

Spring JV Waterfowl Committee Meeting Minutes

Jun 7th – 9th, 2022

Winous Point Marsh Conservancy

Committee Attendees: John Simpson, Greg Soulliere, Randy Knapik, Mike Eichholz, John Coluccy, Auriel Fournier, Bob Gates, Heath Hagy, Jake Straub (virtually) Mohammed Al-Saffar (partial, day 1).

Absent: Adam Janke. Drew Fowler and Mitch Weegman recently moved to positions outside JV region and are no longer committee members.

Guests: Brendan Shirkey, Sara Burns, Jeffrey Edwards, Charles Ferrell

*Action items from January 2022 committee meeting (nested boxes) included within agenda, agenda items are bulleted.

June 8th Morning Session

January 2022 Action Item: In the coming years, the **Waterfowl Committee** (maybe full Science Team) will build from this basic model (with likely variation among bird groups) to:

- 1) Identify and recruit ES/HD technical experts who can provide JV guidance in this effort,
- 2) Identify a complete list(s) of primary ES provided by bird habitats in the JV region,
- 3) Define each primary ES and its related value to people (re: provisioning, regulating, cultural, supporting),
- 4) Determine which ES are most important to people in this region (with likely variation by stakeholder group),
- 5) Determine how best to target JV bird habitat conservation (and communications) to achieve most desired / effective ES with the ultimate goal of growing public support for bird habitat conservation.

On-going long-term effort

Integrating Ecological Services into JV planning (Mike, Greg, Committee)

- Lake Erie Water Quality project, CRP project, Mississippi River Towns initiative (Ellen Herbert) Ellen Herbert and from Ducks Unlimited presented on work DU is doing to advance wetland conservation through water quality and flood control. This work was especially relevant to how the Waterfowl Committee see's the incorporation of HD and EG+S into our Waterfowl Plan and informative regarding what that might look like and how it can be accomplished.
- Review and discuss latest diagram / model and Flyway / JV Board feedback (Mike). Greg provided history of this action item within the Waterfowl Committee as well as the JV Technical Committee, which included an excise to identify and priority rank ES expertise and other expertise (i.e., HD, Climate Change, and Communications) needed by the JV during the next several years. Working with Bob, Mike, and Dave Ewert (3 long-standing Tech Com members), Greg developed a draft JV technical report (the "Roadmap Report") documenting the JVs history in developing a science foundation and, more recently, identifying future expert needs. Mike

then led the committee discussion on this topic of greater ES integration into our JV planning process, and consideration of tradeoffs related to biological vs social objectives. Although the discussion was informing, the group again concluded the importance to having social science expertise at our committee meetings. Mike and John reviewed the latest draft of the conceptual model for planning with the group, primarily to review the HD and ES. A couple of minor modifications were made to better prioritize the ES. There was substantial discussion regarding the potential to use HD / ES modeling approaches in collaboration with the more traditional approach of biological energetics modeling to support wetland objectives. One example Bob Gates provided was using a “recreational use days” metric to capture spatial distribution and density of human dimensions objective for comparison with EGS and habitat objectives. The committee also discussed ways to add diversity to the waterfowl group and considered developing some type of internship program to facilitate this objective.

- Identify ES/HD most relevant to our JV
The committee discussed and determined that recreational use (HD), biodiversity (EG+S), flood control (EG+S), and water quality (including sediments, nutrients, and contaminants; EG+S) are the most relevant and accessible for incorporation. Shoreline protection was also identified as relevant to the JV (Great Lakes) but not prioritized for this first effort.
- Establishing a new JV working group with explicit social-relevance focus (Greg)
The group generally agreed that a new stand-alone group would be the best approach at some time, but that in the meantime visiting expertise on the Waterfowl Committee would be used to gauge interest in doing so. There was also considerable discussion and interest in hiring (perhaps a post-doctoral student) to coordinate the early efforts in identifying expertise and collecting information and data. Lastly, it was suggested that perhaps Greg’s replacement could have background in HD and/or EG+S in addition to other relevant expertise.

ACTION ITEM: Mike (and Greg?) will report our discussion at the August JV Management Board meeting and solicit input from the committee regarding expected attributes of the new science coordinator.

ACTION ITEM: Mike will report at the August JV Management Board meeting our committee’s ES discussion and current assessment of growing need for ES / HD expertise if we hope to remain aligned with NAWMP changing themes. Additionally, he will gauge the board’s interest in moving forward with a planning approach that incorporates continued movement towards a greater emphasis on the influence of ES / HD in our JV planning.

ACTION ITEM: Greg, John C, John S., and Mike will explore the potential for funding a post-doc to help support the new HD / ES working group.

ACTION ITEM: Mike (and entire committee) will identify and invite HD and EG+S individuals of expertise to attend our next meeting (tentative NOV 2022) as visitors with the intent of eventually forming a new JV working group once sufficient and appropriate individuals are identified.

June 8th Afternoon Session

Action Item: By 15 February, **Greg, Auriel, and Bob** will develop and send a note to Stephanie Beilke (Audubon), reminding her of our interest in the NFWF-supported wetland evaluation project, especially as it relates to testing JV wetland-bird planning assumptions and the success of various conservation actions that might inform JV planning. **Done (update presentation planned for June committee meeting)**

Overview and progress with NFWF-supported wetland / wetland bird evaluation project – Stephanie Beilke (Audubon).

Stephanie and Sarah Saunders (Audubon Society) gave a 30-minute presentation on their project evaluated in the wetland bird response to NFWF SOGL funded wetland enhancement projects across the Great Lakes. The project design includes comparing bird use and habitat metrics at sites that received SOGL-funded enhancements with nearby paired sites that did not receive SOGL funding. Bird and habitat metrics are being collected by consultants 3-4 times per year using the following protocols: waterfowl - IWMM, marshbirds – Bird Studies Canada marshbird monitoring protocol, Shorebirds – ISS Protocol. The study got a late start in 2021 and only late summer shorebird data was collected. 2022 and 2023 will be full data collection years with the hope that long-term monitoring funding will be available beyond that timeframe.

Using eBird to derive spatial distributions models for focal species – (WI DNR; Drew Fowler, Jay Winiarski, Jason Fleener, Jake Straub).

The group presented on work being conducted by the WI DNR to evaluate the utility of using eBird data to generate spatial distribution models (spring migration, summer breeding, and fall migration) for focal species in the WI stepped-down JV habitat conservation plan instead of the expert opinion-based models currently being used. The eBird model uses user-input bird observation data while the expert model is based largely around wetland densities and assumed focal species associations. The group built and then compared both models at a watershed level. Generally speaking, the expert opinion and eBird models did not align well, with the eBird model highlighting the SE region of the state much more than the expert model and the expert model highlighting wetland dense areas of the upper and nw portions of the state that eBird data did not. The group and WI DNR is likely going to revise the plan using the eBird data.

Review, discuss and refine UMGLRJV Waterfowl Research and Monitoring needs (review led by Adam and Auriel)

Auriel and Randy lead a discussion and ranking process for JV research and needs, beginning with objectives from the 2017 JV Waterfowl Habitat Conservation Strategy and subsequent lists of themes and project ideas to address those objectives (these lists were last updated September 2018). A significant number of the Research needs have been addressed and/or are being addressed by JV-funded and other-source funded research projects. Each Committee Member was then given 4 votes to vote for future priority Research Needs and highest ranked will be word-smithed by the committee and used as priorities going forward. The identified list included (in order, pre-word smithing):

- *Quantify relationships (overlaps, tradeoffs, and compatibility) between various waterfowl habitats, current and restorable, and the ecological goods and services provided by these habitats that are also most important to people.*

- *Refine understanding of factors influencing outdoor recreation related to waterfowl habitat and potential conservation support. Also, evaluate means to maximize hunter/user recruitment and long-term program support; assess prioritizing habitat conservation locations (e.g., distance to urban) based on hunter/user access.*
NOTE: Rephrase for less R3 wording (recreation carrying capacity of wetlands managed for waterfowl) understanding how changes in the landscape changes rec activity, add in the disturbance aspect of 28, possibly combine with 15
- *Develop or refine demographic models to examine influence of vital rates on λ for at least the breeding focal species.*
NOTE: combine with 10 (maybe also 9)
(10) Develop Integrated Population Models (IPMs) for evaluating limitations to population growth and model parameter sensitivity. Evaluate influence of density dependence (recruitment) and harvest as part of IPM, especially for Wood Duck, Mallard, and Ring-necked Duck.
(9) Test habitat model assumptions used in focal species accounts (e.g., is Wood Duck brood habitat abundance/quality limiting population growth);
- *Determine means to provide maximum ecological services and habitat values to other species of concern (e.g., secretive marsh birds, shorebirds) while also maximizing habitat value to waterfowl.*
NOTE: Combine with 6
(6) Develop agreed upon criteria to evaluate tradeoffs (gains vs. losses = net change) for species and related plant communities of conservation concern. Document the costs and benefits to species other than waterfowl of habitat delivery for waterfowl. NFWF monitoring and evaluation program (in development) may provide complementary model.
- *Complete a retrospective analysis of factors influencing habitat carrying capacity (e.g., precipitation/water quality, food, invasive species, wetland processes), especially for species most likely to be limited by non-breeding habitat.*
NOTE: Combine with below item
Forecast expected carrying capacity in the face of changing habitat conditions (e.g., climate change, wet vs. dry years, with/without habitat programs, continued habitat loss, agricultural practices, etc.), especially for species most likely to be limited by non-breeding habitat.
Combine with immediately above item

At the end of the ranking exercise and discussion, Auriel offered to wordsmith the highest priority project ideas on the Research list by the end of the month.

ACTION ITEM: By 3 July 2022, Auriel will provide the committee with the revised list of JV waterfowl research priorities.

ACTION ITEM: By 15 July 2022, Greg will review and finalize the list and add the new versions to the JV website, providing researchers access to our most important Research needs.

June 9th Morning Session

Review, discuss and refine UMGLRV Waterfowl Research and Monitoring needs (review led by Randy and Auriel)

Randy and Auriel led a brief but efficient review of both the wording and accomplishments to date of the Monitoring needs spreadsheet which has not been updated since 2018. A few were removed, added, and/or combined. Each Committee Member was then given 4 votes to vote for future priority Research Needs and highest ranked will be word-smithed by the committee and used as priorities going forward. The identified list included (in order, pre-word smithing):

- *Develop JV-wide survey(s) and or collaborate with eBird system to generate unbiased estimates of waterfowl distribution in time and space throughout the non-breeding period. A coordinated survey (likely different for rivers vs. Great Lakes) of migrating and wintering waterfowl across regions would provide distributional information to better establish population objectives coordinated and connected to the NAWMP in a meaningful way. Expanded / modified use of eBird data may provide an acceptable low-cost source of distribution and abundance information (work with Cornell Lab of Ornithology).*
- *(2) Establish a statistically sound wetland change assessment by BCR. There is interest in developing tools/techniques to assess annual variability in wetland availability across the JV region and link to waterfowl abundance. A pilot wetland change study was completed in the Prairie Pothole Region using the FWS Wetland Status and Trends Survey data, and a wetland inundation study (Eicohholz-SIU) is ongoing in Illinois. Findings resulting from these initial studies will inform the potential for a broader effort, as wetland availability may be quite difficult to quantify in real time and at broad scales.
NOTE: Combine with 7*
- *Long term monitoring of ecological goods and services
NOTE: Needs further articulation/refinement*
- *Identify relevant non-hunter conservation supporters and potential supporters and establish a means to evaluate trends and motivations to conservation support for these stakeholder groups.*
- *(7) Characterize landscape trends in JV region, particularly relative wetland area and quality due to invasive plants (e.g., giant reed, hybrid cattail, reed-canary grass), hydrology / flood duration, and climate change. Explore use of FWS Wetland Status and Trends Survey data and National Land Cover Data (NLCD) to evaluate landscape change by BCR at 5-10 year intervals.
NOTE: Combine with 2*

At the end of the ranking exercise and discussion, Randy offered to wordsmith the highest priority project ideas on the Monitoring list by the end of the month.

ACTION ITEM: By 3 July 2022, Randy will provide the committee with the revised list of JV waterfowl monitoring priorities.

ACTION ITEM: By 15 July 2022, Greg will review and finalize the list and add the new versions to the JV website, providing researchers access to our most important monitoring needs.

Update on David R. Luukkonen Graduate Student Fellowship (Greg and John C)

Greg and John C reviewed the status of developing the *David R. Luukkonen Graduate Student Fellowship*, including origin of the idea (our committee), chain of events leading to current state, current pledges (and collections), and how JV is contributing (\$20K / Yr for 3 years) for student grants, but not for endowment. Over \$60,000 has been pledged over the next 2 years towards the fellowship which is hoped to reach \$100,000 so that an annual \$5000 fellowship can be awarded in perpetuity. We have a DU contact (Cathy Saunders) taking checks and credit card contributions as well as a 1-page flyer to help get the word out. In addition, the JV will fund two \$10,000 awards each for the next 3 years a part of the initial Fellowships, DU is working to get that agreement in place. The Waterfowl Committee thanked Greg and John for their hard work on this fellowship. A few questions and comments followed afterwards centered around criteria for awards, limitations on use (if at all), and other similar items that John C will address with the DU Canada Selection Committee.

ACTION ITEM: By 1 July, Greg and John C will work with ACJV Coordinator (Anna) to develop means to spend JV funds via cooperative agreement (JV-DU) in the name of the Luukkonen Fellowship. Using this JV money for next three years provides an opportunity to build the endowment for a more permanent funding source to help waterfowl / wetland graduate students.

ACTION ITEM: By 1 August, Greg, John C, and John S will contact current pledges and have them transfer their funding commitments to DU via Cathy Saunders.

ACTION ITEM: By 1 August, Randy (and Barb Avers?) are going to reach out to CWAC in MI to spread the word about contribution options.

ACTION ITEM: By 1 August, (John S and/or Greg) will draft an appropriate email and include the Fellowship description for the AFTON listserv.

ACTION ITEM: By 1 May 2023, John C, John S. and Greg will have all agreements completed, anticipating announcement of the fellowship in November 2023 when other similar DU fellowship opportunities are announced. Luukkonen Fellowship announcement in spring 2023 will include the Afton List-serve.

<p>Action Item: By 1 May, John C and Randy will explore open water / Great Lakes waterbird distribution and abundance data and data sources as they relate to future JV planning (wind energy placement, shipping / boat disturbance, underwater pipeline risk, etc.). Progress not reported as of April 2022</p>
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Overview and progress made with waterbird (including waterfowl) data search and next steps in this planning process (John C and Randy)

Randy and John C. provided an update on progress made towards exploring open water/Great Lakes waterbird distribution and abundance data and data sources as they relate to future JV planning (wind energy placement, shipping / boat disturbance, underwater pipeline risk, etc.). John is involved with the Great Lakes Wind-Wildlife Collaborative (GLWWC) and reached out to Mike Monfils who is developing an online survey (<https://arcg.is/CqWTy>) to gather metadata on bird (and bat) survey efforts on the Great Lakes. The survey is in draft form and awaiting distribution by Joel Merriman, GLWWC coordinator. However, Joel will soon be leaving GLWWC to pursue another career opportunity. Randy is working with MIDNR partners to gather

information from Great Lakes waterbird surveys. In addition, the group discussed a recent paper by Gutierrez et al. 2021 (A pathway for citizen science data to inform policy: A case study using eBird data for defining low-risk collision areas for wind energy development) which utilized eBird data to inform low-risk collision areas for future wind development. eBird data may provide a promising alternative when other survey data is lacking for future JV planning as it relates to wind farm development and other disturbance factors.

Process for ranking proposals resulting from 2022 JV-MB NOFO (review by Greg)

Greg reviewed the new JV-MB (Region 3 Migratory Bird Program) combined Notice of Funding Opportunity (NOFO) and timeline for proposal review, ranking, and selection:

- **31 May** – Application due date - *Science Needs for Bird Habitat Conservation in the Upper Mississippi / Great Lakes JV Region*.
- **10 June** – Anna S-S will receive from DOI Grant Solutions these applications and send them to Greg.
- **20 June** – Greg will review each application and generate a spreadsheet with relevant information comparing proposed projects. Greg will share proposal spreadsheet JV Technical Committee (w/ scoring directions) and with Andy Forbes (MB Program).
- **10 July** – JV Tech Committee members will provide responses to Greg, R3 MB staff will do same with Andy, coordinating with new Tech Committee member (and MB staff biologist) Kelly VanBeek.
- **1 August** – Greg will organize a meeting to deliberate JV Tech Com scoring
- **15 August** – Kelly and Greg will develop for Doug and Andy a project-funding model, based on results of JV and MB Program proposal-ranking, related program meeting discussions, and approximate available total funding. This model will include recommendations for which proposals to fund and the most logical allocation of program funding resources based on available information.

Note: Only two proposals were received for the 2022-23 JV-MB NOFO.

JV Science Coordinator succession planning / potential recommendations to JV Tech Com and Board (Soulliere)

Greg told the committee his retirement was very likely to occur by near the end of the year. The group spent time discussing how the Science Coordinator position has been essential in building the JV science foundation for waterfowl conservation as well as the other primary bird groups.

ACTION ITEM: Mike will work into his August JV Board update the need for a coordinator in Greg's capacity and our vision of the skill set required and role of the coordinator position if we are to continue to be a cutting-edge science-based partnership.

Fall meeting, potential priorities and locations (Simpson/Eichholz)

The committee concluded a need for a fall meeting, with focus on inviting social scientist(s) to share our ideas and to gather feedback, helping the committee consider how we should treat ES/HD integration in the next JV Waterfowl Habitat Strategy revision (current strategy is 5 years old). Greg (SE Michigan) and Auriel (central Illinois) reviewed pros and cons of two meeting locations with consideration being given to the recruitment of 2 new committee members (Randy Smith (TNC) and Ben Sedinger (UWSP)). The committee leaned toward the Havana IL area, with tentative target dates of 20-23 November with Harsens's Island November 9-11 as a

back-up. Additional fall meeting priorities include continue development of a potential post-Doc position, review/approve revised Research and Monitoring spreadsheets.

ACTION ITEM: By 15 August, co-chairs John S and Mike will make a final decision on meeting dates, location, agenda topics, and invited guests. They will make related committee assignments as needed to assure a productive and enjoyable meeting for members and guests.