



## SCIENCE AND RESEARCH COMMITTEE-MEETING REPORT

Chair: Dr. David Yoskowitz, Texas Parks and Wildlife Department

Vice Chair: Jason Sumners, Missouri Department of Conservation

Tuesday March 26, 2024

8:00am-10:00am (ET)

Room: Thornapple (3<sup>rd</sup> Floor)

89<sup>th</sup> North American Wildlife and Natural Resources Conference | Grand Rapids, MI

**Meeting Participants (42+):** Jason Sumners (MDC), Mark Humpert (AFWA), Mike Quartuch (CPW), Jeff Davis (CPW), Natalie Sexton (USFWS), Pat Klein (USFS), Margaret Everson (Oak Grove Initiatives), Jonathan Mawdsley (USGS), Lisa Webb (USGS), Mike Brasher (DU), Jimmy Taylor (USDA-APHIS-WS), Anne Kinsinger (USGS), Meredith Longoria (TPWD), Scott Hall (WIDNR), Rich Schultheis (KDWP); Carrie Ruhlman (NCWRC), Cory Gray (AG&F), Stever Meyer (MIDNR), Keith Norris (TWS), Ann Forstchen (WMI), Heather Hubbard (CPW), Jon Rachael (IGFD), Sheela Johnson (USFWS), Tricia Frey (MAFWA), Doug Austen (AFS), Tyler Harms (IADNR), Gil McCrae (FFWC), Scott Hale (OHDNR), Melanie Steinkamp (USGS), Teresa Newton (USGS), Chad Bishop (Univ MT), Jim Heffelfinger (AGFD), Sherri Russel (MDC), Wood Turner (NASA), Jessica Burnett (NASA), George Scholten (IADNR), Jon Soper (NGPC), Ken Elowe (AFWA), Michelle Hagerty (TPWD), Elroy Masters (BLM), Russ Mason (NIMROD/CIDRAP/OSCF), Jean Malpas (USGS)

### Scheduled Discussion Items

The meeting was convened at ~8:00am. The vice chair welcomed committee members.

Science Informed Landscape Conservation- Ken Elowe, introduced Gordon Myers as his replacement at the AFWA Landscape Conservation Coordinator. The work is guided by the 2020 President's Task Force Report on Science and Landscape Conservation Priorities. The report included three recommendations related to shared science, durable collaborative structures, landscape conservation and State Wildlife Action Plans. Last year we discussed how to tie science priorities to landscape conservation priorities. The regional fish and wildlife associations have identified their landscape priorities. We are working to connect them to funding sources. There is an evolution in landscape design. It's important to ask the question, 'a landscape for what purpose' to determine needs, and what kind of and configuration of a landscape. We need to also connect the science. This committee can focus on science priorities and tie them to

landscape conservation. One way to do it is to develop a connection between this committee and the regional landscape conservation collaboratives. We should discuss needs versus priorities. There will be a Landscape Conservation JTF meeting on Thursday at 10am. We will be talking about the relevance of agency work on landscape conservation. This is complex work; we are trying to determine how much of a priority landscape work is and how to better integrate landscape conservation work using the regional conservation blueprints and how to make the blueprints better and more relevant to State Wildlife Action Plans.

USGS Ecosystems Mission Area Update- Anne Kinsinger reported that the Ecosystem Mission Area now has seven programs giving it all the capabilities that it needs. This includes Biological Threats and Invasive Species Research, Climate Adaptation Science Centers, Climate Research and Development, Cooperative Research Units, Environmental Health, Land Management Research, and Species Management Research. There is a new tribal engagement federal policy to incorporate indigenous knowledge into federal decision making. We are working on how to incorporate TEK into scientific decision making. Lots of traditional knowledge is considered sacred. We are leading a group to address those tough questions. When we have used traditional knowledge, it has enriched our understanding. Twenty federal agencies follow the common rule which includes research on humans. As we grow into social science, the common rule will apply. The Department of Interior is one of the departments that has not adopted the Common Rule, but USGS has decided to adopt the practices. There is concern about artificial intelligence and opportunities. We set up a working group to address agency plans. The Administration issued an Executive Order on the safe, secure, and trustworthy use of AI was put out by the Administration; it will be a game changer. We use Generative AI to make predictions and for classifications. We are also using it for satellite imagery. We can use genetic data to discover bacteria in kidneys. Much time can be saved. We are exploring ways to count birds, use machine learning for vegetation classification, and for wildlife crossings. Maybe we could form a community of practice or work group to talk about use and ethics related to AI. AI can be used to record meeting outcomes.

Kieth Norris-The Wildlife Society is thinking about how to use indigenous knowledge in publications.

Patty Klein-Thanks for bringing up TEK. The US Forest Service has an office of tribal relations. It's work is very important.

Anne-Language that we use can be offensive related to data usage. We should be careful how we use western science terms.

Cooperative Research Units-Jonathan Mawdsley thanked the committee for its support. There is a fact sheet that summarizes the work of the unit. We added three units in the last few years. These came about through the support of AFWA and other partners. Caroline Murphy was added to staff as the partnerships and programs coordinator and Kevin Pope replaced Jon Thompson. We have filled 38 vacancies. There are 10 jurisdictions that are interested in new units. There is a Cooperatives Coalition meeting at 2:30pm. They are working on funding needs

to meet growth opportunities. Last fall this committee passed a resolution on CRU strategic planning. Margaret Everson of Oak Grove Consulting is leading the effort. We will develop a vision and answer the question of what the value and role of CRUs in the future is. We presented at the SEAFWA meeting. We would like to hear from all interests. A steering committee made up of Paul Johansen, Jason Sumners, Wendy Weber, Tony Wasley, Stephanie Hussey, Chad Bishop, Tim McCoy, Becky Humphries, Doug Austin, and others is leading the effort.

USFWS Science Applications Update-Deb Rocque reported that SA is not robustly funded, but still do do a lot with a little bit. A flat budget and congressionally directed spending does not account for fixed cost increases. This equates to an overall 8% cut. We are trying to figure out how to better share resources, prioritize, and identify where we can save money. Our program's focus is collaboration. We are doubling down on working with the regional fish and wildlife associations. The Midwest Landscape Initiative blueprint was a major accomplishment last year. It was mirrored after the Southeast Conservation Adaptation Blueprint. These are seamless geospatial representations at landscape scales. We are partnering with the Native American Fish and Wildlife Association and NASA. Data sharing is an important issue with some substantial barriers. We need to establish some priorities. Climate Adaption continues to be focus, as well as nature-based solutions, coastal resilience, sentinel landscapes, and fish and wildlife health. We are working with the National Fish and Wildlife Foundation on administering the bipartisan infrastructure law's America the Beautiful program. We are hoping to make some improvements including allowing regional fish and wildlife associations and tribal associations to apply for grants. SA has social scientists, and we are using AI to mine information on at-risk species and conservation. We have less flexibility because of budget constraints.

NASA Data for Fish and Wildlife Conservation-Woody Turner reported that NASA has a biological research program. They want to get their science into the hands of decision-makers. We are working to develop more capacity to use our data. We often hear users need finer scale data. Landsat Next coming on board at the end of the decade will help with that. We can acquire commercial satellite data that is at finer scales too (i.e., 1-meter resolution). The Earth Science Division offers competitive grants. We don't have many state agencies on the proposals. We want to change that. CRUs are a potential way to change that. We can model projected changes and support geospatial work. If your staff have geospatial training needs, contact Jessica Burnett. I appreciate the opportunity to work with federal partners, we need to get to where the work is done at the state level. Camera traps, MOTUS, and other data can be combined with satellite, LIDAR, and microwave data. A revolution is happening. We can't do it without the observations you make. I hope you include geospatial needs in the science needs survey. Tell us what your problems are at scale. We might be able to help. You are helping to pull these communities together.

Jessica Burnett-Be on the lookout for a survey on geospatial needs. We are working with AFWA and WMI on more specific fish and wildlife needs.

Jason-I have an initial list of data needs. Maybe we should start with some low hanging fruit.

Jessica-We are still in the relationship exploration phase, we are willing to talk to anyone.

Woody-Maybe we could have a meeting with AFWA and WMI to discuss needs.

Jeff Davis-Colorado has spatial data needs.

Social Science Subcommittee Report (see written notes from PPT below)-Mike Quartuch

Science & Research Needs Survey-Jason Sumners asked what is our next step with the survey? What are the opportunities to address the real challenges and priorities. Three priorities were identified in the survey (climate change, fish and wildlife health, invasive species).

Anne Kinsinger-All three topics are cross-jurisdictional. We need to honor state management authorities. We have made the case, why we should work across boundaries. The Fish and Wildlife Health Initiative is talking about data sharing, there is a role we can play.

Jonathan-We drilled down to three areas, what are we missing? What is eating the lunch of Directors. If you identify those issues, we can help.

Jason-Other committees are also addressing issues. We don't want to duplicate efforts.

Natalie-I like the idea of drilling down, what is eating people's lunch? What is also a priority, more clarity on science needs is needed.

Mike Quartuch-I like the idea of identifying gaps we are missing. What are some other things we could ask the states.

Jonathan-We left out direct species management.

Anne-All three priorities have to do with risk and are interjurisdictional. We could bring this science to the Invasive Species and climate adaptation committees. How can bring in AI and other tools.

Jonathan-There is a whole science discipline around risk.

Mike-How often is the science needs survey conducted?

Jason-Every 3 years. We need a mechanism to do a pulse check. How can it be more than information to the grants committee. I've talked to Paul Johansen about coming into the fish and wildlife health committee. We should start working with the other committees.

Natalie-I'm putting together an executive summary for this committee that we can share.

Jonathan-I'm willing to help.

Mike-I'm trying to go to as many committees as possible.

Mark Humpert- The Wildlife Diversity Conservation and Funding Committee would a good committee to engage. We also do a monthly meetings with wildlife diversity program managers and State Wildlife Action Plan coordinators.

Doug Austen-The American Fisheries Society worked on a project to start a dialogue with fish chiefs on what states are doing and then linking them together. There is a need to connect the agencies and discuss how to improve the process.

Justin-Maybe risk assessment can help us make better decisions. AFWA is standing up a business committee, this is part of what they are talking about.

Jonathan-There is coordination with wildlife diversity program managers and state wildlife action plan coordinators. We need more capacity for wildlife diversity and SWAP coordination.

Michigan is using science to change management, that is important. Shared learning among the states that can tie research back to management.

Jason-Translation is critical.

The meeting adjourned at 9:39am.

#### **Action Items**

There were no action items.

#### **Progress and Opportunities**

Progress continued on improving the science needs survey. New potential opportunities emerged on identifying science needs for regional landscape priorities, putting together a work group on artificial intelligence, engaging in the CRU strategic plan, use of NASA geospatial data,

#### **Threats and Emerging Issues Identified**

No threats or emerging issues were identified.

#### **New Opportunities Identified**

Non specifically identified.

#### **Submitted By:**

---

AFWA social science subcommittee PPT

89<sup>th</sup> North American Wildlife &

Natural Resources Conference

Mike Quartuch, Colorado Parks and Wildlife (Chair)

Natalie Sexton, U.S. Fish and Wildlife Service (Vice Chair)

Subcommittee charge

*Provide a forum for discussion about social science research and applications in state, federal and provincial wildlife and natural resource agencies and partners to...*

Subcommittee purpose

- *Highlight the **necessity of social science integration***
- *Identify and provide **effective tools, resources, and expertise***
- *Promote and foster **increased social science capacity & literacy***
- *Build **cross-jurisdictional connections***

2023 Subcommittee Workplan Highlights

Organized Sessions

- Social Science to Bring Back 3 Billion Birds
- Informing Conservation of Central Grasslands
- Integrating Social Science in Bird Conservation
- Lessons Learned from Integrating Social Science in Conservation
- Mainstreaming Social Science in Conservation Planning
- Unifying Human Dimensions Research Capacity for CWD Management

**Science & Research needs Survey**

Survey results

Invasive Species  
Fish/Wildlife Health/Disease

Survey Results

Social Science Integration

Not at all or only sometimes integrated into decision making

Sometimes used to address invasive species, fish/wildlife health and climate change

Barriers to Social science integration

Manuscript Submission on social science contributions & trends

2024 Work Plan

- ***Highlight the necessity of social science integration***  
***NA Conf. Special Session: Conservation Strategies Informed by Wildlife Values***
- ***Identify and provide effective tools, resources, and expertise***  
***Support SWAP Revisions – SS 101 Webinar May 18, 2024***  
***Develop CWD Resource Clearinghouse***
- ***Promote and foster increased social science capacity and literacy***  
***Invited Manuscript***  
***HD Foundations Training – Sept 10-12, 2024***
- ***Build cross jurisdictional connections***  
***Deeper Connections with Other AFWA Committees***

Conservation Strategies Informed by Wildlife Values

Wednesday 10a-12p

Ambassador Ballroom EAsT

Thank You!