

MAFWA Legal Committee

Chair Keith Sexson, Assistant Secretary for Fish, Wildlife and Boating, Kansas Department of Wildlife, Parks and Tourism

Vice-Chair Tamara McIntosh, Attorney, Iowa Department of Natural Resources

Report:

In 2017, the Legal Committee met in conjunction with the Director's Meeting in Ashland, Nebraska. The focus of the 2017 meeting was to provide continuing education on legal issues related to natural resource protection. Specifically, there were presentations on a conservation update for the monarch butterfly, a wildlife criminal law update, two CWD case studies and analysis of special river designations and their impact on management.

There were 8 attendees at the committee meeting, representing 5 states, the federal government and one NGO partner. The meeting was very successful and the committee would encourage participation by the states in the future.



Midwest Association of Fish and Wildlife Agencies

Private Lands Working Group

And

Public Lands Working Group

Annual Report

2018

May 25, 2018

Respectfully submitted by

Kent Luttschwager and Kevin Kading

North Dakota Game and Fish Department

Public and Private Lands Committee Reports

Meeting Time and Place

The North Dakota Game and Fish Department (NDGFD) hosted the annual joint meeting from May 7 - 10, 2018 in Williston, North Dakota. This location was chosen to highlight the challenges and impacts facing fish and wildlife resources from oil and gas development in the Bakken oil fields.

Attendance

There were 55 attendees of the joint meeting. All member states were represented except for Kentucky. The AFWA Agriculture Policy Program Manager, National Wild Pheasant Plan Coordinator, U.S. Fish and Wildlife Service representatives and several NGOs also attended. See Appendix A for full attendee list.

Executive Summary

The meeting began with a joint session between public and private lands working groups. Director Terry Steinwand of the North Dakota Game and Fish Department welcomed the attendees followed by several talks including an introduction and overview of the Williston area and Northwestern North Dakota, with special emphasis on oil and gas impacts to fish and wildlife resources in the Bakken oil fields. There was a presentation about moose expansion into the prairies in North Dakota, an overview of the state's Outdoor Heritage Fund, a presentation from the ND Oil and Gas Division – Department of Mineral Resources about technology and development in the Bakken, a presentation by Ducks Unlimited on the impacts of oil and gas development on duck nesting ecology, a presentation by the US Fish and Wildlife Service on the importance of the small wetland acquisition program in the Prairie Pothole Region of the Dakotas and a presentation on the North Dakota Game and Fish Department's newly developed voluntary wind development guidelines. Following the joint session, attendees broke into public land and private land working groups for the remainder of the meeting.

Private Lands Working Group

This year's private lands working group discussions focused on potential changes in the 2018 farm bill, primarily changes impacting the Conservation Reserve Program (CRP). Other farm bill program priorities were also discussed. A few key conservation programs and efforts in North Dakota were showcased as well as general discussion about state's pollinator and monarch efforts and their relation to the Mid-America Monarch Conservation Strategy. The group felt this was a very productive meeting with relevant discussions. There is value in meeting counterparts from different states, comparing issues and challenges and working together toward solutions. The group encourages the Directors to continue their support for this working group.

2018 Farm Bill Update

AFWA's Ag Policy Program Manager, Andrew Schmidt, provided the group a summary of the House Farm bill (H.R. 2). There is much speculation that there will not be enough votes to pass H.R. 2). Chairman Conway is trying to get enough votes to bring the bill to the House floor in May. Chairman Conway is planning to limit amendments; an effort is underway to get sponsors who file an amendment to offer to support the bill. (Update: since the MAFWA meeting, the House rejected H.R.2 by a vote of 198-213.)

The Senate is expected to release a bipartisan bill sometime in May or early June. It's unlikely to contain as much of an increase for CRP cap as the House bill. AFWA and other organizations recently sent a letter to Chairman Roberts and Ranking Member Stabenow asking for their support of full baseline funding in the conservation title in the next Farm Bill.

CRP

The group had extensive discussions on proposed changes to CRP being discussed in the H.R. 2 and how they compared to AFWA's farm bill policy priorities. One key issue discussed was the CRP acreage cap. AFWA's recommendation was to increase the cap to 36-40 million acres. H.R.2 includes a step-up acreage cap of 29 million acres in 1 million acre increments by 2023. There is concern from the group over the inclusion of 3 million acres of CRP Grasslands as part of the 29 million acres. CRP Grasslands is proposed to be increased to 1 million acres in 2019 and 500,000 acres per year up to 3 million by 2023. Concerns are over CRP Grasslands not doing what it was intended to do, it is mainly enrolling native prairie and not expired CRP.

The group has concerns over proposed rental rates being capped at 80% of the estimated average county rental rate for initial reenrollment, with a declining scale for each subsequent reenrollment: 65% after first, 55% after second, 45% for third and 35% for fourth reenrollment. The intent of the rental rate cap is to provide cost savings to help pay for an increase in CRP acreage cap. The rental rate cap is intended to discourage productive cropland from being enrolled and will incentivize features like filter strips, buffers and other treatments for marginal lands. There is concern from the group that this change could have a negative impact on enrollment, however, others feel the focus on marginal croplands may not have a large impact. Another concern is the step-down rental rate caps for subsequent reenrollments, which could also have negative impacts on reenrollment.

The group discussed the proposed change to allow "certain continuous practices" to enroll in 15 or 30 year CRP contract lengths. With the proposed 80% rental rate cap this could be a positive or a negative, depending upon the situation. Some have concerns that producers will not want to enter into a long term contract at the lower rental rate. Others felt that this may be attractive to some producers knowing they will have the 80% rental rate cap for a longer period of time before they reach the next step-down rate. Group suggested improving the language to say "10", 15 or 30 years. There was some positive discussion for longer term enrollment options for SAFE and CREP.

H.R. 2 allows haying to no more than once every three years. Requires at least 25% of a CRP contract cover to be left unharvested in years when it is hayed. This would eliminate a whole CRP field from being hayed in one year. Hayed acres will receive a 25% reduction in rental payments. Allows more flexibility for grazing, Removes the limitation on CRP grazing of not more than once every 2 years and replaces it with "such frequency that contributes to health & vigor of established cover". Allows grazing during the primary nesting season at a 50% reduction in the stocking rate. Grazed acres will receive a 25% reduction in rental payments. Reduces cost-share from 50% to 40% and to 25% for seed costs related to establishment of cover. H.R.2 allows grazing as mid-contract management with no reduction in rental rates, this aligns with AFWA's recommendation.

Monarch and Pollinator Updates

North Dakota presented an update on the North Dakota Monarch Butterfly and Native Pollinator Strategy. Many states have developed their own plans or strategies. Most states have some form of urban pollinator program, school program or other community or backyard habitat programs. Michigan has developed EQIP funding pools for pollinators, landowner workshops and other educational and outreach tools. Various forms of research and monitoring is being conducted on pollinators/monarchs in different states. Some states are using plugs of milkweed to develop pockets vs. whole fields of pollinator habitat to be able to manage for monarchs while looking out for grassland nesting birds being impacted by earlier management. Ohio is having good success with pollinator workshops. Mid-contract management assessors in OH are collecting stem count data on CRP. There was an update and discussion on status of MAFWA Mid-America Monarch Conservation Strategy. Many state private land staff have been involved in the discussions about stem goals and other objectives but some have not been involved. It was suggested that private lands staff get involved in discussions about the Mid-America Monarch Conservation Strategy and other pollinator planning efforts in their state.

Precision Agriculture

Rachel Bush, North Dakota State Coordinator, Pheasants Forever, presented information on the Precision Ag partnership in North Dakota. Pheasants Forever is working with producers in a four-county area in North Dakota to implement conservation practices on areas of negative Return On Investment (ROI) through the use of AgSolver precision ag platform software. The North Dakota Game and Fish Department is providing funding for conservation practices as well as a precision ag and conservation specialist. Other partners, including soil conservation districts, North Dakota Department of Health and the North Dakota Natural Resources Trust are also involved with matching/supporting funds for the partnership. Several states expressed interest in this partnership and the group encourages the Director's to support similar efforts in their state.

Working Grassland Partnership

Kevin Kading, North Dakota Game and Fish Department and Terry Albee, ND Natural Resources Trust presented the Working Grassland Partnership (WGP). The partnership is centered on the North Dakota Game and Fish Department's State Wildlife Action Plan (SWAP). Several partners, including the North Dakota Game and Fish submitted a SAFE proposal – Declining Grassland Birds, which highlights several grassland birds of concern outlined in the SWAP, including the state bird, the Western Meadowlark. The SAFE proposal laid the foundation for WGP, which is partially funded through the state's Outdoor Heritage Fund. The concept of WGP is to provide infrastructure, such as fencing and water, on and around SAFE (and other CRP) to allow grazing as management and to ensure those areas remain in grazing production after the end of the CRP contract.

Other Farm Bill program discussions included the Voluntary Public Access and Habitat Improvement Program (VPA-HIP) and utilizing results of an economic study that was completed to request more funding. H.R. 2 proposed \$50M, AFWA's platform recommends \$150M over 5 years. Increased outreach may also help as all four members of the Ag. Committee have VPA-HIP in their state. There was a discussion on EQIP wildlife funding pools. Most states are meeting their five percent wildlife funding pool but there have been issues with signup struggles,

staffing issues, USDA unfamiliar with projects, etc... There are various Regional Conservation Partnership Program (RCPP) projects underway relating to cover crops, warm season grasses, Audubon's Conservation Ranching Program, and changes to USDA grass planting specifications to move from PLS to seeds per square foot. Many states are having a difficult time coming up with match for RCPP. It was noted that other non USDA federal funds can be used as a contribution towards RCPP.

National Pheasant Plan Update

Scott Taylor, National Wild Pheasant Conservation Plan Coordinator, Pheasants Forever, provided an update to the group. Scott provided information about guidelines the Technical Committee is working on, website updates, including a library of pheasant literature. He also provided information regarding pheasant habitat, populations and hunter participation for ten top pheasant states. He explained a brief outline of policy priorities, including farm bill programs and habitat modeling decision support tools being worked on with three joint ventures.

Field Tour

The private lands working group started off with a tour of an active oil drilling rig where we learned about the technology used in the Bakken. We looked at an example of a tract of land enrolled the North Dakota Game and Fish Department's Private Land Open To Sportsmen (PLOTS) program where habitat has been impacted by oil wells, increased truck traffic, pipeline easements, habitat fragmentation and other indirect impacts (noise). We also looked at three sites that are part of the US Fish and Wildlife Service Partners for Fish and Wildlife program. The sites consisted of an expired CRP tracts being used as pasture, bale grazing and cooperative grazing on a Waterfowl Production Area and adjacent private land. We looked at an example of a new CP37 planting in conjunction with the North Dakota Game and Fish habitat plots hunting access program. We looked at a large expanse of CRP that expired in 2017 which will likely revert to cropland. We wrapped up the tour at our final stop where we are trying some interseeding into expired CRP on some of our hunting access program lands. The group met up with the public lands working group at the Missouri-Yellowstone Confluence Interpretive Center for supper.

Public Lands Working Group

This year's Public Lands Working Group meeting focused on issues related to landscape impacts and Wildlife Management Area impacts, as well as discussion on budgets, WSFR Federal Aid, staffing and spending authority. States were requested to submit a condensed and brief individual report that highlighted their top issues and challenges so the Group could focus discussion on the challenges. Key discussion topics are included below.

Importance of MAFWA meeting

The overwhelming consensus of the Group is the MAFWA meeting is extremely beneficial to participants. The Group encourages Directors to continue to support attendance and participation for staff members attending the Public Lands Working Group MAFWA meeting. The meeting connects names and faces, and greatly enhances communication between states on success, failure, and how to avoid pitfalls or potential mistakes when implementing management actions. In addition, the annual meeting has resulted in the creation of a network between states that discusses issues electronically over the course of the entire year.

Funding, staffing, and Spending Authority

Although all states have different funding mechanisms, a vast majority of management activities implemented on Wildlife Areas are funded by 75% WSFR Federal Aid and matching 25% agency funds. For some states, staffing, funding, and projects are on hold because state legislatures may not understand the funding and often lump special fund agencies in with other state agencies which can be subject to spending cuts, hiring freezes, etc. Therefore, funding is not available in many states. Often states have needs, but agencies do not have spending authority.

Balance of Compatible Uses of Wildlife Areas, but staying relevant for outdoor use.

Wildlife Areas funded and managed specifically for fish and wildlife management purposes continue to see an increase in non-traditional uses. Requests continue for hiking, biking, horseback, ATV trails and other activities that may not be compatible. Many non-traditional users think Wildlife Areas should be managed for a park like atmosphere, which can conflict with habitat management objectives for enhancing wildlife production and use of the area and hunting opportunities. Conflict may arise between hunters and the non-traditional users. However, non-traditional users still bring people outside away from cell phones and computers thus making Wildlife Areas relevant and supported by the general public. A delicate balance exists managing public lands specifically for wildlife and non-traditional uses. General public use is encouraged, but habitat and wildlife management must remain a top priority while allowing some compatible use. This is especially important and needs to be recognized since there are requirements for federal WSFR funds that are critical to the management of the areas.

Gun Ranges

The Group discussed gun range issues and operations. Ranges provide for a much needed opportunity but are demanding for staff and time to manage. States discussed managing ranges on Wildlife Areas, State Park property, as well as MOU's with Friends Groups, and concessionaires. Many states are having troubles finding new range sites due to local opposition. Taxes on sales of firearms and ammunition and the resulting funding through Pittman-Robertson funds has been the backbone of Wildlife Area management. In addition, states are compelled to provide ranges that are open for public use. The original intent of ranges was for use by hunters preparing for the hunting seasons. However, there has been an increase in recreational shooting and an increased demand for ranges.

The collective concern of the Group was how to address continued wildlife habitat management funding with PR funds and still address the needs of recreational shooting. Habitat projects are a high priority, but recreational shooters are contributing excise taxes and may want additional ranges and opportunities. This is particularly concerning because ranges are often expensive to construct, time consuming, and expensive to manage and operate.

Land Management Partnership with Federal Partners

Most States manage some Corps of Engineers, Bureau of Reclamation, or other federal lands for fish and wildlife management purposes. There is occasional frustration by States due to federal regulations or requirements that are imposed by the federal partner. This includes prescribed burning standards and training, grazing as a management tool, administrative process and report

writing. The federal requirements are hampering aggressive wildlife habitat management projects.

Land Acquisition

States should prioritize land acquisition and further discussion is merited. States discussed concerns about buying Wildlife Areas near urban areas faced with urban sprawl and overuse; or to purchase cheaper lands more distant from urban centers.

Other Discussion Topics

Numerous other topics were discussed either as an agenda item, or as a result of State Reports, which generated discussion. Items included drones, neonicotinoid pesticides, partnerships, contracting for services, staffing, cooperative farming agreements, etc.

Director Information Items – Public Lands Working Group

Opportunity: Continued use and proliferation of drone ownership by hobbyists and use of drones as an agency management tool grows as the technology improves. States should continue to document impacts to wildlife and hunting. States continue to see a need for the development of official agency policies regarding drone use on public lands.

ACTION: None

Director Information Items – Public Lands Working Group

Opportunity: An annual discussion item is compatible use on public lands managed for fish and wildlife. Lands purchased for fish and wildlife production and hunting opportunities are continually viewed as opportunities for other outdoor related recreation. Impacts to wildlife, overuse by the public, conflicts between hunters, anglers, and trappers and non-traditional users continue increase and pose issues for land managers. However, non-traditional users still bring people outside away from cell phones and computers thus making Wildlife Areas relevant and supported by the general public. The 2017 Report identified two approaches to address the issue 1) Educate the public about funding sources used to purchase and operate these areas and 2) clearly specify in acquisition grants, the intended use of the areas as well as indicating that secondary uses are allowed as long as they do not conflict with primary use.

ACTION: None

Director Information Item – Public Lands Working Group

Opportunity: In 2016, the Public Lands Working Group submitted a resolution for the consideration to encourage evaluation of neonicotinoid pesticide treated seed use on public lands. States continue to pursue wildlife friendly alternatives, try to obtain non-treated seed, and support the discontinued use of neonicotinoid pesticides on state managed lands under its authority. The Working Group reaffirmed this position in 2017, and wished to continue their support in 2018.

ACTION: None

Director Information Item – Public Lands Working Group

A majority of habitat and public use management activities implemented on state Wildlife Areas are funded by 75% WSFR Federal Aid and matching 25% agency funds. In some states, Wildlife Management area staffing, support funding, and basic operations, maintenance, and development projects may at times be limited due to state legislatures and political leadership not fully understanding or appreciating the source or mechanisms by which wildlife management funding is derived. Thus, state wildlife agencies are often subject to fiscal limitations applied to other state agencies receiving general appropriations. Despite availability of both WSFR and license funds to address wildlife habitat and public use needs on state Wildlife Management Areas, fiscal limitations often equate to merely lack of available spending authority in management budgets. The Group discussed possible approaches to address this, including (1) the need for increasing communication with legislatures and other political leadership to better explain all aspects of WSFR (P-R/ D-J), and how this equates to local spending authority by on-the-ground managers; and (2) possibly develop a video to distribute to legislators and other state leadership explaining the issue.

ACTION: None

Director Information Items-Private Lands Working Group

Opportunity: The Mid-America Monarch Conservation Strategy is a high priority for MAFWA. Many state's private land staff have been involved in the discussions about stem goals and other objectives, but some have had little or no involvement. States should ensure that private lands staff, who implement private land projects, are involved in discussions about the Mid-America Monarch Conservation Strategy and other pollinator planning efforts in their state.

ACTION: None

Director Information Items-Private Lands Working Group

Opportunity: The increased emphasis on precision agriculture provides opportunities for conservation and habitat development on private lands. Directors are encouraged to consider developing precision agriculture partnerships in their state.

ACTION: None

Time and Place of Next Meeting

The next annual meeting will be held in May 2019 in Ohio.

Appendices:

Appendix A: Private/Public Lands Committee Attendance List

Appendix B: Joint Meeting Agenda

Appendix C: Private Lands Meeting Agenda

Appendix D: Public Lands Meeting Agenda

Appendix A

MAFWA Private/Public Lands Committee Attendance List

First Name	Last Name	Organization
Andrew	Schmidt	Association of Fish and Wildlife Agencies
Kaylan	Carrlson	Ducks Unlimited
Jonas	Davis	Ducks Unlimited
Mike	Wefer	Illinois DNR
Josh	Griffin	Indiana DNR
Dan	Eckstein	Indiana DNR
Pete	Hildreth	Iowa Department of Natural Resources
Brian	Hickman	Iowa Department of Natural Resources
Jake	George	Kansas Dept of Wildlife, Parks and Tourism
Dustin	Mengarelli	Kansas Dept. of Wildlife, Parks and Tourism
Wes	Sowards	Kansas Dept. of Wildlife, Parks and Tourism
Jason	Deal	Kansas Dept. of Wildlife, Parks and Tourism
Mike	Parker	Michigan Department of Natural Resources
Monique	Ferris	Michigan Department of Natural Resources
Earl	Flegler	Michigan Department of Natural Resources
Bob	Welsh	Minnesota Department of Natural Resources
John	Maile	Minnesota Department of Natural Resources
Lee	Hughes	Missouri Department of Conservation
Lisa	Potter	Missouri Department of Conservation
Terry	Allbee	North Dakota Natural Resources Trust
Rick	Warhurst	North Dakota Natural Resources Trust
John	Laux	Nebraska Game and Parks Commission
Pat	Molini	Nebraska Game and Parks Commission
TJ	Walker	Nebraska Game and Parks Commission
Eric	Zach	Nebraska Game and Parks Commission
Scott	Wessel	Nebraska Game and Parks Commission
Lucas	Negus	Nebraska Game and Parks Commission
John	Axtman	North Dakota Department of Mineral Resources
Doug	Howie	North Dakota Game and Fish Department
Todd	Buckley	North Dakota Game and Fish Department
Bill	Haase	North Dakota Game and Fish Department
Levi	Jacobson	North Dakota Game and Fish Department
Casey	Anderson	North Dakota Game and Fish Department
Jeb	Williams	North Dakota Game and Fish Department
Kent	Luttschwager	North Dakota Game and Fish Department
Nate	Harling	North Dakota Game and Fish Department
Jacob	Oster	North Dakota Game and Fish Department
Elisha	Mueller	North Dakota Game and Fish Department

Terry	Steinwand	North Dakota Game and Fish Department
Scott	Peterson	North Dakota Game and Fish Department
Sam	Oster	North Dakota Game and Fish Department
Jason	Smith	North Dakota Game and Fish Department
Brian	Prince	North Dakota Game and Fish Department
Kevin	Kading	North Dakota Game and Fish Department
Dan	Halstead	North Dakota Game and Fish Department
Kent	Reirson	North Dakota Outdoor Heritage Fund
Michael	Ervin	Ohio Dept. of Natural Resources
John	Kaiser	Ohio Dept. of Natural Resources
Scott	Taylor	Pheasants Forever/MAFWA
Rachel	Bush	Pheasants Forever
Paul	Coughlin	South Dakota Game, Fish & Parks
Mark	Norton	South Dakota Game, Fish & Parks
Scott	Mcleod	US Fish and Wildlife Service
Todd	Frerichs	US Fish and Wildlife Service
Monte	Ellingson	US Fish and Wildlife Service
Timothy	Lizotte	Wisconsin Department of Natural Resources

Appendix B

MAFWA Public and Private Lands Working Group Meetings May 7-10, 2018 Williston, North Dakota

Tuesday, May 8, 2018

- 7:00 - 8:00 Continental breakfast (provided with motel reservation)
- 8:00 - 8:10 Welcome and Introductions – Terry Steinwand, Director, ND Game and Fish Department
- 8:10 - 8:30 Introduction to Williston and Northwestern North Dakota/Housekeeping items - Kent Luttschwager, Wildlife Resource Section Leader, ND Game and Fish Department and Kevin Kading, Private Lands Section Leader, ND Game and Fish Department
- 8:30 - 8:50 Prairie Moose Update – Jason Smith, Big Game Biologist, ND Game and Fish Department
- 8:50 - 9:10 Outdoor Heritage Fund –Kent Reiersen, Outdoor Heritage Advisory Board
- 9:10 - 9:40 Oil and Gas in the Bakken – John Axtman, District Supervisor, Oil and Gas Division, Department of Mineral Resources, ND Industrial Commission
- 9:40 - 10:00 Effects of oil and gas development to duck nesting ecology – Kaylan Carrlson, Manager of Conservation Planning, Ducks Unlimited Great Plains Regional Office
- 10:00 - 10:30 Break – sponsored by the North Dakota Chapter of the Wildlife Society
- 10:30 - 10:50 USFWS Small Wetland Acquisition Program – Scott Mcleod, ND Partners For Wildlife Coordinator, US Fish and Wildlife Service
- 10:50 - 11:20 Wind Mitigation – Steve Dyke, Conservation Supervisor, ND Game and Fish Department

Appendix C

MAFWA Private Lands Working Group Meeting May 7-10, 2018 Williston, North Dakota

Tuesday, May 8, 2018

- 1:00 - 1:15 Review of 2017 MAFWA meeting and discussions
- 1:15 - 3:00 2018 Farm Bill update and CRP discussion – haying and grazing, ND MOU with FSA and conservation groups re: emergency hay/graze and discussion – All
- 3:00 - 3:30 Break – Sponsored by North Dakota Chapter of the Wildlife Society
- 3:30 - 4:00 Pollinator and Monarch Updates - All
- 4:00 - 4:20 Precision Ag. Partnership – Rachel Bush, ND State Coordinator, Pheasants Forever
- 4:20 - 4:40 EQIP discussion – what are states doing for wildlife with EQIP - All
- 4:40 - 5:00 Working Grassland Partnership – Kevin Kading, ND Game and Fish, Terry Albee, North Dakota Natural Resources Trust
- 5:00 - 7:00 Dinner (on your own)
- 7PM Social Sponsored by Pheasants Forever

Wednesday, May 9, 2018

- 7:00 - 8:00 Breakfast (provided with motel reservation)
- 8:00 - 8:20 North Dakota CREP Riparian Project, Kevin Kading, ND Game and Fish
- 8:20 - 8:40 National Pheasant Plan – Scott Taylor, National Wild Pheasant Conservation Plan Coordinator, Pheasants Forever/Midwest Association of Fish and Wildlife Agencies
- 8:40 - 10:00 Continued farm bill discussions
- 10:00 - 5:00 Depart for field tour (bag lunch provided – included in registration)
- 6:00 - 8:00 Dinner – Missouri-Yellowstone Confluence Interpretive Center (included in registration)
- 8PM Social Sponsored by Pheasants Forever

Thursday, May 10, 2018

7:00 - 8:00 Breakfast (provided with motel reservation)

8:00 -10:00 State reports (if time allows, otherwise, they will all be available in print form to members)

10:00 - 11:00 Action items for Directors, letters, resolutions, wrap up.

Appendix D

MAFWA Public Lands Working Group Meeting
May 7-10, 2018
Williston, North Dakota

Tuesday, May 8, 2018

- 1:00 House Keeping, Announcements
Local North Dakota Issues – Host Kent Luttschwager, NDGF
Review Mission - Kent Luttschwager/all
2017 Committee Report to MAFWS Directors – Nebraska Rep
State Highlights of Issues and Challenges
- | | |
|----------|--------------|
| Colorado | Minnesota |
| Illinois | Missouri |
| Indiana | Nebraska |
| Iowa | North Dakota |
| Kansas | Ohio |
| Kentucky | South Dakota |
| Michigan | Wisconsin |
- Habitat Conservation Plan to address incidental take issues surrounding listed bats in Missouri - Lee Hughes
Cooperative Farming/Sharecropping Agreements – Mike Ervin/all
Electronic permits – Dustin Mengarelli
How other states deal with Oil and Gas Issues on fee title lands, and leased lands – all
Drones – all
UTV trials and tribulations – Bob Welsh/all
Urban sprawl/overrun WMA’s Dustin Mengarelli/ Carl Flegler
Public Lands Information, public lands, mobile apps, website - all
Neonicotinoids – all
External Audit – all
Federal Aid/WSFR –Nick Palia USFWS

Thursday, May 10, 2018

- Continued State Highlights of Issues and Challenges
Wrap up and adjourn

2018 AMFGLEO Report to MAFWA Directors
Presented by Bob Timian
AMFGLEO President/North Dakota Chief Warden
Bismarck, North Dakota
June 26, 2018

The Association of Midwest Fish and Game Law Enforcement Officers (AMFGLEO) was chartered in February 1944 at Lincoln, Nebraska. There are currently 23 member agencies from Canada and the United States. The AMFGLEO meets every year taking turns in different states and provinces.

The AMFGLEO meets annually in the spring/summer. The sessions are designed to allow field personnel and law enforcement staff to learn about new issues in wildlife enforcement, discuss items of mutual interest and to develop and maintain contacts that facilitate interstate and international investigations of resource violations.

Every third year (this year) our meeting is in conjunction with the MAFWA Directors and we always look forward to the interaction with the leaders of our different agencies. Next year our meeting will be with the Midwest Investigators in Colorado followed by a stand-alone meeting in Ohio for 2020 before starting the rotation over again. These meetings have been beneficial to the member agencies. Over the years, the AMFGLEO has become the lead group among wildlife enforcement organizations in the development and maintenance of training for field officers that protects the resource and benefits the citizens of our states, provinces, and countries.

The AMFGLEO developed the *Wildlife Forensic Field Manual*. The 4th Edition was published in April 2012. AMFGLEO sells the manual to interested states, provinces and individual officers, private citizens, attorneys, colleges and universities. The AMFGLEO has supported wildlife enforcement research through grants from our treasury.

The AMFGLEO has standing committees that survey the member agencies and present reports such as training issues, legislation and forensics. The AMFGLEO also recognizes the officer of the year in the member agencies and may develop resolutions about issues effecting wildlife law enforcement.

Each year AMFGLEO publishes an annual agency report covering Training; Funding and Staffing Issues; Major Conservation Law Enforcement Trends; Unique Cross Boundary or Cooperative, Enforcement Efforts; New Innovations in Conservation Law Enforcement; State, Regional and National Issues, Legislation, Legal Challenges and Court Decisions Impacting Natural Resources Law Enforcement; Cost Savings Initiatives; and, Other Special Law Enforcement Issues. This year's report is 77 pages long so will hit a few of the highlights.

Training

Many states are training officers on the use of naloxone. To further combat the opioid epidemic many officers now carry the opioid antagonist, Narcan.

Missouri is also working to develop a law enforcement ranking system to provide a clear chain-of-command statewide, create additional promotional steps between the conservation agent and district supervisor positions and better prepare agents for future leadership opportunities.

Texas hosted a training for eighteen Texas Game Wardens designed to teach adaptive leadership principles with the understanding that leadership can occur at all levels, regardless of rank. The assistance of Randy Stark and the National Association of Conservation Law Enforcement Chiefs is much appreciated.

Funding and Staffing Issues

Recruitment and retention of officers is a challenge with vacancies due to resignations, retirements, and decreasing applicant numbers. Agencies has been trying to actively recruit to fill vacant positions as budgets allow as significant number of officers have retired over the past ten years. Many officers will leave the natural resource agency's law enforcement position and move to other more traditional law enforcement jobs that offer more money and better benefits.

Many agencies are struggling with pay compression issues and how to fix that issue among their staff.

Many natural resource law enforcement branches or agencies are struggling with equipment issues such as with vehicles, boats, ATV/UTV, radios.

Major Conservation Law Enforcement Trends

Many agencies are struggling with how best to engage with non-consumptive users, such as kayakers and mountain bikers.

Many agencies are joining various state and federal law enforcement task forces such as Joint Terrorism, etc.

Unique Cross Boundary or Cooperative, Enforcement Efforts

Since wildlife law violators operate across state lines there has been many successful cooperative law enforcement efforts among member states to include major investigations and invasive species surveillance. Agencies law enforcement personnel works cooperatively with many state agencies, federal agencies and other law enforcement/judicial entities.

A good example is Illinois has two officers dedicated to a task force for identifying and apprehending persons involved in the importation of invasive and disease susceptible aquatic life, primarily Asian Carp. Another example from Minnesota is the import/export of minnows related both to the potential for disease and aquatic invasive species transmission between states.

New Innovations in Conservation Law Enforcement

Smart phone tracking applications are now available to track officers for officer safety as well as smart phone mapping capabilities to help locate a poacher's activities. An officer can pinpoint the location of where a subject has been or their traveling patterns with probable cause of a violation combined with a subpoena/search warrant. This information is invaluable when investigating trends of taking animals in closed areas, use of improper licenses, borrowing/loaning licenses, and the taking of animals before purchasing a license.

"Internet wildlife" crimes with all the social media outlets are ever increasing. Probable cause of a violation via social media continues to be more and more prevalent. There are continual advances in digital evidence analysis and technological data evidence capabilities to combat these internet wildlife crimes.

Many agencies continues to promote or move towards electronic hunting and fishing licenses.

Many agencies are starting to develop policies, get licensed certified pilots and use drones in natural resource management and enforcement efforts.

More and more agencies are going to electronic citations and Nebraska is mandated to go to electronic citations by 2020.

Many agencies such as Ohio are looking at or implementing a digital law enforcement records manage system (RMS). The addition of the RMS will allow officers within the agency to share in a statewide digital database of activity. This will provide for improved officer safety, intelligence sharing as well as agency wide case management component to be utilized to improve the efficiency and effectiveness of the entire law enforcement program. Most RMS includes a statewide fully integrated evidence management module. Property and evidence is identified and labeled, the storage location is updated, the status of the item is updated and a complete chain of custody is maintained.

Oklahoma Department of Conservation, Law Enforcement Division implemented a law enforcement Facebook page edited by selected game wardens. The page continues to be instrumental in developing leads in wildlife cases from the public, and serves as a method to provide feedback from the public on law enforcement efforts. The benefit of social media is low cost to the agency and the ability to disseminate focused information to interested constituents.

Many agencies, including Ontario are going away from laptop computers in officer vehicles to tablets with docking stations.

State, Regional and National Issues, Legislation, Legal Challenges and Court Decisions Impacting Natural Resources Law Enforcement

Wildlife and outdoor spaces are among our most valuable and valued resources. They enhance our quality of life, bring us prosperity and represent our heritage. Citizens depend on our agencies to deliver on its mission and ensure future generations have access to the quality hunting, fishing and parks recreational opportunities available today.

Many states saw several changes in resource law this legislative season. Such as funding streams, forfeiture law, mandated training, etc.

Many states continue to receive pressure from tribal governments and others when it comes to expanding treaty rights. Some entities are still searching for a “test case” of those rights.

As of May 1, 2018, Missouri Department of Conservation is still waiting on a Missouri Supreme Court Decision regarding a lawsuit filed by the captive cervid industry over the authority to regulate confined cervids. The Department is patiently awaiting this landmark decision that will have implications for the health of Missouri’s fish, forest, and wildlife resources beyond just captive cervids.

Cost Savings Initiatives

Grants through the International Wildlife Crime Stoppers Association has allowed some agencies to purchase wildlife decoys.

Agencies are using the volunteer programs to assist officers including enforcement patrols, outreach and education programs, training scenarios and wildlife surveys. The volunteer program is also a valuable recruitment tool.

Most agencies have equipped their officers with smart phones. Many officers have utilized the camera, voice and video records and GPS functions of the phones to assist in several outstanding enforcement cases. Over time, micro recorders, video recorders and small digital cameras can be replaced as a cost savings measure.

Other Special Law Enforcement Issues

Many agencies are involved in feral hog issues and termination within their respective states.

Many agencies see a need and are expanding or looking to expand long-term investigation capabilities to combat illegal trafficking and commercialization of wildlife.

The Ohio Division of Wildlife transitioned to a new platform and vendor for its customer licensing, game harvest and event management system. A component of this system compares reported game harvest of deer and wild turkey to several parameters relating to harvest and licensing regulations. Abnormalities are flagged and officers review the harvest error as a basis for beginning an investigation. Several outstanding cases have been made as a result of one flag in a reported game harvest.

NATIONAL CONSERVATION NEEDS (NCN) REPORT 2018

NCN Committee: Jim Douglas, Dale Garner and Kelly Hepler

In February of this year, Executive Secretary Ollie Torgerson assisted MAFWA's National Conservation Needs (NCN) Committee (Jim Douglas, Dale Garner, Kelly Hepler) in soliciting proposals for a NCN priority submission for consideration by the National Grants Committee. The National Grants Committee convenes at the North American Conference each year and prepares a list of the priorities for the State Directors to approve at the annual business meeting.

This year, MAFWA was again approached by the AFWA's Bird Conservation Committee and asked to co-sponsor a submission entitled "Grassland Conservation and Awareness: Enhance, Protect, Conserve and Restore a Diminishing Ecosystem". MAFWA's NCN Committee and Executive Committee were afforded the opportunity for coordination and approved language related to the proposal. A copy of this proposal is attached. The joint proposal was approved by MAFWA's Executive Committee and submitted on time to the National Grants Committee.

The NCNs selected and approved by the State Directors included our proposal. The selected NCNs which help establish the states' funding priorities for the current grant funding cycle are attached.

The Association of Fish and Wildlife Agencies solicited Letters of Intent to address the selected NCNs. I advised Ollie Torgerson to check with MAFWA Committees prior to the May 4, 2018 deadline about any intentions to submit Letters of Intent relative to the selected NCNs. The grasslands letter of intent was submitted on time

Our hope is to be invited to prepare a full project proposal by the August 3 deadline for final competition in the multi-state conservation grant funding process. The MAFWA Executive Committee has agreed to become the banker/administrator of the grant proposal if it is selected for funding.

Respectfully submitted,

Jim Douglas

Grassland Conservation and Awareness: Enhance, Protect, Conserve and Restore a Diminishing Ecosystem

Submitted by: Bird Conservation Committee, co-submitted by MAFWA

Statement of Need: The grasslands of North America include diverse ecosystems like tallgrass, mixed-grass, and shortgrass prairies, desert grasslands, hardwood and pine savannas and private agricultural hay and pasture lands. These ecosystems have experienced persistent, long-term erosion in both quantity and quality. Threats such as agricultural intensification, invasive species, climate change, energy development, urbanization, and other development continue to take their toll; for example, based on World Wildlife Fund's 2016 Plowprint Report, 53 million grassland acres have been lost since 2009 in the Great Plains alone. This has led to alarming declines in a variety of grassland-dependent species (notably birds and pollinators, several of which have become candidates for listing as threatened or endangered), revealing an urgent need to raise awareness and develop strategies to stem the loss of our nation's grassland ecosystems, and to restore grassland functions as wildlife habitat. Since a significant proportion of our intact grasslands are privately owned, conservation efforts must involve local communities in the design, implementation and evaluation of their intended investments and outcomes.

Desired Proposals: Grant recipients would compete for Multi-state Conservation Grants (MSCG) to:

- Quantify recent changes to grassland ecosystems (loss to conversion, fragmentation, and invasion); assess their condition, quality, and distribution; and improve tools for remote sensing.
- Identify grassland habitat needs (acreage, condition, distribution, priority areas, etc.) and conservation tactics (enhancement, easements, restoration, etc.) to most efficiently achieve the goals and objectives of State Wildlife Action Plans, state pollinator plans, and/or multi-state wildlife planning documents (e.g., national bird plans, joint venture plans, etc.)
- Create support systems (e.g. landowner cooperatives, inter-agency communication opportunities) to deliver grassland conservation on private and public land to improve ecological condition, restore natural processes, and prevent the decline of intact, healthy grasslands for the benefit of multiple species through Farm Bill programs, foundations, states and other funding entities.
- Develop ways to track and share conservation delivery efforts to measure the impact of programs and conservation plans on programmatic, bird population, habitat, and human dimension objectives
- Raise public awareness of the importance of healthy and diverse native grasslands, and coordinate and focus federal initiatives (including Farm Bill programs) to maximize impact and results
- Fill in key knowledge gaps for grassland bird conservation, including fine scale distribution, habitat requirements, migratory connectivity, limiting factors, and population response to management and other impacts, such as ancillary benefits to pollinators.
- Increase understanding of human perceptions and decisions related to grassland management, conservation outcomes, and incentive efficacy, particularly regarding grazing lands

Desired Outcomes: Desired outcomes of successful proposals would include:

- Expansion and improvement of effective and efficient grassland conservation programs and monitor the impacts of these programs on both ecological functions and human well-being
- Full implementation of existing strategic grassland conservation plans designed to support specific regional and national wildlife population goals, and development of new plans, where needed.
- Increased public appreciation and support of functioning grassland ecosystems
- Promotion and support of agricultural practices like holistic grass-based livestock grazing operations that have been demonstrated to sustain birds, pollinators and other species of concern
- Advancement of science regarding limiting factors and management of healthy, diverse native grassland for wild bird populations and multiple species benefits, including pollinators

Midwest Association of Fish and Wildlife Agencies State Wildlife Action Plan Technical Working Committee Report

Meeting Time and Place – The committee held quarterly conference calls and one in-person meeting over the last year.

Conference calls were held on September 5 and December 5 2017 and March 5 2018.

The in-person meeting was held on May 2-3, 2018 in Omaha, NE at the Papio Missouri Natural Resources District Headquarters See Appendices for meeting agenda and attendance list.

Committee members from 11 of the 13 states participated. The State Wildlife Action Plan Technical Committee includes State Wildlife Action Plan Coordinators, Wildlife Diversity Coordinators, and Threatened and Endangered Species coordinators from the MAFWA states(See attached list of members: Appendix II); all were invited.

Director Information Items

1. State and Tribal Wildlife Grant (SWG) Funding
 - a. The “Formula” (as opposed to Competitive) SWG funding apportionment will be \$50.8M for FY18.
 - b. SWG was zeroed out in president’s budget before being reinstated to current funding level. Was also zeroed out in president’s proposed FY19 budget.
 - c. 2010 marked the highest SWG apportionment (\$76.5M) since its inception in 2002.
 - d. Previous two years funding for formula SWG 2016 (\$50M) and 2017 (\$52M).
 - e. For the Competitive Program, MAFWA SWAP coordinators are concerned that this year’s proposal ranking process gives priority to federal Candidate species. There is currently only one Candidate species (Rattlesnake-master borer moth) in our region. This limits the species that MAFWA states could work on cooperatively.
 - f. Technical Committee members ask for your continued support to increase funding levels for both the annual apportionment and competitive SWG. SWG remains the primary funding source for rare and declining species conservation and State Wildlife Action Plan Implementation.

2. Recovering America’s Wildlife Act
 - a. At the time of this report, 57 representatives have signed on to co-sponsor the Act, but more are expected to be added. A senate introduction is anticipated soon.
 - b. Should the Act pass, State Wildlife Action Plans will play a significant role in carrying out delivery of conservation funding.
 - c. Technical Committee members appreciate the directors’ past support and ask for continued support of the Act.
 - d. The members of this Technical Committee pass along a request from the Alliance for America’s Fish and Wildlife to contact your state’s delegation or attend the Fly-in to support the Act.

3. USFWS 7 Year Endangered Species Listing Work Plan
 - a. Technical Committee members believe it would be beneficial for states to participate in the listing process as new species are added.
 - b. Technical Committee members will contact FWS Region 3 representatives to discuss key places in the process where states can participate. Committee members are currently developing a process to identify Species of Greatest Conservation Need shared within MAFWA to prioritize conservation across state boundaries and better prepare our agencies to respond most efficiently should any of the selected species be petitioned for federal listing.

4. Landscape Scale Conservation
 - a. Discussed many ideas at the meeting on how funds available for landscape conservation projects would best serve the mission and goals of this Committee.
 - b. Two potential projects the Committee would like to submit to the Directors.
 - i. Fund a coordinator for our MAFWA SWAP committee.
 - ii. Develop an on-line, interactive, planning tool that combines MAFWA priority species and natural communities along with other physical, biological and ecological characteristics to allow MAFWA and its partners to query, map, assess and models for directing conservation work.
 - c. The Technical Committee members ask for your support of these ideas for LCC funding.

5. Listing Process
 - a. It was asked of this committee to better explain the current T&E listing process and when during the process states can best supply information, develop conservation plans or engage in USFWS decision processes and criteria for when each of these options are best utilized. A summary is being developed by the Technical Committee and will be shared with Directors upon completion.

Director Action Item

1. Migratory Bird Treaty Act Letter
 - a. MAFWA SWAP coordinators are concerned with new interpretations of the Migratory Bird Treaty Act from USFWS that indicates that incidental take will no longer be considered a violation of the Act.
 - b. The Technical Committee members have drafted a letter and request your consideration of sending the attached draft letter to USFWS on behalf of MAFWA.

Time and Place of Next Meeting

The committee will continue to hold quarterly conference calls. The next in-person meeting will be held in the spring of 2019 and North Dakota will be the host state.

Appendix 1. Meeting Agenda

MAFWA SWAP Technical Committee – May 2 and 3rd

Meeting Location: Papio Missouri Natural Resources District Headquarters

8901 S. 154th Street, Omaha, NE 402-444-6222

<https://www.papionrd.org/>

May 2

- 8:30 Introductions
- 9:00 Round Robin from States – Tools/solutions worth sharing among states regarding SWAP Implementation
 - CERT tool example (Rick Schneider)
 - BISON – related to 7 year listing proposal (Tentative: Amy Derosier and Abby Benson USGS – phone in)
- 9:30 Region 3 Update –Kate Parsons/Amy
- 10:00 Break
- 10:30 Revisiting the expansion of the mission of this group – Discussion. Create separations from USFWS Region 3 SWAP group of roles.

- 11:00 Overview of ESA listing process – Dan Kennedy/Eileen?
- How should we as a committee interact during or prior to the listing process?
 - Proactive and reactive approaches
 - Other USFWS regions? See if a region 6 and region 3 person can share perspectives.
 - Outcome – Preferred Diagram/white paper of MAFWA SWAP Committee interaction with the federal process (this may need to be vetted with the USFWS for accuracy so will be draft)
- 12:00 Lunch
- 1:00 ESA process discussion continued
- 2:00 7 Year Work Plan for Region 3 and 6. Which species should be MAFWA’s responsibility or which ones should MAFWA have a lead role?
- What criteria makes it a MAFWA creature? Geography, timeline, USFWS region
 - Outcome – Priority list of MAFWA species
 - Are there state leads?
- 3:00 Break
- 3:30-5:00 Landscape Scale Conservation Accomplishments – Other regions have accomplished across state decision support tools. Sometimes with LCC, sometimes with AFWA regional Association. Is there a need/opportunity for the Midwest?
- Brief update of examples CHAT (Rick Schneider), North East (Amy D), South East (Katy R), Conserving Nature’s Stage (Rick Schneider).
 - Discussion from group.

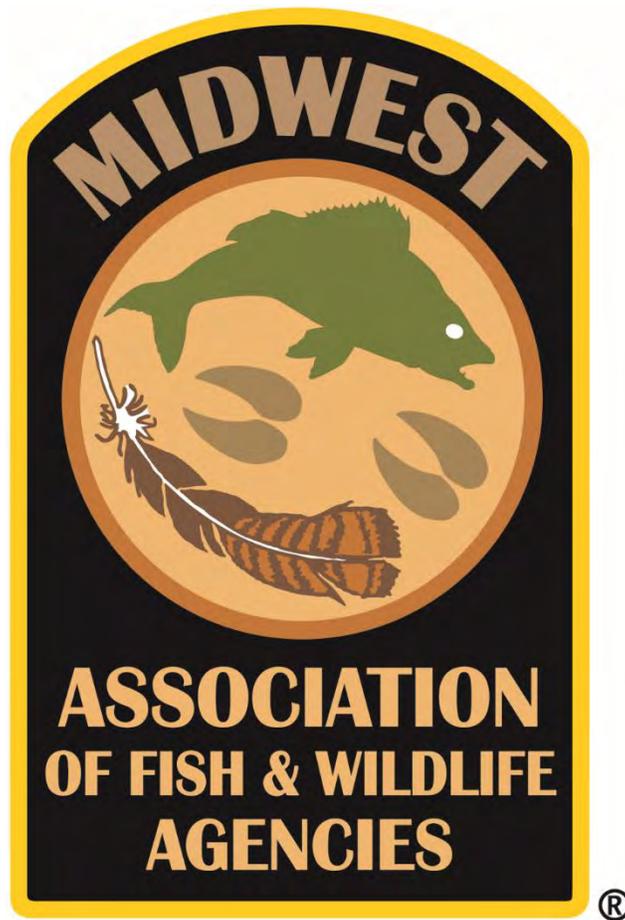
May 3rd

- 8:30 MAFWA SWAP/TE needs
- Current priority species, habitats, issues or overarching threats
 - Outcome: Priority list of these pressing needs
 - Do SWAP needs and 7-year work plan priorities (developed day 1) match? Align? Compliment? Opposite?
- 10:00 Break
- 10:15 Landscape Conservation Decision Support Tools – our list of ideas
- 12:00 Lunch
- 1:00 Director Action Items
- 1:30 Next steps for our Committee
- 2:00 Adjourn

Appendix 2. In-person meeting attendance list

<u>State</u>	<u>Attendee</u>
IA	Karen Kinkead
IA	Kelly Poole
IA	Katy Reeder
IL	Leon Hinz
IN	Brad Feaster
KS	Chris Berens
KY	N/A (Laura Buford)
MI	Amy Derosier
MI	Dan Kennedy
MN	N/A (Rich Baker)
MO	Kelly Rezac

MO	Nathan Muenks
NE	Kristal Stoner
NE	Rick Schneider
NE	Melissa Panella
ND	Patrick Isakson
OH	Kate Parsons
OH	Erin Hazelton
SD	Eileen Dowd-Stukel
WI	Shari Koslowsky
MAFWA	Claire Beck



Midwest Fish and Wildlife Health Committee Meeting

April 24-25, 2018

Traverse City, MI

Hosted by:

Michigan Department
of Natural Resources



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Michigan.....	xx
Minnesota.....	xx
Missouri.....	xx
North Dakota.....	xx
Ontario.....	xx
South Dakota.....	xx
Virginia.....	xx
Wisconsin.....	xx
Appendix IV: USGS National Wildlife Health Center Report.....	xx

Meeting Time and Place

April 24-25, 2018
Traverse City, MI

Agenda: see Appendix I

Attendance

Attending this year's Midwest Wildlife and Fish Health Committee Meeting were representatives from 12 state fish and wildlife agencies: Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, North Dakota, Ohio, South Dakota, Virginia, and Wisconsin; 1 provincial wildlife agency: Ontario; and representatives from two federal agencies:

- the United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (USDA-APHIS-WS), and
- the United States Geological Survey, National Wildlife Health Center (USGS-NWHC)

A total of 24 individuals attended (Appendix II), including an invited guest from Michigan State University. In addition, 5 individuals participated in the meeting remotely, including an invited speaker from Pennsylvania, and representatives from the Southeastern Cooperative Wildlife Disease Study (SCWDS), Michigan State University, and the Michigan Department of Natural Resources. Kansas, Nebraska, Manitoba and Saskatchewan were not represented.

Executive Summary

Disease Reports

Each state or province in attendance, the National Wildlife Health Center, and USDA-Wildlife Services provided an update on the wildlife disease issues within their jurisdiction. For your convenience, an index of disease reports is included in Appendix III.

Michigan CWD: Post Symposium, Dr. Kelly Straka, Michigan DNR

CWD was first detected in a captive deer in 2008. In Michigan, captive deer are referred to as privately-owned cervids (POCs). Three years of surveillance around the index facility yielded no CWD-positive free-ranging deer. Michigan's first case of CWD in the free-ranging deer herd was detected in 2015, two counties southeast of the index facility.

From 2015-2017, surveillance detected 9 more CWD positives between two counties (Ingham and Clinton) of the south central lower peninsula. In April 2017, Michigan's Natural Resources Commission requested the formation of a CWD working group to recommend further steps and actions to substantially mitigate or eliminate CWD in Michigan. To better inform these recommendations, a two-day CWD Symposium with 20 speakers from 10 states was held in October 2017. This symposium presented cutting edge research and management strategies for CWD; several members of the MFWHC were in attendance or invited to speak.

In October 2017, a youth hunter voluntarily submitted a CWD-positive deer from Montcalm County. By January 2018, a total of 57 CWD-positive deer had been identified; with 48 of them in the area of the October 2017 detection.

The CWD Working Group developed a recommendation report for the January 2018 meeting of the Natural Resources Commission. 5 main recommendations were brought forward, divided into 4 topic areas: communication, research consortium, farmed cervidae and harvest and removal. Each topic area was determined to be addressed during monthly NRC meetings from February through June. The Department began a process to co-create a strategy moving forward through significant engagement efforts. Focus groups were held with stakeholder leadership; these were outcome-based conversations to determine goals for CWD management within the state. Concurrently, public meetings were held across the state where DNR staff were asked to listen and gather information. Finally, audience research through a deer harvest survey and a public and hunt survey gauged public understanding and desires. From these efforts, the following five management objectives were identified:

1. Preserve deer hunting opportunities for future generations
2. Slow the spread of disease
3. Maintain low prevalence rate
4. Continue a strong and transparent communication process
5. Fill information gaps in our knowledge of CWD science and management

Bovine TB-History and Update, Dr. Dan O'Brien, Michigan DNR

The history of land use in northern MI is important to understand how bovine tuberculosis (TB) became endemic in Michigan's free-ranging deer. Pre-settlement was a period of logging, and the cleared lands gave way to new habitat growth and a burgeoning deer population. Commercial deer hunting drastically reduced deer numbers, and landowners began purchasing large tracts of land for livestock and wildlife conservation.

In the 1920s, bovine TB reactor rates in cattle rose to 20-30% in some areas, setting up ideal conditions for spillover into wildlife, primarily deer. The history of land ownership is an important factor, as >90% of the core TB outbreak area is privately-owned, much of it managed purposely for deer abundance and age, for more than a century.

Michigan has tested over 250,000 deer for TB, and has the longest running continuous wildlife TB surveillance program in the world. As of March 8, 2018, there have been 872 cases of bovine tuberculosis in Michigan's free-ranging deer and 72 infected cattle herds. While apparent prevalence trends in deer have been relatively stable since the early 2000s, recent years are approaching a significantly increasing trend. Of 49 positives in 2017, 15 were outside the TB core area (DMU 452).

The combination of increasing trends in prevalence and concurrent declines in hunter numbers raise questions about future management of bovine tuberculosis. Relying on hunter harvest to control the disease is no longer likely to be successful, so alternative solutions must be developed.

In addition to cases in cattle and deer, there have been three zoonotic cases of tuberculosis caused by *M. bovis* in Michigan. One of these cases involved a hunter who contracted a cutaneous form of the bacteria through an injury sustained while field dressing a TB-positive deer.

Whole genome sequencing is emerging as a powerful tool for investigating bovine TB transmission. Both Michigan and Minnesota TB strains originated in the same lineage: EU1. This comes from old European strains moved to the U.S. in the 1700-1800s. However, the isolates in Michigan are divided into 4 separate clades, suggesting the disease has been there a long time. By the time Michigan had started actively managing for TB in 1995 this divergence had already occurred. Minnesota TB strains do not reflect this diversity; the disease was likely caught at an early stage of infection.

Whole genome sequencing has also shown that furbearers are not likely playing a significant role in the epidemiology of the disease in Michigan.

CWD Research Update, Dr. Lindsey Long, Wisconsin DNR

Southwest Wisconsin CWD Deer and Predator Study is seeking to answer to main questions: What are deer dying from? and What kind of impact is CWD having on the population? Although so far a small sample size, initial results suggest deer positive on RMALT are dying at a higher percentage than deer that do not have CWD detected via RMALT test.

One challenge with the diagnosis of CWD is that commercially-available tests are to be used postmortem; live animal tests are limited in availability, and those options that are available have reduced sensitivity when compared to post-mortem tests and other complicating factors that must be assessed. Tonsil biopsy was originally considered but studies in mice indicate that damage to oral mucosa can make animals susceptible to CWD infection. Also, cost of disposable equipment for the tonsil biopsy procedure was a limiting factor in study design. Based on these considerations, rectoanal mucosa-associated lymphoid tissue (RMALT) was determined to be the most prudent option for a survival analysis study in this area to reduce possibility of CWD transmission/incidence being increased iatrogenically through sampling procedures. It must be analyzed recognizing the limitations on detecting early CWD positive deer.

The RMALT requires a small piece of rectal mucosa removed (about size of penny) for testing. The mucosa must include 6 follicles on slide for the test to be valid, unless there is an obvious positive result.

It is important to remember that there is no assay available to definitively declare an animal CWD-free; results are given as positive or not detected.

The draft USDA CWD Program Standards are considering the use of RMALT to test herds that are under quarantine but not for clearing individual animals for movement.

MI Grouse: What's happening?, Al Stewart and Tom Cooley, Michigan DNR

In Michigan, the last drumming survey was done in 2015. Currently, the number of flushes by hunters and hunter effort are used to calculate flush rates/hour. Grouse have natural population cycles; in 2010 their numbers in Michigan were at high abundance and dropped by 2015. Although it is hard to fill in gaps in information without appropriate surveys, the numbers are currently suspected to be increasing. However, the number of birds in the past season were not at expected levels. The cause is uncertain, although heavy rains in the spring may have impacted chick survival and recruitment.

West Nile virus (WNV) was first detected in MI's wildlife in 2001. Since 2002, only 82 grouse have been submitted for necropsy. One WNV-positive bird was detected in 2002 and 12 more in 2017-2018. While trauma has historically been the most common cause of death, recent cases of WNV have placed this virus as the 2nd leading cause of known mortality.

2017 marked the highest number of all WNV cases across wildlife species submitted to the DNR's Wildlife Disease Lab. Not all of the WNV-positive grouse were in poor body condition; many were in good to very good condition. Seven of the 12 positive birds were also positive on histology.

Minnesota, Michigan and Wisconsin are considering a multi-state survey to better understand the effects of this virus on grouse. The diagnostics are to be determined, based on goals of the sampling. These three states are the top 3 for grouse hunting, so understanding populations is important. While we know habitat is key for grouse, the question becomes "Can good habitat help overcome any stresses or losses from WNV?"

Minnesota Grouse and West Nile Virus, Dr. Michelle Carstensen, Minnesota DNR

Spring drumming counts for ruffed grouse (*Bonasa umbellus*) were up 57% statewide in Minnesota in 2017, compared to the previous year, and nearing a 10-year peak in the cycle. This created high expectations from grouse hunters for increased harvest opportunities this past fall; however harvest rates were anecdotally much lower than expected. Wet spring and summer conditions can directly impact chick survival; however, spring and summer were drier than normal or normal in northwestern and north-central Minnesota, respectively. This raised concern that other stressors may be impacting MN grouse populations that are not attributed solely to weather, such as disease.

Recently, West Nile Virus (WNV), a mosquito-borne disease, has been implicated in reduced grouse numbers in Pennsylvania and was confirmed as a causative agent for some grouse deaths in Michigan. While WNV has been known to occur in MN since 2002 and has become established in mosquito populations statewide, we still have no information on its potential impact to ruffed grouse populations in the state. Understanding if grouse are exposed and actively infected with this disease may help explain discrepancies between spring drumming counts and hunter experiences afield, and may help adjust expectations of juvenile contributions to fall hunting seasons.

A project proposal has been drafted with the following objectives:

- 1) Assess the feasibility of working with grouse hunters to obtain biological samples from wild ruffed grouse for disease screening and collecting relevant metadata.
- 2) Estimate exposure to WNV in ruffed grouse populations in northwest and north-central MN
- 3) Determine prevalence of active infections of WNV in ruffed grouse populations in northwest and north-central MN by age class (juvenile and adult)
- 4) Correlate exposure to WNV with active infection of the disease in the same bird using paired samples
- 5) Improve our understanding of the potential impact of WNV on grouse populations in northern MN

The total study estimate is \$15,000 and, if approved, is anticipated to start in the fall of 2018. Conversations with neighboring states (MI, WI) are underway to determine if a multi-state effort is possible.

Pennsylvania Grouse and WNV, Dr. Justin Brown, Pennsylvania Game Commission

Ruffed grouse population numbers in Pennsylvania dramatically declined during the early 2000s and have subsequently remained depressed throughout much of the state. While this decline has been temporally associated with the presence of West Nile virus (WNV), lack of information on the WNV susceptibility of this popular game bird species has limited the ability to interpret the potential impacts of WNV.

Pennsylvania is taking an integrated approach to better understand the impacts WNV may be having on grouse populations. The first phase was experimental infections of 18 birds: 10 naive birds were inoculated with WNV, 5 were vaccinated and inoculated with WNV and 3 naive were inoculated with sham. 4/10 naive inoculated birds were euthanized within 7-8 days post inoculation due to severe disease, the remaining 6 were euthanized at 14 days. The first 4 euthanized birds had severe heart lesions; the other 6 birds had moderate lesions at time of euthanasia. None of the vaccinated or contact birds became sick.

The second phase of the study looked at exposure to WNV through serology. Nobuto strips were validated against serum tests, and sent to hunters for sample collection. Hunters returned the strips as well as feathers for age determination. This survey found a high antibody prevalence near the northwest of the state, raising questions on the role of habitat for surviving WNV infections. A leading thought is grouse may be able to survive WNV if there is both good habitat and time to recover.

The final phase of the study involved mosquito surveillance. Over 15,000 mosquitoes were collected, comprising 25 different species. *Culex restuans*, a competent vector of WNV, comprised 22% of the mosquitoes collected. Three WNV-positive mosquito pools were identified.

Future research efforts include population and disease modeling, expanded mosquito surveillance, genetic evaluation of grouse populations and a regional serosurvey. Management follows an adaptive, transparent harvest framework that currently includes statewide closure of the late harvest season. For more on management, please see: www.pgc.pa.gov/wildlife/wildlifespecies/pages/ruffedgrouse.aspx

USDA-WS and Highly Pathogenic Avian Influenza Update, Dr. Tom DeLiberto, USDA APHIS-WS

Tom presented several updates on behalf of USDA-Wildlife Services.

There will be a funding increase for feral swine efforts nationwide.

There is a new test for canids and felids for plague and tularemia. This test is being validated for other species.

There will be a national Foot and Mouth Disease exercise May 8th – 10th , 2018.

Active surveillance for Highly Pathogenic Avian Influenza (HPAI) is based on watersheds. Sampling is through mortality, active and occasionally environmental surveillance. The last detections of Eurasian HPAI were in 2016.

Type A detections have been fairly consistent over years. H5 detections are decreasing in Mississippi flyway, consistent in the Central flyway. Type A seasonal detections are typically highest in August and spike in late winter. The same is true for H5 viruses, with a 2nd peak in October-November and spike in late winter. H7 stays consistent throughout year and peaks in late winter.

Wild bird surveillance provides several benefits: understanding of virus circulation and potential threats, early detection of emerging strains and context to poultry detections and outbreaks (spillover from poultry to wild birds – biosecurity issue).v The viruses can be challenging to find in wild birds; even with a high number of outbreaks happening in poultry, the peak prevalence in wild birds was <1.3%.

Several unknowns in the epidemiology of HPAI viruses remain. The role of wetlands in persistence of the viruses is uncertain. Another uncertainty is the mechanism of virus movement between poultry, wild birds and humans. The number of bird species that can be competent hosts is unknown, as is the immune response in different species of wild birds to emergent HPAI viruses.

Michigan Deer Disease Initiative, Dr. David Williams, Michigan State University

David discussed several research initiatives currently undertaken by the Boone and Crockett Quantitative Wildlife Center (QWC) at MSU. The approach of the MDDI is to create a powerful partnership to better understand the dynamics of deer diseases in Michigan. The work plan has four main components:

1. Find diseased animals early
2. Sharpen focus of removal actions
3. Interaction of emergent diseases
4. Field testing and model validation

A non-resident hunting connectivity project seeks to identify hunters who go to other states to hunt, are successful at harvesting a deer and return to home state – assessing risks associated with possible interstate carcass movement.

A recent publication (*When mechanism matters: Bayesian forecasting using model of ecological diffusion*) about modeling the spread of CWD in Wisconsin is being evaluated for its applicability to Michigan to identify high risk areas. The Boone and Crockett QWC is beginning to use agent-based models to look at the spread of CWD taking the environmental contamination into consideration.

A collared deer study in the Lansing area is ongoing to evaluate how deer movement can influence the spread of disease.

Work on epizootic hemorrhagic disease (EHD) compared abundance at two different sites, focusing on riparian zones and agricultural zones at each site. There was a noted population increase in the riparian zone at the EHD-affected site and not in the agricultural zone post EHD outbreak. In the control site population was basically steady in both zones post EHD outbreak. Drought is likely playing a role in EHD outbreaks; research suggests the probability of EHD increases at higher (northern) latitudes.

CWD Update, Bryan Richards, USGS-National Wildlife Health Center

Bryan share the importance of communications and getting the message right in the face of CWD. Communications related to CWD has lasting impact and can be hard to change. Agencies must be careful in the messages they create. The "ick" factor as it relates to CWD can impede future deer management efforts.

In the four counties with the highest incidence of CWD in Wisconsin, only 1 in 12 hunters are getting their deer tested; in spite of recommendations from the CDC.

There are three primary management approaches being used by agencies: Passive-monitoring, demographic changes likely, population impact likely; Wait and see – technological advancement (vaccine), genetic resistance; Active Management – population reduction unpopular. All of these approaches have their strengths and limitations.

WAFWA's Adaptive Management Framework has several important points: reduce points of artificial concentration, harvest management (increase buck harvest), target disease foci, establish goals, implement experimental manipulation, and pursue stakeholder support.

Director Action Items

Committee Elections

After 1 year of serving in the role of Chair of this Committee, Dr. Dan Grove is stepping down as he has accepted a new position in Tennessee starting in August 2018. Dr. Kelly Straka is promoted from Vice-Chair to Chair, effective June 2018. Dr. Nancy Boedeker was nominated and elected to serve as the new Vice-Chair.

RESOLUTION IN OPPOSITION TO THE BAITING AND FEEDING OF CERVIDS TO REDUCE THE RISK OF DISEASE TRANSMISSION AND ESTABLISHMENT

WHEREAS, baiting (placement of food by humans to aid hunter harvest), recreational feeding (placement of food by humans to aid in wildlife viewing for entertainment) and supplemental feeding (placement of food by humans to increase the nutrition available to wildlife) congregate animals and increase transmission of infectious diseases;

WHEREAS, increased transmission of diseases in deer may place wildlife, domestic livestock and public health at risk;

WHEREAS, some infectious diseases such as chronic wasting disease (CWD) and bovine tuberculosis (TB) may remain infectious at bait or feed sites after the feed or bait no longer exists;

WHEREAS, baiting and feeding artificially concentrates deer and their activity, facilitating both animal-to-animal contact and exposure to potentially disease-contaminated sites;

WHEREAS, evidence to date suggests that restrictions on feeding quantity would not mitigate the potential for disease transmission and that putative mitigating practices such as spreading feed or bait over a specified area, or restricting the kinds of food items that can be used does not substantially reduce the potential risk for disease transmission;

WHEREAS, baiting and feeding may both change social dynamics among animals and increase contacts between otherwise disparate individuals, groups, or species-another risk factor for disease transmission;

WHEREAS, peer-reviewed research suggests the effects of baiting for increasing harvest is insignificant;

WHEREAS, diseases such as CWD and TB can result in devastating economic losses and/or significant ecological impacts;

WHEREAS, effective communication, education and enforcement are enhanced when rules and regulations are consistent across state and provincial boundaries;

NOW THEREFORE BE IT RESOLVED, the banning of baiting and feeding of cervids is a practical and justifiable best management practice to reduce the risk of disease transmission and establishment in light of nationwide concerns with CWD and bovine TB;

AND BE IT FURTHER RESOLVED, the Midwest Fish and Wildlife Health Committee encourages the Midwest Association of Fish and Wildlife Agencies directors to adopt this resolution at their annual meeting in Bismarck, North Dakota on June 24-27, 2018.

RESOLUTION IN OPPOSITION TO THE ARTIFICIAL MOVEMENT OF NON-ENDANGERED CERVID SPECIES

WHEREAS, the restoration of cervids to historical range is a current endeavor by some state, federal, and tribal wildlife agencies;

WHEREAS, the movement of wildlife is movement of a “biological package” potentially hosting numerous disease agents or parasites that may result in the inadvertent introduction of disease with devastating economic losses and/or significant ecological impacts;

WHEREAS, chronic wasting disease (CWD), a fatal, neurologic disease of cervids, currently has no antemortem test with reliable sensitivity and therefore no way to assure uninfected status in a living cervid;

WHEREAS, the geographic spread of CWD has been exacerbated via human intervention and trade;

WHEREAS, inconsistencies in disease surveillance and management exist between differing states and provinces;

WHEREAS, concerns exist regarding transmission potential and human susceptibility to CWD;

WHEREAS, significant population level impacts have been documented in mule deer, white-tailed deer, and elk in areas where CWD is endemic, including decreased survival and productivity;

WHEREAS, injured or “orphaned” deer may be moved across county lines for the purposes of rehabilitation;

WHEREAS, peer-reviewed studies cite inappropriate behavioral traits and poor survival probabilities in rehabilitated deer;

WHEREAS, effective communication, education and enforcement are enhanced when rules and regulations are consistent across state and provincial boundaries;

NOW THEREFORE BE IT RESOLVED, the banning of the artificial movement of non-endangered cervid species is a practical and justifiable best management practice to reduce the risk of disease transmission and establishment;

AND BE IT FURTHER RESOLVED, the Midwest Fish and Wildlife Health Committee encourages the Midwest Association of Fish and Wildlife Agencies directors to adopt this resolution at their annual meeting in Bismarck, North Dakota on June 24-27, 2018.

Director Information Items

CWD Ad Hoc Working Group

The Midwest Association of Fish and Wildlife Agencies Fish and Wildlife Health Committee is working closely with the Midwest Deer and Turkey Study Group to form an Ad Hoc Working group on CWD. The mission of the CWD Ad Hoc Working group will be to develop recommendations for Adaptive Management of Chronic Wasting Disease in the Midwest.

1. Develop a regional, collaborative approach to management
2. Seek to identify potential CWD suppression strategies using an adaptive management framework
3. Seek to identify harvest strategies that impact disease dynamics
4. Provide clarification on monitoring, surveillance and management needs
5. Develop consistent messaging to communicate what defines successful disease response and management

AFWA Federal Appropriations Recommendations for 2020 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:

- Ranking #1, Chronic Wasting Disease for \$40M – Equine/Cervid Health line item APHIS
- Ranking #2, Bovine Tuberculosis for \$18M – Ruminant Health line item APHIS
- Ranking #3, White Nose Syndrome for \$15M – USFWS DOI
- Ranking #4, Amphibians and Reptile Health for \$5M – USGS DOI
- Ranking #5, Invasive Species for \$30M – Wildlife Damage Management line item APHIS
- Ranking #6, Neonicotinoids for \$5M – USFWS DOI
- Ranking #7, Wild Bird Surveillance for \$5M – Avian Health line item APHIS
- Ranking #8, Viral Hemorrhagic Septicemia (VHS) for \$5M – Aquaculture line item APHIS

We recommend funding is continued \$750,000 for Southeast Cooperative Wildlife Disease Study. We also recommend funding for USDA-APHIS-WS for the Wildlife Disease Monitoring and Surveillance program for \$15M. This program provides wildlife disease assistance to states at no cost, such as CWD and bovine TB surveillance, feral hog control, and participation of wildlife disease biologists in state agency wildlife disease management activities. Finally, we recommend \$10M to support the USGS National Wildlife Health Center.

Time and Place of Next Meeting

During the wrap-up, the committee decided the location for the 2019 meeting would be in Minnesota in April.

This year's meeting was a raging success and we want to thank the Directors who sent representatives to this meeting and encourage those who did not to consider sending one to next year's meeting. Also, we thank Michigan Department of Natural Resources for hosting this year's meeting, because it was awesome.

APPENDIX I. AGENDA

Tuesday, April 24

12:00	Arrival and welcome	Kelly Straka and Russ Mason
12:15	Opening remarks and introductions	Dan Grove
12:30	State disease reports	State Representatives
2:15	<i>Break</i>	
2:30	State disease reports (continued)	State Representatives
5:00	Break for dinner	

Wednesday, April 25

8:00	Michigan CWD: Post Symposium	Kelly Straka
8:30	Invited presentation: Bovine TB-History and Update	Dan O'Brien
9:15	Update CWD Research WI	Lindsey Long
9:45	MI Grouse: What's happening?	Al Stewart and Tom Cooley
10:15	<i>Break</i>	
10:30	West Nile Virus –MN perspective	Michelle Carstensen
11:00	Invited presentation: WNV and Grouse	Justin Brown (via distance)
11:45	Wildlife Services Update	Tom DeLiberto
12:15	<i>Lunch (with presentation by Michigan's Wildlife Disease Lab Staff)</i>	
1:15	Invited presentation: MI's Deer Disease Initiative	David Williams
2:00	CWD Surveillance & Management	Bryan Richards
3:00	<i>Break</i>	
3:15	Additional health concerns in the States	All
4:00	AFWA Federal Appropriations Recommendations	All
4:30	Action Items	All
5:00	Wrap up and next year's host	

Appendix II. ATTENDEE NAMES AND CONTACT INFORMATION

<u>Attendees</u>	<u>Affiliation</u>	<u>E-mail</u>	<u>Phone</u>
Boedeker, Nancy	Indiana Department of Natural Resources	nboedeker@dnr.in.gov	317-517-3431
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Grove, Daniel	North Dakota Game and Fish	dmgrove@nd.gov	701-202-0775
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Ryan, Tami	Wisconsin Department of Natural Resources	tamara.ryan@wi.gov	608-266-3143
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Whelan, Gary	Michigan Department of Natural Resources	whelang@michigan.gov	517-242-2764
Williams, David	Michigan State University	dmwill@msu.edu	315-560-6376
<u>Participated remotely</u>			
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