

Meeting Minutes: Quarterly Board Meeting

Date: 12/06/2022

Location: Oliver Kelley Farm (15788 Kelley Farm Rd, Elk River, MN 55330) and teleconference on Microsoft Teams

Attendance

Board Members

- Erica Sawatzke, President
- Peggy Anne Hawkins, Vice President
- Dean Compart
- Jessica Koppien-Fox
- Alex Stade
- Jim Vagts

Consultants to the Board

- Michelle Carstensen, Minnesota Department of Natural Resources
- Michelle Medina, Minnesota Department of Agriculture
- Laura Molgaard, University of Minnesota College of Veterinary Medicine
- Albert Rovira, University of Minnesota Veterinary Diagnostic Laboratory
- Stephan Schaeftbauer, USDA Animal and Plant Health Inspection Service (APHIS), Veterinary Services
- Joni Scheftel, Minnesota Department of Health

Guests

- Paul Anderson, Veterinarian
- Robyn Corcoran, USDA APHIS, Veterinary Services
- Nikki Deyle, Minnesota AgriGrowth
- Bruce Dokkebakken, Minnesota Dairy Herd Improvement Association
- Jenna Fier, USDA APHIS, Veterinary Services
- Scott Fier, Deer Producer
- Todd Froberg, Minnesota Department of Natural Resources
- Elaine Hanson, Minnesota Pet Breeders Association
- Brenda Hartkopf, Elk Producer
- Stacy Holzbauer, Minnesota Department of Health
- Lucy Hunt, Minnesota Department of Agriculture
- Sharon Kessner, Minnesota Department of Agriculture
- Sandy Larson, Minnesota Department of Agriculture
- Nicole Neeser, Minnesota Department of Agriculture
- Michael Oehler, Minnesota Department of Natural Resources
- Gary Olson, Deer Producer
- Laura Paynter, Legislative Analyst, Senate Agriculture and Rural Development Finance and Policy Committee
- Jill Resler, Minnesota Pork Producers Association
- Scott Salonek, Elk Producer
- David Stallknecht, University of Georgia

- Regina Turney, Intern, Minnesota Department of Health
- Mark Volk, Deer Producer
- Melinda Wilkins, University of Minnesota College of Veterinary Medicine
- Ken Williams, Deer producer
- John Zanmiller, Bluffland Whitetails Association

Staff

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|--------------------|-------------------------|-------------------|----------------------|
| • Marion Garcia | • Kara Schmidt | • Nancy Reeck | • Tim Schulz |
| • Erik Jopp | • Michael Crusan | • Brad Peterson | • Jason Cater |
| • Brian Hoefs | • Erin Crider | • Allison Pollock | • Heather Damico |
| • Courtney Wheeler | • Krista Lautenschlager | • Blia Kha | • Myrrh-Anna Kienitz |
| • Shauna Voss | • Lisa Ehlen | • Susan Chapman | • Bekah Weitz |
| • Myah Walker | • Tony LaBarre | • Laura TeBrake | • Susan McClanahan |
| • Veronica Bartsch | • Addie Evans-Engelke | • Duane Fox | • Jesica Aho |

Call to Order/Approval of Minutes and Agenda

Ms. Erica Sawatzke called the meeting to order. After introductions, she asked for a motion to approve the minutes from the September 21, 2022, quarterly meeting. Mr. Dean Compart made a motion, and Mr. Jim Vagts seconded it. There was no discussion, and Ms. Sawatzke called for a vote to approve the motion, with all voting aye.

Ms. Sawatzke then asked for any additions or corrections to the agenda. Hearing none, she asked for a motion to approve the agenda. Dr. Peggy Anne Hawkins made the motion, and Mr. Alex Stade seconded it. Ms. Sawatzke called for a vote to approve the agenda, with all board members voting aye.

Legislative Update

Michelle Medina stated Governor Tim Walz was re-elected in November, and Democrats now hold the majority in both the House and Senate. The 2023 legislative session will begin on January 3. This will be a budget session but will also include policy and possibly bonding, since that was not completed in the 2022 session.

Ms. Medina shared some quick facts about the Senate and House numbers. The Senate stands at 34 Democrats and 33 Republicans, with 24 newly elected members. The House stands at 70 Democrats and 64 Republicans, with 47 newly elected members. There are many new legislators, so much time at the beginning of the session will be spent on education and informational hearings.

In the Senate, the Agriculture and Rural Development Committee will be chaired by Senator Aric Putnam; Sen. Nick Frentz will chair the Energy, Utilities, Environment and Climate Committee; and the Legacy and Natural Resources Committee will be chaired by Sen. Fong Hawj. The House Agriculture Finance and Policy Committee will be chaired by Representative Samantha Vang, and Rep. Rick Hansen will chair the Environment and Natural Resources Finance and Policy Committee. No committee members have been announced yet.

Ms. Medina discussed Board-related activities for the 2023 Legislative Session. The Minnesota Department of Agriculture (MDA) and the Board have an ask for funding for preparedness for the Ag Emergency account. This would cover responses to Highly Pathogenic Avian Influenza (HPAI), African Swine Fever and other foreign animal diseases. MDA received a \$15 million revolving loan from USDA Rural Development to provide low-interest loans to meat processors. Chronic wasting disease (CWD) will continue to be an issue discussed during the upcoming session, so MDA and Board staff will be watching what transpires.

Board of Animal Health Update

Dr. Marion Garcia briefly reviewed items to be discussed during the meeting. The Board and DNR will present CWD test results from farmed and hunter harvested deer, respectively. They will show the need for the Board to continue working with the DNR and partners at the University of Minnesota to gain a well-rounded understanding of CWD.

The USDA will present important changes for HPAI management. Some of these changes are designed to give states more flexibility in how they meet the requirements, while others change the federal requirements. In Minnesota, the Board will be taking advantage of some of these changes by incorporating industry resources into the response to free up state and federal resources for other program responsibilities.

With many newly elected legislators and newly hired Board personnel, the upcoming legislative session gives us an opportunity to forge solid relationships that will benefit the people of Minnesota.

The Board has had continued staff vacancies, largely due to the hiring freeze during the pandemic. Board leadership has worked to identify staffing needs and have come up with a plan to realign personnel. The new structure will leverage experts and program managers with generalists and field staff, consolidate staff to increase efficiency, and make sure all program and all species are managed successfully. There will be some paradigm shifting, but with patience and work the structure will make us better than the Board already is.

Ms. Sawatzke asked Dr. Garcia to explain the “paradigm shifts” she mentioned. Dr. Garcia stated the assistant directors at the Board also currently serve as program managers. Program management is a full-time position by itself. Under the new structure, assistant directors will focus on coaching, mentoring, and teaching, and also will help Dr. Garcia set priorities for the Board. One assistant director will oversee the program managers, and the other will oversee the field staff.

USDA Update

Dr. Stephan Schaeffbauer stated USDA Animal and Plant Health Inspection Service (APHIS) is authorized to make payments for birds destroyed due to HPAI based on fair market value. APHIS can also reimburse producers for depopulation and disposal activities as well as cleaning and disinfection. Nationwide (as of December 5, 2022), 633 flocks have been confirmed with HPAI in 46 states, totaling 52.7 million birds. As of December 1, 2022, APHIS has committed over \$372 million for indemnity for depopulated birds and eggs, \$126 million for depopulation, disposal, and virus elimination activities, and an additional \$108 million for current associated personnel, state agreements and field costs. Of those totals, Minnesota totals include \$89 million for indemnity for depopulated birds and eggs, \$15 million for depopulation, disposal, and virus elimination, and \$5 million for current associated personnel, state agreements and field costs.

Dr. Schaeffbauer said that Minnesota Veterinary Services currently has 15 staff, of which three are administrative and 12 are field staff. They also have five vacancies. They have interviewed applicants for the Veterinary Medical Officer (VMO) position on the Central Team, and a tentative offer will go out this week. The vacant Program Assistant and Animal Health Technician positions on the South Team are both being advertised as of this meeting. The Animal Identification Coordinator and Epidemiologist positions will be advertised in January or February 2023.

Dr. Schaeffbauer presented information on the USDA Pathways Programs, which offer students and recent graduates “pathways” to gain experience in a variety of fields within the USDA. There is an opportunity to convert that experience into a permanent position without competing for it. She highlighted the Chester A. Gipson, the Daniel E. Salmon, and Saul T. Wilson Internship Programs. She also discussed the Ag Discovery Program for high school students interested in animal or plant health fields. She invited attendees to have any interested Minnesota students contact her to discuss the process. Applications will be available soon, and she recommended starting on them early.

Ms. Sawatzke asked how these programs are advertised. Dr. Schaeffbauer said some are promoted through student organizations, conferences and fairs, word of mouth, and on usajobs.gov, where all federal jobs are posted. Ms.

Sawatzke said her husband is a high school ag teacher and suggested advertising the AgDiscovery opportunities in high schools. Dr. Schaeffbauer thanked her for the suggestion and said she would look into this.

Mr. Compart suggested sending the program information to 4H. He also said the Board could advertise these programs in its monthly Animal Bytes newsletter. Dr. Schaeffbauer agreed and said she would share the information with Board Communications staff.

Mr. Compart asked if there is someone who can create HPAI epidemiology (epi) reports, as Dr. Mary Donahue has left her position. Dr. Schaeffbauer said Dr. Donahue worked with Dr. Sandy Larson on the HPAI response. Dr. Larson will give an epi report later in the meeting. Dr. Wheeler will handle CWD epi reports until the new epidemiologist is hired. That person will bring their own strengths to the position, and they will be trained as needed.

College of Veterinary Medicine Update

Dr. Laura Molgaard stated that about one-third of leadership positions at the College of Veterinary Medicine (CVM) are filled at an interim status. The hiring searches for all the positions have begun, but the positions have yet to be permanently filled. The search for the new Veterinary Diagnostic Laboratory (VDL) Director will be launched tomorrow, and Dr. Garcia has agreed to be on the search committee.

Dr. Molgaard said workforce shortages continue to challenge the veterinary community and the CVM's ability to meet their mission. This brings a risk of staff burnout and extra costs in overtime pay. This is often reported as a local problem, but it is a national problem felt locally. There needs to be a coordinated solution to address the problem across the country. Dr. Molgaard met with MDA Commissioner Petersen on strategies to improve the situation. They discussed the current Veterinary Loan Repayment Program, which the State funds at \$375,000 annually for five graduates to receive repayment of \$75,000 per year for five years. Currently, this program is limited to rural and food animal-focused veterinarians. They discussed expanding program funding and eligibility to address the critical shortages in Minnesota. Dr. Molgaard said one of the CVM's challenges is the State Practice Act, which limits their ability to recruit candidates from universities in other countries. Dr. Molgaard has begun conversations with Minnesota Veterinary Medical Association (MVMA) and other veterinary organizations to address this issue.

Dr. Molgaard briefly discussed the University of Minnesota's position on the Companion Animal Board legislation. The University as an organization has no position on this bill. CVM faculty can offer their personal positions, as long as they make it clear they are not speaking for the University. Dr. Molgaard looks to Board members and staff for guidance and education.

The University's funding priorities for this legislative session do not include any bonding money for the CVM, though she hopes to be requesting funding in the future, as buildings are aging and classrooms are too small for increasing class sizes.

Dr. Hawkins asked what the State Practice Act entails. Dr. Molgaard replied the act says a candidate needs to be a board-certified specialist or have gone to an AVMA-accredited school. In other states, their practice acts say a veterinarian working at the state's college of veterinary medicine would receive a provisional license to do their work at the college. If they leave the college, they will lose their license. She said Minnesota's State Practice Act needs to be worded with more flexibility.

Dr. Fox asked if the CVM is considering earmarking money in the Veterinary Loan Repayment Program for specific fields. Dr. Molgaard said she is not proposing anything at this time, but the program likely needs to be expanded to meet other needs.

Mr. Compart asked why the CVM is not asking for bonding money now, when there is a lack of personnel. Dr. Molgaard said they are taking time to solidify the Two-Plus-Two Program, which will increase their class sizes and to help clarify the CVM's plans.

Veterinary Diagnostic Laboratory Update

Dr. Albert Rovira said the Veterinary Diagnostic Laboratory (VDL) was busier than projected from the summer into October, with November numbers yet to come. Swine and poultry testing have remained steady since summer. The VDL raised testing fees in July, without much change in submission numbers. Currently, the VDL is doing more testing for PRRS and swine influenza, as they occur more often this time of year.

The VDL and MPTL have been doing a lot of HPAI testing. There have been a couple of cases of avian encephalomyelitis which were diagnosed by one of their pathologists and confirmed by sequencing. These cases were linked to vaccination. The VDL increased the frequency for bovine PCR tests to twice weekly to meet demand. They are also now doing twice weekly PCR testing for porcine sapovirus, which has been proven to cause diarrhea in pigs.

In October, VDL staff attended the American Association of Veterinary Laboratory Diagnosticians (AAVLD) Annual Conference held in conjunction with the United States Animal Health Association Conference. Because it was held in Minneapolis, more VDL staff could attend. The conference also included 10 presentations from VDL faculty and staff.

Dr. Rovira stated the VDL sent Stacy Pollock, Lab Section Manager at the Minnesota Poultry Testing Laboratory (MPTL) to Georgia for the National Poultry Improvement Plan (NPIP) Avian Influenza Workshop, which is required for certification in the NPIP Program.

The VDL is working on hiring for several positions, including a Food Animal Diagnostician and two pathology residents. Like many other professions, the VDL is having trouble finding and hiring good candidates. They are working to better publicize jobs through employment websites, such as Indeed and LinkedIn, and newspapers to reach candidates in different ways.

Dr. Rovira said equipment purchased with funding a couple of years ago was installed. Two liquid handlers have gone through the validation and testing processes and are finally up and running as of last week. These machines will reduce the potential of false positives and save staff time through automation of testing. The VDL received funding for more equipment during the last legislative session. They are in the process of ordering this equipment. This should be complete in the next several months.

Minnesota Department of Health Update

Dr. Joni Scheftel gave a brief overview of influenza, including Influenzas A, B, C and D. The way Influenza A is structured makes it easier to mutate and change. However, she also said that disinfectants are very effective at destroying the virus.

The traditional public health viewpoint is that influenza could mix with avian or swine influenza, create a new virus transmissible between people, and start the next pandemic. Dr. Scheftel does not agree with this and believes that Influenza A is a shared virus between humans and animals, which disguises the amount of transmission from humans to animals. She said some years, when influenza viruses found in swine were sequenced, up to 30 percent of them were human seasonal flu viruses. Turkeys are also susceptible to human strains of influenza. She stressed the importance of vaccination for those who work with swine or poultry.

Dr. Scheftel stated many wild birds and raptors have been affected by HPAI. MDH provided training on establishing a sick bird triage, protocols for keeping resident birds safe, and proper PPE practices for Raptor Center staff. In the spring, 70 percent of birds brought to the center had HPAI and had to be euthanized. MDH has also worked with the Wildlife Rehabilitation Center and the Minnesota Zoo on HPAI protocols for animals and staff.

Dr. Scheftel showed a list of varied mammal species with positive HPAI detections in 2022. The list includes red foxes, skunks, seals, bottlenose dolphins, raccoons, pigs, American black bears, and more. There is a low to moderate transmission risk of infection for humans, but it is very important for people in contact with infected birds to take precautions to prevent any further virus spread.

The MDH staff serve as human disease surveillance officers on the HPAI Incident Management Team (IMT), interviewing, evaluating and monitoring people associated with 107 flocks. Dr. Scheftel stated they have interviewed 595 people, with 460 completing the monitoring process. Twenty-three symptomatic poultry workers and responders were tested, with no positive HPAI detections.

Dr. Scheftel stressed the importance of a One Health approach to avian influenza, as host-adapted viruses like HPAI change unpredictably and are shared by people and animals. To keep animals and people as safe as possible, experts in animal, human and environmental health need to work together to understand how the virus is changing to keep animals and people as safe as possible.

Ms. Sawatzke asked if the mammals found positive for HPAI are known carriers of the disease. Dr. Scheftel said that is unknown. It is likely the animals considered medium-sized carnivores (foxes, skunks, etc.) ate dead birds with HPAI. Ms. Sawatzke asked if these animals die from HPAI. Dr. Scheftel said they often develop encephalitis and rabies-like symptoms, and many of them have died. Dr. Michelle Carstensen said many wild birds the DNR has found positive for HPAI have been asymptomatic. She also stated this fall, they have not seen the die-offs from HPAI that they saw in the spring.

Dr. Scheftel stated cases of animal blastomycosis are rising in Minnesota. The hypothesis for the increase is a series of wet springs combined with a dry summers and falls caused increased fungus growth and spread of spores through the air. Blastomycosis cases are required to be reported to the Board, though the reports come to MDH to help discover where human cases are present. There have been 15 clusters of two dogs in the same household that have tested positive in different counties. Dr. Scheftel displayed a heat map of animal blastomycosis cases in Minnesota by county, which showed a larger number of cases in the north central part of the state. Ms. Sawatzke asked why the cases are so regional. Dr. Scheftel said blastomycosis prefers water and certain soil types.

Board of Animal Health Bylaws

Ms. Kara Schmidt presented the current draft of the Board of Animal Health Bylaws, which Board members had edited since the September meeting. Ms. Schmidt asked for any additional changes.

After discussion, Ms. Schmidt requested Board members to vote to adopt the bylaws as edited. Ms. Sawatzke asked for a motion to adopt. Dr. Hawkins made the motion, and Dr. Fox seconded it. A vote was taken, with all voting aye to adopt the bylaws as edited.

Mr. Scott Salonek said some of the Board rules pertain to Farmed cervid producers. He asked what would be required to have a seat on the Board designated for a cervid producer. Both Ms. Sawatzke and Dr. Wheeler said this would require a change in legislation. Dr. Hoefs pointed out that cervid producers are eligible to fill the seats designated for livestock producers.

HPAI Update

Dr. Erik Jopp showed a graph of the 2022 versus the 2015 HPAI epidemiology curve. Overall Minnesota has surpassed the number of 2015 HPAI cases. Dr. Jopp then showed a bar graph depicting 2022 HPAI epi curve by type of facility. He stated that Minnesota saw a cluster of cases in August through early fall, but cases have been trickling in since then. Seventy eight of the 108 confirmed cases have been turkey facilities.

He then showed a heat map of cases by county, with most being in West Central Minnesota, the main poultry production area of the state. He displayed a map of national HPAI cases, which showed 46 states have been affected by HPAI. Mr. Compart asked how this situation compares to the HPAI outbreak in 2015. Dr. Shauna Voss said there were only a few cases in the Midwest and on the West Coast during 2015. Dr. Schaeffbauer stated 21 states were affected by HPAI in 2015.

Dr. Jopp said he anticipates cases will continue to come in, since HPAI is still in the wild bird population. The Board is now working with accredited veterinarians to assist with some of the HPAI response work. If they have a valid VCPR, they can do some of the cleaning and disinfection verification.

As stated at the September meeting, the Board requested and brought in half of a USDA emergency response team. They were in Minnesota for about three weeks, and the Board has not requested another team. However, a few USDA staff are being called on to fill different positions virtually within the response.

Mr. Compart asked how long it will take the HPAI virus to clear out of Minnesota's birds. Dr. Jopp said that the Board is anticipating that HPAI is here to stay. Dr. Hawkins asked if HPAI has become a resident virus in Europe. Dr. Jopp confirmed that. Dr. Hawkins then asked what Europe is doing in response to this situation. Dr. Jopp said he believed they are still depopulating flocks but are also considering other options, such as vaccination. Dr. Garcia said the USDA has offered the option for states to not depopulate non-poultry facilities, but Minnesota is going to continue to depopulate facilities unless the positive animal has no access to other poultry.

HPAI Epidemiology

Dr. Sandra Larson, Field Epidemiologist at the Minnesota Department of Agriculture, worked with Dr. Mary Donahue on HPAI epidemiology before Dr. Donahue left for a new position. Dr. Larson stated the information on HPAI risk factors she would be sharing is based on observation on the HPAI positive sites and on what people have said.

The most common risk factor appeared to be building integrity. Older, curtain-sided barns were much more likely to be the site of infected birds versus environmentally controlled, fully enclosed or newly renovated barns. Issues observed included failing roofs, small birds in the barns, unsecured ridge vents, loss of wall integrity, holes in screens, and ground level breaches in biosecurity including seeing daylight around the base of the walls, rodent holes or tunnels, concrete pulled away, and wet ground in the barn.

The second most common risk factor was the proximity to wetland. Many of the infected premises were near low-lying marsh areas. Migratory waterfowl were seen flying overhead, landing in nearby fields or, in one case, walking on the gravel paths between the barns.

Another risk factor observed was roosting birds. Wild birds were often seen perching on top of bins and barn roofs. Dr. Larson showed a photo of a barn with longer eaves. This barn also had a board under the eave where birds could sit. The exposed truss did not have perching deterrents and pigeons were observed sitting on top of the actuator.

Another risk noted was inadequate biosecurity. She said some observed examples were barn workers only wearing plastic booties over shoes that were not barn-specific; using only a hand sprayer to disinfect items instead of pressure washing and disinfecting; and storing hay with three sides open, allowing birds to get to the hay and leave droppings. This hay was chopped up and used for bedding material. The chopper used could have aerosolized the virus.

Fomites, including flies, rodents, and other animals that were observed near the barns, also added risk of infection. Dr. Larson mentioned two positive premises that were 0.5 miles apart, and both had a lot of flies. The premises did not have any employees in common and even talked by phone to map out separate routes to their respective premises.

Several premises could also have had risk from recent harvests. Two premises had a sweet corn field between them that had been recently harvested, and people observed many birds on the newly cut field. Another premises had a farmer baling corn stalks in a field immediately upwind from the infected barn. Finally, in a few cases, no risk factors were apparent.

Dr. Larson offered recommendations for biosecurity. If a farmer has properties with different Premise Identification Numbers (PINs) that operate as one farm, these properties should be treated as separate premises with their own biosecurity. She also recommended using a drone or lift to inspect barn roofs to look for any spaces where birds could get in. Then, stop birds from roosting on barns with birdstops or spikes.

Ms. Sawatzke noted the presentation mentioned a lot of small bird activity. She asked if there has been research done on songbirds as HPAI carriers. Dr. Carstensen said songbirds do not have much impact on HPAI spread. However, they could be a risk for moving virus around if they encounter it.

Ms. Sawatzke asked if there are plans to send out a survey to producers about HPAI and biosecurity practices and share the results with producers, as was done in 2015. Dr. Schaeftbauer confirmed the USDA is working on a producer survey and case studies. She said these will take time, but the results will be compiled and shared.

Mr. Alex Stade asked if farms are required to fix the problems found during the epi investigation. Dr. Larson said some issues can be addressed in the HPAI flock plan, but major issues, like replacing a barn, cannot. Dr. Jopp said there have been two flock plans written to state specific problems needed to be resolved or the flock owners would not be eligible for indemnity if they got HPAI again.

Dr. Brian Hoefs asked if USDA is considering when they might stop giving out indemnity, as HPAI is likely here to stay. Dr. Schaeftbauer said they are in new territory, so they are tracking infected flocks and what producers have done differently after infection. She encouraged producers to make changes so they do not reach any parameters that may be implemented. Indemnity payments to sites that get reinfected multiple times and make no changes prevent infection will not continue.

Mr. Gary Olson stated that cervid farmers must be permitted to receive indemnity. He asked if turkey producers need to be permitted to receive indemnity. Dr. Voss said commercial turkey producers do not need to be permitted, but some breeder flocks do. Large flocks need to have a biosecurity plan in place, and it must be audited by the Board.

Ecology of Avian Influenza

Dr. David Stallknecht shared information from his time testing wild birds for HPAI in northwestern Minnesota and other parts of the country. About 40 percent of the birds tested in Minnesota were positive for HPAI. He has also done HPAI testing in Louisiana, where about 15 percent of birds tested positive. He complimented the Board and their partners for their continued efforts to keep commercial birds safe.

Dr. Stallknecht covered how HPAI has been affecting different bird species. Ducks have been shown to be one of the main reservoirs for HPAI. Ducks display a range of sickness and mortality, and the reason is unknown. They appear to be more resistant to HPAI than other bird species. There has been a lot of mortality in geese and raptors, especially eagles, throughout the U.S. His team sampled gulls and pelicans in northwest Minnesota and found LPAI in their populations. However, there was a large HPAI outbreak in pelicans in Peru, where 13,000 birds died.

Dr. Stallknecht said he is watching HPAI cases in mammals. While there is no indication that HPAI is spreading in these species, it is important to stay vigilant.

He said extensive research has been done on songbirds in relation to poultry flocks and HPAI. Results show they are not in the main cycle of infection, but that does not mean they do not play a part in HPAI spread. Some feel songbirds may be a carrier of HPAI, though there is no proof of this. Their presence in a barn may be a good indicator of larger biosecurity issues on the site.

Dr. Stallknecht offered ideas on what will happen next with HPAI. There may be a peak in cases associated with the fall migration, as is seen in Low Pathogenic Avian Influenza (LPAI) outbreaks. The influx of birds getting ready to migrate sets the stage for the spread of HPAI. Geese migrate in October/November, and the southeastern U.S. is starting to see this in their mortality. He said it is likely there will be a peak in cases in the spring, though it may not be as bad as last spring due to growing population immunity. Unfortunately, what is happening now is probably going to continue, as there is no indication that the virus is going away. Everyone needs to remain vigilant, as this virus is very adaptable to wild birds and could spread to other species.

Dr. Scheftel asked why he thought the virus might be infecting so many different mammals. Dr. Stallknecht said wild birds are dying from HPAI, and it is likely they are being eaten by scavengers. These animals are not a part of HPAI surveillance activities, so it is impossible to tell how extensive these infections are.

Dr. Carstensen said she and the DNR were involved in testing wild birds in the spring and fall. Positive cases from this fall were minimal. They did not see the sick birds, ducks and raptors they saw in the spring. She asked what might be ahead for wild birds and HPAI. Dr. Stallknecht said fewer positives could be the result of HPAI susceptibility or population immunity. He has researched previous exposure to HPAI birds. In testing cloacal swabs and brain tissue of hunter-killed blue-winged teal in Louisiana, HPAI was present in almost all the brain tissue samples. Research will continue.

Dr. Hoefs asked about the level of infection in wild turkeys. Dr. Stallknecht said there have been a few wild turkey cases in Montana and Wyoming. However, his team has routinely tested wild turkeys, and HPAI has not been detected. Dr. Carstensen noted the DNR tested wild turkeys in the spring of 2015 and this spring, and they were all negative.

Department of Natural Resources Update

Dr. Michelle Carstensen reviewed the DNR's fall CWD surveillance. They tested deer in 10 areas of the state, with mandatory sampling in all areas on opening weekend. Changes from the last hunting season included only having self-service sampling stations open during firearms season and offering [Hunter Mail-in Kits](https://www.dnr.state.mn.us/cwd/cwd-kits.html) (<https://www.dnr.state.mn.us/cwd/cwd-kits.html>) and participation in their [CWD Statewide Partner Sampling](https://www.dnr.state.mn.us/cwd/cwd-partners.html) (<https://www.dnr.state.mn.us/cwd/cwd-partners.html>). These changes were meant to reduce CWD workloads in management and control zones as well as increase sampling opportunities for hunters.

Dr. Carstensen said they found no new CWD cases in their East Central or West Central surveillance zones, there have been no CWD detections in three consecutive years of testing. If no positive cases are found by the end of this fall, the DNR will end surveillance in these areas. They have seen no new detections in the North Central management zone, where the last positive deer was found in 2021.

The DNR detected two Northwest surveillance zone (around the Beltrami County positive farm and illegal dump site). While no new cases were detected last year, two cases were found this fall south of Bemidji. Testing in Grand Rapids management zone found no additional detections this fall. The DNR found no positive cases in the Climax management and surveillance zones (on the North Dakota border) this fall.

Surveillance in the South Metro management zone detected two additional CWD cases in the Chub Lake area, where there seems to be a low-level disease persistence.

The Southeast management and surveillance zones saw several new cases around the Preston area and around the Winona County positive farms. They also detected a case in Houston County. Altogether, they have found eight positive and three suspect cases. Dr. Carstensen noted this shows CWD disease prevalence is still at about 1 percent in the Southeast.

There will be a late season hunt in the Southeast, South Metro, and Beltrami County (Deer Permit Area 184) in mid-December. The DNR also plans to do winter culling work in the Southeast and South Metro zones.

Mr. Olson asked if additional DNR testing on the spontaneous CWD cases yielded detections in unexpected places. He cited testing in Norway that found eight different varieties of CWD, with some being more lethal than others. He asked if the DNR knew these cases were spontaneous, would their disease response in that area be different. Dr. Carstensen said more research needs to be done to determine if cases are indeed spontaneous. They are using the ELISA CWD test and are also working with MNPRO on diagnostics that will detect the disease in living deer. He then asked if the DNR is doing any genotyping of the positive deer. Dr. Carstensen confirmed they are working on genotyping and will be able to share information on this soon.

Mr. Vagts thanked Dr. Carstensen and the DNR for their hard work in the Southeast area of the state, where he lives. He also expressed his concern over statements made in recent Board communications. In the [November issue of Animal Bytes](#), the article on upcoming CWD research projects stated, “Most CWD infections on Minnesota farms since 2015 did not result from moving CWD positive deer from another infected farm. Most of the infected farms were located in regions with CWD-positive wild deer, which could serve as a source of infection through indirect contact with farmed cervids.” He believed this is untrue. He also questioned the [December 5, 2022, press release](#) on the completion of the Board’s CWD investigation that began in October 2020. He said the Board did not share that there had been two additional positives on the Winona County farm after the initial August 2022 detection. He also disagreed with the Board’s description of the CWD prevalence in wild deer in the Southeast zones as “high” when the prevalence is about 1 percent. He strongly recommended the Board choose their words more carefully. Dr. Garcia agreed with Mr. Vagts that words matter and thanked him for his input.

Farmed Cervidae Program Update

Dr. Courtney Wheeler, new director of the Farmed Cervidae Program, said state agencies have been unable to effectively control and eradicate CWD. There is a need for the Board to work with its partners and researchers to compromise and innovate to find solutions that will keep the disease under control and allow farmed cervid producers to continue doing business.

The total number of registered cervid herds continues to decrease, with a current total of 229 herds. One hundred thirty-two of these include white-tailed deer (WTD). In Fiscal Year 2021, 1,085 cervids were tested for CWD. The last detection of CWD in a farmed cervid herd was in August 2022 in Winona County. That herd was depopulated in October 2022, with no additional CWD detected.

Dr. Wheeler gave an update on activities related to the Board/DNR concurrent authority over white-tailed deer. The DNR has appointed Michael Oehler as Farmed Deer and Captive Species Coordinator and Jennifer Mueller as the Animal Health Division coordinator to focus on concurrent authority. The Board meets with them weekly to share updates on program activities and challenges to implementation of concurrent authority. The Memorandum of Understanding (MOU) between the Board and the DNR is nearing finalization. This document outlines each agency’s responsibilities related to concurrent authority over WTD. While communication between the two agencies still needs improvement, it is going well.

Dr. Wheeler summarized the final findings from the CWD investigation that began in October 2020. The last remaining quarantined herd in Winona County was depopulated in October with no CWD detected. This herd, that had been under quarantine since October 2020 and tested 168 animals during quarantine, and three were positive. Brenda Hartkopf said having only three positive animals among so many seems odd. She asked for Dr. Wheeler’s thoughts on this. Dr. Wheeler said the Board is investigating the epidemiology reports and will be talking with the producer next week and in the future. Further research is needed because where CWD is coming from is unknown.

Dr. Wheeler showed the Board’s definition of CWD endemic area and what it means for herds in these designated areas. She then showed the endemic area map, which includes a new endemic area in Hubbard County. There are two WTD farms in this area, which were notified of the associated movement restrictions.

She then showed the definition of CWD endemic area and what is allowed and not allowed to move into Minnesota from endemic areas in other states. She then showed the USAHA’s resolution regarding endemic areas, which urges states to use proximity restrictions based on the best available science and to share that science with the public. Then she showed the Board’s definition of an endemic area and the DNR’s definition of a management zone side by side. The definitions are very different.

Dr. Wheeler called for more discussions and cooperation between state agencies and deer and elk producers. Previous discussions have not been effective. She suggested taking discussions in new directions to consider different CWD management solutions, such as an option to quarantine positive herds for five years and require participation in

genome sequencing research for CWD susceptibility, with any susceptible animals being removed, and Minnesota Center for Prion Research and Outreach (MNPRO) research on environmental testing. Other requirements could include annual rectal biopsy testing approved by the USDA, CWD testing for any animals that die, and biosecurity audits.

Genomic Testing in White-tailed Deer

Dr. Wheeler stated the Board was awarded cooperative agreement funding from the U.S. Department of Agriculture. The Board will use it to pay for testing to determine the genetic susceptibility of Minnesota's farmed white-tailed deer to chronic wasting disease (CWD). This testing will be conducted through the North American Deer Registry (NADR) and their affiliated laboratories (<https://www.nadeerregistry.com/>).

She described Dr. Chris Seabury's process in developing a genomic predictive system that gives individual animals a Genomic Estimated Breeding Value (GEBV), indicating their CWD susceptibility. Producers with animals in the study will also receive results on Polymorphisms in the Prion Protein Gene (PRNP) for each animal. PRNP are an important factor in influencing the susceptibility to prions and their rate of propagation. PRNP and GEBV are interpreted at the same time. Animals with an extremely negative GEBV and the Codon 96SS genotype will have a lower risk of developing CWD. She showed an example of the CWD Susceptibility Panel a producer would receive.

There was discussion on exercising extreme caution in selective breeding, as unexpected or undesired traits may emerge. Dr. Wheeler stated they understand there is a potential for unexpected traits, which would be addressed if they appear. This research is valuable to understanding CWD and disease susceptibility. The Winona County herd will be submitting all their adult animals for this genomics study. She is interested to see their GEBV scores, as so many animals in the herd did not develop CWD despite its presence in the herd. The producer did not choose these animals based on CWD susceptibility, but in choosing these animals for other desired traits, it will be valuable to know if he also inadvertently chose animals with lower CWD susceptibility.

Dr. Wheeler summarized the Board's goals for the Farmed Cervidae Program:

- Develop a detailed CWD response plan for farmed Cervidae in Minnesota.
- Evaluate current import requirements for farmed Cervidae and apply proximity restrictions based off best available science and make the science publicly available.
- Promote legislation that allows state and federal agencies, producers and hunters to work together to further CWD research.
- Work with state and federal partners, researchers and farmers to further research that promotes live animal testing and mitigating the spread of CWD.

U.S. SHIP/African Swine Fever Update

Dr. Brian Hoefs shared a brief history on African Swine Fever (ASF). In recent years, it has spread to Germany, with cases near the borders of the Netherlands, France, and Switzerland. In the Caribbean, ASF was detected in Haiti and the Dominican Republic, which are not far from Florida and the U.S. Dr. Hoefs also noted the threat of disease spread from feral swine, especially from a large population near the Canadian border.

If African Swine Fever entered the U.S., the results would economically devastate pork producers, pig farmers and anyone whose livelihood involves pigs. Consequences would include a halt in U.S. pork and pork product exports, a drop in hog prices of up to 50 percent, widespread disruption in production, job losses, culling of herds, and more.

Dr. Hoefs presented national and statewide ASF prevention strategies. National efforts include the "Beagle Brigade" to detect pork products at airports, border fencing to keep feral pigs out of the U.S., vaccine research in Vietnam, biosecurity, and the USDA's ASF protection zone in Puerto Rico and the U.S. Virgin Islands. State efforts include regular

meetings of the Emergency Disease Management Committee for Swine (EDMCS), the evolving Minnesota ASF Response Plan, and routine surveillance for ASF.

Minnesota works with federal officials, veterinarians, pork producers, packers, and academia on the U.S. Swine Health Improvement Plan (U.S. SHIP) to develop a nationwide plan with unified standards that can be updated as new science develops. State animal health officials can administer the plan to meet the needs of their state, and program participants implement the program. U.S. SHIP began as a pilot program in 2020 and will transition to USDA Veterinary Services in 2023.

U.S. SHIP has developed standards for enrollment, veterinary service providers, traceability, and sampling and testing. Their current resolutions include developing a repository for movement records, establishing a Feed Biosafety Working Group, beginning research on market haul sanitation, endorsing the Certified Swine Sample Collectors program, and the establishing the U.S. SHIP General Conference Committee.

Minnesota has 963 U.S. SHIP enrollments, with the majority (886) being growing pig herds. Dr. Hoefs thanked Michael Crusan, Bliia Kha, and Tony LaBarre for their work in getting U.S. SHIP enrollment available online.

Mr. Compart recalled there were problems in the Dominican Republic with depopulating herds and then repopulating the sites quickly. He asked if that situation had changed or what had happened. Dr. Hoefs said it has been difficult to know what is happening there. There is distrust in the U.S. government, an unstable government in Haiti, and people who are afraid of losing a major food source, so they do not tell anyone when their pigs get sick. At a conference in the spring, the Secretary from Department of Agriculture in the Dominican Republic spoke on the ASF situation, and it sounded like there is improvement in depopulation. However, Haiti is not doing anything to prevent ASF spread.

Dr. Hawkins asked if the ASF vaccine research in Vietnam is funded by the U.S. government, a production facility is there, and the vaccine and production would be viable if needed. Ms. Jill Resler said vaccine research is funded by the Swine Health Information Center, which is funded by the National Pork Board and Pork Checkoff. She clarified that there is no viable vaccine at this time. Dr. Hoefs stressed that use of an ASF vaccine would have major trade implications, so much discussion would be required before any vaccine use. He also mentioned there are two USDA grants that would fund ASF vaccine research in Vietnam.

Next Meeting and Adjourn

The next Quarterly Meeting of the Minnesota Board of Animal Health will be held on either February 7 or 8, 2023 (pending Dr. Fox's schedule), starting at 9:30 a.m., at a location to be determined.

Ms. Sawatzke called for a motion to adjourn the meeting. Mr. Compart made the motion, and Mr. Vagts seconded it. A vote was taken, with all voting aye to adjourn.

Respectfully submitted,

Dr. Marion Garcia
Executive Director
State Veterinarian