Upper Mississippi River and Great Lakes Region Joint Venture Technical Committee Meeting - Minutes 15-16 December 2004, Indianapolis, IN

Committee Members Present: John Castrale, John Coluccy, Mike Eichholz, Dave Ewert, Bob Gates, Diane Granfors, Dan Holm, Dave Luukkonen, Greg Soulliere (Chair), and Tom Will. Bernie Freeman also attended this noon to noon meeting.

New members John Culuccy, Dave Luukkonen, and Greg Soulliere, plus acting JV Coordinator Bernie Freeman introduced themselves. Each technical committee member had an opportunity to share information about their backgrounds and interests in bird conservation.

Great Lakes Mallard Research

John Coluccy provided the history and reasons for establishing the Ducks Unlimited Great Lakes / Atlantic Regional Office in Ann Arbor, MI. Much of the research focus in the Great Lakes states has been on mallards. Great Lakes mallards are very important to harvest, particularly in WI, MI, OH, and IN. A breeding mallard ecology study was completed during 2000-03. Sensitivity analysis revealed that duckling survival had greatest influence on population change, which is different then mallards on the midcontinent prairie where nest success is most important.

The HEN (Habitat Evaluation Network) model was reviewed. This is a decision support system to better target breeding waterfowl habitat work based on existing landscape features and information learned during the mallard research project. A decision matrix has been developed to determine whether acquisition or grassland/wetland restoration should be the preferred management option based on landscape variables. The mallard model calculates an estimate of current productivity and identifies what land-management options best fit an area to increase value to breeding mallards.

State Wildlife Conservation Strategies

Tom Will reviewed Minnesota's comprehensive wildlife planning effort resulting from the federal SWIG grants available to all states. When plans are completed, states will be eligible for additional funds to manage species of greatest conservation need. Sets of these species are being identified in MN, and they are using state GAP analysis to identify where species are located and the communities being used by each species of concern. MN used 27 subsections for ecological landscape division, and in each subsection a couple priority habitats (communities) are identified.

This planning effort may be an opportunity for the JV. States are probably struggling with quantitative aspects of planning and JV bird population habitat objectives would be useful. A need was identified to inform states about the interests of the JV in stepping-down bird population and habitat objectives from continental plans to our JV region. We also need to provide states with a list of bird species of regional concern.

Action item: Identify wildlife conservation strategy representatives for each state in the JV. Inform them of the role of the JV and intentions to develop regional and smaller scale habitat objectives for bird species of conservation concern. Greg and Dan will complete this task.

Wisconsin has four people funded by SWIG, a format other states should consider. States need to eventually link efforts for migratory birds with help from the JV. The JV should promote a regional bird conservation message and remind states of their important roles.

The North Central Section of The Wildlife Society recently discussed a possible symposium on state conservation plans to be held at the next Midwest Fish and Wildlife Conference (Grand Rapids MI in 2005). Proceedings would be published. Dave Luukkonen is the incoming TWS north-central section president and he is going to determine if states would be interested in this type of symposium. The state strategies are to be completed by October 2005 so symposium emphasis may be on the process and proposed improvements for the next iteration of plan writing. The symposium should include a regional perspective for bird conservation.

Action item: Dave L. will inform the 2005 Midwest program committee in Michigan of the potential value of a symposium to compare state wildlife planning efforts, and that a migratory bird conservation theme would help link Midwest states together.

Joint Venture Implementation Plan Revision

The group spent a lot of time discussing the needed revision to the joint venture implementation plan, particularly how to assure the document will have a strong scientific foundation.

Waterfowl--Bob Gates discussed stepping down continental bird population and habitat objectives, and he described what was done for ducks in the mid-latitude (migration staging) states when developing the 1998 JV plan. States were divided into breeding and migration states for the 1998 plan. Migration habitat goals were based on a continental fall flight of 100 million ducks, rather then the 62 million spring population goal. Using winter population goals for the Lower Mississippi Valley and Gulf Coast JVs, our JV planning model parameters were 26 million ducks for 30 days, with production states (MN, WI, and MI) supporting 1/10 of goal. States with mid-migration habitat were identified as important areas with significant wetland loss, and there was a need to translate population goals into habitat objectives. Food energy was assumed to be the limiting factor, and natural foods were assumed to be the primary diet for ducks.

Many planning assumptions had to be made when developing migration habitat objectives in the 1998 implementation plan. The waterfowl breeding habitat portion was almost completely a "bottom-up" approach with individual states identifying breeding duck population and habitat goals. The next version of the JV plan will need to be more

"top down" for both breeding and migration habitat, and it will include waterbird, shorebird, and landbird components. The JV can provide regional linkages between states when developing and implementing the plan. There are several state bird conservation initiatives (BCIs), plus bird conservation regions (BCRs), that will be integral in the plan.

The group discussed a major uncertainty: How do nutrition resources available during migration effect survival and reproduction, and should we focus on fall or spring food supplies. Based on a recent study completed in Ohio, fall foods for waterfowl were over abundant and spring foods may have been a limiting factor. Food supply may be limited in fall for shorebirds (more likely) but this has not been evaluated. Ultimately, we will need to translate bird abundance goals and demographic rates into habitat objectives using a biological foundation.

Thoughts shared on refining biological foundation

- Focus on spring migration stepping down habitat objectives will be a challenge with exiting data.
- Need to differentiate habitat needs by foraging guild.
- Consider differences in carrying capacity (K) for various bird species among broader range of habitat types.
- Important to determine K to see if we are even close in our habitat objective.
- Consider non-food factors that limit use (e.g., human disturbance).
- Need geographic partitioning of habitat objectives state BCIs.
- Consider cost effectiveness of alternative conservation strategies.
- Integration with landbird and waterbird conservation plans.
- Monitoring and evaluation to address biological assumptions.

Landbirds--Tom Will discussed the bird prioritization approach used by Partners in Flight (PIF) for landbirds. Landbirds were ranked based on vulnerability, considering several factors for breeding and wintering areas, at continental and regional scales and a "watch list" was developed. Because vulnerability/trends are based on breeding bird survey (BBS) routes, the starting point for population trend analysis starts about 30 years ago. Population objectives are set based on what has happened over the last 30 years. Landbird population estimates are provided by BCR and states using BBS data, correction factors, and many assumptions (see Appendix B of PIF landbird plan).

The PIF "Port Aransas 5-element Process" for translation of population objectives into habitat objectives was reviewed. Elements include:

- Landscape assessment
- Population response models (species to represent guild)
- Conservation opportunities (conservation lands available)
- Community-based optimal landscape design (stakeholders, bird/guild needs, conflicts)
- Monitoring and evaluation

The landbird community is starting to examine landbird migration-habitat requirements. Some of these elements are abstract, and they need further development. Linking habitat objectives for breeding birds is feasible but the greater challenge will be the non-breeding habitat objectives. We reviewed an integrated (multi-species) conceptual strategy for partners working in the Morris Wetland Management District, MN. Work was completed by the FWS Habitat and Population Evaluation Team (HAPET) at the Fergus Falls office. This group may be able to provide our JV with some assistance, at least information, but their primary effort is in the Prairie Pothole JV.

Sub-committees and population objectives--We discussed how best to approach the implementation plan revision, with chapters written for the four bird groups or by BCRs. The JV shift to integrated bird (all-bird) conservation was a big change. There may be need to break the plan down by waterbirds (waterfowl, wading and colonial-nesting waterbirds, and shorebirds) and landbirds (2 groups vs. 4). Subcommittees need to target species of concern, determine key issues that should be addressed in the plan, and determine what science they can contribute to the JV plan.

Whereas the JV plan should have a strong BCR emphasis, with linkages between states, implementation of the North American Waterfowl Management Plan has been based on political boundaries. Landbird conservation has not evolved to the same level yet, so landbird conservationists have not had to deal with implementation issues. The JV has a management board that facilitates at a regional level, and they must help interstate communication. Other JV plans have been completed or are in the process of being written. They may provide plan-format examples to review for help determining a logical chapter layout.

Action item: Greg will review continental and regional bird plans and generate a list of bird species of greatest concern. Tom will review the landbird portion as there have been recent regional adjustments. Greg will also review other JV implementation plans (e.g., Central hardwoods, PPJV) for chapter formatting examples.

The JV technical committee will ultimately develop bird habitat objectives for the JV. We will probably need to target species of greatest concern and/or "focal" or "umbrella" species that serve as surrogates for species groups. Guilds will be associated with landscape cover types and can be identified at various scales when providing JV partners direction for habitat management. Location, abundance, patch size, and juxtaposition are important landscape considerations. Many assumptions will have to be made, but assumptions will be explicit (testable) in the plan. Modeling will be needed when translating population objectives for species groups into habitat objectives. We need to identify what sources of bird population data are available and what landscape modeling efforts have been completed or can be completed to assist in JV planning. Mary Mitchell in Region 3 may be doing work that can assist the JV, however, she is with refuges and they are known to be provincial with data sharing. Wayne Thogmartin and Melinda Knutson (USGS La Crosse Office) have also been working on GIS-based models for landscape conservation planning.

Action item: Greg will contact Mary Mitchell and staff at the USGS Office to discuss spatial models for bird conservation, determine what information is available, and determine if there may be interest in collaboration with the JV. Greg will also identify other potential science contacts involved in large-scale bird conservation planning and begin net-working with those who might help the JV.

Bird Conservation Region 22 – Draft Plan Review

Diane Granfors lead a discussion on the draft BCR 22 plan completed by Ellen Paul and Greg Butcher. Ellen Paul is not a scientist, but an advocate for the Ornithological Society. Bird scientist Greg Butcher was contracted by the JV to complete the plan but he subcontracted Ellen because of time constraints due to his changing employment. This was a bit of an experiment to see if the JV could contract this type of work. However, the four JV technical committee members and two other reviewers (Melinda Knutson – USGS and Steve Lewis – FWS) were not very favorable in their review comments. The BCR 22 plan contract is officially completed, but Butcher and Paul are willing to do some revising to better accommodate JV needs.

Major review comments included:

- There are statements in the draft that are not appropriate and that do not reflect the desires and concerns identified in the original BCR 22 planning meeting.
- The MORAP GIS maps were not interpreted correctly.
- Technical layout and table and figure formatting are incorrect.
- There is no clear direction for priority bird conservation work.
- Too much detail in unimportant areas and too little text on important issues.
- The draft plan is largely ideas and may not be salvageable as a plan.

Action item: Greg will compile reviewer comments and meet with Ellen Paul and Greg Butcher to review the draft and what must be added to increase the value of the plan to JV partners.

Review of JV Flex Fund Grant Applications

Before ranking grant applications we discussed ground rules for the process, as some proposals were submitted by technical committee members. Committee members were asked to prioritize the 25 proposals high-1, medium-2, and low-3 before the meeting, using criteria provided. All scores were pooled and averages calculated; members requesting funds were not allowed to provide a score for their application. Proposals were ranked based on pooled scores and a printed spreadsheet was provided to technical committee members. Using this sheet and a projected image of the spreadsheet, we had a thorough discussion about the merits of the proposals. Some scores were adjusted during group discussion and a final ranking was determined and provided to the JV Coordinator.

Major grant application discussion items are listed below.

- There was a general consensus that minor habitat projects do not contribute to the goals of the JV, whereas evaluation projects that test assumptions and fill information gaps for regional bird conservation planning are very important.
- The Emiquon Project was considered a good bird habitat project, but very expensive considering the funds available. This may be more appropriate for a NAWCA grant.
- The Illinois River Valley Characteristics project increased in popularity when its multiple values were considered ... bird and wetland data available to JV partners. However, project results need to reflect JV needs for improved conservation planning.
- Wetland Isolation Project there was some concern that study sights will not be representative and results will be used in other lake systems.
- A formal report (i.e., introduction, methods, results, discussion, management implications, and budget) from each funded grant applicant should be required so that the information learned is available to others. Future funding should be contingent on reporting.
- Grant application guidelines should include species or issues of concern for the JV. Results from the most relevant projects should be presented to the JV Technical Committee and/or JV Management Board.

Future grant ranking criteria—There was concern about grant ranking criteria and the types of project proposals being submitted (i.e., their significance to bird conservation). Dan Holm lead us in a discussion about how we might adjust JV flex fund criteria to better fit JV priorities. Continental bird plans, including the NAWMP, have identified the need to base conservation decisions on better science. Much of the bird conservation activity in the past has been opportunistic habitat work vs. conservation efforts to achieve greatest biological effectiveness. We reviewed the request for proposals (RFP) memo for JV flex funds and many suggestions were made to better focus potential applicants on improving JV science foundation.

Action item: Greg, John Castrale, and Dave Ewert will draft a revision of the JV flex fund RFP using technical committee feedback and provide a copy with recommended changes to the JV Coordinator.

Other Items

The group discussed importance of GIS capabilities for regional bird conservation planning and completion of the JV implementation plan. Habitat objectives for the plan should be based on spatial and statistical models, similar to work being done at the FWS HAPET office in Fergus Falls, MN. We need a ready access system, probably at the FWS East Lansing Office. Dave Ewert listed several sources of GIS data layers. Some technical committee members felt the JV could serve as a clearinghouse for various GIS data bases.

The National Science Support Team (NSST) of the North American Waterfowl Management Plan is addressing some of these questions. The National Ecological

Assessment Team (NEAT) is another biological planning entity established to increase (across Divisions) science-based conservation in the FWS.

The committee briefly revisited the need to form subcommittees to identify focal species within bird groups. Expert qualitative assessment would be used to identify which species should be modeled to generate habitat objectives for JV planning. Tom Will offered to send the PIF 5-element presentation for converting population objectives into habitat objectives. Bird-group subcommittees are listed below (technical committee member Mike Roell may also be interested in working on a subcommittee).

Landbirds – Tom Will, John Castrale, Dave Ewert Waterfowl – Mike Eichholz, John Coluccy, Dave Luukkonen Shorebirds – Bob Gates, Dave Ewert, Diane Granfors

Waterbirds - Bob Gates, Diane Granfors, Dan Holm

Action item: Tom will email Greg a PIF 5-element presentation and Greg will forward to the rest of the technical committee.

Action item: Subcommittee members (above) will identify several (3-10) focal (umbrella, surrogate) species within assigned bird groups; birds should be largely from the JV list of regional-concern species. Selected species should have habitat requirements representative of multiple species and there should be adequate knowledge of species life requisites available (i.e., understanding that allows habitat and landscape relationships to be modeled).

Next Meeting

The group felt we should meet again in early spring (mid-April to early May). Our focus will be the JV implementation plan revision, particularly progress on action items and spatial modeling. Committee members were asked to email Greg dates that would not work for them. At this point, late April (lets say **April 27 and 28**) seem to be the best dates. We will plan on **East Lansing, MI** unless a better opportunity presents itself in the next couple months.

Minutes compiled by Greg Soulliere, 1-5-05