment the relatively few samples that were collected in 2018.

Hunter participation in CWD surveillance is voluntary (except for hunters with special CWD licenses pertaining to an area close to Libby and a portion of Region 4, in which case a harvest check is mandatory). Hunters who harvest deer or elk in the priority surveillance areas are asked to have their animals checked at special CWD check stations in the surveillance areas, or arrange to have them checked at the FWP regional office.

# Weighted Surveillance

Weighted surveillance incorporates the relative risk of different categories of cervids to economize sampling efforts. For example, studies on mule deer in Colorado have shown that within CWD-endemic areas, symptomatic individuals are much more likely to be CWD-positive than apparently healthy, hunter-harvested animals. Similarly, at least with mule deer, animals that have died due to vehicle collisions, predation or other unexplained mortalities are more likely to be infected with CWD. Adults of either sex are more likely to be infected than young animals, as they have more time to become infected, and males are more likely to be infected than females. These differing probabilities of infection have been used to create a weighted point system, where animals that are more likely to be infected with CWD are given more points towards meeting a sample size goal (Table 1).

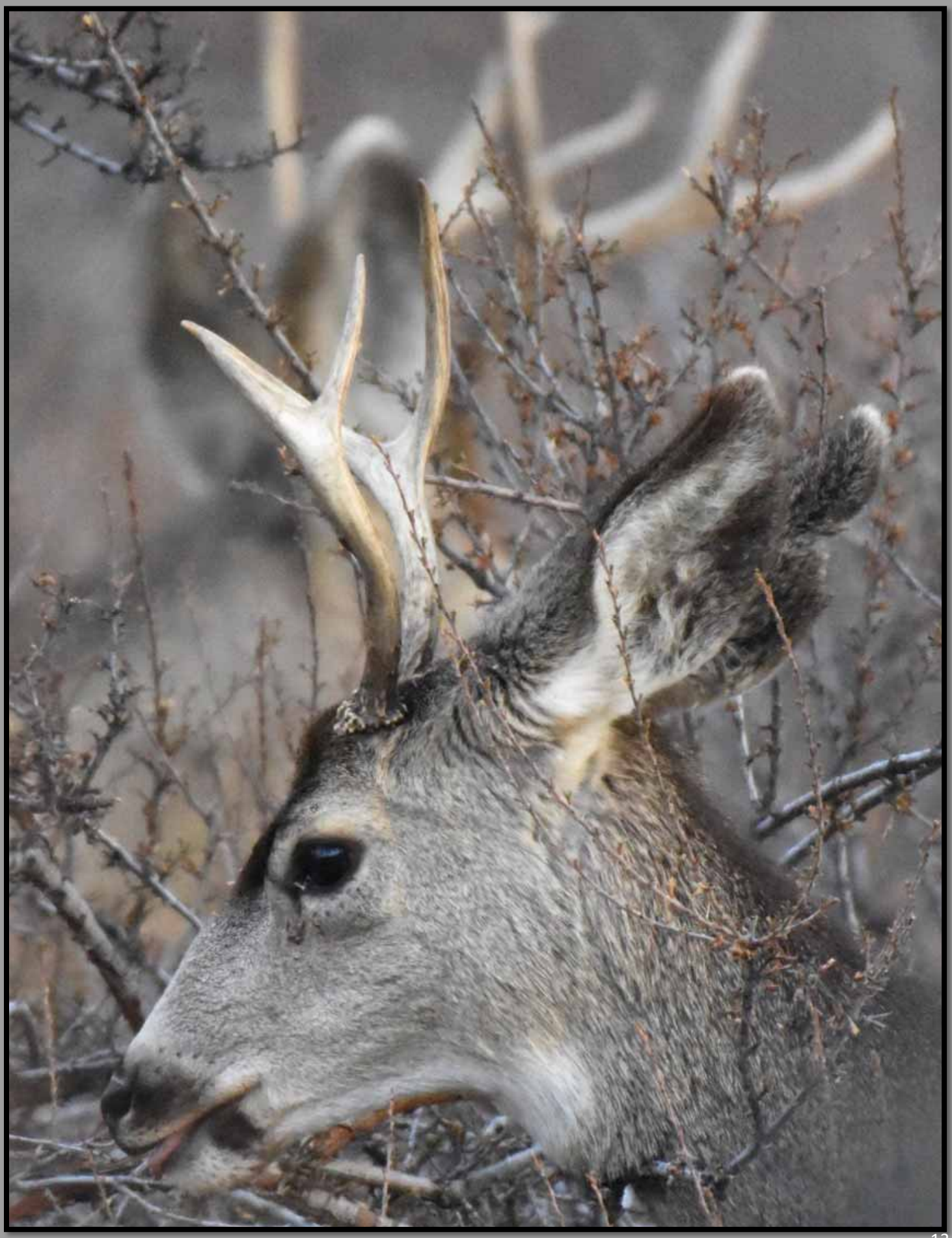
Using weighted surveillance, our goal is to detect CWD with 95% confidence if it is present at 1% prevalence. The required number of points to achieve this is 300. Thus, with 300 weighted surveillance sample points we expect to be able to detect at least one positive animal with 95% confidence if CWD were present at 1% prevalence within a minimum surveillance unit.

The points awarded for a sample from each category of deer or elk are shown below (Table 1).

**Table 1.** The relative weights or "points" associated with each demographic group of deer and elk that count towards meeting a sample size goal using a weighted surveillance strategy based on data from mule deer and elk in CWD-positive areas in Colorado (Walsh & Otis, 2012) and white-tailed deer in Wisconsin's CWD management zone (Jennelle et al., *in review*).

| | Weight/Points | | |
|---|---|---|---|
| **Demographic Group** | **Mule Deer** | **White-tailed Deer** | **Elk** |
| Symptomatic female | 13.6 | 9.09 | 18.75 |
| Symptomatic male | 11.5 | 9.09 | 8.57 |
| Road-killed males/females | 1.9 | 0.22 | 0.41 |
| Other mortalities (predation, other unexplained in adults and yearlings) | 1.9 | 7.32 | 0.41 |
| Harvest-adult males | 1 | 3.23 | 1.16 |
| Harvest-adult females | 0.56 | 1.30 | 1.00 |
| Harvest-yearling females | 0.33 | 0.85 | 0.23 |
| Harvest-yearling males | 0.19 | 1 | NA |
| Harvest-fawns/calves | 0.001 | 0.001 | NA |

**Pictured: 1.19 points toward the weighted surveillance goal of 300, if harvested by a hunter in a priority area.**



# Sampling & Testing

**Pictured: Dr. Jennifer Ramsey, FWP Wildlife Veterinarian, demonstrates good humor, technique and success in extracting a lymph node from a deer as part of the training module that she led for FWP Region 2 employees in September 2018.**

For each cervid sampled as part of the CWD surveillance program, field and laboratory staff will collect retropharyngeal lymph nodes from deer and elk and an obex sample from moose, all of which are taken from the head of the animal. Also, an incisor tooth (for aging) and a small genetic sample (muscle tissue) will be collected when possible. Field staff will work with hunters or others to gather precise location information on where the animal was harvested or found, species, age and sex. Samples will be submitted to a National Animal Health Laboratory Network-accredited diagnostic laboratory (currently Colorado State Veterinary Diagnostic Laboratory) as soon as possible.

Results from hunter-harvested animals will be posted on FWP's website as soon as results are received from the lab, which is generally within 2-3 weeks.

If a harvested animal tests positive for CWD, FWP will attempt to directly contact the associated hunter to inform them of the test results, so that the meat may be legally disposed of, and to determine the disposition of carcass parts.

Hunters who have harvested animals outside of a targeted surveillance unit for that year and who wish to have their animal tested for CWD will be asked to pay for the testing costs. In such cases, hunters will have to extract samples from their own animals. FWP provides information on sample collection and submission on its website (fwp.mt.gov/cwd), including a very helpful instructional video. FWP will also request that hunters sign a release to allow the diagnostic lab to share results with FWP.

# Human Health Precautions

To date, several lines of evidence suggest that humans are at low risk of contracting CWD. There have been no documented cases of CWD causing disease in humans, despite investigations of known or suspected exposures.

Scientists and human health officials agree that it is prudent to minimize human exposure to CWD. The Centers for Disease Control (CDC) and the World Health Organization (WHO) advise against consuming any animal known to be infected with CWD. Furthermore, the CDC recommends that hunters strongly consider having their animals tested before eating the meat when hunting in areas where CWD is known to be present.

Some simple precautions should be taken when field-dressing cervids, particularly in CWD endemic areas:

- Wear rubber gloves and eye protection when field dressing game animals.
- Minimize the handling of brain and spinal tissues.
- Wash hands thoroughly after field dressing is completed.
- Wash instruments thoroughly after field dressing is completed. Immersing in bleach for up to 5 minutes is recommended.
- Avoid consuming brain, spinal cord, eyes, spleen, tonsils and lymph nodes of harvested animals.

# Carcass Disposal

Environmental contamination through dispersal of heads and spinal columns from butcher waste has the potential to introduce or spread CWD in wild populations. Carcass waste of animals harvested from areas of Montana where CWD has been detected should be disposed in an approved municipal solid waste landfill. The Montana Department of Environmental Quality, Solid Waste Division, regulates and certifies landfills and has provided a list of Class II sanitary landfills qualified to dispose of potentially CWD-contaminated materials (see Table 1 on page 10 of the Montana CWD Management Plan on FWP's website). The Missoula and Deer Lodge landfills in Region 2 are listed as so qualified.

Carcasses and carcass wastes may also be incinerated when possible or buried onsite.

The practice of harvesting deer or elk in eastern Montana or elsewhere, then transporting the whole animal home and dumping the dressed carcass out in the woods, while never ethical, is now understood to be one of many ways that humans can negligently spread CWD. We encourage the informed public to help educate their neighbors and friends.

# Estimating Prevalence

## CWD Management

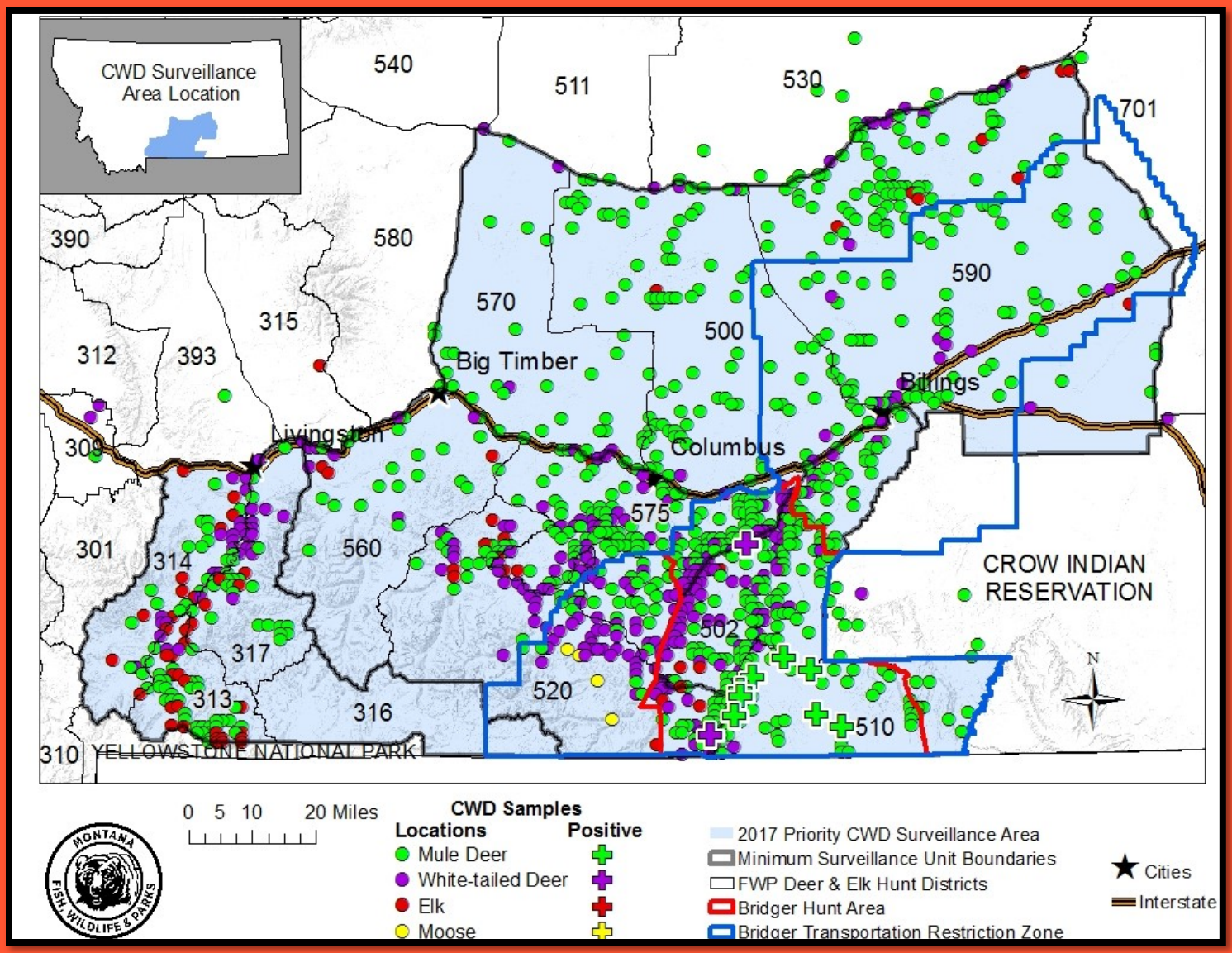
Once CWD is detected, the first step in understanding the extent of this slow moving disease is to increase the sample size to estimate CWD's prevalence in the affected population. Eradication is not the objective of additional targeted collections of deer and elk, but rather a focused harvest and collection of samples adequate to estimate prevalence. Knowledge of prevalence is foundational for prescribing future long-term management.

## Results in Region 5, 2017-2018

FWP first detected CWD in wild deer in Montana during CWD surveillance in Region 5, south of Columbus, during the 2017 general hunting season (Figure 1).

In accordance with Montana's CWD Management Plan, FWP solicited hunters' help in a special late hunt to estimate prevalence. Among 411 mule deer sampled, CWD was present in 2% of the samples, and among 217 white-tailed deer, CWD was present in 1% of the samples (Figure 1).

Figure 1. Locations of CWD samples collected from elk, mule deer and white-tailed deer in a described portion of Regions 3 and 4, along the Wyoming border, and and the locations of samples testing positive for CWD. Numbers on the map represent hunting districts.



## Results in Region 4, 2017-2018

In addition to samples collected in the priority surveillance area for 2017, a GPS-collared mule deer buck that was harvested by a hunter north of Chester, MT also tested positive for CWD (Figure 2). Similar to Region 5, FWP Region 4 conducted a special hunt after the general hunting season in a portion of Hunting District 401 and obtained no further positive tests for CWD among 121 mule deer sampled.

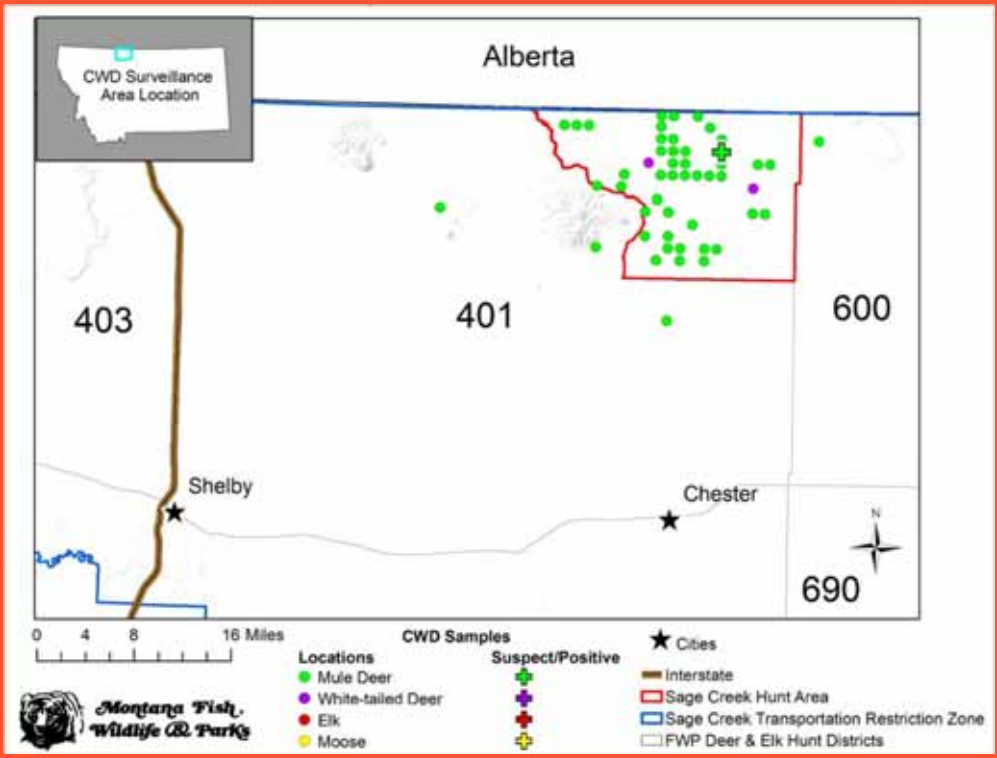



Figure 2. Locations of CWD samples collected from mule deer and white-tailed deer in a described area of Hunting District 401, north of Chester, and and the locations of one sample testing positive for CWD. Numbers on the map represent hunting districts.

## Results on the Hi-Line and Region 5 in 2018

In the fall of 2018, FWP focused its CWD sampling efforts along the central Hi-Line (Hunting Districts (HDs) 400, 401, 403, 600, 611), eastern Hi-Line (HDs 620, 630, 640 and 670), around Philipsburg (HDs 210, 212, 217) and south of Billings in the Carbon County CWD Positive Area (HDs 502, 510, 520, 575).

During the 2018 season, FWP collected a total of 1,922 samples from mule deer (n=1,367), white-tailed deer (n=458), elk (n=105) and moose (n=9). Through these efforts, FWP detected 26 new cases of CWD among wild deer, including 21 cases along the northern border in every county from Liberty County east to the North Dakota border; and 5 cases within the CWD-positive area south of Billings.

Prevalence of CWD in the northern CWD-positive hunting districts averaged 2% in mule deer and 1% in white-tailed deer. South of Billlings, CWD prevalence was estimated to be 2% in mule deer and 1% in white-tailed deer.

## Results in Region 2 in 2018

In the fall of 2018, FWP did not detect CWD around Philipsburg, but fell short of its sampling goal needed to ensure confidence that FWP would have detected CWD if it were present at $\geq$1%. FWP will revisit the Philipsburg area for surveillance in 2019.

# Surveillance in Region 2

## Hunting Districts

CWD surveillance in Region 2 in 2019 will again target Hunting Districts 210, 212 and 217 , which are located generally south of I-90, east of Rock Creek, north of Skalkaho Road and west of Garrison. This outlines the area in which any lingering CWD from the 1999 detection on the captive game farm would most likely be found in wild deer, if present.

## Hunters

All hunters who harvest a mule deer in HDs 210, 212 or 217 in 2018 are asked to present it to FWP for sampling and testing at a check station, the FWP Butte Area Office, or the FWP Missoula Office. While mule deer are the top priority, FWP is also interested in sampling white-tailed deer and elk harvested in HDs 210, 212 and 217.

## Check Stations

A special check station for CWD surveillance will be operated on weekends in 2019 on the roadside pull-off just south of Hall (pictured on facing page). Due to the lack of hunter traffic encountered at the Porter's Corner Check Station in 2018, FWP will resume operating the Anaconda Check Station in 2019 and collect CWD samples there from deer and elk harvested in HDs 210, 212 and 217.

## FWP Region 2 Office

The FWP Region 2 Office is open 8:00-5:00, Monday-Friday, and is located 1 mile west of Reserve Street on 3201 Spurgin Road in MIssoula. Hunters who harvest deer or elk in HDs 210, 212 or 217 and do not pass the local check stations are encouraged to present their harvested animals for sampling at the Region 2 Office, preferably on Mondays when CWD technicians are available to handle those animals efficiently. However, hunters with deer or elk from those districts may also drop off heads with a bit of neck attached at the headquarters if hunters do not want the heads back. In all cases, FWP staff will immediately fill out an identification card with the hunter's name, ALS, address, phone and location and date of kill, and will tag the head with a number corresponding to the ID card.

CWD technicians extract biological samples from a harvested mule deer head at a Region 2 check station in 2018. FWP is grateful for the work of technicians and student volunteers from The University of Montana for their enabling contributions toward Montana's CWD response. Without them, FWP would be unable to achieve the surveillance and management targets in its CWD Management Plan.

View when encountering the CWD Check Station at Hall in 2018, when approaching from the south.

## Other Hunting Districts

CWD surveillance in Region 2 in 2019 will target Hunting Districts 210, 212 and 217. Anyone who harvests a deer, elk, or moose outside of this year's CWD surveillance areas will be responsible for their own sample collection and submission (information is posted under "Submitting your own sample" at fwp.mt.gov/CWD).

## Archery-Only Season

Archers who harvest their deer, elk, or moose within our priority surveillance areas and want it tested can:

- collect and submit lymph node samples directly to the FWP Wildlife Health Lab , including data on location, species and sex. (Find more information at fwp.mt.gov/CWD.)
- or, have their animal sampled at a regional office, but samples may be banked and submitted at the end of the archery season. ***Hunters will not be guaranteed results within 3 weeks during the archery season.***

## Taxidermists

FWP has mailed letters to taxidermists asking that they request permission from hunters who have harvested deer or elk from HDs 210, 212 or 217 and who haven't had their animals checked for CWD to turn the animal head over to FWP for collection along with a completed ID tag. In this way, hunters who wish to have heads mounted can do so while also providing important samples for CWD sampling.

## Meat Processors

Similar to taxidermists, FWP has mailed letters to meat processors asking that they inform hunters who have harvested deer or elk from HDs 210, 212 or 217 and who haven't had their animals checked for CWD to turn the animal head over to FWP for collection.

# Managing With CWD

## Goal

Long-term cervid management in CWD-positive areas will be designed to reduce or maintain CWD prevalence below 5% and limit distribution of the disease. A program will be designed to reduce density or modify age or sex structure of the population.

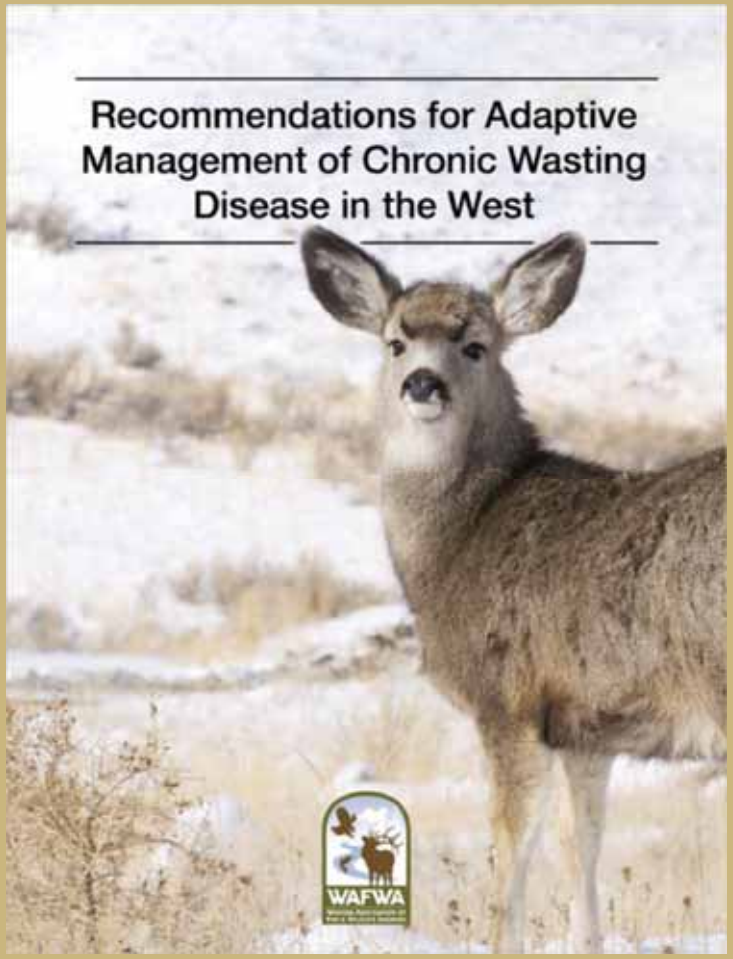
## Monitoring

A monitoring strategy will be developed to detect the spread of CWD and track CWD prevalence over time among susceptible cervid species in the infected area.

## Options

A "one size fits all" approach to CWD management is not possible given the diversity of habitats where cervids occur. FWP personnel and local stakeholders may develop herd or population plans tailored specifically to circumstances, populations, or areas at a hunting district or larger scale. FWP will cooperate with neighboring states and provinces on CWD management as outlined in the Western Association of Fish and Wildlife Agencies 2017 guidelines. Management actions may consist of one or more of the following alternatives, or may be unique to circumstances that are not captured in this list:

- Increased harvest, especially of antlered deer.
- Targeted removals in limited areas around CWD detections.
- Reducing deer and elk concentrations within a designated management zone by managing localized attractants, hazing, dispersal hunts or other means.
- Animal transport restrictions.
- Additional methods developed and proven effective in other states and provinces.
- Experimental approaches with scientific research designs and a commitment to monitor effectiveness.




- Preemptively managing for CWD in hunting districts adjacent to CWD-positive areas.
- Communicating internally and with the public about the threat and consequences of CWD and ways that the public can help prevent greater damage to resources and the public's opportunities to enjoy them.

Thank You Partners, Landowners, Hunters, Taxidermists, Meat Processors and All.

# Hunters

## Bring your game to H&H Meats or Lolo Locker for free processing to donate to our local Food Bank.

**Montana Hunters can help end hunger in our community**

Any donation of legally harvested deer, elk, antelope, bison or moose is processed free of charge for the donor and then distributed to a community hunger-fighting agency. Donated meat is the #1 protein source for customers at Missoula Food Bank & Community Center. Help us keep healthy food on the tables of our friends & neighbors this hunting season.

*Find the Quarterly online at fwp.mt.gov/regions/r2/WildlifeQuarterly*