Mission Statement

To control and eradicate animal diseases, prevent the transmission of animal diseases to humans, and to protect the livestock industry from theft and predatory animals.

Figure 1. Beef Pairs
Source: DOL Staff

FISCAL YEAR 21
July 1, 2020 through June 30, 2021
Table of Contents

Cover ................................................................................................................................. 1
Table of Contents ............................................................................................................. 2
LOOKING BACK/HIGHLIGHTS ...................................................................................... 3
Animal Health Staff ......................................................................................................... 4, 5

DISEASES
Brucellosis—Epidemiologic Investigations/Testing and Reimbursement ........................................ 6
Brucellosis—Testing and Reimbursement, continued ............................................................... 7
Brucellosis—Compliance Assessment .................................................................................. 8
Brucellosis—Boundary Adjustment/Live Elk Capture ............................................................ 9
Brucella canis (B. canis) .................................................................................................. 10
Brucella ovis (B. ovis)/Chronic Wasting Disease ................................................................. 11
COVID-19 ........................................................................................................................ 12
Eastern Equine Encephalitis/Equine Herpes Virus .................................................................. 13
Johne’s .............................................................................................................................. 14
Rabbit Hemorrhagic Disease ............................................................................................ 15
Rabies ................................................................................................................................ 16
Trichomoniasis/Tuberculosis/West Nile Virus ....................................................................... 17
Reportable Disease Summary ............................................................................................ 18
Foreign Animal Disease Investigations ............................................................................... 19

TRAINING/EDUCATION
Deputy State Veterinarian ................................................................................................. 20
Emergency Preparedness ................................................................................................. 21
Public Health/Veterinary Loan Repayment Program ................................................................ 22

PROGRAM PERFORMANCE
Alternative Livestock ......................................................................................................... 23
Bison Management ........................................................................................................... 24, 25
Feral Swine ........................................................................................................................ 26
National Poultry Improvement Program (NPIP) ..................................................................... 27

IMPORT/EXPORT
Call Center/Traceability ...................................................................................................... 28
Compliance ........................................................................................................................ 29
Animal Movements ............................................................................................................ 30
Equine Extended Certificate of Veterinary Inspection (EECVI) ............................................... 31
Permits, Licenses, and Fees Collected FY21 ....................................................................... 32

Field Reports .................................................................................................................... 33, 34
Administrative Rules of Montana (ARM) Rulemaking .......................................................... 35
LOOKING FORWARD ....................................................................................................... 36
Summary Highlights
Tahnee Szymanski, DVM

This annual report covers the state fiscal year spanning July 1, 2020 through June 30, 2021 (FY21) and describes work done by the department to carry out our mission of safeguarding the health and food production capacity of our state’s livestock and poultry industries and to prevent the transmission of animal disease to people. We accomplish our mission through four major areas of activity: import/export regulations, disease control, alternative livestock, and field operations.

FY21 brought a second confirmed case of CWD in an alternative livestock premises, this time in Flathead County; detections of rabbit hemorrhagic disease in feral domestic rabbits in Yellowstone County, and the final stage in the transition to requiring electronic CVIs for Montana origin animals.

The Animal Health Bureau remains committed to the strength of our state’s traceability system, our state and federal disease programs, and the regulation of animal imports in order to continue to protect and serve Montana’s livestock industry by ensuring confidence in our state’s exports. Our success can be directly attributed to the dedication of staff. Their investment in the quality of work produced by this agency is unparalleled. My personal thanks to all of you.

Sincerely,
Tahnee Szymanski, DVM
Bureau Chief
Assistant State Veterinarian
Marty Zaluski, DVM  grew up in Butte, Montana and graduated from Michigan State University College of Veterinary Medicine in 1997. He joined the Department of Livestock in 2007. As the state veterinarian and the administrator of the Animal Health & Food Safety Division, he is focused on the mission of protecting animal and public health. He oversees the bureaus of Animal Health, Veterinary Diagnostic Laboratory, Meat & Poultry Inspection, and Milk & Egg. He has been highly involved in Montana’s brucellosis program, trichomoniasis, traceability, animal imports and food safety. Dr. Zaluski is married to Heather Zaluski, MD and has three children, Kate (15), Evan (19), and Maia (22). In his off-duty time, Dr. Zaluski enjoys brewing beer, riding dirt bikes, hunting, and boating.

Tahnee Szymanski, DVM is a Helena native and a 2004 graduate from Oregon State University College of Veterinary Medicine. She joined the Department of Livestock in 2008 after several years in large animal ambulatory practice. As the Assistant State Veterinarian and Animal Health Bureau Chief, Dr. Szymanski is responsible for the import office, Montana’s state traceability program, animal health enforcement field staff, the alternative livestock program, and state and federal disease programs. These include trichomoniasis, tuberculosis, as well as other cattle, equine, and small ruminant disease programs. In her off-duty time, Dr. Szymanski enjoys hiking, kayaking, snowshoeing, and other outdoor adventures with her nine year-old daughter, Campbell.

Eric Liska, DVM grew up on the family Angus ranch in Nebraska, graduated from the University of Nebraska-Lincoln with a bachelor’s degree in science and a minor in agriculture. Following his graduation from Kansas State University College of Veterinary Medicine in 1998, he practiced and owned his own large animal veterinary practice in Helena for 11 years. Dr. Liska came on board with the Department of Livestock as the Brucellosis Program Veterinarian in June of 2009. He enjoys pheasant hunting and quality time with his wife Eleana, and daughters, Stella (17) and Grace (14).

Anna Forseth, DVM grew up in Three Forks, Montana. She received her bachelors degree from Montana State University in 2012, her veterinary degree from Colorado State University in 2016 and her Masters degree from Iowa State University in 2020. She joined the Department of Livestock in 2018 as a Program Veterinarian, after working in the swine industry in Iowa following graduation from veterinary school. Dr. Forseth oversees the department’s animal emergency preparedness and One Health efforts, the state’s National Poultry Improvement Plan program, and disease programs including rabies and Johne’s. Dr. Forseth and her husband Rocky have two children, Olie (3) and Joslynn (2). The Forseths stay busy exploring the great outdoors of Montana, spending time at the family ranch in Fairfield, farm in Three Forks, and visiting friends throughout Montana.

Import Office

Brooke Ruffier Hoopes grew up in Butte, Montana. She holds two bachelor degrees from Rocky Mountain College in Billings, Montana: one in Equitation and Training and the other in Business Management. Brooke joined the department in March 2017. She manages the import office and the alternative livestock program. Brooke pals around with her corgi, enjoys training horses and spending time with her husband Austin and one year old son, Jackson.

Cinda Young-Eichenfels grew up in Three Forks, Montana and graduated from Carroll College with a Bachelor’s Degree in English Writing/History in 1996. She furthered her education with a Paralegal Certification. Cinda joined the Department of Livestock in May 2012 and is the department’s Administrative Rules Specialist and editor of monthly and annual reports. On her hobby ranch, Cinda raises a few chickens, attends to her horses, and looks for adventures in travel whenever possible!

Kaylee Hiel grew up in Helena, Montana. She previously worked as an Operations Manager, and a Residential Coordinator for people with developmental disabilities, dedicating time to coaching Special Olympics. She joined the Department of Livestock in September 2019 as a Permit Technician and is now a Compliant Specialist, managing the blanket permit program. She enjoys traveling, hiking, baking, and spending time with her family and dogs.
Britta Sekora grew up in Shelby, Montana and attended Carroll College for History and Constitutional studies. Britta was hired by the Department of Livestock in September 2019 and is now a Compliance Specialist, manages the poultry program, and edits quarterly and annual reports. She lives in South Helena with her husband Andrew and two daughters, age 4 and 8. In her free time Britta enjoys traveling, knitting, hiking, golfing and spending time on the river with her family.

Sara Starkey grew up in Southern California and earned an Associate’s Degree in Equine Health from the University of Montana Western. She then spent four years working at a mixed animal veterinary clinic as a veterinary technician. Sara joined the Animal Health Bureau of the Department of Livestock in May 2016. She is a program specialist and manages seasonal grazer and biologics programs, coordinates the veterinary accreditation seminars, oversees electronic health certificate management and manages import quarantines. In her free time, Sara spends time with her husband, daughter, four dogs and six horses on their growing ranch.

Leslie Doely is a native of Creston, Montana in the Flathead Valley. She graduated from Montana State with a Bachelors of Science in Animal Science and soon after married high school sweetheart, Josh. The couple both secured jobs in Helena in 2010 – Leslie as a temp with Department of Livestock. Leslie has held several positions with DOL but is currently enjoying her role as the Brucellosis Compliance Specialist. The couple have two feisty boys, ages 3 (Callaway) and 6 (Cooper), a small beef cattle and meat goat operation, a few horses, chickens, cats, dogs and a big garden to keep them all busy and enjoying the outdoors.

Enforcement

Dan Bugni grew up in Montana, North Dakota, Wyoming, and Oklahoma. He spent his high school years jockeying racehorses, which took him all over the western United States for nine years. Dan eventually settled in Butte, Montana and was hired by the Department of Livestock in 1995 as a market inspector in Billings. From there Dan went to Great Falls, Ramsay, into the Chinook District and finally the Dillon District. He is currently the Western area supervisor working animal health and brands investigations. Dan is married, has a son who is a corporal in the Marine Corp and a daughter who is currently a sales associate at the Murdoch’s corporation. In his free time Dan enjoys hunting, fishing, riding horses and assisting area ranchers to work their livestock.

Travis Elings grew up in Montana and graduated from Browning High School. In 1997, Travis graduated from Dawson Community College in Glendive with an Ag Business Degree. Travis hired on with the Department of Livestock in 1997, first working in Great Falls. Travis is now located in the Billings area and is the Eastern Montana Area Supervisor working animal health and brands investigations. Travis lives in Shepherd Montana, is married, has a son who is a senior in college, and a daughter in the 9th grade. Off-duty Travis likes to rope with his kids and work in his shop.

Bison Program

Clay Vines was born and raised in Montana. He grew up and went to high school in Livingston, Montana. He attended Dawson Community college in Glendive, where he graduated with a degree in Criminal Justice; Law enforcement. He stayed competitive on the rodeo team participating in team and calf roping. Clay became a fishing guide in college and Fishing Outfitter in the years to follow. In 2014 he took a job with the Montana Department of Livestock and is now the Bison Program Manager living in the West Yellowstone, Montana area.

Mike Himmelspach was born and raised in Livingston Montana. He has spent most of his life guiding hunters and ranching in Paradise Valley. Mike hired on with the Department of Livestock in January of 2019 with the Bison Management Program. Mike enjoys hunting, riding horses in the mountains, camping and lives in Paradise Valley with his wife Alison.
**D I S E A S E S**

**Brucellosis—Epidemiologic Investigations**

Department of Livestock (DOL) had two herds under quarantine as brucellosis affected in FY21. One quarantined herd is a large domestic bison herd based in Gallatin County which has been under quarantine since FY11. The other is a herd located in Madison County and was placed under quarantine following the discovery of an infected animal in FY19. The Madison County herd performed a whole-herd test fall 2021. If the herd test is negative this fall, the quarantine may be lifted.

Twenty three herds were involved in epidemiologic investigations due to suspect results on both screening and confirmatory testing.

One slaughter trace in FY21 was a non-negative cow slaughtered in Kuna, Idaho in FY20. The Kuna slaughter trace was initially closed but was reopened, to ensure consistency on how non-negative results are followed-up on, and to again attempt to determine the ranch of origin. The source herd was not identified but a risk assessment was performed on most herds identified as potential contributors. Two producers who contributed animals voluntarily tested their herd and a third is within the Designated Surveillance Area (DSA) and voluntarily tests each year for DSA surveillance. This case was closed based upon test result interpretation and completion of follow-up.

In addition to slaughter trace investigations, DOL monitors all surveillance testing and interviews owners or managers of animals that have been tested and have a higher than expected result on the brucellosis screening test. Although these animals have all been determined to be negative through additional testing of the original sample, the potential remains that the test could have been performed on a recently exposed animal whose response to infection could just be rising. Ten epi. interviews were performed following suspect brucellosis screening tests in FY21. This risk data helps us advocate for future reviews and changes to the testing protocol and interpretation.

**Brucellosis—Testing and Reimbursement**

DSA-related brucellosis testing is reimbursed to veterinarians at a rate of $6 per test for 51 or more animals, $8.50 per test for 11-50 animals, $10.50 per head for 10 or fewer animals, and $7 per test for livestock market testing. Producers may also request reimbursement at a rate of $2 per test. Veterinarians may request reimbursement at a rate of $4 per animal for adult brucellosis vaccination of DSA cattle. The total amount reimbursed to veterinarians and producers FY21 for testing and adult vaccination was $736,000 (Figure 3).

<table>
<thead>
<tr>
<th><strong>Veterinarian</strong></th>
<th><strong>Producer</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Reimbursement Requests Processed</strong></td>
<td>207</td>
</tr>
<tr>
<td><strong>Number of Animals Reimbursed for Brucellosis Testing</strong></td>
<td>96,364</td>
</tr>
<tr>
<td><strong>Amount Reimbursed for Brucellosis Testing</strong></td>
<td>$599,936.00</td>
</tr>
<tr>
<td><strong>Adult Vaccination Reimbursement</strong></td>
<td>$9,732.00</td>
</tr>
</tbody>
</table>

Figure 3. Brucellosis Reimbursements. Source: DOL Staff
Diseases

Brucellosis—Testing and Reimbursement, continued

Montana brucellosis test volume followed a similar pattern in FY20 and FY21 (Figure 4). The brucellosis program saw a significant drop in testing in FY20 (Figure 5). This drop can be attributed to the adoption of a new primary screening test. The new test had more false positives than expected resulting in some delays in movement and sale of DSA animals. These delays caused many DSA producers to forego voluntary herd testing and opt only to complete the minimum required testing for change of ownership or movement out of the DSA. Following a change in the USDA testing and interpretation protocol for the new screening test, we saw a significant drop in the number of false positive results. Fewer false positives meant fewer animals involved in movement and sale restrictions and a renewal in producer confidence resulting in a rebound in voluntary herd testing in FY21; the total number of tests rose from 90,684 to 112,458 (24%). The cost of the new screening test, the rebound in voluntary testing, in combination with additional DSA animals following boundary adjustments have led to a significant increase in program cost.

Figure 4. FY20 and FY21 Brucellosis Testing. Source: DOL Staff

Figure 5. Brucellosis FY11 through FY21 Inventory and Testing. Source: DOL Staff
**Diseases**

**Brucellosis—Compliance Assessment**

The FY20 annual brucellosis program compliance assessment includes a detailed scrutiny of brand inspections and grazing permits for animals in the Designated Surveillance Area (DSA). The annual compliance assessment helps determine deficiencies in Montana’s brucellosis program or confirm its effectiveness. The evaluation also examines testing of DSA cattle sold at Montana livestock markets.

There were nearly 3000 inspections and permits issued for movement/sale out of or within the four DSA Counties: Beaverhead, Gallatin, Madison, and Park. Each inspection or permit was examined to determine if 1) the animals originated in the DSA, 2) a test was required, and 3) required testing was completed. Out of 1,227 DSA movements or sales (38,767 animals), 23 movements (1.9%; 747 animals) were out of compliance with testing requirements. To date, all but eight movements (197 animals) have been either confirmed as compliant or brought into compliance through follow-up. Follow-up actions for the remaining eight movements are ongoing and expected to be completed during fall processing.

Livestock market testing occurs when test eligible animals bearing a brand flagged for DSA utilization are sold at a Montana livestock market. In FY20, there were 10,106 market tests but the database shows that 14,841 cows and bulls were sold bearing a flagged brand. This discrepancy can largely be attributed to animals for which the brand flag needed to be removed because the brand is no longer utilized in the DSA. Additionally, many animals were not tested because they were tested prior to leaving the DSA and therefore did not need an additional test at the livestock market.

<table>
<thead>
<tr>
<th>Total Movements</th>
<th>DSA Movements</th>
<th>Out of Compliance*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inspections</strong></td>
<td><strong>Cattle</strong></td>
<td><strong>Inspections</strong></td>
</tr>
<tr>
<td>Gallatin County</td>
<td>692</td>
<td>9,521</td>
</tr>
<tr>
<td>Park County</td>
<td>496</td>
<td>23,183</td>
</tr>
<tr>
<td>Madison County</td>
<td>635</td>
<td>20,142</td>
</tr>
<tr>
<td>Beaverhead County</td>
<td>928</td>
<td>55,916</td>
</tr>
<tr>
<td>Grazing permits</td>
<td>175</td>
<td>37,344</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,926</strong></td>
<td><strong>146,106</strong></td>
</tr>
</tbody>
</table>

Figure 6: Brand inspections and grazing permits in the four DSA counties for cows, bulls, and heifers.

*Out of compliance includes movements that have been corrected or brought into compliance since they were discovered as well as movements that have not yet been brought into compliance.

Overall compliance with DSA requirements was high at 98.1% for field inspections. Significant changes in documentation and a much more detailed examination of market sales and tests are needed to address the discrepancy of DSA cattle sold and livestock market tests. Beginning in FY22, livestock market testing and sales of animals bearing a flagged brand are being evaluated at least monthly. This increased frequency allows for individual examination of sellers and animals tested to update the brand flag database to reflect animals that require testing at the market.

The annual review of Montana’s brucellosis program validates trading partner confidence in the effectiveness of our state program and the brucellosis free status of Montana livestock. The DSA plays a key role in protecting the marketability of all Montana cattle and domestic bison. Additionally, as part of the State brucellosis management plan required in Title 9CFR Part 78, the DSA allows Montana to retain brucellosis Class Free status.
Brucellosis—DSA Boundary Adjustment

In May 2020, the Animal Health Bureau (AHB) proposed a Designated Surveillance Area (DSA) boundary adjustment in Madison and Beaverhead Counties (Figure 7) to the Board of Livestock (BOL). The proposal was in response to the detection of seropositive elk outside of the current DSA during the winter 2020 targeted elk capture (Figure 7) conducted by Fish, Wildlife and Parks (FWP). The BOL supported the proposed change to ensure all potentially exposed cattle and domestic bison are included in the brucellosis surveillance program. The change to the boundary became effective July 11, 2020, following the public rulemaking process.

Figure 7. DSA boundary adjustment (Ruby Mountains). Source: DOL Staff

Brucellosis—FY21 Live Elk Capture for Brucellosis Surveillance

The Targeted Elk Brucellosis Surveillance Project, initiated in 2011, is a collaborative effort between FWP and the Department of Livestock (DOL). The project was designed to improve our understanding of the disease in elk and determine the extent of brucellosis in wildlife on the landscape. Populations for sampling are selected based on information regarding potential movement of brucellosis exposed elk outside of the DSA.

The FY21 capture occurred in January and targeted two populations. First, a population located near Ashland was selected due to their proximity to Wyoming’s Big Horn Mountains where seropositive elk have been found. The second population, in the Horseshoe Hills near Manhattan, was selected due to concerns that brucellosis positive elk from within the DSA (south of the interstate) may commingle with elk in the Horseshoe Hills to the north.

In the Ashland area, FWP captured 100 females and 20 males. Forty females and all 20 males received Global Positioning System (GPS) radio collars that will be deployed for three years. All 100 females were tested for exposure to brucellosis and were negative.

In the Horseshoe Hills, 100 female elk were captured and tested for brucellosis. All tested negative for exposure to the bacteria. Thirty animals were fitted with GPS radio collars that will be monitored for one year by FWP to help DOL determine the level of connectivity with elk herds inside the DSA boundary.

Because both populations were negative, there was no associated boundary adjustment in FY21.
**Diseases**

*Brucella Canis (B. canis)*

In FY21 the Animal Health Bureau (AHB) conducted extensive outreach as a result of an increased number of *B. canis* diagnoses in Montana (Figure 8). *B. canis* is a bacterial infection of dogs that can cause a variety of clinical signs including reproductive abnormalities and lameness. Importantly, *B. canis* is also a potential zoonotic disease (capable of being spread to humans).

Several of the recent positive cases in Montana had a common epidemiological link to areas with large populations of intact, stray dogs. A majority of the cases were also adopted through a Montana shelter or rescue organization. This rise in cases with a common epidemiological link resulted in the Department of Livestock (DOL) working with veterinarians, shelters, and rescue groups, with the goal to decrease the number of positive animals placed in homes. Strategies to meet this goal include, (1) increasing awareness about the disease and (2) providing guidance on management of high-risk animals.

Importantly, *B. canis* is considered a lifelong infection with potential health and welfare impacts to infected dogs. Long courses of antibiotics are not curative and are expensive. Because of the lack of treatment options for *B. canis*, many dogs that are diagnosed post-adoption are euthanized at the decision of the new owner. DOL recommends positive dogs not be treated or made eligible for adoption, but rather be euthanized at the time of diagnosis. If a shelter/rescue chooses not to euthanize a positive animal, disclosure of the dog’s infection status is required prior to adoption.

In FY21, DOL began requiring surveillance testing of high-risk populations including all dogs from Valley and Roosevelt counties, symptomatic dogs, and pregnant dogs with an unknown breeding history. A flow chart was developed to help guide veterinarians and shelters/rescues through the testing and interpretation process. The AHB worked extensively with the Montana Veterinary Diagnostic Laboratory (MVDL) to refine the recommended testing protocol: dogs suspected to have a *B. canis* infection are to be screened using one or more serological methods to detect the presence of antibodies. Subsequent testing for all dogs that screen positive or dogs that are showing clinical signs may include additional serologic testing, and culture or Polymerase Chain Reaction (PCR) testing to detect the bacterial agent for a definitive diagnosis.

In May and June 2021, AHB held six webinars for animal shelters/rescues and veterinarians to learn more about *B. canis*. Thirty-five individuals registered for the webinar. Information about Montana case data, public health implications, surveillance testing and management recommendations for positive cases was shared.

![Figure 8. Brucella canis cases FY21. Source: DOL Staff](image-url)
**Diseases**

*Brucella Ovis (B. ovis)*

*B. ovis* was diagnosed in a group of rams in Garfield County. The owner noticed swollen testicles on several animals when pulled off pasture. Historically, the animals go to pasture alone but without the owner’s knowledge, a second group of rams was commingled. Both flocks were placed under quarantine. Prior to receiving test results, several animals from the index herd were culled and sold through a South Dakota market based upon the presence of swollen testes or because of failing a breeding soundness exam. Animal Health Bureau (AHB) worked on tracing and notification of receiving states (South Dakota and Washington) for sold rams to verify that all animals were in slaughter channels only.

Testing of the second group of rams revealed additional *B. ovis* positive animals. Both herds were required to cull all test positive animals and complete a second test of all remaining rams after at least 45 days. No restrictions were placed on females, but a final post breeding test was recommended.

**Chronic Wasting Disease (CWD)**

During FY20, Department of Livestock (DOL) received notice of a confirmed case of chronic wasting disease in an Eastern Montana captive cervid herd. This was the first detection of CWD in captive cervids in Montana in 20 plus years. The affected animal showed no signs of illness and was slaughtered for home consumption. Following the diagnosis, DOL attempted to work with the producer on final depopulation of remaining animals. Because of an inability to establish contact, DOL worked through legal counsel and the local Sheriff’s Office to deliver official communication stipulating steps to be taken immediately to prevent DOL staff from executing available authority and entering the premises to conduct an inspection. The owner of the game farm contacted DOL following receipt and worked to have animals depopulated. In November 2020, the remaining animals were depopulated by the owner and heads submitted to a local veterinarian for CWD testing. All remaining animals on the premises were negative for CWD. The premises remains under quarantine for five years. The owner is prohibited from restocking with susceptible species and must maintain existing fences for the duration of the quarantine.

In November 2020, DOL received notice of a second case of CWD in a Montana captive cervid. The affected animal died on a premises in Flathead County. The owner reported no clinical signs associated with CWD, but the animal was tested as required by Montana’s herd certification program. The positive tissue sample was confirmed to be from the reported animal through genetic matching of tissue. The herd was placed under quarantine pending final disposition. The epidemiological investigation has not determined the route of disease introduction into the herd. The herd has been closed for the last 20 years and there are no diagnosed cases of CWD in wildlife within 60 miles. The movement of risk materials, while not confirmed, is a potential route of introduction.

DOL continues to work with the affected producer, United States Department of Agriculture Veterinary Services (USDA-VS), and United States Department of Agriculture Wildlife Services (USDA-WS) on federal indemnity for the herd and a plan to depopulate the remaining animals.

With the detection of CWD in Montana, DOL received numerous public information requests for the identity and location of affected game farms. Administrative Rule 81-2-115, MCA requires DOL to keep test information confidential. DOL was able to protect the identity of the producers and worked with United States Department of Agriculture (USDA) to designate regions of Montana by which positive herds will be reported, as in several instances, there is only one game farm per county and identification to the county level is identifying information.
DISEASES

COVID-19

The Department of Livestock (DOL) provided guidance to Montana veterinarians on when it was appropriate to test a domestic animal for COVID-19 due to concerns regarding the potential infection of domestic animals with COVID-19 and the limitations in interpreting non-validated tests. The guidance included notification of local public health officials or the State Veterinarian’s office. As a result, DOL provided direction on management of multiple domestic animals potentially exposed to COVID-19. In most instances, testing was not recommended as more common respiratory pathogens had not been ruled out or COVID-19 exposure could not be confirmed. Figure 9 refers to criteria to “guide evaluation and laboratory testing for SARS-CoV-2 in animals” from the Center for Disease Control (CDC).

A single Montana dog was confirmed positive for SARS-CoV-2 by the National Veterinary Services Laboratory (NVSL). Unfortunately, the animal was tested without consultation of local public health or DOL. The dog is owned by a household that was COVID-19 positive in September of 2020. The hunting dog seemed to have lost the sense of smell as noticed by the owner during duck hunting in October 2020. Blood was drawn on the animal in December 2020 and the sample tested in March 2021 due to waiting on test validation at the reference laboratory. Because the positive was such a long time prior, no action was taken by DOL or Department Public Health and Human Services (DPHHS). The positive case was however, reported internationally to the World Health Organization (WHO).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Epidemiological Risk</th>
<th>Clinical Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Animal with history of exposure to a person or animal suspected or confirmed to be infected with SARS-CoV-2.</td>
<td>AND Animal has clinical signs suspicious of SARS-CoV-2 infection.3</td>
</tr>
<tr>
<td>B</td>
<td>Animal with exposure to a known high-risk environment (i.e., where human cases or animal cases have occurred), such as a residence, facility, or vessel (e.g., nursing home, prison, cruise ship).</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Threatened, endangered or otherwise imperiled/rare animal in a rehabilitation, sanctuary or zoological facility with possible exposure to SARS-CoV-2 through an infected person or animal.</td>
<td>AND Animal is asymptomatic; OR Animal has clinical signs suspicious of SARS-CoV-2 infection².</td>
</tr>
<tr>
<td>D</td>
<td>Animals in a mass care or group setting (e.g., farm, animal feeding operation, animal shelter, boarding facility, zoo, or other animal holding) including companion animals, livestock, and other species, where their exposure history to people with COVID-19 is unknown.</td>
<td>AND A cluster of animals show clinical signs suspicious of SARS-CoV-2 infection.³</td>
</tr>
</tbody>
</table>

Figure 9. Criteria/guide for SARS-CoV-2 in Animals. Source: CDC
DISEASES

Eastern Equine Encephalitis (EEE)

Department of Livestock (DOL) received notice from National Veterinary Services Laboratory (NVSL) of a positive Eastern Equine Encephalitis titer consistent with infection. The positive tittered animal was one of two animals exhibiting neurological signs on the premises. Both animals either died or were euthanized due to the severity of clinical signs. Clinical signs were consistent with EEE, but only one of the two animals was serologically positive. Through collaboration with United States Department of Agriculture (USDA) National Equine Staff and the NVSL, remaining samples from the animals were forwarded to NVSL for additional testing. NVSL was unable to confirm EEE in both animals.

The serologically positive animal met the case definition of EEE and the second animal was classified as a suspected case of EEE. While the owner’s address is a Montana address, the premises was determined to be located in North Dakota. This is the furthest west that EEE has been confirmed in horses in the United States. DOL worked with state animal health officials in North Dakota and state public health officials on future messaging regarding the risk of EEE in the region.

Equine Herpes Virus (EHV)

Equine Herpesvirus Myeloencephalopathy (EHM) was confirmed on a Lake County premises. The premises had four affected horses and three mortalities. All mortalities were brood mares. Upon notification, the property was placed under quarantine until 28 days past the resolution of clinical signs of all horses on the property. The owner of the property began conducting twice daily temperature readings of all animals. Sick and febrile animals were isolated. Based on movement history of animals on and off of the property, DOL conducted follow up with a premises in Ravalli County. No additional sick animals were identified.

DOL received feedback regarding compliance with the quarantine. Officer Seward visited with the owner of the quarantined animals and found the owner to be in compliance with quarantine and taking additional precautionary measures to prevent disease spread. The decision was made to delay the pending transfer of property ownership until the quarantine was released.

The premises was released from quarantine after 28 days with no additional clinical signs of disease.

DOL also received notification from the Arizona state veterinarian’s office of an EHV-1 positive horse that had been in attendance at an equine event held March 14-29, 2021 in Scottsdale, AZ. The show’s list of registered participants included three Montana attendees. Animal Health Bureau (AHB) also used export Certificate Veterinary Inspection (CVI) data to identify additional potential attendees. Contact was made with eight of the ten owners of potentially exposed horses to discuss dates of attendance, risk factors, and what to look for in their own animals. None of the eight owners had animals in attendance at the same time as the EHV-1 positive horse. Continued efforts to make contact with the other two potential attendees were unsuccessful.
Johne's

The Montana Johne’s Control Program was introduced to Livestock producers and Montana veterinarians in August 2019. Currently nine herds enrolled and 67 veterinarians are certified to work with Montana producers. Johne’s testing numbers have increased since the program’s inception as shown in Figure 10. The increase in testing is not solely represented by Program participants but the DOL believes increased outreach and disease awareness in the livestock industry and veterinarians has influenced this upward trend.

![Johne's Tests by Fiscal Year](source: DOL Staff)

The increase in testing (Figure 10) came with an increase in positive diagnoses as shown in Figure 11.

![Number of Positive Diagnoses by Fiscal Year](source: DOL Staff)

With each positive test result, AHB contacts the producer with a letter that discusses the disease, federal restrictions on movement of positive animals except through slaughter channels, management considerations, and the Johne’s Control Program. Since July 1, 2020, AHB has sent 333 letters to producers, 59 of which were sent in FY21.
DISEASES

Rabbit Hemorrhagic Disease (RHD)

In February 2021, Department of Livestock (DOL) was notified of rabbit mortalities in Yellowstone County. The four dead rabbits were from a local population of approximately 40 feral domestic rabbits. Through collaboration with state and federal wildlife officials, the rabbits were submitted for Rabbit Hemorrhagic Disease Virus (RHDV) testing at the Foreign Animal Disease Diagnostic Laboratory (FADDL). FADDL confirmed the presence of RHDV. The landowner where the rabbits were found was notified and additional epidemiologic information gathered. No recent known movement of rabbits into the area had occurred. No quarantines were issued as the infected animals were not owned animals. The landowner did report that over several days the entire population of rabbits disappeared. While the source of disease introduction was not determined, DOL suspects that rabbit transporters may have played a part due to proximity to interstate access.

As a result of the diagnosis, DOL worked on the development of guidance documents specific to RHD and information for veterinarians on how to obtain vaccine. Currently there is no United States Department of Agriculture (USDA) approved product for RHD. DOL approved veterinarians to import vaccine from the European Union. To date, approximately 1000 doses of RHD vaccine have been imported into Montana. DOL also coordinated with USDA and Fish, Wildlife and Parks (FWP) on the handling of rabbit mortalities and where to submit samples from wild and feral domestic rabbits.

A second set of mortalities was subsequently reported, approximately two miles from the initial RHD detection in Yellowstone County. Samples were collected and submitted for RHD testing and the disease was once again confirmed in feral domestic rabbits in Yellowstone County. Multiple additional rabbit mortalities have been reported to DOL from Yellowstone County. Based upon communication with USDA and FWP, Yellowstone County was declared endemic for RHD and no further feral domestic mortalities were tested. Privately owned rabbits and wild rabbits would continue to be tested. For a summary of all reports of domestic rabbits submitted for RHD testing, please see the Foreign Animal Disease (FAD) section on page 20 of this report.

Montana’s RHD cases are part of an ongoing national outbreak of RHD. The first detection of RHD was in March 2020 in New Mexico. Since that time, RHD has been confirmed in 14 states. The strain of RHDV2 found in Montana was a genetic match to cases seen in the southwest over the last year.
DISEASES

Rabies

Consistent with years past, a variety of species were tested for rabies in FY21. These included: cow, dog, cat, coyote, raccoon, skunk, bat, rabbit, muskrat, goat, horse, fox, mountain lion, and squirrel. Of the 423 samples tested, Montana had 16 positive submissions for rabies: 13 positive bats and 3 positive skunks. The counties with positive submissions included Beaverhead, Big Horn, Cascade, Custer, Dawson, Fergus, Missoula, Park, Powder River, Ravalli, and Yellowstone. Six positive cases resulted in action by the department, including 60-day county quarantines in response to the positive skunks in Big Horn, Powder River and Yellowstone Counties.

Historical trends show a select number of counties with consistently high numbers of submissions, and subsequent positive cases, when compared to other areas of the state. Figure 13 below shows a correlation between the number of samples sent from a county with a higher population density and larger number of accredited veterinarians in the county. Figure 13 data suggests that counties with larger populations have more opportunities for interactions with wildlife, and more veterinarians to assist with the submission process.

Figure 13. Total Rabies Tests per County. Source: DOL Staff
DISEASES

Trichomoniasis

No trichomoniasis positive bulls were reported for FY20 or FY21. Figure 14 below shows trichomoniasis positive bulls per county by state fiscal year.

<table>
<thead>
<tr>
<th>County</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carter</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Custer</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fallon</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Glacier</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Yellowstone</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Negative Tests</td>
<td>9765</td>
<td>7310</td>
<td>7308</td>
<td>7341</td>
<td>8412</td>
<td>9658</td>
</tr>
<tr>
<td>Total Positive Tests</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 14. Trichomoniasis Positive Bulls by County FY21. Source: DOL Staff

Tuberculosis (TB)

Department of Livestock (DOL) completed assurance testing of a Treasure County beef herd, following the detection of bovine TB in a cow at slaughter in Nebraska in March 2019. The herd completed an initial whole-herd test with the removal of eight Caudal Fold Test (CFT) responders. All animals were classified as negative, and a second negative whole-herd test was conducted allowing for quarantine release.

West Nile Virus (WNV)

DOL received one report of WNV in FY21. The case was diagnosed in Rosebud County and involved a two-year-old horse that was not previously vaccinated and had no known travel history. The horse was neurologic and presented with muscle twitching and within 24 hours was unable to stand, though it did survive the infection.

Historically, clinical horses testing positive for WNV, have not been vaccinated. The WNV vaccines that are available for domestic animals including horses have shown to be effective against the virus and development of clinical signs.

In addition to the positive equine case, there was a single positive human case reported in 2020, in Custer County and a single positive mosquito surveillance sample collected in Valley County. Information about positive WNV cases are shared between the DOL and the Department of Public Health and Human Services (DPHHS), to support identification of potential risk areas within the state and to help with WNV prevention. While direct transmission of WNV between animals and people does not occur, a veterinarian’s diagnosis of WNV in an animal warrants client and public education about the presence of the disease in a region.
The following (Figure 15) is a summary of reportable disease testing and diagnoses for fiscal year 2021. These numbers represent testing conducted at the Montana Veterinary Diagnostic Laboratory.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Number Tests Run</th>
<th>Number Positive/Suspect</th>
<th>Notes About Positive/Suspect Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabies</td>
<td>423</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Johne’s</td>
<td>7847</td>
<td>345</td>
<td></td>
</tr>
<tr>
<td>Trichomoniasis</td>
<td>4289</td>
<td>3</td>
<td>Positives tests were feline samples</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>1915</td>
<td>14</td>
<td>All responders were determined to be negative</td>
</tr>
<tr>
<td>Avian Influenza</td>
<td>137</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>CWD</td>
<td>378</td>
<td>18</td>
<td>17 positives were from wildlife samples</td>
</tr>
<tr>
<td>West Nile</td>
<td>13</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Brucella Canis</td>
<td>372</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Equine Infectious Anemia</td>
<td>7020</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Anaplasmosis</td>
<td>1305</td>
<td>224</td>
<td>Antibody +, doesn’t indicate disease</td>
</tr>
<tr>
<td>Bovine Herpes Virus (BHV-1)</td>
<td>790</td>
<td>169</td>
<td>Antibody +, doesn’t indicate disease</td>
</tr>
<tr>
<td>Bluetongue</td>
<td>268</td>
<td>20</td>
<td>Antibody +, doesn’t indicate disease</td>
</tr>
<tr>
<td>Bovine Leukemia Virus</td>
<td>935</td>
<td>101</td>
<td>Antibody +, doesn’t indicate disease</td>
</tr>
<tr>
<td>Bovine Viral Diarrhea</td>
<td>2673</td>
<td>115</td>
<td>Antibody +, doesn’t indicate disease</td>
</tr>
<tr>
<td>Brucella ovis</td>
<td>714</td>
<td>34</td>
<td>Includes big horn sheep, mountain goats</td>
</tr>
<tr>
<td>Ovine Progressive Pneumonia/ Caprine Arthritis Encephalitis</td>
<td>290</td>
<td>15</td>
<td>Antibody +, doesn’t indicate disease</td>
</tr>
<tr>
<td>Campylobacter</td>
<td>1472</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Heartworm</td>
<td>108</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><em>Salmonella enteritidis</em></td>
<td>1412</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><em>Salmonella pullorum</em></td>
<td>64</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Trichinellosis</td>
<td>4</td>
<td>1</td>
<td>Positive sample was from a bear</td>
</tr>
<tr>
<td>Vesicular Stomatitis</td>
<td>88</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 15. FAD Investigations FY21
Source DOL Staff
In 2021, Foreign Animal Disease Diagnosticians (FADDs) conducted 12 investigations—2 poultry, 1 feral rabbit, 5 domestic rabbits, 2 wild rabbits and 2 horses. Figure 16 shows FY21 FAD investigation disease information and results in each county.

<table>
<thead>
<tr>
<th>Disease Investigated</th>
<th>Species</th>
<th>Date</th>
<th>County</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vesicular Stomatitis</td>
<td>Equine</td>
<td>August 2020</td>
<td>Beaverhead</td>
<td>Negative</td>
</tr>
<tr>
<td>Vesicular Stomatitis</td>
<td>Equine</td>
<td>September 2020</td>
<td>Musselshell</td>
<td>Negative</td>
</tr>
<tr>
<td>Influenza A virus, Avian paromyxovirus</td>
<td>1 Domestic turkey</td>
<td>January 2021</td>
<td>Lewis and Clark</td>
<td>Negative</td>
</tr>
<tr>
<td>Rabbit Hemorrhagic Disease</td>
<td>4 Feral-domestic rabbits</td>
<td>February 2021</td>
<td>Yellowstone</td>
<td>Positive</td>
</tr>
<tr>
<td>Rabbit Hemorrhagic Disease</td>
<td>1 Domestic rabbit</td>
<td>March 2021</td>
<td>Deer Lodge</td>
<td>Negative</td>
</tr>
<tr>
<td>Rabbit Hemorrhagic Disease</td>
<td>1 Cottontail</td>
<td>February 2021</td>
<td>Yellowstone</td>
<td>Negative</td>
</tr>
<tr>
<td>Rabbit Hemorrhagic Disease</td>
<td>1 Cottontail</td>
<td>February 2021</td>
<td>Yellowstone</td>
<td>Positive</td>
</tr>
<tr>
<td>Rabbit Hemorrhagic Disease</td>
<td>1 Domestic rabbit</td>
<td>April 2021</td>
<td>Ravalli</td>
<td>Negative</td>
</tr>
<tr>
<td>Influenza A virus, Avian paromyxovirus</td>
<td>5 Domestic chickens</td>
<td>April 2021</td>
<td>Park</td>
<td>Negative</td>
</tr>
<tr>
<td>Rabbit Hemorrhagic Disease</td>
<td>1 Domestic rabbit</td>
<td>June 2021</td>
<td>Ravalli</td>
<td>Negative</td>
</tr>
<tr>
<td>Rabbit Hemorrhagic Disease</td>
<td>1 Domestic rabbit</td>
<td>June 2021</td>
<td>Big Horn</td>
<td>Negative</td>
</tr>
<tr>
<td>Rabbit Hemorrhagic Disease</td>
<td>2 Domestic rabbits</td>
<td>June 2021</td>
<td>Gallatin</td>
<td>Negative</td>
</tr>
</tbody>
</table>
ANIMAL HEALTH BUREAU (AHB) conducted three joint accreditation sessions for 49 veterinarians new to practice in Montana. The sessions are in partnership with United States Department of Agriculture - Animal and Plant Health Inspection Service - Veterinary Services (USDA-APHIS-VS) and provide information to veterinarians on issues specific to Montana, including brucellosis, trichomoniasis, Johne’s and traceability. Due to COVID-19 restrictions, the AHB and USDA-APHIS-VS provided all three accreditations virtually.

AHB oversees the regulatory activity of 761 deputy state veterinarians. As part of this oversight, the department conducts education and outreach to provide current information on state and federal regulations, disease incidence, and ongoing disease investigations. Outreach includes the quarterly publication of the StockQuotes newsletter and email updates with time-sensitive information.

Past editions of the newsletter and associated One Health insert are available on the web at: https://liv.mt.gov/Animal-Health/Newsletters/index. Twenty four DOL updates were sent to veterinarians covering topics such as: rabbit hemorrhagic disease (RHD), transition to electronic Certificates of Veterinary Inspections (CVIs), Radio Frequency Identification (RFID) reader reimbursement, Brucella canis, National Poultry Improvement Plan (NPIP) testing and emergency management training.

In addition to outreach and education, DOL also monitors and responds to veterinarians who fail to comply with state and federal regulations. In FY21, DOL worked on standardizing the response to non-compliance issues. For incorrectly completed test charts, brucellosis vaccination certificates, and CVIs, AHB staff contact the veterinarian with information about the violation and to request the correct information. For repeat violations, the information is communicated to USDA-APHIS-VS and a Veterinary Medical Officer (VMO) contacts the veterinarian to conduct in-person education.

For veterinarians who continue to fail to comply with state or federal regulations, DOL works with USDA-APHIS-VS to contact the veterinarian and take follow-up action as appropriate. Follow-up may include a letter of information or a formal investigation into the violations. For substantial violations, a fine and/or suspension of state and federal accreditation may occur.

Actions taken during FY21 include the following:

- A joint letter from AHB and USDA-APHIS-VS was sent to a Montana veterinary clinic regarding ongoing issues with the issuance of certificates of veterinary inspection and compliance with veterinary practice and traceability standards. The letter outlined the specific violations and required a response with a defined plan of how issues were to be addressed. Ultimately, the practice ended up changing their practice model to ensure that they were able to comply with state and federal regulations. Monitoring of compliance is ongoing.
- DOL and USDA-APHIS-VS held an informal conference with a Montana accredited veterinarian who was found in violation of several federal standards for accredited veterinarians. USDA-APHIS-VS and Investigative and Enforcement Services (IES) issued a fine against the veterinarian. Also, a one year suspension of federal veterinary accreditation and state deputy veterinarian status was issued based upon the severity of the violations.
Emergency Preparedness

Department of Livestock (DOL) continued to hold Incident Management Team meetings with Montana Disaster Emergency Services, and United States Department of Agriculture personnel. The subject of focus in FY21 was disease surveillance during a foreign animal disease outbreak. Discussions included the various factors that will influence surveillance strategies such as the species of animals susceptible to the disease, available test types for diagnostics, and population size being surveyed. During a foreign animal disease outbreak, surveillance will be required for producers within the control area, as shown in Figure 17, before a movement permit is issued, to assure susceptible animals are not infected prior to transport.

Biosecurity Grant:
In FY21 Animal Health Bureau (AHB) was also awarded a $29,540 grant through the National Animal Disease Preparedness and Response Program (NADPRP) as part of the 2018 Farm Bill. Money from this grant will fund outreach activities that increase awareness of the need for biosecurity within Montana’s cattle industry. The NADPRP grant was written to address deficiencies that were identified during the Agriculture Response Management and Resources (ARMAR) exercise in 2018. These deficiencies include:

- A need to develop state and commodity-specific plans that outline the biosecurity measures required during disease outbreaks, to facilitate movement permitting and other disease control strategies.
- A need to conduct outreach to Montana producers and industry stakeholders for successful implementation of Secure Food Supply plans in Montana.

DOL will hold ten tabletop courses in FY22 that focus on the biosecurity recommendations from the Secure Beef Supply (SBS) Plan, including the line of separation, cleaning and disinfection, visitors, animal movement, and carcass disposal. The tabletop exercise will include a 3D, interactive model of the SBS premises map in order to help with visualization of biosecurity principles and why they are fundamental to decrease risk of disease introduction. Funding will also support a contract veterinarian to conduct on farm SBS biosecurity assessments in order to evaluate compliance with the SBS biosecurity guidelines presented during the tabletop exercises. AHB recognizes the benefits of biosecurity for both domestic and foreign diseases and believes biosecurity is critical for movement permitting during a disease outbreak.

Euthanasia Grant:
Activities associated with the FY19 grant (focusing on captive bolt euthanasia), as well as the Incident Command System (ICS) 300 course were put on hold during FY21 due to the COVID-19 pandemic.
Public Health

Department of Livestock (DOL) and Department of Public Health and Human Services (DPHHS) hosted the second annual “One Health in the 406” conference. The FY21 conference was a virtual format and focused on the zoonotic risk of tuberculosis (TB). Topics included: the history of TB in the United States and in Montana, the biology of TB infection in people and animals, epidemiology of TB cases, other states’ experiences with TB, occupational health considerations, TB in wildlife reservoirs, whole genome sequencing technology, and food safety. One Health in the 406 Conference served as an educational opportunity for the veterinary, public health and human healthcare communities to join and learn about this disease and discuss mitigation strategies. A total of 57 people registered for the conference. DOL plans to continue collaborating with DPHHS as well as Fish Wildlife and Parks (FWP) on future One Health in the 406 conferences.

Veterinary Loan Repayment Program

Animal Health Bureau (AHB) submitted shortage nominations to the National Institute of Food and Agriculture (NIFA) for the Veterinary Medicine Loan Repayment Program (VMLRP). Last fiscal year, Montana had two successful applications in designated shortage areas. The VMLRP program will provide up to $25,000 per year for three years towards student loans. Montana’s shortage nominations can be seen below in Figure 18.

<table>
<thead>
<tr>
<th>2021 Shortage Nomination Area (County)</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custer, Prairie</td>
<td>High</td>
</tr>
<tr>
<td>Powder River, Carter</td>
<td>High</td>
</tr>
<tr>
<td>Garfield, Mc Cone</td>
<td>Critical</td>
</tr>
<tr>
<td>Glacier, Liberty, Pondera, Toole</td>
<td>High</td>
</tr>
<tr>
<td>Daniels, Roosevelt, Sheridan, Valley</td>
<td>High</td>
</tr>
<tr>
<td>Gallatin (Public Practice)</td>
<td>Critical</td>
</tr>
</tbody>
</table>

Figure 18. Montana Shortage Areas 2021.
Source: DOL Staff.
Alternative Livestock

There are 17 alternative livestock herds in Montana, with two mixed species herds. Herd sizes range from 2 to 321 animals. The majority of alternative livestock animals are elk. During FY21, there were 710 animals in alternative livestock herds. There were 184 births and 137 deaths, of these deaths 133 animals were age eligible and tested for chronic wasting disease (CWD).

Animal Health Bureau (AHB) staff completed review of alternative livestock annual inventories and assigned herd status in the CWD Herd Certification Program accordingly. The CWD Herd Certification Program is a cooperative effort between Department of Livestock (DOL) and United States Department of Agriculture - Animal and Plant Health Inspection Service Veterinary Services (USDA-APHIS-VS) to monitor, control, and contain the spread of CWD in farmed cervids. The certification program contains levels of herd monitored statuses and after five years of testing, reporting, and monitored status, CWD Herd Certification is granted. Certification status is required to import or export animals. Requirements for enrolled herds include fencing, individual official identification, regular annual inventories, and testing of all cervids that die over the age of 12 months. AHB completed annual herd inventories and reviews of 17 alternative livestock premises. The pie chart below (Figure 19) illustrates the current CWD Monitored Herd Status of Montana’s 17 alternative livestock ranches.

During FY21, Montana imported two Elk from Idaho for slaughter. Montana exported the following animals to Texas, Ohio, Idaho, Nebraska, and Utah: 96 elk, white tail deer, mule deer, and big horn sheep.
Department of Livestock (DOL) participates in the Interagency Bison Management Plan (IBMP), along with the National Park Service, United States Department of Agriculture - Animal and Plant Inspection Services (USDA-APHIS), Montana Fish Wildlife and Parks (FWP), United States Forest Service (USFS), and tribal entities. The dual goals of the IBMP are to limit the co-mingling of wild bison and domestic cattle to prevent the spread of brucellosis and to maintain a wild and free roaming bison population in and around Yellowstone National Park (YNP).

There are two separate management areas, on the west (West Yellowstone) and north (Gardiner) boundaries of the park, with the following zones:

- Zone 1 is the area inside the park, near the park boundary.
- Zone 2 is the tolerance zone outside of the park boundary.
- Zone 3 is outside of the park where there is no tolerance.

Staff monitor bison movements both in and out of the tolerance zones and respond according to IBMP guidelines when bison are outside of an appropriate zone. Animals found in Zone 3 are hazed back into a tolerance zone. If animals cannot be successfully hazed and there is potential for commingling with livestock, bison may be lethally removed. In FY21, there were no lethal removals of bison. Figures 21 and 22 on page 25 of this report present a summary of bison counts by region, zone, and date.
Program Performance

Bison Management, continued

Figure 21. FY 21 Gardiner Bison Movements by Zone. Source: DOL Staff

Figure 22. FY 21 West Yellowstone Bison Movements by Zone. Source: DOL Staff
In FY21, the number of reports of suspected feral swine continued to increase. The Department of Livestock (DOL) attributes this increase to increased public awareness as a result of ongoing collaboration with the Montana Invasive Species Council (MISC) and continued promotion of the Squeal on Pigs campaign (Figure 23). To date, the presence of feral swine in Montana has not been confirmed. Continued awareness and regular reporting will help Montana rapidly minimize the impact through early detection.

In FY21, reports of feral swine and associated follow up included:

- Multiple reports of a potential feral swine in the Montana City area of Jefferson County. The pig was captured and ownership determined. The pig had been reported in the area multiple times over several weeks prior. On the heels of this report, DOL shared information on feral swine reports with a peace officer association to ensure that calls are directed to DOL in a timely manner.
- A call from the vertebrate pest specialist with Department of Agriculture regarding a report of turf damage in the Big Fork area that was inconsistent with any of the usual species. There was no contact information available for the reporting party. DOL notified United States Department of Agriculture—Wildlife Services (USDA-WS) and Fish, Wildlife and Parks (FWP) to make sure that field staff in the Big Fork area remain vigilant.
- Possible feral swine sighting in Blaine County. The district officer worked with the reporting landowner to round a sow and piglets up. The owner of the animals was identified, and the animals returned.
- Potential feral swine sighting from FWP Region Staff. The report was relayed to the feral swine notification list and Animal Health Bureau (AHB) staff followed up on the report. Based upon communication with the FWP warden and the reporting party, the animals were seen at dusk and suspected to be feral swine. Further investigation revealed tracks consistent with the presence of raccoons in the area. USDA-WS staff will continue to monitor the Montana Hi-line for potential feral swine activity.
- Potential feral swine sighting in Roosevelt County. The District Officer and field personnel from USDA-WS responded locally. The animals were determined to be owned animals, the owner identified, and the pigs rounded up and returned.
- A pig discovered on a carcass dump pile. The pile was primarily wildlife species that had been shot and dumped. AHB was contacted to determine if the animal was feral and to ensure that appropriate follow-up occurred. The animal appeared to be a Mangalitsa pig, likely an owned animal. Brands Enforcement Division was notified in the area of the dump pile in case of a report of a missing owned pig.
- Potential feral swine activity in Liberty County. Worked with the District Officer and USDA-WS on a plan to conduct surveillance and eradicate pigs if found. Aerial surveillance did not detect any additional land damage or live swine.
National Poultry Improvement Plan (NPIP)

NPIP focuses on managing disease risk in live birds and hatching eggs. The program was initially developed to combat *Salmonella pullorum*, a disease that can cause high mortality in young poultry, and has since expanded to include additional diseases of concern, notably avian influenza. In FY21, Montana added eight NPIP participants, bringing the total to 23. Of Montana’s participants, 16 are backyard flocks, 4 are gamebird farms, 2 are commercial egg layers, and 1 is a dealer (Figure 24). Montana participants are located in Big Horn, Broadwater, Flathead, Glacier, Granite, Lincoln, Musselshell, Pondera, Ravalli, Sheridan, Silver Bow, Sweetgrass, and Yellowstone Counties.

Surveillance testing requirements vary by flock type and size. In FY21, nine flocks were tested for *Salmonella pullorum* and 17 were tested for avian influenza. Department of Livestock (DOL) works closely with 12 accredited veterinarians who conduct a majority of the state’s NPIP testing.
The Import/Export office of the Animal Health Bureau (AHB) strives to provide excellent customer service through a busy call center, an after-hours answering service that provides 24/7 coverage, and several online systems. The call center processed 11,044 calls consisting of both permit requests and general questions. Figure 25 shows a breakdown of calls in FY21 by month.

![Animal Health Monthly Call Totals](image)

Figure 25. AHB Telephone Call Log FY21
Source: DOL Staff

In January 2020, DOL removed the import permit requirement for designated electronic certificate of veterinary inspection (CVI) platforms. On April 1, 2021, the same import permit waiver was expanded to include all forms of electronic CVIs. Historically, permits were required due to the delay of paper certificates traveling by mail to state offices. The transition to electronic health certificates enables Department of Livestock (DOL) to obtain traceability data at a much faster (often instant) rate, eliminating the need for a permit. This change has resulted in a significant drop in the number of calls to the import/export office. During FY21, DOL saw a 28 percent decrease in calls.

The online permit system provides a permitting option for out-of-state veterinarians with horses traveling on paper CVIs into Montana. The after-hours answering service provides an additional option for veterinarians to obtain an after-hours permit for paper CVIs. Montana veterinarians and producers also call the after-hours line to report suspected disease or feral swine sightings.

**Traceability**

The United States Department of Agriculture (USDA) requires states that receive Animal Disease Traceability (ADT) funding to complete National Priority Traces. DOL Staff was able to complete all eight traces in under an hour, most being completed in under 15 minutes. The traces demonstrate the efficiency of DOL’s database systems, United States Animal Health Emergency Reporting Diagnostic System (USAHERDS), VetStar Animal Disease Diagnostic System (VADDS), Fort Supply, and others, when an animal needs to be traced.
The Import/Export office monitors the movement of livestock and animals into and out of the state of Montana. During FY21 a total of 37,398 Certificates of Veterinary Inspections (CVIs) were checked for compliance: 13,951 import CVIs and 23,447 export CVIs. Starting January 1, 2021, Department of Livestock (DOL) mandated the use of electronic certificates of veterinary inspection for all animals exported from Montana. The transition to electronic CVIs resulted in a 55 percent decrease in the number of papers CVIs issued. Figure 26 illustrates the number of paper export health certificates received in FY20 compared to those received in FY21. The extreme drop in paper health certificates in January 2021 illustrates the high level of adoption of electronic CVI options.

To improve animal disease traceability, the import/export office sends out compliance letters for private veterinarians and their respective state offices. A “no permit” letter is sent to veterinarians who issue paper CVIs for animals destined to Montana without obtaining an import permit. A total of 266 “no permit” letters were sent to out-of-state veterinarians in FY21. A letter is sent to state veterinarians when a permit number is issued, but a copy of the health certificate is not received within the required eight weeks of the permit being issued. A total of 205 “missing CVI” letters were sent to state veterinarians in FY21.

When animals enter Montana illegally, Animal Health Bureau (AHB) staff work in conjunction with enforcement to ensure animals meet import requirements post-entry. In FY21 AHB worked to bring 14 non-compliant imports into compliance with Montana regulations. Violations included importations without a CVI, animals entering without meeting testing requirements, and animals being imported without official identification. All violations were rectified, and the importers and exporters informed regarding Montana import regulations.
Figure 27 illustrates the number of animals exported compared to the number of animals imported. Montana is a net export state with 71 percent of animals (926,562 cattle) being exported to the following five states: Nebraska, South Dakota, Iowa, Wyoming, and Colorado (Figure 28).
Equine Extended Certificate of Veterinary Inspection (EECVI)

As of January 1, 2020, Department of Livestock (DOL) transitioned to the EECVI as a replacement for the 6-month horse passport. This electronic certificate is offered by Global Vet Link (GVL). The certificate is valid for six months and owners track movements through an owner portal. The transition to this certificate has allowed DOL to offer an extended validity certificate and meet traceability requirements. Figure 29 illustrates the number of horse movements on EECVIs in FY21.

Figure 29. EECVI Movements FY21. Source: DOL Staff

Figure 30 shows EECVI participating states in blue (Vermont only participates May 1 – October 31 and is shown in green).

Figure 30. Animals Exported from Montana FY21. Source: DOL Staff
Department of Livestock (DOL) audited the functionality and relevance of licenses and permits offered to producers. As a result of this evaluation, several animal health permits were deemed unnecessary and are no longer being offered. Below is a table of the licenses and permits offered during FY21 and the amounts collected by DOL to facilitate those programs. Also included in the table are the amounts distributed and collected for supplies provided to veterinarians. Animal Health Bureau (AHB) distributes health certificate books, trichomoniasis and alternative livestock tags to veterinarians at cost to help facilitate traceability.

<table>
<thead>
<tr>
<th>Permits/Licenses/Supplies</th>
<th>Certifications Program</th>
<th>Permits/Licenses Certifications Applications/Supplies</th>
<th>Permits/Licenses Certifications Fees Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Equine Semen Import</td>
<td></td>
<td>35</td>
<td>$7.00 per Stallion</td>
</tr>
<tr>
<td>Brucella Ovis – New Application</td>
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<td>1</td>
<td>$40.00 per Flock</td>
</tr>
<tr>
<td>Brucella Ovis – Renewal</td>
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<td>21</td>
<td>$18.00 per Flock</td>
</tr>
<tr>
<td>Biologics – New Application</td>
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<td>$30.00 per Product</td>
</tr>
<tr>
<td>Biologics – Renewal</td>
<td></td>
<td>2</td>
<td>$10.00 per Product</td>
</tr>
<tr>
<td>Bovine Semen Domestic</td>
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<td>4</td>
<td>$4.00 per Bull</td>
</tr>
<tr>
<td>Bovine Semen International</td>
<td></td>
<td>1</td>
<td>$42.00 per Facility</td>
</tr>
<tr>
<td>Equine Feedlot</td>
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</tr>
<tr>
<td>Montana Bull Stud</td>
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<td>3</td>
<td>$350.00 per Facility</td>
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<tr>
<td>Seasonal Grazer - New Application</td>
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<td>11</td>
<td>$37.00 per Application</td>
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<tr>
<td>Seasonal Grazer – Renewal</td>
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<td>47</td>
<td>$14.00 per Application</td>
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<tr>
<td>Trichomoniasis Quarantine Feedlot</td>
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<td>$12.00 per Feedlot</td>
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<tr>
<td>Large Animal Health Certificate Book</td>
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<td>96</td>
<td>$32.00 per Book</td>
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<tr>
<td>Alternative Livestock Tags</td>
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</tr>
<tr>
<td>Trichomonias Tags</td>
<td></td>
<td>4315</td>
<td>$1.67 per Tag</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>4734</td>
<td><strong>$15,432.25</strong></td>
</tr>
</tbody>
</table>

Figure 31. FY21 Revenue generated from special licenses/permits and veterinarian supplies. Official Centralized Services (CS) analysis may differ due to actual dates and items that were received and processed. AHB data is shown to display specific program item revenue. Source: DOL Staff
FIELD REPORTS
Eastern Area—Travis Elings, Area Manager

Personnel: In the last fiscal year, Brands enforcement had several people retire, leave markets, or on leave due to injuries. At the time of this report, personnel shortages include a district investigator in Baker, a market supervisor in Glendive, a market inspector in Miles City, a market inspector in Glasgow and a short-term worker in Lewistown.

Elings assisted with local inspections, training of local inspectors, delivering inspection books, and evaluating stray animals in Eastern Montana. Additionally, Elings attended various industry meetings and multiple bull sales.

Disease Testing: Disease testing in the Eastern Area this year included TB testing, CWD testing, Pullorum and AI testing, and various illegal import testing.

Quarantines: Several quarantines were issued and enforced in the Eastern Area including sheep from North Dakota, a baby bat being raised in Montana, three separate rabies quarantines, cattle from Wyoming, and 107 head of DSA cattle that left without proper testing.

Feral Swine: Reports of feral swine in the Eastern Area included a pot belly pig in the Chinook area, a dead pig in the Wilsall area, and several pigs in the Malta area. None of the reports listed were determined to be feral swine in Montana.

Investigations: Investigations included several complaints of a stolen cattle, various stray animals, poisoning and/or stealing pigs, and the swapping of cattle at night. Numerous investigators helped with a cattle seizure in Yellowstone County, a cattle seizure in Stillwater County, and a trespass/sheep at large issue in the Ashland area.
Personnel: Bugni started as the Western Area manager in August 2020 and also ran the Dillon district and market. In November 2020 the Dillon district position was filled by Officer Cheryl Marchesseault from the Motor Carrier Services. Bugni spent much of this last year training with Officer Marchesseault. Marchesseault was assigned to work at the Ramsay livestock auction market at every sale, along with the Dillon livestock market sales, as they gave her the required exposure to the livestock inspection process, requirements, and health requirements necessary to have a viable livestock industry in Montana.

Contact was maintained with Western area district investigators every week with either questions on livestock imports, exports, quarantines or to see how it was going in their areas. All personnel have done an exceptional job this year.

Quarantines: Throughout the year, Bugni followed up on the management of numerous import quarantines throughout western Montana for lack of official individual identification, testing requirements that are mandatory by Montana laws, or variances issued out of the Animal Health office for vaccination, spaying or individual identification requirements for imported livestock. Bugni has been greatly assisted by the various district personnel and their knowledge of their area producers, and ability to contact or track individuals down throughout Western Montana to resolve quarantines quickly.

Investigations: In the last fiscal year, Bugni assisted with the serving of a search warrant for possible theft of livestock in Granite county, and two animal cruelty cases, one in Stillwater county concerning 200 plus head of cattle and one in Lewis and Clark county concerning 50 plus head horses.

Bugni followed up on an elderly individual that had been bitten on the hand, in the middle of the night, by a bat while he was trying to dispose of it. The individual was contacted, advised to speak with Dr. Anna Forseth regarding rabies exposure, and referred to public health officials.

Other: Bugni assisted with the inventory inspection of a game farm and worked extensively with Dr. Eric Liska and Leslie Doely on DSA slaughter traces and compliance requirements for both cattle and yaks. Several loads of bison were sealed and unsealed coming and going from a herd quarantined for brucellosis in Beaverhead County.

Figure 33. Western Montana. Source: Google Images
Rule making for the Animal Health Bureau was minimal for the fiscal year 2021. Below summarizes the amendments adopted into rule:

**Poultry:** The department amended ARM 32.3.217 to provide consistency with the National Poultry Improvement Plan (NPIP) guidance. NPIP is a nationally recognized poultry program, run by United States Department of Agriculture (USDA) that focuses on health and biosecurity. Many states, including Montana, allow NPIP participation to satisfy their import requirements. The changes bring consistency to the age of testing and will assure that poultry not enrolled in the NPIP program still satisfy disease testing requirements.

Additionally, much of the paperwork associated with the NPIP program has transitioned to an electronic format which negates the need for an import permit for participants. The changes to this rule will streamline the import process for the department and poultry producers, while maintaining health standards that are consistent with the USDA and other states.

**Alternative Livestock:** The department amended ARM 32.3.221 eliminating the interstate Brucellosis testing requirements for interstate movement of alternative livestock, outside of the Greater Yellowstone Area (GYA). At the 2017 United States Animal Health Association (USAHA) annual meeting, a resolution was passed supporting the elimination of this requirement. There have been no confirmed cases of brucellosis in alternative livestock outside of the GYA in the previous twenty years. The risk of disease in this population is low and therefore an interstate movement test is not required to protect the livestock population of Montana.

**Swine:** Administrative Rules of Montana required swine to be inspected within ten days of importation into Montana. The federal standard for the issuance of certificates of veterinary inspection is inspection within ten days of certificate issuance and thirty days of movement, which is applied across all neighboring states and several midwestern states with large swine populations.

Montana amended our import rule to be consistent with the federal standard and other states. The rule requiring inspection within ten days of shipment frequently resulted in a second inspection of animals because veterinarians were not aware of the Montana specific requirement. Animal Health Bureau staff researched state and federal laws to find supporting language for the use of ten days and are unable to explain the origin or intent of the rule.
As we leave behind FY21, we are back in the office full time and are hopeful that disruptions experienced due to the COVID-19 pandemic will remain behind us. Because we do not know what the coming year will bring, our best option looking forward is to continue to strengthen our state’s traceability and emergency preparedness capabilities. These two foundational items will provide us the tools needed to protect the health and viability of our state’s livestock and poultry industries, no matter what challenges we encounter.

Thank you for letting us serve you!

Tahnee Szymanski, DVM
Bureau Chief
Assistant State Veterinarian