Midwest Fish and Wildlife Health Committee Annual Report May 26, 2023

Meeting Time and Place

Our annual meeting took place at the Holiday Inn and Conference Center in Deadwood, South Dakota and via video conference. The meeting began on April 11th, 2023, from 12 – 5:30 pm, and continued April 12th, 2023, from 8:00am – 5:00pm. Travel restrictions reduced available travel opportunities for some of our members.

Attendance

The 2023 Midwest Fish and Wildlife Health Committee Meeting was attended by representatives from 8 state or provincial wildlife agencies in person (MAFWA Members included: Indiana, Kentucky, Minnesota, Missouri, North Dakota, Ohio, South Dakota, and Wisconsin). The remaining states and provinces attended virtually (Illinois, Iowa, Kansas, Manitoba, Michigan, Nebraska, Ontario, and Saskatchewan). USDA-APHIS-Wildlife Services attendance occurred in person while USGS-National Wildlife Health Center, and the US Fish and Wildlife Service representatives attended virtually.

Executive Summary

Each state or province in attendance provided an update during the annual meeting on wildlife health initiatives, disease concerns, ongoing research in their jurisdiction, and work adjustments or problem solving to accommodate ongoing public health initiatives and emerging disease response, most notably highly pathogenic avian influenza. Additional discussion focused on emerging disease surveillance, CWD testing and research including updates on research efforts and management tools, SARS-Cov-2 in wildlife, and the committee began discussion on what the future of wildlife health looks like on a national to local scale.

In addition to updates and discussion on ongoing state programs, a number of outside speakers were invited to provide detailed information on a range of wildlife health topics. Bryan Richards provided a combined federal update on the Highly Pathogenic Avian Influenza virus that continues to circulate this spring, although at a level that has substantially reduced from last year for most Midwest states. Observations from over the course of this event include that multiple independent virus introductions into North America occurred from both the Atlantic and Pacific coasts; intraspecific scavenging in black vulture populations, that also socially nest, are suspected to have maintained local epornitics (outbreaks of disease in bird populations); spillovers occurred into mammal species but no clear evidence of terrestrial mammal to mammal transmission; and almost all currently circulating viruses are reassortments. Further discussion also occurred regarding a domestic dog that had been reported as testing positive. This dog had died in close duration with a known incident of exposure to sick waterfowl. Questions from the committee included if a full necropsy was conducted and if similar histopathologic lesions were detected in this dog that had been identified in other mammalian species. A request for further details has been made to elucidate the findings more fully. The current federal and most state guidance for domestic dogs (including those used in hunting) is to not feed raw meat especially game meat and to minimize contact with sick or already dead wild birds. The committee also discussed the species specific impacts that have been documented from HPAI mortality events

and how integration of surveillance, research, and management might occur this year as well as the goals of the program.

Patrick Hagen and Eric Hildebrand provided an update on Minnesota's White-tailed Deer targeted culling program. The presentation provided detailed information on the evolution of their program and efficiencies that have been developed through annual evaluation of the program. Updates have included using additional tools to trap or remove deer from priority locations to how to process and distribute non-detect venison through donation. The program has progressed to the use of cooperating processors to allow for less staff time devoted to deer processing. How to access effectiveness and creation of assessments for the program have also been a key component. Currently, new modelling efforts and genetic relatedness are part of investigative methods to evaluate the program's goals in relationship to CWD management.

Dr. Tom Deliberto provided an update on the USDA-APHIS SARS-CoV-2 wildlife projects and funding. Currently funding is appropriated to support research (identifying species at risk by receptor characterization, sero-surveys, and experimental infection), surveillance (surveillance in high-risk species and/or high risk environments) for the conduction of risk assessments, and management (develop and implement intervention tools). Successful proposals for a current round of funding should be out soon. An additional funding round may be available in the future.

Dr. Chad Lehman provided an update on a test and remove program of Bighorn Sheep *Mycoplasma ovipeumoniae* (Movi) carriers that is being evaluated in South Dakota. Bighorn sheep were reintroduced into South Dakota in the early 1900s. In recent years, three significant pneumonia die-off events have occurred from 2004-2016. The state set out to determine if removing chronically infected individuals from their populations would reduce the prevalence of Movi shedding and ascertain if the removals reduced pneumonia-related mortality. Multiple case control studies were undertaken. Results suggest that a few individuals may chronically carry Movi and following their removal there were significant reductions in adult mortality related to pneumonia and significantly increased lamb survival in those herds. In the question of removing a whole herd, this could be an option instead, however it is expensive. The vast network of roads through much of the South Dakota Bighorn sheep landscape allows for access to these herds to use a test and removal strategy.

Director Action Items

None at this time

Director Information Items

- ❖ Interviews have occurred for the Midwest Fish and Wildlife Health Coordinator position funded through the USFWS grant. The hiring announcement and introduction is planned to occur at the Midwest Meeting.
- ❖ The committee began discussing the future of wildlife health, impacts on MAFWA, and how we can collectively leverage a concurrent interest in One Health related initiatives. Of note this includes: (1) the recent AFWA "One Health White Paper," authored by Shane Mahoney, (2) the AFWA Director's resolution endorsing "One Health," (3) the AFWA President's

Task Force on One Health, (4) sessions at the North American and AFWA regarding the future of the North American Model, (5) the AFWA Healthy Fish & Wildlife Initiative, (6) the second Wildlife Health Forum, sponsored by FWS, and (8) a recent workshop on the future of surveillance and wildlife health. We understand that there will be a session at the Director's meeting in Green Bay that will consider these topics. Following on MAFWA's 2020 One Health Resolution, the Committee encourages consideration of how MAFWA can utilize the Committee and its members to collectively transition from primary focus on wildlife disease to wildlife health, from traditional focus on single species to ecosystem-level health, and consideration that the Committee can assist with leading MAFWA forward in this paradigm shift towards healthy systems.

- ❖ AFWA Federal Appropriations Recommendations for 2024 Federal Budget We recommend the following funding is needed to support state and tribal monitoring, research, and management of these diseases in free-ranging wildlife:
 - ➤ Chronic Wasting Disease-Equine/Cervid Health line item for CWD surveillance, research and management on wild, free-ranging cervids (USDA APHIS): \$30M
 - Fish, Amphibian and Reptile Health-surveillance, research, and management of emerging fish, amphibian, and reptile health issues. (USGS DOI): \$30M
 - Avian Influenza surveillance, research, and management on free-ranging wildlife (USDA APHIS, USGS DOI, SCWDS and NIH DHHS): 20M
 - ➤ White Nose Syndrome-surveillance, research, and management efforts (USFWS DOI): \$15M
 - ➤ Emerging Contaminants-research on impacts of (examples neonicotinoids and PFAS) to wildlife species (USFWS DOI): \$5M
 - ➤ SARS-CoV-2 potential, research and management on free-ranging wildlife, determination of susceptible species and transmission. (USDA APHIS, USGS DOI, CDC DHHS): \$10M
 - ➤ Bovine Tuberculosis- Ruminant Health line item for bovine TB surveillance, research and management on wild, free-ranging cervids (USDA APHIS): \$5M
 - ➤ USGS National Wildlife Health Center. The USGS National Wildlife Health Center is the only national center dedicated to wildlife disease detection, control, and prevention in the United States. Its mission is to provide national leadership to safeguard wildlife and ecosystem health through active partnerships and exceptional science.: \$3M
 - Southeast Cooperative Wildlife Disease Study (SCWDS), a state-federal wildlife health cooperative providing research expertise, diagnostic capacity, and training to agencies. SCWDS is instrumental in the protection of this nation's wildlife resources, domestic livestock interests, and human health.: \$3M
 - ➤ Wildlife Disease Monitoring and Surveillance program (USDA). This program provides wildlife disease assistance to states, such as CWD and bovine TB surveillance, feral hog control, and participation of wildlife disease biologists in state agency wildlife disease management activities.: \$3M

Time and Place of Next Meeting -

The next in person annual meeting is planned to be scheduled in April of 2024. Currently destination is tentatively scheduled to occur in Ohio.

Appendices

Appendix 1. Midwest Fish and Wildlife Health Meeting Attendees and Contact Details

Appendix 2. Agenda for the Annual Meeting

Appendix 1.

MAFWA Fish and Wildlife Health Committee Annual Meeting Attendees

	State/province/agency	Name	Email
In Person	Indiana	Mitch Marcus	mmarcus@dnr.in.gov
	Kentucky	Christine Casey	christine.casey@ky.gov
		Michelle	
	Minnesota	Carstensen	michelle.carstensen@state.mn.us
	Minnesota	Patrick Hagen	patrick.hagen@state.mn.us
	Minnesota	Erik Hildebrand	erik.hildebrand@state.mn.us
	Missouri	Sherri Russell	Sherri.russell@mdc.mo.gov
	North Dakota	Mason Ryckman	mryckman@nd.gov
	North Dakota	Charlie Bahnson	cbahnson@nd.gov
	Ohio	Mike Tonkovich	mike.tonkovich@dnr.state.oh.us
	South Dakota	Steve Griffin	steve.griffin@state.sd.us
	Wisconsin	Jasmine Batten	jasmine.batten@wisconsin.gov
	Wisconsin	Lindsey Long	lindsey.long@wisconsin.gov
	USDA/APHIS/WS	Tom DeLiberto	thomas.j.deliberto@usda.gov
Virtual	Illinois	Chris Jacques	Chris.Jacques@Illinois.gov
	Indiana	Michelle Benavidez Westrich	mbenavidezwestrich@dnr.IN.gov
	Iowa	Rachel Ruden	Rachel.ruden@dnr.iowa.gov
	Kansas	Shane Hesting	shane.hesting@ksoutdoors.com
	Manitoba	Richard Davis	richard.davis@gov.mb.ca
	Michigan	Megan Moriarty	moriartym1@michigan.gov
	Missouri	Sara Parker Pauley	Sara.Pauley@mdc.mo.gov
	Nebraska	Todd Nordeen	todd.nordeen@nebraska.gov
	Ontario	Larissa Nituch	larissa.nituch@ontario.ca
	Saskatchewan	Iga Stasiak	iga.stasiak@gov.sk.ca
	USFWS	Meg Kirchgessner	megan_kirchgessner@fws.gov
	USGS/NWHC	Bryan Richards	brichards@usgs.gov

Appendix 2.

Midwest Association of Fish and Wildlife Agencies Health Committee Meeting Agenda April 11-12, 2023

Deadwood, South Dakota

Tuesday, Apr	<u>il 11th</u>	
12:00	Welcome	Steve Griffin
12:15	Opening remarks and Introductions	Lindsey Long
12:30	State Summaries	State Representatives
2:30	Break	
2:45	State Summaries Continued	State Representatives
4:00	Federal Partner Updates	
5:00	Dinner, TBD	
Wednesday, A	April 12 th	
8:00	Opening remarks	
8:30	Welcome	Dir. Sara Parker Pauley
9:00	Highly Pathogenic Avian Influenza	-
	Federal Prospective	
	US Fish and Wildlife Service	Meg Kirchgessner
	USDA- Wildlife Services	
	USGS – National Wildlife Health Center	Bryan Richards
10:30	Break	
10:45	Updates on WI CWD research	Dan Storm
11:15	Minnesota's White-tailed Deer Culling project	Patrick Hagen and
	and it's effectiveness on CWD management	Eric Hildebrand
11:45	Wind Cave National Park CWD Research Update	Greg Schroeder or
		Glen Sargent
12:15	Lunch Break Prep	
12:30	South Dakota Elk movement and CWD	Steve Griffin
1:00	SARS-CoV-2 and Wildlife updates	
1:30	Case Studies for Test and Remove Bighorn Sheep	Dr. Chad Lehman
	Mycoplasma ovipneumoniae carriers in South Dakota	
2:00	The wildlife health workshop: What does the	Group Discussion
	future of wildlife health look like?	
3:15	Break	
3:30	Resolution Discussion and voting	Committee
4:30	Final Business	Committee
5:00	Wrap Up: Plan for 2024	