MINNESOTA
BOARD OF ANIMAL HEALTH

Meeting Minutes: Quarterly Board Meeting

Date: January 15, 2020
Location: Minnesota Farm Bureau, 3080 Eagandale Place, Eagan, Minnesota 55121

Attendance

Board Members

- Dean Compart, President, Producer
- Matt Anderson, Vice President, Veterinarian
- Peter Ripka, Producer
- Erica Sawatzke, Producer
- Graham Brayshaw, Veterinarian

Consultants to the Board

- Mary Donahue, U.S. Department of Agriculture, Veterinary Services (USDA – VS)
- Peder Kjeseth, Minnesota Department of Agriculture
- Joni Scheftel, Minnesota Department of Health (MDH)
- Jerry Torrison, University of Minnesota Veterinary Diagnostic Laboratory

Guests

- Jamie Becker-Finn, Minnesota Representative 42B
- Jim Byrne, Minnesota Elk Breeders Association
- Brian Carr, Attorney representing Minnesota Pet Breeders Association
- Michelle Carstensen, Minnesota Department of Natural Resources
- Robyn Corcoran, USDA – VS
- Matheus Costa, University of Minnesota College of Veterinary Medicine
- Pam Debele, Minnesota Turkey Growers Association
- Mike Fier, USDA – VS
- Scott Fier, Cervid Producer
- Elaine Hanson, Minnesota Pet Breeders Association
- Brenda Hartkopf, Minnesota Elk Breeders Association
- Scott Josephson, Cervid Veterinarian
- Barb Keller, Minnesota Department of Natural Resources
- Josie Lonetti, Minnesota Farm Bureau
- Michelle Medina, Minnesota Farmers Union
- Richard Meech, Cervid Producer
- Todd Miller, Cervid Producer
- Tamara Nelsen, Minnesota AgriGrowth
- Ann Olson, Animal Folks
- David Preisler, Minnesota Pork Producers Association

- Scott Salonek, Cervid Producer
- Lucas Sjostrom, Minnesota Milk Producers Association
- Teri Skadron, Veterinarian
- Emilee Skadron, Veterinary Student
- Tim Spreck, Lobbyist representing Cervid Producers
- John Zanmiller, Bluffland Whitetails Association

Staff

- Beth Thompson
- Linda Glaser
- Dale Lauer
- Shauna Voss
- Greg Suskovic
- Courtney Wheeler
- Stacey Schwabenlander
- Morgan Grelson
- Michael Crusan
- Annie Balghiti
- Addie Evans
- Terry Sistad
- Erin Crider

Approval of January 15, 2020 Agenda and December 11, 2019 Minutes

Dean Compart called the meeting to order. He noted that the Legislative Update will be removed from the agenda, as no updates are available as of this meeting. Mr. Compart asked for any other changes or corrections to the agenda. Hearing none, he asked for a motion to approve the agenda. Graham Brayshaw made a motion, Peter Ripka seconded, and all present voted aye.

Mr. Compart asked for a motion to approve the draft minutes from the December 11, 2019, meeting. Peter Ripka made the motion, Erica Sawatzke seconded, with all present voting aye.

Board of Animal Health Update

Beth Thompson offered an update on plans for a national emergency response to African Swine Fever (ASF). The National Assembly of State Animal Health Officials (NASAHO) formed an ASF planning group, which includes state animal health officials and stakeholder groups. This began with 10 to 12 state veterinarians and is now up to 14. The group has had ongoing phone discussions in the last year, met in Indiana in August, and will meet in person again next month in Minnesota. Discussions center on ASF testing research, biosecurity, permitting and movement.

The largest challenge in preparing a national ASF response is permits and planning. Discussions continue on what should be included on the permit and who should receive it. States are getting closer to an agreement on this. However, the Secure Pork Supply (SPS) Plan is a point on which states still differ. Some want to work SPS Plans into their state response plans. Dr. Thompson stated Minnesota will not be using SPS plans this way; producers and veterinarians will use them as guides for an on-farm response during an ASF outbreak.

They are also discussing planning for enhanced biosecurity and permitting. All state veterinarians in the group expect a category II accredited veterinarian to be working with each infected farm to develop and implement a site-specific enhanced biosecurity plan. The group will also decide on a “certification statement” regarding enhanced biosecurity. This may be included on the movement permit or in another place.

Dr. Thompson said the group is also requesting the development of ASF testing strategies and a program for certified swine samplers.

USDA Update

Robyn Corcoran provided the USDA update. In August 2019, the National Veterinary Services Laboratory (NVSL) began testing selected non-histologically compatible (negative) TB granulomas submitted from all plants. They also tested all granulomas found to be histologically compatible. To date, 185 granulomas have been tested under this program. Of the granulomas submitted, 39 percent matched, and seven percent did not match. Fifty-four percent of the samples were not tested. Of these, 14 percent did not have ID attached, and 86 percent did not have tissue attached to the ID.

The National Animal Health Monitoring System (NAHMS) will be performing a swine study this year. This study will involve 2,700 operations with at least 1,000 swine from the top 13 producing states, including Minnesota. These operations are expected to yield over 4,000 sites. In Phase One, selected sites will complete an in person National Animal Statistics Service (NASS) questionnaire this summer. Those sites that consent to participate in Phase Two will complete a Veterinary Services questionnaire and can receive free biologics testing for select swine viral and bacterial pathogens via oral (Seneca Valley Virus-SVV) and fecal collections (*Salmonella, Enterococcus and E. Coli*). Oral sample results will provide the USDA with useful information to argue for better diagnostics to differentiate between SVV and foreign animal diseases. Fecal sample results and antimicrobial susceptibility results will be returned to the operation contact to get a snapshot of susceptibility patterns unique to their site(s).

A NAHMS study of small swine operations will also take place this summer, in which selected sites will complete a mailed survey and a follow-up phone interview.

Dr. Corcoran gave an overview of the Goat Genotype Prevalence Project, which will estimate the national prevalence of the alleles linked to classical scrapie resistance in goats and provide samples needed to develop a rapid PCR test for goat genotyping and proficiency panels for lab approval. The USDA hopes this project will lead to a scrapie resistance pilot project in goats, as was previously conducted for sheep. Around 3,000 samples from goats across the U.S. will be genotyped to establish prevalence. Sample types include fresh brain tissue from Regulatory Scrapie Slaughter Surveillance (RSSS) or necropsy, or whole blood from live, on-farm goats. Sample submission will begin in federal fiscal year (FY) 2020, the project is expected to continue into FY 2021.

College of Veterinary Medicine Update

Jerry Torrison said Dr. Alvin Weber passed away in December at the age of 101. Dr. Weber was a research and teaching faculty member at the college for over 60 years. He will be greatly missed by his colleagues and former students.

Interviews for next year's veterinary class will begin this month. The college received over 950 applications, with 98 seats available. The new class will start at the College in September 2020.

The veterinary education partnership between the University of Minnesota and South Dakota State University (SDSU) continues to move forward through the approval process. Official approval is expected soon. The first students in this program would enter SDSU for their first- and second-year studies in Fall 2021 and join the College in St. Paul Campus in Fall 2023.

Dr. Thompson asked for an update on the University's search for the new dean. Dr. Torrison stated the Provost has called for nominations for the search committee. The general timeline for dean searches is longer than a year. Dr. Laura Molgaard is prepared to serve as Interim Dean for up to two years.

Veterinary Diagnostic Laboratory Update

Jerry Torrison shared the Veterinary Diagnostic Laboratory (VDL) will be participating in several upcoming events, including the Minnesota Pork Congress at the end of the month, the Minnesota Veterinary Medical Association Annual Meeting, the American Association of Swine Veterinarians, and the Midwest Poultry Federation Convention.

Dr. Torrison stated that interstate permits for shipments of non-select agent pathogens are no longer required by the USDA. States could decide if they wanted to require permits. The Board decided not to require permits. These pathogens only go to select, trusted laboratories. If the Board opts to change this decision, the VDL would comply with it.

The Minnesota Poultry Testing Laboratory (MPTL) 2019 overall testing volume and revenue numbers were down slightly. Revenue was down due to a decrease in Board funding, although there also was an increase in clinical services, leaving a net loss of about $30,000. The MPTL lost one employee to another opportunity, and they did not fill that position. Dr. Torrison expressed concern for appropriate staffing levels for PCR testing in the event of a disease outbreak. The VDL will likely transfer some cattle testing to the MPTL to take some workload off the St. Paul staff. The VDL and MPTL also will be presenting several talks at the Midwest Poultry Federation Convention to promote MPTL testing services.

As of the December Board Meeting, the VDL had received their new autostainer for CWD testing and had filed for approval to use it. Unfortunately, they applied under old standards, which had changed during the year the VDL was without an autostainer. The VDL reapplied under the new criteria and is hoping for approval soon. They are also exploring the possibility of contracting for the DNR's CWD testing, as the current contract with Colorado State University will be ending soon. Dr. Torrison said the changing environment of CWD testing creates challenges in making wise decisions on tests and equipment.

Dean Compart asked how long it takes to perform a CWD test at the VDL. Dr. Torrison said the process for IHC testing takes several days, which includes fixation, staining and interpretation. Dr. Glaser stated it takes 3-4 weeks for results. If the results are CWD suspect, it will go to the National Veterinary Services Laboratory for testing.

Michelle Carstensen asked if RT-QuIC testing, the test Dr. Peter Larsen and his team are developing, will be put forward for approval. Dr. Torrison said he was not aware of a timeline for this.

The VDL is partnering with the Board and MDA on a legislative funding request to alleviate staffing shortages in the event of a disease outbreak. They want to have more automation in the St. Paul PCR lab to provide timely results during an outbreak and make effective, efficient use of staff. They are also examining their salary structure to retain highly skilled staff at the VDL. The request will also include funding for a stockpile of test kits for use during an outbreak. The VDL is waiting for pricing from vendors to determine the request for this.

Mr. Compart asked where cases of highly pathogenic avian influenza (HPAI) are right now. Dale Lauer said H5/N8 HPAI is in Poland and a few other European countries. This is concerning; spread depends on migratory patterns, which the Board will be watching. Dr. Torrison asked if there had been any updates on the HPAI outbreak in Mexico. Dr. Lauer said he could give an update on this topic at the next Board meeting.

Dog and Cat Breeder Excellence Program

Courtney Wheeler provided an update on the development of the Dog and Cat Breeder Excellence Program. The Board organized a task force comprised of licensed commercial breeders, Commercial Dog and Cat Breeder

veterinarians and Board staff. The task force met six times to develop draft Breeder Excellence Program requirements, which the Board will present to the industry and the public in the next few months. The program will be implemented July 1, 2020.

The task force developed five requirements for the Breeder Excellence program. Licensed commercial breeders will earn a badge for each requirement they meet. Individual badges can be displayed at their facilities as earned. Breeders who wish to apply for Breeder Excellence status must meet all five requirements to be in the program and have no violations during their previous licensing period. The five badges/requirements are:

- **Canine Brucellosis / Feline Leukemia Screening:**
    - **Canine Brucellosis:** Breeders must present copies of two negative test results, performed 4-12 weeks apart, for each adult dog in their facility. Any dogs introduced to the facility must be isolated and test negative on two tests performed 4-12 weeks apart.
    - **Feline Leukemia:** Breeders must present copies of negative test results for Feline Leukemia Virus and Feline Immunodeficiency Virus to the Board for each adult cat in their facility. Any cats must be isolated and test negative prior to introduction into the facility.
- **Behavior and Socialization:** Breeders must present a written enrichment plan outlining activities in two of the following three enrichment categories: Animal-to-animal interaction, human-to-animal interaction, and environmental stimulation. The Board and appointed industry advisors will review the plan, and Board inspectors will review a log kept by the breeder detailing 60 days of plan implementation.
- **Health Screening:** All adult animals in the facility must have a comprehensive annual wellness examination by a veterinarian. The veterinarian must conduct an onsite assessment of all animals in the facility once per year. Breeders must also perform a health screening on their breeding animals at the direction of the veterinarian. The health screening may include genetic or disease testing and/or screening for parasites.
- **Facility Management:** Breeders must submit written biosecurity and emergency response plans to the Board. Board inspectors will review the plan implementation.
- **Continuing Education:** Breeders must submit proof of at least 20 hours of Board-approved continuing education or 12 hours and proof of membership in a relevant association for all individuals listed on the license application. They must also present documented evidence of a formal training program for all facility employees.

The Board is opening the program to feedback from breeders and the public. They are working on materials to help breeders better understand the requirements, and to help the public understand the program and what each badge means.

Graham Brayshaw asked if licensed commercial breeders will need to reapply for the program badges. Dr. Wheeler said breeders will need to reapply annually. Dr. Brayshaw asked if this will increase the workload for Board inspectors. Dr. Wheeler stated workload levels will increase, but she hopes the Board will be able to absorb the majority of the work by having administrative staff review the applications before passing them on to the inspectors.

Dr. Thompson asked about the process for canine brucellosis investigations. Dr. Wheeler said once the Board is notified of a brucellosis-positive dog, the Board begins the investigation with an onsite visit to look into the background of the animal (which animals and people had contact with the dog) and decide if it will be quarantined or euthanized. The Board then contacts MDH to investigate the health of the people who had direct contact with the dog and determine what care is needed. Joni Scheftel said canine brucellosis causes heartbreak for families and exposes them to the disease. Kennel workers, veterinarians, veterinary technicians, and clinic staff who whelp dogs are also at serious risk. She thanked the Board for including canine brucellosis screening in the Breeder Excellence program.

Mr. Compart asked about canine brucellosis symptoms in humans. Dr. Scheftel said diagnosis is difficult because the test for people only detects the more serious form of the disease. More diagnoses are happening as emergency rooms are running more blood tests. However, the true number of cases is uncertain. Mr. Compart asked if people can transmit the disease to other people. Dr. Scheftel stated canine brucellosis is not transmitted from person-to-person.

Streptococcus Equi Subsp. *Zooepidemicus* in Pigs

Matheus Costa from the University of Minnesota College of Veterinary Medicine provided an update on the current outbreak of *Streptococcus Equi* Subsp. *Zooepidemicus* (*Strep zoo*) in North America. *Strep zoo* has affected multiple animal species, surviving in the upper respiratory and reproductive tracts. It does not always cause disease, but it can become pandemic. It is closely related to *Streptococcus equi*, the bacterium that causes Strangles in horses. Not much is known about *Strep zoo* in humans. Human cases have been traced to food, not to animals. Most cases have occurred in immune-suppressed patients.

Prior to 2019, there were no reports of *Strep zoo* clinical disease—respiratory lesions and sudden death—in North American pigs. There was a major outbreak in China in 1977, after which *Strep zoo* was considered endemic there. Since then, they have found sporadic cases in different regions, which significantly affected the industry in those areas. Sporadic cases have also occurred in the Philippines. All cases reported the same clinical signs.

In March 2019, a multiplier farm in Manitoba reported high mortality from *Strep zoo*. This farm was part of a pig flow involving three other farms. The disease mainly affected gilts and sows and presented unconvincing clinical signs before death, though abortions rose significantly during this time. The farm was found to be PRRSv positive. All following outbreaks presented the same symptoms: sudden death with no time for treatment.

Dr. Costa and other researchers collected diagnostic samples from the affected pigs. *Strep zoo* was consistently isolated, especially in the lymph nodes around the neck. Whole genome sequencing showed this strain, which they called "Sequence Type (ST) 194," was most closely related to the one found in the 1977 China outbreak in pigs, and not to strains found in other animals. Between 1977 and 2019, only one case of ST 194 was reported. This was in 2001 in a human female in the U.K. and associated with foreign travel. No other details are available at this time.

Since the initial Manitoba cases, reports of ST 194 with similar symptoms have come from several swine operations in the U.S. All were associated with pig-dense areas where the animals did not have access to the outdoors. Researchers also became aware of a 2018 ST 194 case in New Zealand, where the pigs were kept outside.

Investigations are ongoing to learn more about ST 194. The University of Minnesota, USDA-APHIS, the Manitoba Agriculture Ministry, and the Canadian Food Inspection Agency (CFIA) are working together to investigate when ST 194 was introduced into North America. It is still circulating in Canada and causing mortality. The Universities of Minnesota and Manitoba are investigating what makes ST 194 problematic for pigs. Finally, USDA APHIS is conducting clinical trials to identify how ST 194 infection occurs in pigs, how and when the pathogens are shed, and clinical signs to help develop a diagnostic test.

Dr. Costa briefly shared findings from University of Minnesota research into why ST 194 is problematic in pigs. In a normal immune response, the body would identify the bacteria, and immune cells would engulf and kill it. ST 194 coats itself in a protein that blocks the immune response, and the gene that regulates this protein has a mutation. Dr. Costa stated that ST 194 seems to be bacteria better prepared to fight the immune response in pigs, more so than other *Strep zoo* strains.

Dr. Anderson asked about the pathology on the infected pigs. Dr. Costa said the lymph nodes around the neck were very reactive, and some animals showed signs of pneumonia. No other signs were apparent. It is a very aggressive, fast-moving infection.

Mr. Compart asked if the VDL is doing any testing for this, knowing it looks like other diseases, such as PRRS. Dr. Torrison stated the VDL always does bacterial isolation on all diagnostic samples. They have gone back through their results over the years, and they have never found a case of *Strep zoo* in pigs. In high mortality events, the VDL tests for everything, so *Strep zoo* would be identified on a culture. They are confident they have not missed *Strep zoo* in their routine testing.

Dr. Matt Anderson asked what specific tissues would be best to culture. Dr. Costa stated lymph nodes around the neck are the most reactive, but he has received lungs, throat swabs, and blood. The study being performed by the USDA will help clarify the best samples for testing.

Dr. Joni Scheftel asked if there was any information on how people were treated for *Strep zoo* in the 1977 China outbreak. Dr. Costa said little information exists, so he presumes infection in people was not frequent. Dr. Scheftel said she and Dr. Thompson are working on a plan to protect people and animals in Minnesota if *Strep Zoo* were found in the state, but the lack of information on human infection creates challenges in developing a response plan. Dr. Costa said *Strep zoo* seems to affect infants, seniors, and immune-suppressed people. It may be valuable to evaluate human risk on infected farms and treat those individuals who were sick before or during the infection.

Dr. Beth Thompson asked where the infection came from in Canada. Dr. Costa said it may have come from farm workers from the Philippines who traveled home once a year. There is no solid evidence this is the source of infection; none of these workers were sick around the time of the outbreak. Dr. Thompson said she heard some of the pigs from the infected farms came to the U.S. and were on the road for days between buying stations. The disease could have broken because the animals were stationary for a long time. Dr. Costa agreed this could be true.

Dr. Thompson asked about the development of vaccines for *Strep zoo*. Dr. Costa said South Korean and Chinese researchers have been working on this for a while. There are a few vaccines that might be candidates for commercial use, but he does not know of any that are used widely. With the current disease information and proper research, he feels fairly confident they should be able to develop an effective vaccine.

Farmed Cervidae Procedures

Linda Glaser presented an update on the farmed Cervidae procedures. She began by introducing a new staff member, Addie Evans, who will be a lead worker in the cervid program.

Dr. Glaser proceeded with a PowerPoint presentation reviewing the procedures and goals of the cervid program. The cervid program is the most intensely monitored livestock program the Board oversees. It involves time intensive record keeping and a lot of individual conversations with producers to ensure they are meeting program requirements. Additionally, it has the most producer record keeping requirements out of all the Board's programs. She added that individual tracking of cervids from birth to death is imperative to maintain an accurate database record so staff can look back on records during chronic wasting disease (CWD) investigations. Once an official ID is entered into the Board database, it is closely monitored for the remainder of its lifetime.

In the next portion of the presentation, Dr. Glaser talked about the program from the producers' perspective and what forms and interactions they encounter with Board staff. She reviewed forms used by the cervid team to conduct their program work. The first form she reviewed was the application to start a herd. Once an application comes into the Board it's reviewed to see if the applicant has a livestock premises registered in the database. Next,

field staff are assigned to visit with the applicant to make sure they are prepared to meet program requirements. If everything is correct, the field staff will conduct an initial inspection of the herd and collect an annual registration fee. She said farms should be inspected before they are stocked with any cervids so they can evaluate fencing and gates. Once a herd is in the program, producers must continue to submit annual inventories, allow field staff to conduct annual inspections, including physical inspections every three years, verify animals are officially identified, document the movement of animals, verify herd inventories, report all escapes within 24 hours, and review records including CWD testing, which requires all deaths be reported and tested. Producers must maintain these annual records for 10 years.

Dr. Glaser then discussed the involvement of 19 field staff who inspect cervid herds and are individually assigned to each farmed cervid herd producer registered with the Board. This inspection process is a joint effort supported by USDA APHIS VS field staff in Minnesota. In addition to other livestock program responsibilities, field staff must conduct the following regarding farmed cervid herds: conduct initial and annual inspections, issue quarantines, issue notices of violation or civil penalty, investigate escapes and document recovery plans, educate producers on regulations and deadlines to submit materials, and provide testing supplies to producers for collecting CWD tissue samples. Field staff also oversee herd plans for CWD-positive premises that have been depopulated. These farms are required to keep their enclosures up and cervids out of them for five years after the date of the CWD detection. In addition to state employee responsibilities, the USDA field staff contribute to the cervid program by conducting appraisal and indemnity work with CWD-infected herds.

Six office staff have some part of their workload dedicated to farmed cervid work. Dr. Glaser said the nature of the program is very data entry intense, and record keeping requirements keep a lot of people busy. A majority of their time is spent on data verification, entry and reporting, and extracting it from the database. They also engage with producers when there are discrepancies in records or if producers have questions about their herd. Staff focus on data quality and verifying the information entered is accurate. In addition to those staff, there are program managers in the office who oversee the CWD work and set the procedures for office and field staff. Managers define and develop data entry needs, oversee compliance, and step into the other roles when necessary. They also coordinate with other state and federal partners on CWD management.

The Board members received copies of the forms used by the cervid program in their meeting packets. Forms reviewed at the meeting included: registration application, inventory form, re-tagged animal form, CWD testing summary, and herd agreement for Cervidae. All of those forms must be submitted annually. The inventory form includes an explanation of the physical inventory, required every three years for individual herds, and other changes made to the program with new laws effective July 1, 2019. One-third of Minnesota's registered herds had a physical inventory in 2019, one-third will have it in 2020 and one-third will have it in 2021. Dr. Glaser pointed out that all paper forms are tagged with QR code stickers and are scanned into the database so they can be recalled electronically via the QR code. This step maintains accuracy and expedites records searches. Official identification is also recorded on the inventory and needs to be thoroughly reviewed during each inspection. Animals can lose their ID tags, and the replacement tags have different numbers, which require verification and updating of the record in the Board's database.

Dr. Glaser reviewed screenshots of CoreOne, the Board database for tracking animal health related to herds and owners. In general, a record includes information on the owner, premises, livestock held, disease program records and other additional information inspectors and office staff utilize. She highlighted the use of "restricted" headings on the records of certain herds. These headings indicate quarantines or other restrictions placed on the herd. Additionally, the database tracks fee payments and field staff workload and progress. One unique feature of the cervid records is the CWD status level, which classifies herds along a range of one to six and indicates its CWD testing history and status to be able to move animals. For every year they are in the program and have not detected

CWD, they gain a status level. The majority of registered herds are level six because they've been in the program a long time and have a history of CWD testing indicating the disease has not been detected in their herd. There is also a requirement for federal certification to move animals interstate, which the Board tracks in CoreOne.

The form review continued with the "Farmed Cervidae Chronic Wasting Disease Sample Submission" form, which also serves as the death report form to the Board. The data from this form collects ID and characteristics of the animal to enter it into a test record for the CoreOne database. These test results are very detailed, and the Board imports all of the information into the database.

The "Movement or Death Report" form is required whenever an animal moves out of a herd. It is required within 14 days of the animal's movement and must be submitted for both interstate and intrastate movements. Only level four and above certified herds are allowed to move intrastate, and only level six certified herds are allowed to move interstate. Once the information from the form is entered in the CoreOne database, it is created as a new record for the Board to compile a movement history, which can be used in the event of a disease outbreak.

Dr. Glaser said the Board also shares an annual status report with producers to provide an overview of the records it maintains on their herd. It provides the information they need to move animals to other states, clarifies testing and inspections they have passed and what fees they have paid or will incur. Any endemic area restrictions or quarantines are noted in the report so the producer has a record of what they are certified to do as a herd. Dr. Glaser said producers commonly use this report to request a movement permit from other states to sell their animals.

Dr. Beth Thompson asked Dr. Glaser to clarify the different certified levels. For example, if a herd is at level three, and they have a small number of healthy animals, do they automatically advance levels as long as a certain period of time goes by if they are not moving the animals or selling them and submitting CWD samples for testing? Dr. Glaser said if a herd owner has a small herd and none of the animals are tested or dying, they still advance a level based on time intervals of no CWD detected. Another part of herd status is that if a producer buys animals from a herd, they inherit the status of the animals they purchased. A producer starting a herd without any animals at a level of zero can purchase level six animals and be at level six.

Dr. Glaser addressed a question from a guest about a herd receiving animals from different certification levels by saying the entire receiving herd is classified at the lowest level animal they purchase.

A veterinarian in attendance, Dr. Scott Josephson, asked if he could make comments regarding health papers issued by an accredited veterinarian. The Board allowed him to comment. He proceeded, saying health papers can only be issued by accredited veterinarians. He continued with another comment about the decision to receive an animal interstate depends on the state of destination, and all livestock species require a CVI. He works with cervid producers and recently had deer that were supposed to be sent from Minnesota to another state. The other state accepted it, but the movement was denied in Minnesota. He asked if there is a different set of rules for white-tailed deer. Dr. Glaser asked him if he was referring to the current Department of Natural Resources emergency rule stopping movement of white-tailed deer. Dr. Josephson responded with another question asking if he were to issue a health paper during this ban, is he operating under the jurisdiction of the DNR rather than the USDA, Minnesota Board of Veterinary Medicine and Minnesota Board of Animal Health. Dr. Thompson interjected and told him that will likely be decided following litigation between the DNR and deer farmers.

Dr. Josephson said he is concerned that white-tailed deer are being treated differently than other livestock species. He then posed a question about sending white-tailed deer to a terminal facility during the DNR emergency rule. He said other livestock species are allowed to move to federally inspected terminal facilities during a disease outbreak

because it allows health officials to get important test results. Dr. Thompson reiterated that the current stop movement order is being litigated and answers will likely emerge when it is complete.

Dr. Josephson asked the USDA representatives attending the meeting to comment on interstate movements of white-tailed deer, which fall under the jurisdiction of federal agencies. The USDA also did not have a comment pending the results of the litigation.

CWD Investigation Processes

Dr. Mary Donahue talked about the epidemiological investigation process of farmed cervid herds. As a follow up to Dr. Glaser's presentation, she said the USDA relies heavily on the records compiled by the Board. She referenced the USDA CWD Program Standards published in May 2019 and said the standards are available from the USDA website: https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/sa_by_date/2019/sa-05/cwd-standards.

Dr. Donahue discussed how an investigation starts when the state receives a CWD suspect test result at the University of Minnesota Veterinary Diagnostic Laboratory, which is then forwarded to the National Veterinary Services Laboratory (NVSL) in Iowa for official confirmation. When a suspect is flagged, a verbal quarantine is issued and the investigation process begins to look into many aspects of the herd, including carcass disposal, herd history and a preliminary record review.

Mr. Compart asked if Dr. Donahue could explain why the NVSL is the only laboratory able to confirm a disease result. She said they are authorized to run a certain test and they do further analysis of the sample. It is a quality control situation at the federal level to only allow one lab to confirm results.

Once the NVSL confirms results via official notice to the state veterinarian and USDA state office, CWD quarantines are issued to all epidemiologically linked herds and any infected premises. The property named on the results is quarantined for five years from the date of detection. Any animals tied to the herd are also quarantined for five years set to the time they spent on the infected property. While quarantines are in place the animal health officials are busy tracing animal movements and records forward and backward from the infected farm.

A producer at the meeting asked if quarantines of related farms are put in place before or after confirmed results. Dr. Donahue said they are issued when results are confirmed.

Mr. Compart asked about the timeline of CWD testing from sample collection to NVSL confirmed results. Dr. Donahue said preliminary results take about two to three weeks at the University of Minnesota VDL, and confirmed results take up to three weeks at the NVSL laboratory.

Dr. Donahue continued with her presentation and said the main purpose of the epidemiological investigation is to find any CWD-exposed animals. CWD testing requires euthanizing animals because there is no validated live-animal test. She said after testing, she reviews Board records pertaining to the suspect herd, including inventory records, movement reports and CWD testing history. These are evaluated to make sure movements and inventories are accurate.

The next step in her investigation is a herd visit, including an in-person interview with the owner to go over all documents. A fence inspection is also conducted with the DNR and a field inspector present. She said her epidemiological investigations gather as much information as possible and identify risk factors. It is not always possible to narrow down the causative agent from what she finds. Instead, the information is compiled into a preliminary summary, which is submitted to the USDA for a request for federal indemnity for the owner to

depopulate and test the remainder of the Cervidae on the property. Federal indemnity funds cannot be requested without a completed preliminary summary.

A preliminary summary consists of the history of the CWD confirmed animal, compliance history and herd-certification-program status, history of herd, traces, location of herd, wild cervid herd density and CWD testing history around the farm. This is submitted to USDA national cervid staff along with the request for indemnity.

If the USDA compensates the owner for the animal, there must be a final report filed. A final report is written after the herd is depopulated, all trace animals are accounted for, and CWD testing is completed. A final report is approximately 11 pages when complete and is maintained by the USDA.

Mr. Compart asked Dr. Donahue two questions. Who accompanies her when she visits the site to investigate, and, if wood materials, like fencing and feeders, are destroyed after depopulation on a CWD positive farm to reduce potential for risk for disease to spread. Dr. Donahue said the Board inspectors and a DNR representative accompany her to all cervid farm investigation site visits. She said all wood materials are burned on the site after depopulation, in accordance with the herd plan.

Dr. Thompson asked for Dr. Donahue to talk about the federal requirement for cervid herd quarantines. She said the federal program requires states to quarantine all CWD-suspect farms and quarantine all epidemiologically linked herds to a CWD-confirmed positive.

Michelle Carstensen of the DNR asked what Dr. Donahue thought about new research into the potential pathway of CWD transmission through semen. Dr. Donahue said she just received the study and had not had a chance to dig into it yet. She said she has seen past studies examining if CWD transfer can occur in utero transfer from the doe to the fawn. Her concern is that equipment used in artificial insemination could potentially become contaminated with CWD prions and spread the disease to animals after repeated use.

Dr. Josephson commented on his interpretation of the potential of semen as a transmission pathway for CWD because he works with artificial insemination. He said he spoke with the National Institute of Health and they felt there was minimal risk of spreading CWD through semen. He went on to explain his involvement with in-vitro fertilization with white-tailed deer and said this year marked the first case of a white-tailed deer produced via this method. He said the process is very similar to the process in other species like cattle. He added that this method could be used to select genetic resistance to CWD in white-tailed deer.

Mr. Compart asked if the semen used is fresh or frozen. Dr. Josephson responded they use both fresh and frozen, and fresh is used within four or five days.

Dr. Thompson asked if there has ever been a case of CWD traced back to semen from a positive buck? No one in the meeting had heard of such a case.

Dr. Josephson also cited a recently released study in Washington exploring genetic resistance to disease in goats. He suggested the same could be explored for CWD-resistant genes identified in white-tailed deer, similar to scrapie in sheep. Scrapie has been essentially eliminated through selective breeding for disease-resistant genes, and he thinks there is potential to do the same thing in white-tailed deer. He encourages the Board to make scientific decisions before increasing regulations on deer farm operations. He hopes one day to see white-tailed deer farm depopulations of only CWD-susceptible animals on the site and allow genetic resistant animals to live.

A producer asked Dr. Donahue if research is conducted on any of the CWD positive farms. She said the USDA has collected samples for future research and validation of other tests. Dr. Glaser said the University of Minnesota is also getting out to infected premises and collecting tissues and environmental samples for research. They are using those

samples to develop CWD tests. The Board works with the producers to allow those collections on the property. They are collecting the samples at this time but may not have run tests yet.

Ms. Sawatzke asked if euthanized animals on farms linked to a positive farm are also indemnified. Dr. Donahue said all animals taken during an investigation can qualify for indemnification.

A member from the group Bluffland Whitetails asked about the timeline for the Pine County investigation and when it will be complete. Dr. Donahue said the preliminary report is in process and will be complete next week. There is still one more herd to visit and gather additional information. Additionally, there are still exposed animals without known disease status. The remaining work relates to a trace investigation not related to a CWD test result. The herd is being investigated because it provided a doe to the Pine County herd in the past five years. The total herds involved at this point include five quarantined herds plus the Douglas County herd that no longer has animals on site.

An elk producer asked if the final report includes any conclusions or statements about where it is thought the CWD originated. Dr. Donahue said the report attempts to narrow down the timeframe of when the exposure may have occurred and what the risk factors might be; it does not necessarily point to a specific answer. She also said the reports are confidential. The Board has written summaries of these reports in the past and provided them to the media when requested.

Dr. Thompson asked the Board if any members had concerns about the following parts of the investigation going forward: continuation with program procedures outlined by Dr. Glaser; maintain the quarantines on the index premises and all trace-forwards and trace-backs; collaborate with the USDA on appraisal and indemnity for the CWD positive and exposed animals; working on a timely depopulation of CWD infected herds; and cooperation with all agencies. She said based on the past hour of the conversation, these were the main points she gleaned. There were no concerns from the Board. Dr. Anderson did ask if there has ever been a statewide quarantine related to CWD. Dr. Thompson said it has never happened.

A cervid producer asked if the new state law requiring herd owners of a CWD positive animal to depopulate their herd affects the owner's ability to qualify for federal indemnity if they're forced to depopulate before a federal agreement can be reached. Dr. Donahue said the USDA will only pay for live animals and there is a chance they would be unable to provide indemnity. She also said there are always more requests for federal indemnity across the country than there are funds available to pay producers.

State Representative Becker-Finn asked how many counties are affected by the current CWD-positive investigation. Dr. Glaser said there are six, and two of the counties have herds with CWD-exposed animals in them, meaning they spent time with the positively confirmed animals, and they will remain quarantined.

Representative Becker-Finn asked if there's a plan for the Board to take additional action on the herds because there are positives in multiple locations. Dr. Thompson and Dr. Donahue replied, saying the response plan is being followed and the investigation process will continue through the steps mentioned in earlier presentations. They said the only potential change is visiting the birth farm for the latest Pine County detection. If there is something there that would identify higher risk, the plan would change. However, at this point, everything in the investigation is continuing as planned. The Board quarantined all known links as soon as they were discovered and has had good cooperation with other state agencies as they investigate.

A producer said the Board took all of its steps to respond on day one of the suspected CWD case in this investigation because they immediately quarantined all connected farms.

Michelle Carstensen added that the DNR also follows its response plan and is doing aerial survey flights around these farms to get an idea of risk and activity around the fence lines. They are also instituting recreational feeding bans in these counties and planning future wildlife surveillance testing and zones.

Dr. Josephson asked if he could get direction from the Board about movement restrictions for animals moving to slaughter. He said his clients are concerned that they are not allowed to move animals to slaughter. He referenced such a movement request from a producer, which was forwarded from the Board to the DNR and was denied. Dr. Anderson advised him that, since the DNR issued the stop order, they should be consulted about any requests or challenges to it.

A cervid producer said he sold a doe to someone in Wisconsin who is planning to pick it up on January 28 and asked if this is legal. Dr. Thompson said she could not comment on the DNR order and encouraged him to delay the transaction until after the order expires. The DNR movement order is expected to expire January 29. She told the producers in attendance that she understands their frustrations and concerns about it costing them revenue. She asked them to please be patient and allow the agencies and science to get ahead of the disease in the future.

Mr. Compart made a comment about why the Board voted against issuing a statewide disease control zone at its last meeting. He explained they interpreted the statute being directed toward a foreign animal disease and not an endemic disease like CWD. The Board wanted to issue the stop movement to allow time to complete the investigation. He also commented on the issue of responding to a disease while keeping the channel of commerce to slaughter facilities open for impacted livestock producers. He compared this to the days when pseudorabies impacted the swine population and pigs were able to move to slaughter because it wasn't a foreign animal disease and it met the needs of the disease response while also allowing livestock owners to move animals to slaughter.

Representative Becker-Finn commented that the duty of the Board is to protect the health of the domestic animals of the state and, additionally, the general public. She stated her duty is to the people of Minnesota and not businesses. She said the Board's mission should guide its actions.

Minnesota Federated Humane Societies-Introduction and Updates

Elisa Soper-Johnson, Executive Director of the Minnesota Federated Humane Societies (MFHS), introduced herself and the MFHS mission and goals. She was joined by President Jeff Dow and Treasurer Mario Lee, who is also a Ramsey County animal control officer.

Mr. Dow explained the background of the MFHS, which is designated in state statute to certify and train humane agents, work with law enforcement to investigate animal cruelty and neglect and enforce animal welfare laws. He said a lot of investigations are educational efforts to teach people how to treat their animals.

Ms. Soper-Johnson wanted to highlight the MFHS as a collaborator and resource for the Board. She said they are often contacted by the public and police regarding animal welfare issues. MFHS also receives hoarding cases, kennel complaints, calls from the DNR, and contact from Board staff when they come across humane issues in their day-to-day work. She used an example of collaboration when the MFHS works with the Board to investigate alleged issues at a commercial breeding facility. She said the Board supports her agents' ability to make sure the organizations are compliant. In turn, humane agents work to make sure people are following Board statutes.

Dr. Wheeler asked Ms. Soper-Johnson how many humane agents there are in Minnesota. Ms. Soper-Johnson said there are more than 40 trained agents covering the entire state. MFHS has also increased training for those agents to make sure there is a certification in process for agents to adhere to procedures and protocols. The MFHS also spends time training law enforcement on animal welfare issues.

Dr. Wheeler told the Board all field staff inspectors report welfare issues identified during an inspection to the MFHS because Board staff do not have the powers to enforce humane issues. Mr. Dow said this is also the case with many other organizations, which often don't have the knowledge or resources to handle violations or issues on farms.

Dr. Stacey Schwabenlander asked Ms. Soper-Johnson about the primary species her agents handle. Ms. Soper-Johnson said humane agents' powers cover all animals, though they primarily deal with livestock and domestic companion animals. She said when they encounter issues beyond their powers, they partner with responsible agencies, like the Board, to work through the issue.

Dr. Matt Anderson asked what the MFHS does once an animal has been seized or how they handle dangerous dog situations. He wanted to know how dangerous dogs are removed from local law enforcement's dangerous animal lists. Mr. Lee said a dangerous dog's owner can annually appeal to their local jurisdiction to be removed from the list. Most smaller municipalities do not have a process in place to remove dangerous dogs from their lists so it would likely require an appeal to the town board, which should release the dog from the list after a qualified appeal.

Dr. Robyn Corcoran asked if police departments grant the MFHS investigative authority or where they get those powers. Mr. Lee said they have statutory authority from Minnesota statute, which recognizes their nonprofit as an investigative branch.

Mr. Compart asked what they do with seized animals. Ms. Soper-Johnson said they work with other agencies and rescue contacts to place the animal and get it examined by a veterinarian.

Compliance Updates

Dr. Courtney Wheeler and Annie Balghiti provided an update on compliance actions. They reviewed the Board's progressive action toolbox. Dr. Wheeler said each situation is unique, and they use varying timelines and tools to handle them independently. Field staff spend a significant amount of time with the same producers to remedy repeat offenses. The Board has authority to apply progressive enforcement in all of its programs. The USDA also has a branch of investigative and enforcement services. However, its primary power resides in interstate movements and not state-level offenses.

Dr. Wheeler said field staff are often the first to identify a non-compliance issue. The Board also has a formal complaint form available for the public to submit if they suspect an issue and want to report it to the Board. However, field staff are typically on farms and are the ones to find an issue and ask the producer to remedy it. The producer can then fix the issue and follow up at a specified date. If they fail to remedy the issue by that date, the issue moves up the compliance actions list. The Board's goal is to have a consistent approach to compliance issues across all species. Dr. Wheeler presented a mock scenario to demonstrate the steps escalating from initiating investigations to utilizing the civil penalty matrix, which calculates amounts to fine a person for an offense. She said the highest penalty they have issued through the compliance program is $4,200.

In many cases, producers have the right to contest a compliance action by the Board. For example, producers have the right to contest a penalty and request a contested case hearing. These hearings are similar to a trial and are presided over by an administrative law judge at the Office of Administrative Hearings. Ms. Balghiti said people can request contested case hearings through specific rules and statutes. She said there are different timelines for producers to contest Board actions; as an example, cervid producers have 30 days while other species have 20 days to contest.

A member of the public asked if commercial breeders and kennels have different timelines to contest a case, since commercial breeders have more extensive laws. Dr. Wheeler said kennels and breeders have different timelines.

Ms. Balghiti continued with the presentation and discussed the three stages of a contested case hearing: prehearing, hearing and post-hearing. The process is similar to a trial, and the final decision usually comes from the agency, not the administrative law judge. The parties can settle the case at any time during the proceedings. The administrative law judge issues a recommended decision, and the agency makes the final decision. With the Board of Animal Health, this falls upon the five-member Board. Parties are allowed to present their case to the Board before it makes the final decision. Once the Board reaches a decision, it has to provide a written explanation of the decision and serve it on the administrative law judge and the party. From this point, the party has the option to appeal the Board's decision to the Court of Appeals.

Dr. Brayshaw asked if the Board ever skips steps when escalating penalties, like in an extreme case. Dr. Wheeler said yes, it is possible for the Board to skip steps based on the background and severity of the issue.

Once the presentation on the compliance updates concluded and before the next agenda item, Dr. Anderson asked Dr. Schwabenlander how long backtags are valid when applied to kill cows that come in from out of state. She replied federal law requires when a backtag is applied, the animal must be killed within three days.

Swine Fever Exercise for Agriculture Response (SFEAR) Preliminary After Action Report (AAR)

Dr. Greg Suskovic updated the Board on the SFEAR exercise in 2019 and an overview of the preliminary action report. He reviewed the SFEAR exercise timeline from the planning phase in November 2018 to implementation in September 2019. He also walked through the four days of the exercise and the focus of each day: foreign animal disease investigation, national movement standstill, depopulation and disposal plan, permitting of movement.

The contractor for the exercise just published a preliminary report for the participating government agencies to review. The first day was scored well, and the only issue was with the timing during the exercise. Dr. Suskovic was very pleased with Minnesota's response to the simulated swine investigation. The second day of the exercise was completely separate from the events of day one and exercised a national stop movement order. One issue identified in Minnesota was how to announce the end of the stop movement so everyone knows when they can move again, and how to support a national stop movement plan. The third day focused on depopulation and disposal and how to logistically handle the depopulation and herd plans. Minnesota did not realistically identify its logistics during the third day. The permitting process was tested on the fourth day. This included testing the Emergency Management Resources System (EMRS) for processing permits, which malfunctioned during the exercise. The team in Minnesota had to resort to paper documentation. Dr. Suskovic said the group did not address testing during the movement permit process, and there needs to be further examination in the future.

Dr. Suskovic highlighted that the exercise was assembled in nine months, and the short time frame could be why there were some issues with the overall exercise design. He noted the organization of the days and the sporadic timeline of events made it very difficult for exercise players to get up to speed, especially on days one and three.

The next step for the after action team is to work on the final report. The Board also needs to review its internal plans for disease response and potential movement standstills. Dr. Suskovic closed by saying the Swine Emergency Disease Management Committee is one of the best things to come out of the ARMAR.

Dave Preisler with the Minnesota Pork Board said the pork industry continues to have great confidence in the Board after this exercise. He sees where Minnesota stands compared to other states and feels the state is way ahead of others. He said the approach of stamping out the disease is a good method. He believes the Board is doing the right things to get prepared and believes Minnesota is in a much better spot than in the past.

Mr. Compart asked Mr. Preisler if he has heard anything about indemnity for swine in the case of an African Swine Fever outbreak. Mr. Preisler said, as long as the state does not have anything available, there would be full indemnity from the federal government. He believes producers can probably count on federal funds at the beginning of a disease outbreak, and they should expect funding to change as the outbreak changes.

Dr. Anderson asked Board staff if they have ever reviewed England's foot and mouth disease outbreak to learn about those lessons for engaging a disease. Dr. Donahue said the USDA has done exercises in the past and sent federal employees to other countries to study diseases and government responses.

Michelle Medina of the Minnesota Farmers Union asked Dr. Suskovic how officials will ensure animal welfare during a stop movement. Dr. Suskovic said the current plan is to allow all trucks on the road to reach their destination when the order is issued and then stop, thus allowing them to complete their planned transport.

Mr. Compart asked for a motion to adjourn. Mr. Ripka made the motion, and Dr. Brayshaw seconded, with all members voting aye.

Next Meeting

Date: April 15, 2020
Time: 9:30 a.m.
Location: Minnesota Farm Bureau

Respectfully Submitted,

Beth Thompson
Executive Director
State Veterinarian