Without making predictions, I hope that 2022 highly pathogenic avian influenza (HPAI) is behind us. The most recent confirmation in domestic poultry was reported on May 4. The epi curve seems to be tracking 2015, the year of the last national scale outbreak of this disease. In 2015, the last case was June 16, 2015. While there are many similarities between 2022 and 2015, there are some differences worth mentioning.

2022 HPAI SEEMS MORE INFECTIVE TO WILDLIFE: Traditionally, HPAI primarily targets domestic poultry with mild to moderate impact on wildlife. However, this year’s strain has resulted in high mortality in many types of wild birds with over 50 species affected in over 40 states. The state of Montana has diagnosed HPAI in great horned owls, Canada geese, turkey vultures, red-tailed hawks, a bald eagle, wild turkeys, and other species. Infections in non-avian scavenging species have been prominent nationally with infections confirmed in foxes, coyotes, skunks, opossums, bobcats, racoons, and mink.

MORE DOMESTIC POULTRY FARMS HAVE BEEN AFFECTED: The higher wildlife infection rate also likely contributed to the higher number of states with domestic poultry infections with 36 states diagnosing at least one infected flock. In the state of Montana, Department of Livestock (DOL) confirmed nine flocks in eight counties.

POULTRY FARMS HAVE IMPROVED BIOSECURITY: 2015 was notable in that numerous infections and domestic poultry were caused by movement of virus from affected premises to other facilities. This conclusion was based on whole genome sequence technology that demonstrated an identical viral fingerprint in multiple affected poultry operations. This contrasts with 2022 when farm to farm transmission was relatively rare and almost all new infections were the result of point source introductions from wildlife. In one large poultry operation in the Midwest, two different virus introductions were identified, i.e., the confirmation in another house in the same premises was not linked to the already affected poultry, but to a separate introduction from wild birds.

PHONE CHANGE AT THE HELENA OFFICE: Animal Health Bureau (AHB) will be inactivating the state veterinarian phone number line (406/444-2043), in lieu of maintaining the 24/7 import line at 406/444-2976. The state veterinarian line was helpful when the position had an administrative assistant that needed to type letters, set up meetings, and fulfill other administrative duties which to a large degree have been streamlined using computers and technology. For the moment, the 2043 number will be forwarded to the 2976, but will subsequently be disconnected.

ELECTRONIC HEALTH CERTIFICATES: DOL has heard from Montana Veterinarians that there is still a need for a low-cost electronic health certificate platform, and DOL therefore, has been eagerly awaiting deployment of VETCVI. This application is now available to all Montana Veterinarians for desktop use. We expect application use on mobile devices to be available shortly. Data syncs between devices and completed health certificates seamlessly transfer data to the destination and origin state to maintain traceability information.

RABIES: Every spring DOL works with veterinarians on cases of animal exposure, vaccination protocol, and encouraging sample submissions from wildlife to have a better understanding of the distribution of the disease. Rabies surveillance information is available on the DOL website at https://liv.mt.gov/Animal-Health/Reportable-Animal-Diseases/Rabies. However, DOL has not previously discussed how to mitigate the use of buildings and other structures by wild animals, so I jumped at the opportunity for a guest column from Stephen Vantassel who administers the vertebrate pest program for the Department of Agriculture. Please see the article on page four for interesting pest proofing tips that would help your clients prevent the unintentional harboring of skunks, racoons, and other vermin around home and ranch structures.

OPENINGS: DOL is still looking to fill several key positions including the Chief of Food Inspection Bureau (meat and poultry inspection and milk and egg), two veterinarians, and a Brands Enforcement Division Administrator. We are also looking to hire another sanitarian for the milk and egg program.

By Marty Zaluski, DVM
High Path Avian Influenza (HPAI) Update

Montana has not had a confirmed case of Highly Pathogenic Avian Influenza (HPAI) in a domestic bird since May 6, 2022. While Department of Livestock (DOL) hopes this means the risk of disease to Montana poultry is decreasing, a few factors remain that give us pause. Environmental conditions remain cool and wet, conducive to virus survival, detections in wildlife continue, and other states in Montana’s flyways (Central and Pacific) continue to have detections. Washington, Utah, and Colorado have all had detections into the second week of June. During the 2015 HPAI outbreak, the last detections were similarly in the second week of June. Hopefully, by press time, DOL will have found this to be true for 2022.

The 2022 HPAI outbreak has impacted 372 premises in 36 states. Total number of birds affected is 40.09 million. This compares to 21 states and 50.5 million birds in the 2014-2015 HPAI outbreak (Figure 1).

Because it has been greater than a month since Montana’s last confirmed case of HPAI, DOL has lifted the Official Order that prohibited poultry shows, exhibitions, swaps, and other public sales of birds. DOL anticipates that by fair season, Montana should be warmer and drier and that the risk will have further lessened. Despite allowing this order to expire, the Department recommends that poultry producers continue to implement biosecurity measures to protect their flocks.

Based upon a few factors associated with this year’s HPAI strain, there is concern for a second wave of disease during the fall migratory bird season. These factors include ongoing findings of HPAI in wild birds and Europe having experienced a second wave when they had this strain prior to 2022. Additionally there is concern about these strains becoming endemic in wild bird populations. There have been problems already with the disease in vulture roosts. Additionally, recent news reports have included the diagnosis of HPAI in fox kits in Michigan. Avian influenza is believed to be the cause of death in these species, with suspected exposure through consumption of wild birds. While transmission of HPAI to mammalian species is rare, this is an important reminder that HPAI has both zoonotic potential and the ability to infect other species, one of the primary reasons that regulatory agencies respond to HPAI detections with such an aggressive approach.

By Tahnee Szymanski, DVM

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Figure 1. 1924-2016 HPAI Strains by Year in the United States Source: USDA

Figure 2. HPAI 2022 Confirmed Detections Source: USDA
Electronic Forms Update

Department of Livestock (DOL) is working toward transitioning to electronic submissions of certificates of veterinary inspection (CVI), brucellosis vaccination records, and submissions to the diagnostic lab. Below is an overview of the current electronic options, and future electronic options DOL is working on. Veterinarians have expressed concern that transition to electronic forms use will add extra cost to clinic overhead. To aid in this transition the department has invested in many no cost electronic form options and hardware reimbursement. Below is a break down of the electronic options and hardware reimbursement, available to veterinarians ease the transition.

CERTIFICATES OF VETERINARY INSPECTION

There are currently six Montana approved electronic CVI options available to veterinarians. Available platforms include:

- VETCVI
- Global Vet Link
- myVETTECH
- VSPS
- VetSentry
- Sale Time

Veterinarians are not limited to one CVI platform, if you are interested in additional options please contact Sara Starkey for additional information at sstarkey@mt.gov.

BRUCELLOSIS VACCINATION RECORDS

DOL also offers an electronic (excel based) Brucellosis vaccination record. This electronic record has been available for a few years but was recently revised to improve completion efficiency. Please contact Brooke Hoopes at 406-444-9525 or brooke.ruffier@mt.gov to obtain an updated master copy.

LABORATORY SUBMISSIONS

The Montana Veterinary Diagnostic Laboratory (MVDL) has recently released a new web portal that allows veterinarians to submit form submissions completely electronically, without the use of an excel spreadsheet that needs to be emailed to the lab. Advantages of the lab portal include, online sample submission, discounted shipping, lab results, e-statements, fee payment, and account management. For more information about the lab portal please contact the lab at 406-994-4885 or email mvdl@mt.gov.

HARDWARE FUNDING

To aid in the transition to electronic data use and improved traceability, DOL has federal traceability funding available to offset the cost of improving infrastructure to read radio frequency identification (RFID) tags and include electronic data on movement documentation. The funding is available for veterinarians in Montana to purchase equipment ($500 for a handheld RFID reader, $1000 for a stationary reader to be used in a livestock market, or $400 towards the purchase of a printer or other approved hardware. This funding will expire March 31, 2023. Please contact Sara Starkey for additional information, sstarkey@mt.gov.

The Helena office has recommendations for laptops that can be covered by the total hardware reimbursement. Items can be purchased for higher amounts but the maximum reimbursement is $400 per veterinarian.

WHY ELECTRONIC?

Some of the advantages for veterinary clinics that transition to electronic submission and records management include saving employees time in finding and accessing needed documents, reducing paper records, easily backing up documents in case of disaster, and reducing mailing and filing cost.

FUTURE ELECTRONIC RECORDS

Currently the only electronic coggins submission is offered by Global Vet Link (GVL) DOL is working on a fillable Portable Document Format (PDF) coggins form that would be available free of charge to Montana accredited veterinarians.

BRUCELLOSIS VACCINATION AND TUBERCULOSIS TEST RECORD

Phase two of the VETCVI platform will include the ability to complete and send in a brucellosis vaccination record and tuberculosis test record within the application. This future enhancement is scheduled to be deployed in 2023.

ELECTRONIC PERMIT APPLICATIONS

DOL website is being updated to include electronic permits such as annual equine semen permits, annual bull semen permits, biologics, and seasonal grazer applications. These forms will enable producers or owners to apply, pay, and submit permit applications online.

For more information on available and upcoming forms please contact Brooke Hoopes at 406-444-9525.

By Brooke Hoopes, Office Manager
Striped skunks (*Mephitis mephitis*) are well known for their potent smelling essence used to defend themselves from threats. While getting sprayed makes for a bad day, it pales in comparison to your livestock, pet or a human getting exposed to rabies. Montana’s rabies distribution reports, which record the number of positive rabies cases identified in Montana, year after year, show skunks are the second most common species testing positive for rabies (bats are number one).

While most skunks are rabies free, it is prudent for landowners to keep skunks away from their buildings, livestock, and pets. Fortunately, taking a few simple steps can make a property less friendly to skunks which will not only reduce the risk of a potential rabies exposure but also any smelly encounters.

**STEP 1. REDUCE OR REMOVE CLUTTER.**

Look around your property and identify areas where items may have been stored or piled for extended periods of time. Examples include wood and rock piles, old vehicles, hay bales, and unused sheds or outbuildings. Items surrounded by tall grass or young trees are good indicators that the items you thought would be useful were not. Removing those abandoned items will eliminate denning opportunities for skunks as well as habitat for animals’ skunks’ prey upon.

**STEP 2. SECURE YOUR BUILDINGS.**

Skunks love living in the voids provided by crawl spaces, decks, sheds, and foundations. To prevent skunks taking up residence under a structure, you will need to install a dig-proof barrier made from ¼-inch or ½-inch galvanized wire mesh. Determine the amount of mesh you will need by taking the following measurements. For the length, measure the building’s perimeter, adding an additional 12 inches to allow for sufficient overlap. To obtain the mesh’s width, measure the wall to the ground. Then add 28 inches. One inch will provide the length needed to affix the mesh to the base of the wall, three inches will be needed to extend the mesh into the ground and the last 24 inches will be for the skirt that will extend from the structure. If aesthetics is a concern, paint the mesh with flat black paint to make the mesh less visible.

Using a shovel, cut a 24-inch swath around the structure to a depth of three inches. Place the sod or soil on a tarp as you will be putting it back. Secure the mesh to the bottom of the vertical wall, extend the mesh to the ground then bend the mesh 90 degrees and extend it at least 24 inches from the structure. Pin the mesh to the ground. Replace the soil or turf. By using this L pattern, you create a skirt that prevents the skunk from digging under the wall and entering the space below the structure. If you don’t want to dig, you can obtain the same effect by using heavy patio blocks. Just be sure to angle the blocks away from the structure so that rainwater does not flow toward the structure.

Caution: If there is a chance that animals are living under the structure, do not secure it as doing so will trap animals inside possibly resulting in additional damage or worse. Use a movement indicator to determine if a hole is being used. Just crumple up some newspaper and cork the hole. Wedge the paper in enough to ensure wind doesn’t disturb it but not so tight that a small animal would have difficulty pushing it out of the way. In some instances, loose soil can be placed over the opening provided the soil isn’t too deep. If the newspaper or soil remain undisturbed for at least 5 days under good weather conditions (e.g. above freezing) then you can be reasonably sure that the hole is inactive.

**STEP 3. REDUCE THE AVAILABILITY OF FOOD.**

The last step in making your property unfriendly to skunks is to reduce access to attractive food resources. Avoid feeding pets outdoors as skunks love pet food. If that isn’t practical, then only provide one meal’s worth of food to ensure that none will be left over to attract skunks. Modify bird feeders so that seed doesn’t reach the ground. Tips for modifying bird feeders can be obtained by visiting [https://extensionpubs.unl.edu/publication/9000016368278/selective-bird-feeding/](https://extensionpubs.unl.edu/publication/9000016368278/selective-bird-feeding/)

Skunks are a valuable part of Montana’s natural beauty. Implement the steps above and you will be able to keep skunks at a safer distance. For information on the control of skunks and many other wildlife species, visit [https://agr.mt.gov/Vertebrate-Pests](https://agr.mt.gov/Vertebrate-Pests) or contact Stephen M. Vantassel, Vertebrate Pest Specialist Montana Department of Agriculture [svantassel@mt.gov](mailto:svantassel@mt.gov) 406-538-3004.

By Stephen M. Vantassel, CWCP, ACE
**Introduction To VETCVI**

**VETCVI**, is now available and free to Montana deputy state veterinarians. The application can be downloaded from a browser on a desktop or laptop in the Microsoft store [here](#). The application will eventually be available on apple, android, and windows mobile devices. Department of Livestock (DOL) currently only deploying it on Windows.

After sign up VETCVI use will be “pending” until DOL staff approves the veterinarians request for use. Please allow one to two business days for approval. Once approval is granted the program administrator will email the veterinarian directly with approval status and the VETCVI User guide.

Additional features include:

- **MULTIPLE DEVICE USE**: Data can be synced between multiple devices. To do so, a device must be in service or connected to WIFI.

- **STATEMENTS**: Commonly used statements can be entered and saved to Certificates of Veterinary Inspection (CVIs) with one click.

- **TAGGING INFORMATION**: Official identification (ID) tags can be entered manually, using autofill for a tag range, apply same to all, or a CSV file with ID listed will automatically upload the tags.

- **TEMPLATES**: CVI templates can be created for frequently used consignor or consignee details.

- **REPORTING**: When a CVI is completed, the completed CVI will then be submitted automatically to the state of origin and the state of destination.

- **LARGE AND SMALL ANIMAL**: This CVI platform allows for the issuance of large and small animal CVIs.

- **FUTURE UPDATES**: Tuberculosis (TB) test charts and brucellosis vaccination certificates will be a part of the application in the future.

All technical assistance for this product will be completed by the Helena Animal Health Bureau (AHB) office. Please contact 406-444-2976 with any questions or concerns.

By Brooke Hoopes, Office Manager

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**Carcass Composting**

Department of Livestock (DOL) Veterinarians recently attended an Emergency Response Carcass Composting Training in Washington. The training was paid for with Federal National Animal Disease Preparedness and Response Program (NADPRP) funding. NADPRP is supported through the 2018 Farm Bill.

The NADPRP training session was a train the trainer program for livestock and other agricultural professionals in order to increase the number of subject matter experts (SME’s) on this topic in the Pacific Northwest. The training included mortality management, composting, above ground burial, and the use of grinding equipment.

Traditional methods of carcass disposal include burial, burning, and rendering. Depending on state and local regulations, disposal by burial or burning may be restricted, and access to rendering is limited in many areas. In Montana, the Department is not currently aware of any access to rendering for Montana livestock owners.

Carcass composting is a method of disposal that is being employed with increasing frequency and is desirable for disposal of carcasses due to disease such as highly pathogenic avian influenza (HPAI), African Swine Fever (ASF), or foot and mouth disease (FMD), as the temperatures reached during the composting process are able to inactivate remaining virus. Composting was frequently employed for the disposal of birds depopulated due to HPAI during both the 2014/15 and 2022 outbreaks. In August, DOL is participating in a National Pork Board exercise to look at depopulation and disposal methods for swine. Composting will be employed for the sow carcasses. Composting large numbers of carcasses requires a large area of available land to build windrows with sufficient carbon material for effective composting. A very rough estimate of total windrow length needed is 3.2 feet per 1000 pounds of carcass. Windrows should be 10-12 feet wide and need at least 8 foot alleys between windrows to allow skid steer access for windrow management.

One option to reduce the space needed for construction of windrows is grinding of carcasses prior to composting. Preprocessing carcasses also reduces the amount of carbon material needed and results in faster tissue degradation. One concern with grinding is the potential aerosolization of virus if carcasses have died or been depopulated due to a highly contagious disease. Current United States Department of Agriculture (USDA) guidance prevents the grinding of carcasses associated with foreign animal disease depopulation, but research is ongoing to see if aerosolization and spread of disease can be mitigated.

Besides the use of composting for large mortality events, composting can all be used for routine on-farm mortalities. If you or your producers are interested in learning more about composting, the Department recommends contacting Tommy Bass, Extension Specialist with Montana State University (tmbass@montana.edu) and look for additional information on the heels of the August exercise.

By Tahnee Szymanski, DVM
DESIGNATED SURVEILLANCE AREA (DSA) MANAGEMENT AGREEMENTS: Since the inception of the DSA in 2010, herd management agreements (MA) have been used to assess risk, collect demographic information, and grant variances. Current Administrative Rule of Montana (ARM) requires an MA before any variances or rule exceptions can be granted. Twelve years later, the DSA comprises close to 450 producers, nearly three times more than 2010. Detailed, individual MAs and documented variances are no longer an effective method of meeting producer or program needs.

Animal Health Bureau (AHB) will be proposing ARM changes to the Board of Livestock (BOL) that would take the most common variances to DSA test requirements currently granted in MAs and make them standard exemptions for all DSA producers. Examples include allowing seasonal producers to return to the home place (outside the DSA) to complete testing, identification of calves on arrival, and removing test requirements for animals only utilizing the DSA during the low-risk period.

MAs will still be utilized to grant atypical variance requests where risk can be managed, and demographic information will be collected using producer surveys. Demographic information, such as the number of animals and whether they utilize the DSA seasonally or year-round, is important for budget projections as well as required reporting to United States Department of Agriculture Animal and Plant Health Inspections Services (USDA APHIS), BOL, and the Montana Legislature.

DSA COMPLIANCE ASSESSMENT: Each year, AHB completes an assessment of producer compliance with DSA test requirements. Because of the growing volume of DSA animals and issues with timeliness of paper brand inspections, this assessment may be delayed as much as 18 months. Fortunately, program compliance remains high, with over 98% of movements meeting testing requirements in FY20.

Beginning in FY22, AHB is changing the format of the assessment by scaling back the brand inspection analysis to nearly one third of individual movements. A minimum of 30 individual producer audits will be added to the compliance assessment that will evaluate compliance with testing, official identification (ID), and brucellosis vaccination.

By Leslie Doely, Compliance Specialist