

Midwest Association of Fish and Wildlife Agencies Wildlife Diversity Committee Report

Report submitted by Eileen Dowd Stukel, continuing Chair, to Ollie Torgerson on 28 May 2021.

Meeting Time and Place

The Wildlife Diversity Committee (WDC) held quarterly conference calls and one annual meeting over the last year. Conference calls were held on August 4 and November 3, 2020 and February 8, 2021. The annual meeting was held virtually on May 12 and 13, 2021. See Appendix 1 for the meeting agenda and Appendix 2 for attendance list.

Attendance

WDC members from all 13 states participated in the meeting. The WDC includes State Wildlife Action Plan Coordinators, Wildlife Diversity Coordinators, and Threatened and Endangered Species Coordinators from the MAFWA states (See Appendix 2); all were invited. Additional participants included invited speakers, U.S. Fish and Wildlife Service staff, and MAFWA-affiliated staff, leaders and consultants.

Director Information Items

Midwest Landscape Initiative (From the MLI website: “The Midwest Landscape Initiative identifies shared conservation and management priorities that require the development of scalable collaborative solutions to achieve healthy, functioning ecosystems in the Midwest.”)

WDC members participate in a variety of ways on MLI component parts. They are currently working on:

- Regional Species of Greatest Conservation Need (SGCN) list;
 - assessment of tools states use for habitat assessment and analysis;
 - inventory of wind mapping resources and expanded team to have more state representation;
 - PFAS topic (Per- and polyfluoroalkyl substances);
 - Communications and Engagement Team; and
 - Habitat Inventory & Assessment Work Group.
- WDC members also contribute to the AFWA Wildlife Action Plan and Landscape Conservation Work Group.

Regional SGCN Project

The WDC would like to thank the Directors for their support of the Midwest Regional SGCN project being carried out by the Midwest Landscape Initiative’s At-Risk (Species) working group (joint MLI-WDC). MAFWA and the MLI’s effort have benefitted by the lessons-learned from the two previous projects of this kind (NEAFWA, SEAFWA). A final report is expected in August 2021 and will include the database/list, report covering all major taxa and invertebrates, RSGCN grouped according to three levels of concern, watchlist species, environmental and habitat limiting factors for each RSGCN and online tools. This tool should help inform states during upcoming Wildlife Action Plan revisions and contribute to better coordination across state boundaries to benefit rare species and vulnerable habitats.

Recovering America's Wildlife Act (RAWA)

HR 2773 (Recovering America's Wildlife Act) was reintroduced on April 22, 2021 with the original bipartisan sponsors. Do not anticipate another committee hearing will be needed so a floor vote may come as early as June. A companion Senate bill has not yet been introduced. RAWA will redirect \$1.3 billion per year in existing revenues from the U.S. Treasury to provide federal match funds to help states implement wildlife action plans, deliver environmental education and wildlife-associated recreation programs, and assist tribes with wildlife conservation on their lands.

To achieve greater bipartisan and multi-stakeholder appeal some changes have been proposed. The apportionment formula has been changed to benefit states with more federal threatened or endangered (T/E) species. The complete formula is now based on proportions of land and water resources, human population, and federal T/E species in the state. Over the 5-year authorization, an average of 15% must benefit T/E species. States would still be required to provide 25% match, and no state could receive more than 5% of the total apportionment.

New language in RAWA clarifies the importance of plant conservation; adds "flora" to the definition of Species of Greatest Conservation Need; and federal T/E plants are included in the apportionment formula. States that include plants in their State Wildlife Action Plan may receive up to a 5% bonus to their apportionment.

WDC members appreciate Directors' continued support of the Act. Regional collaboration and species conservation among MAFWA states will be successful if there is continuity of implementation and monitoring that can only be achieved through the stable long-term funding this Act would provide. Suggested actions within your agencies:

- continued contact with stakeholders and state representatives to promote the need and value of RAWA;
- RAWA-readiness:
 - preparations for match;
 - strategy for internal apportionment of funds;
 - prepare for approving and hiring new FTEs and other ways to quickly increase capacity; and
 - shovel-ready projects lined up during transition while agencies and state governments ramp up for long-term implementation

State must be prepared to implement funds and demonstrate outcomes with the first appropriation. The Act covers many activities that overlap WDC's mission and current activities, which underscores the need for RAWA-readiness.

Federal T&E Species Updates

- Bats continue to dominate the discussion and are in various stages of the review/listing process: northern long-eared bat, tri-colored bat and little brown bat; status of hoary bat of increasing concern.
- Five mussel species are undergoing Species Status Assessments (SSA).
- Many 5-year listing reviews are underway.

- Legal challenges: rusty-patched bumble bee critical habitat, hellbender and gray wolf (notice of intent to challenge).
- MAFWA WDC members continue to assert their participation in SSAs and the listing process and improve how they collaborate with the USFWS Midwest Ecological Services, Endangered Species program.
- Some ESA changes and changes to Migratory Bird Treaty Act (MBTA) made under the previous administration are being reassessed.

National Science and Research Needs

See Appendix 3: Science-Based Management Needs - Responses from MAFWA Wildlife Diversity Technical Committee, May 2021.

Federal Budget Priorities

Federal budget priorities should coincide with Wildlife Diversity staff's science-based activities. Support federal priorities that contribute to the successful implementation of State Wildlife Action Plans, including comprehensive climate science support, robust Section 6 funding to assist with federal Endangered Species Act activities, support for continuation of MLI efforts, enhanced delivery of native plant community conservation and restoration on private and public lands, particularly native grasslands, support for federal agency involvement in Wildlife Action Plan revisions and assistance with increased consideration of invertebrate animal and native plant species in Wildlife Action Plans.

Director Action Item

None

Time and Place of Next Meeting

The working group will continue with quarterly conference calls. The next in-person meeting will be held in the spring of 2022, with the host state to be South Dakota, followed by Wisconsin in 2023.

APPENDICES

Appendix 1. Meeting Agenda, MAFWA Wildlife Diversity Working Group – May 12-13, 2021

SESSION 1: Updates from committees, work groups, and teams Moderator: Eileen Dowd Stukel

Introductions – Eileen

Team background – Eileen

Midwest Landscape Initiative – Claire Beck overview

- At-risk Work Group (Katy Reeder, Iowa DNR)
- Wind Work Group (Scott Hicks, USFWS)
- Habitat Inventory & Assessment Work Group, including Habitat and inventory assessment tools survey (Nate Muenks, Missouri Dept. of Conservation)
- Communications and Engagement Team (Melissa Panella, Nebraska Game and Parks Commission)

AFWA Wildlife Action Plan and Landscape Conservation Work Group update (Katy Reeder)

Other topics?

SESSION 2: Wildlife Action Plan Revisions, Recovering America’s Wildlife Act, State and Tribal Wildlife Grant Funding Moderator: Katy Reeder

MAFWA Regional Species of Greatest Conservation Need List (Karen Terwilliger, Terwilliger Consulting, Inc.)

Recovering America’s Wildlife Act

- Update on legislative progress (Mark Humpert, AFWA)
- Getting ready: New or renewed approaches to planning, promotion, inreach or outreach (All)
- Wildlife Action Plan revisions and opportunities for collaboration
- AFWA Update on review of essential elements, relevancy, and other topics (Mark Humpert)
- State Wildlife Grant 20-Year Anniversary plans (All)

Other topics?

SESSION 3: Pollinators and Threatened and Endangered Species and Recovery Planning:

Pollinators

- Monarchs (Claire Beck, MAFWA)
- Update from USFWS, including brief update on Monarch CCA, if appropriate (Lori Nordstrom, USFWS)

Federal T&E species updates, including ESA legal challenges update (Lori Nordstrom)

Other topics?

SESSION 4: Discussion of priorities, governance, and next steps Moderator: Tara Bergeson

- Identification of science needs as requested by MAFWA Directors (led by Katy Reeder)
- Identification of federal budget priorities (All)
- Director’s Information and Action Items (All)
- Next Steps
 - Director’s report and presentation
 - Discuss continuation of quarterly conference calls
- Role of WI and next lead in completing this meeting’s commitments and beginning responsibilities for next chair

Appendix 2: Meeting attendance list

State	Attendee
IA	Katy Reeder
IA	Karen Kinkead
IL	Leon Hinz
IN	Scott Johnson
KS	Daren Riedle
KS	Chris Berens
KY	Laura Burford
MN	Kristin Hall
MN	Cynthia Osmundson
MN	Bridget Henning Randa
MO	Kelly Rezac
MO	Nathan Muenks
NE	Melissa Panella
NE	Caroline Jezierski
ND	Patrick Isakson
ND	Elisha Mueller
ND	Greg Link (MAFWA Director-Liaison)
OH	Kate Parsons
OH	Erin Hazelton
OH	John Navarro
SD	Eileen Dowd Stukel, Chair
WI	Shari Koslowsky
WI	Tara Bergeson
WI	Owen Boyle
USFWS Region 3	Lori Nordstrom
USFWS MI ES	Scott Hicks
AFWA	Mark Humpert
MAFWA - MLI	Ed Boggess
MAFWA – MLI	Claire Beck
Terwilliger Consulting, Inc.	Karen Terwilliger
Terwilliger Consulting, Inc.	Tracy Rice

Appendix 3: Science-Based Management Needs - Responses from MAFWA Wildlife Diversity Technical Committee, May 2021

Compiled by Katy Reeder, Iowa Department of Natural Resources

1. Wildlife Health Topic Area

WDTC Responses:

Most important wildlife diseases:

- White Nose Syndrome (WNS) in bats – this has the potential to have a large economic impact as it severely curtails bat populations in the region, leading to changes in insect populations.
- Chronic Wasting Disease in cervids – in addition to the impacts on deer populations, from a State Fish & Wildlife Agency perspective this disease is a drain on the capacity of wildlife health resources as well as other agency resources such as staff time and funding.
- Chytrid Fungus Disease and BSal in amphibians – these have the potential for large impacts on frog, toad, and salamander populations.
- Snake Fungal Disease – This disease affects many snake species, including the Federally Threatened Eastern Massasauga Rattlesnake.
- Other wildlife diseases of potential concern include rabbit hemorrhagic disease, avian influenza, various tick-borne diseases which can infect humans, freshwater mussel die-offs and various coronaviruses. With respect to the covid-19 pandemic, other emergent diseases, and crossover between wildlife and human health impacts, there needs to be a concerted and unified approach on how we communicate about those concerns. We would benefit from messaging that avoids villainizing wildlife and stresses the importance of zoonotic disease research, and supports the multi-sector, interdisciplinary “One Health” approach (<https://www.cdc.gov/onehealth/basics/index.html>).

Most important plant diseases:

- Rapid White Oak mortality – the cause(s) of this phenomenon aren’t entirely clear, and it’s yet another impact on oak species, which are important hosts for butterflies and other insect species, in addition to producing mast for species like deer and turkey.
- Other plant diseases of potential concern include Thousand Cankers Disease in Walnuts, Beech Bark Disease, and Laurel Wilt.

2. Weather and Temperature-related Concerns Topic Area

WDTC Responses:

Changes in weather regimes that are impacting fish, wildlife, and/or habitat management in the Midwest most at present:

- Increased fluctuations in weather –
- Drought –
- Flooding
- Mis-matches in phenology between wildlife and their ecological needs
- Reduction in snowpack and lace ice - in northern portions of region particularly

- More favorable climate conditions for invasive species – for example, longer growing seasons helps with establishment and proliferation of invasive species that might otherwise be unable to move into the region from warmer climates.
- Extreme temperatures

Greatest concerns about changing weather regimes in the future:

- Unknown interactions among native species/systems, invasive species, and diseases
- Interaction of habitat fragmentation and changes in weather regimes leading to impacts on low-mobility species
- Ecological system shifts to novel states; knowing when to Resist, Accept, or Direct these shifts
- For migratory species, unknown impacts to breeding and/or overwintering areas
- Unknown impacts of increased water temperatures in warm, cool, and cold-water systems
- Other concerns include impacts to water quality, potential changes in timing and intensity of wild and prescribed fire, pressure on agricultural systems to increase productivity, and impacts to cave/karst systems.

Need for step-down guidance from regional modelling:

- The response to this question was overwhelmingly “yes” from this technical committee.
- Climate modeling efforts are siloed, and we would like to see an integrated approach to combine efforts among agencies (Forestry, Ag, Soils, Wildlife, Water).

3. Invasive Species Topic Area

WDTC Responses:

Aquatic and terrestrial invasive species of greatest concern at present:

- Zebra Mussels
- Asian Carp
- Emerald Ash Borer
- Phragmites
- Sericea lespedeza
- Reed canarygrass
- Other invasive species of concern include gypsy moth, Asian long-horned beetle, spotted knapweed, buckthorn, callery pear, oriental bittersweet, leafy spurge, garlic mustard, cheat grass, eastern red cedar, and the introduction of the spotted lanternfly into the region.

Areas needing better science to inform management of invasive species:

- This Technical Committee supports the development of a strategic regional invasive species prioritization and management plan, which would incorporate the following elements:
 - Rapid Detection & Response systems
 - Research on the effectiveness of management options for various invasive species
 - Predictive modelling

4. Emerging Technologies Topic Area

WDTC Responses:

Most pressing needs for advanced technologies in the Midwest:

- Environmental DNA (eDNA) - the use of eDNA could fit into the Rapid Detection & Response System for invasive species, along with improving likelihood of detecting the presence of rare species. Building eDNA libraries is an investment that will assist with research going forward.
- Regionally coordinated habitat mapping – this would help improve landscape-scale conservation efforts in the region
- Rapid detection for new diseases and invasive species
- Improved methods for deterring bats from strikes with wind turbines
- Increased use of passive loggers associated computing power to store and analyze patterns in large datasets
- Live animal tests for CWD
- Expanded use of drones for wildlife management
- Other needs include a way to remotely sense warm vs. cool season grasses, increased machine learning for identification of invertebrate species, and expanded LiDAR coverage and a library for data storage and sharing

Cooperators best suited to helping develop needed technologies:

- Colleges and Universities
- U.S. Geological Survey
- Non-profit entities
- Private companies
- U.S. Fish & Wildlife Service
- Other potential cooperators include other states and the U.S. Forest Service

5. Interjurisdictional cooperation (surveillance, management, assessment) Topic Area

WDTC Responses:

Greatest needs for alignment between multiple agencies in the region for the management of fish and wildlife:

- Shared Resources/Capacity
- Common language - across jurisdictions (e.g., habitat classifications, ecosystem condition assessment, critical for identifying conservation opportunities)
- Identification of potential points of convergence for fish and wildlife habitat, alternative energy development, carbon sequestration, regenerative agriculture and soil health, water quantity/quality management, and other potential energy/climate/food initiatives that may present opportunities to incorporate values beneficial to fish and wildlife
- Regional Species of Greatest Conservation Need (RSGCN) is a great start
- Priority Setting
- Shared monitoring approaches

- Other needs include coordination on species management, human dimensions and social science work, and coordination of restrictions based on CWD (e.g., deer carcass movement, baiting, etc.)

6. Other Priorities outside of existing topic areas:

WDTC Responses:

- Pace of change is increasing need for Science and Research to develop tools to help us focus on what matters
- This group recognizes the need for coordinated preparation for Recovering America's Wildlife Act (RAWA) and 30x30 - a regional prioritization with identified desired future conditions and goals and objectives that the states can then scale down
- There needs to be a dedicated regional organization to implement these ideas. There is always a conflict of workload and priority for people who need to fulfill state-level responsibilities as well as regional interests.
- It is important for states to identify staff people within agencies to serve as liaisons or focus on regional-scale issues.
- This committee sees a need for creating a regional vision for a conservation landscape.
- Need to identify the impacts of solar development on species and diversity.