

**JV Science Team Meeting Agenda**  
**Upper Mississippi River and Great Lakes Region Joint Venture**  
**27-28 January 2016**

The Joint Venture Science Team met following the 76<sup>th</sup> Midwest Fish and Wildlife Conference at the Amway Grand Plaza Hotel, in Grand Rapids Michigan. The Science Team consists of our JV Technical Committee plus additional bird conservation experts who serve on four JV bird-group subcommittees.

**Technical Committee members:** Present – John Coluccy (DU), Dave Ewert (TNC), Bob Gates (OSU), Dave Luukkonen (MI DNR), Doreen Mengel (MO DOC), Greg Soulliere (FWS-JV), and Wayne Thogmartin (USGS). Absent –Dan Holm (IL DNR) Mark Nelson (USFS), and Rich Schultheis (KS PW).

**Ad hoc Bird-group Subcommittee members:** Present – Mike Eichholz (SIU), Heath Hagy (IL NHS), Katie Koch (FWS-MB; connected via skype), Mike Monfils (MI NFI), Brad Potter (FWS-LCC), John Simpson (WPBC), Mike Ward (INHS), and Tom Will (FWS-MB). New Science Team members present included Erin Giese (UW-Madison), Nat Miller (Audubon), Anna Sidie-Slettedahl (FWS-JV Staff), Chris Tonra (OSU), and Linda Wires (FWS-IWMM). Absent –Brian Loges (FWS-Refuges), Ben O’Neal (Franklin College), and Charlotte Roy (MN DNR).

**27 January, 3:30 – 6:00 PM**

We began with introductions, and provided new members some background regarding the JV Science Team. Pat Devers (Black Duck JV) has also expressed interest in participating on the JV Waterfowl Committee but he was unable to attend the meeting.

**Project and program updates and reports**

Tom Will reviewed the status of the 2016 Partners-In-Flight (PIF) Continental Plan update due out in March 2016. The revision will be similar in format to the first PIF plan, with a focus on Watch List species. The first part of the revision document has a continental scale perspective and population analyses, whereas the remainder of the plan has a regional focus with some guidance for JV planning and implementation. This version will include wetland bird species in addition to landbirds. BBS data were employed to calculate population loss over the longer time period (the last 40 years), whereas population trend is only calculated over the most recent 10 year period. A measure of conservation urgency (“extinction risk”) is also included. Each JV will have a couple dedicated pages and a feature story. Our JV story is related to landbird migration.

Greg Soulliere (for Katie Koch) provided an update regarding the Midwest Avian Data Center (MWADC). MWADC is a cooperative effort between Point Blue Conservation Science, the U.S. Fish and Wildlife Service’s Midwest Regional Migratory Bird Program, the National Park Service Heartland I&M Network, and the Midwest Coordinated Bird

Monitoring Partnership. At first glance, the MWADC may seem like a simple website with just a few pages on data management; however MWADC is really a portal into an extensive community and set of online resources on avian monitoring and conservation. In 2015, the MWADC website was overhauled and the new MWADC V2.0 has been launched. It has been completely redesigned to better meet the needs of different visitors (i.e., those who want to manage and share their own data, those who want to discover and download data, and those who want to query and explore data for conservation planning). In 2016, a five-year business plan/investment strategy will be developed for MWADC; there is interest in integrating JV science and serving JV partnership needs as this strategy is developed.

Greg Soulliere (for Katie Koch) also provided a very brief report on activities related to the 2016 Centennial of the Migratory Bird Treaty. The Migratory Bird Treaty Centennial offers an unprecedented opportunity to raise the visibility of all organizations involved in bird and bird habitat conservation. This is a chance to create excitement about an important moment in bird conservation, showing the lasting impact that all partners involved in migratory bird conservation have had during the past 100 years. There are four broad goals for the Centennial celebration:

- Create awareness of the importance of migratory bird conservation
- Promote key actions to help migratory birds
- Increase support for migratory bird conservation programs and initiatives
- Increase opportunities to engage youth and adults in hunting and birdwatching, and other bird conservation activities

Please visit [www.fws.gov/birds/MBTreaty100](http://www.fws.gov/birds/MBTreaty100) for more details.

Mike Monfils provided information regarding the Midwest Marsh Bird Working Group. On 12 February 2016, the working group will have a conference call to update interested parties on several research and monitoring activities occurring across the Midwest region. Many are a result of the 2012-13 effort to identify marsh bird research priorities. Mike provided very brief descriptions of some of the ongoing collaborative projects. The Avian Knowledge Network (AKN) Midwest Avian Data Center (MWADC) is now housing marsh bird population data that will be available to any potential users. MI marsh bird data has not yet been added to the ADC so partners are currently trying to work it into the system. Also, survey crews are now collecting habitat parameters and will be including this information in the ADC. Katie Koch is leading an effort to complete training for data entry. Linda Wires described the Integrated Waterbird Management and Monitoring (IWMM) data site and how they have already included a component for habitat assessment along with the population abundance data. It appears to be an easy process to set up, but IWMM scientists found it was very challenging to develop. The MWADC will benefit from reviewing this IWMM competed process. Doreen Mengel also mentioned a couple projects being completed in MO and that might be a good fit for the working group update call.

Greg Soulliere updated the group regarding ongoing revision of the JV Waterfowl and Waterbird Strategies. Science Team turnover (retirements and moves), lack of a JV Conservation Modeler, and growing workloads for many committee members hampered

progress in 2015. However, the Waterbird Committee has been rebuilt and the JV Conservation Modeler position will likely be filled this winter. In addition, the NAWMP Science Support Team (NSST) has been working on continental population and human/supporter objectives, as well as guidelines to target conservation during the non-breeding period. This information will be important for sections of both JV regional strategies as we are better integrating waterfowl and waterbird habitat objectives in these 2016 revisions. Greg reviewed progress on draft sections of the waterfowl strategy that have been completed by the Waterfowl Committee.

Dave Ewert updated the group regarding the Midwest Landbird Migration Monitoring Network. This network, informally developed in 2011, established a vision statement and goals in 2015 while completing a strategic plan. Currently the network has a 10-member steering committee. Dave reviewed results of a 2015 migration monitoring workshop. They are planning a follow-up workshop in WI during October 2016 with focus on integration of full-life cycle conservation and filling the information gaps to better target conservation work. Several focal species with information adequate for whole life-cycle conservation planning have been identified. The network is promoting the idea of airspace being an important bird habitat component, and they hope to fill information gaps regarding migration corridors (e.g., wind turbine placement information).

Tom Will covered the “STEM models” based on EBird data. You can do this for any point in time, with time series animation. Using this process, EBird data can be used to determine the proportion of a species population existing in a particular region at a given time. We watched an example of results for Magnolia Warbler and Northern Pintail models with great graphics. They are intended to demonstrate migration timing and pathways, plus summer and winter distribution, though some Science Team members questioned portions of the distribution graphics. The apparent tight density of birds at specific locations during key periods may help bird conservation planners identify spatial “bottlenecks” during movement between (or at) winter and breeding areas. One team member suggested the temporal side of model may be more valuable than the spatial component considering EBird relies on observers and some areas of North America have few people to record and enter data.

## **Presentations**

Wayne Thogmartin provided a presentation regarding “extinction risk” based on BBS trends. The data analysis for this effort began in 2005, starting with a Cerulean Warbler assessment when the species was being considered for Endangered Species listing. Extinction risk considers three factors: population size, population trend, and variability of BBS data for the species. Early PIF analyses did not consider data variability, which can be very different for species over time. Wayne and his collaborators have also incorporated a factor for observer error in their calculations. Wayne provided examples of how (when) several bird species are predicted to decline in abundance 30%, 50%, and 70% over time based on historic BBS data. Whereas the most recent 10 years of data are used to project a population trend line into the future, historic (e.g., 1970-2010) data

provide the range of values around the predicted trend line. Using this analysis for 303 landbird species in the Midwest region, 19% are predicted to decline by 50% in next 20 years (termed “half-life” in the presentation). At some point, the BBS will no longer be a suitable monitoring scheme for some species due to very low densities. There are results for all U.S. BCRs. Wayne provided copies of the recent publication describing the effort (Stanton et al. 2015, Flexible risk metrics for identifying and monitoring conservation-priority species. *Ecological Indicators* 61[2016]:683-692).

## **28 January, 8:00 AM – 12:30 PM**

We used this morning as an opportunity to focus on individual bird groups with break-out sessions for the Landbird, Waterbird, and Waterfowl committees. The Waterbird and Waterfowl committees met jointly the first hour and began with a presentation by Heath Hagy. Heath described a project being conducted in IL where researchers are measuring wetland inundation over a three-year period. The amount of water available (% inundated) for water birds in areas designated wetlands by NWI can provide a “correction factor” to help translate wetland quantity values into wetland quality values (i.e., useable wetlands) for conservation planning. Following this presentation, the two committees further reviewed progress on the JV strategy revisions and the logical overlap in some sections, including habitat objectives. We spent time reviewing the new species-habitat association table for the strategies, which now includes species from both bird groups.

Following this discussion, the Waterbird and Waterfowl subcommittees spent time separately working on their strategy revisions, with a focus on breeding population estimates and objectives. Progress and action items are listed below as well as an overview of the Landbird Committee discussion; this information was covered with the whole Science Team from 11:30 to 12:30 when the group reconvened.

***The Waterbird Committee*** (Monfils, new Co-chair) discussed in depth the purpose of focal species and the appropriateness of those currently listed for use. We added Sora, American Bittern, and Common Loon to our 2007 list, so we now have 8 breeding focal species instead of 5. We decided to divide the waterbird list in the species-habitat association table into breeding and non-breeding species occurring in the region, and to include Virginia Rail as a non-breeding focal species. We would then have included all waterbird “surrogate species” also identified by the Upper Midwest and Great Lakes LCC and the Eastern Tallgrass Prairie LCC for planning purposes. The group also spent a lot of time determining best sources of population data for focal species, with more focus on species of concern to assure we have the best information in the new strategy.

**Action items:** 1) Several draft strategy sections will be completed (Greg, Mike, Dan Holm, Racheal to lead) and provided to the full committee for review by the end of February.

2) A conference call is planned for March to discuss draft sections, additional progress, and writing timelines.

3) Nat Miller offered to host a brief training session regarding use of Google Docs for group input and editing of a document.

*The Waterfowl Committee* (Coluccy and Soulliere, Co-chairs) also focused discussion on the JV strategy revision. We reviewed the current draft of the breeding population estimates and objectives sections. After substantial discussion, we decided to use the 80<sup>th</sup> percentile of the long-term average (LTA) population abundance as our objective for breeding ducks rather than the LTA. Although we are currently about 20% below LTA, the argument was made (and agreed to) that establishing abundance targets above the LTA is necessary in order to achieve the LTA. This approach is also aligned with the 2014 NAWMP objectives addendum. Non-breeding population objective setting is in a holding pattern until the NSST completes the guidelines for a regional step-down of continental objectives. Four approaches have been developed and will be reviewed at an upcoming (April) NSST meeting; they use various combinations of Mid-winter Inventory and harvest data to proportion abundance estimates for non-breeding JVs.

**Action items:** 1) Complete population sections and remaining portions of the draft JV Waterfowl Strategy by mid-July so a draft can be provided to JV Management Board members six weeks before the August Board meeting.  
 2) Waterfowl Committee members should plan on attending the Board meeting to help present information.  
 3) We are planning an April committee meeting at Winous Point to continue strategy development. A Doodle Poll will be sent to identify best dates.  
 4) After whole committee discussion regarding the value of some of the climate change modeling approaches, information from Michael Notaro (U. of Wis.) and Mike Schumer was identified as something important to review, especially for the non-breeding period.

*The Landbird Committee* (Ewert and Will, Co-chairs) had a wide-ranging discussion regarding potential approaches for revising the JV landbird strategy, including target audiences and how plan format might be revised. The committee intends to make use of the 2016 PIF plan, stepping down population objectives, but also using trends as a metric to structure a new JV strategy. In addition, many landbird migration projects will inform a non-breeding objectives section, a significant life-cycle planning element not included in the 2007 JV strategy. A landbird plan revision should also address ecological goods and services (EGS, e.g., hypoxia) in an effort to help the public understand how bird habitat is relevant to them even if they are not bird enthusiasts. The committee also discussed bringing on more members, including potentially other JV Science Coordinators from neighboring regions, at least on an ad hoc basis. The group also discussed a need for a JV implementation coordinator to assist moving a landbird plan forward as well as the JV committee serving as the Midwest Team for PIF. Likewise, the Coordinated Bird Monitoring (CBM) network can be better integrated with JV landbird priorities used as the catalyst to spark various bird monitoring initiatives across the Midwest. Katie Koch has volunteered to be a liaison across bird group committees and various monitoring entities, and ultimately the committee would like to develop a communication / collaboration model and formalize a network to help implement habitat delivery for landbirds.

The Landbird Committee envisions population and habitat objectives focused more on managing differently, not necessarily more habitat. We need to find mechanisms that

turn downward trends in a different direction – there seems to be no discernable change in negative landbird trends following completion of the 2007 JV plan. Although not discussed during the committee meeting, Tom noted a need for climate vulnerability assessment for each species, using something like Audubon’s approach or Pete Marra’s work. Nat (and Chad Wilsey) offered to help with the climate change section for each of the JV bird-group strategy revisions.

Toward the end of our full-group discussion it was noted the IWMM information, plus recent energetics work (OSU), plus the INHS project for wetland quality will all be helpful in revising the JV shorebird strategy.

*The JV Science Team meeting adjourned at 12:30 PM. Greg Soulliere and bird-group committee chairs compiled these minutes.*