Upper Mississippi River and Great Lakes Region Joint Venture Science Team Meeting Minutes - December 2011

A Joint Venture Science Team meeting was held following the 72nd Midwest Fish and Wildlife Conference at the Des Moines, IA, Marriott Downtown hotel on 7-8 December. The Science Team consists of our JV Technical Committee plus additional bird conservation experts who serve on four bird-group subcommittees. These notes include coverage of the Science Team session and a separate gathering of the Technical Committee to discuss JV flex-fund grant applications.

Technical Committee members: Present - John Coluccy (DU), Dave Ewert (TNC), Bob Gates (OSU), Ron Gatti (WI DNR), Dan Holm (IL DNR), Doreen Mengel (MO DOC), Greg Soulliere (FWS-JV), and Wayne Thogmartin (USGS); absent - Dave Luukkonen (MI DNR) and Mark Nelson (USFS)

Bird-group Subcommittee members: Present - Andy Forbes (FWS-JV), Mick Hanan (for Brian Loges, FWS-Refuges/IWMM), Steve Lewis (FWS-MB), Brad Potter (FWS-LCC), Charlotte Roy (MN DNR), Bob Russell (FWS-MB), Tom Will (FWS-MB), and new member Ben Kahler (FWS-JV); absent - James Cole (TNC), Tom Cooper (FWS-MB), Katie Koch (FWS-MB), Mike Eichholz (SIU), Melinda Knutson (FWS-Refuges), Mike Monfils (MI NFI), Megan Seymour (FWS-ES), John Simpson (WPMC)

Guests: Neil Chartier and Ryan Drum (FWS-HAPET East), Bill VanderZouwen (WI DNR and JV Management Board Chair), Brian Tavernia (USFS), and Lisa Webb (Coop Unit, U of MO)

7 December, 1:30 – 5:30 PM JV Science Team

Perspectives from the JV Management Board (Bill VanderZouwen)

Following introductions, Bill spoke with the group and covered several areas of interest. The Management Board appreciates and thanks the JV Science Team for the technical information they provide. Government funding is shrinking and we need to do the right work in the right places, based on science. Bill provided two examples of WI DNR staff using products of the JV Science Team. They included the WI Grassland Bird Plan, where professionals and their partners have stepped down JV regional grassland bird objectives to smaller planning units within the state. The other reference was an initiative where agency supervisors from offices across the state gathered all field staff to review JV plans. They also broke into subgroups and, using GIS experts, developed strategies to achieve JV bird habitat objectives within their work areas.

Bill reviewed efforts of the JV Management Board in 1) trying to be more accountable with an annual action plan presented at the board meeting using strategic habitat delivery, 2) being supportive in political advocacy for the JV, even though several board members are not allowed to participate directly, and 3) participating with Landscape Conservation Cooperatives (LCCs), of which we have two in our JV region. We must take advantage of the LCC opportunity, working together for the benefit of bird conservation.

One area Bill thought the Science Team should better integrate into bird conservation planning was the effects of climate change. We must prepare to address this issue in the next JV plan revision. Likewise, the Science Team must be aware of the human side of habitat delivery, such as assisting agency field staff with implementation challenges or simply taking time to explain the science behind JV planning. Thirdly, Bill reminded us of the ease in getting discouraged with the current economic environment, but things change over time, so be prepared and stay optimistic.

Upper Mississippi Valley / Great Lakes Shorebird Conservation Plan (Bob Russell) Bob is spearheading the regional Shorebird Conservation Plan update, first completed in 1999. These regional plans serve as a step-down from the continental shorebird plan. Bob used other regional plans as a model for this revision. Compared to the 2007 JV Shorebird Habitat Conservation Strategy, this plan is more about natural history, ecology, and population status; a symbiotic relationship between this plan and the JV shorebird habitat plan is envisioned. Bob also discussed several shorebird research projects being completed in the JV region.

Northern Forest Futures Project (Brian Tavernia)

Abstract from similar presentation during Midwest Conference, Brian Tavernia and Mark Nelson: Numbers, distributions, and conservation status of forest wildlife species are associated with habitat abundance at regional scales. Future changes in climate and land-use will affect the extent, composition, structure, and ecological processes of forest ecosystems, altering the abundance of habitat types. These changes have the potential to increase the abundance of some habitat types whereas others may decline. Wildlife managers and policy makers need information about potential trends in habitat abundance under future scenarios of climate and land-use change. Recognizing this need, the U.S. Forest Service and several partners initiated the Northern Forests Futures Project (NFFP). NFFP uses Forest Inventory and Analysis information on conditions and trends of existing forests to parameterize a transition model capable of projecting future forest conditions through the year 2060, under a range of climate and land-use change scenarios. Using these projections, we addressed hypotheses about how climate and landuse change will interact to influence the abundance of habitat for forest-associated wildlife species across the Midwest and Northeast. From 2010 to 2060, Midwest forest cover declined under all scenarios, but the magnitude of declines differed, ranging from 2.1 to 4.2 million acres (2.8 to 5.5% of regional forest cover); state trends also varied. We report potential trends for forest habitat types that differ in composition, structure, and physiographic location, and we assess the consistency of these trends across states as well as across climate and land-use change scenarios. We address the ramifications of these changes for wildlife species associated with each habitat type.

Science Team Updates and Reports

Integrated Waterbird Management and Monitoring Program (Mick Hanan) The IWMM Program is a new initiative using a standardized approach to monitor waterbirds during the non-breeding period. It is still FWS-refuge centric, but effort has expanded such as the work branching out around some of the Wetland Management Districts. Because of overlap in monitoring priorities between this program and the JVs, IWMM staff are committed to staying engaged with JV Science Teams.

Mapping significant waterfowl/waterbird areas in NA (Ben Kahler and Greg Soulliere) Ben reviewed the processes used for revising the NAWMP and U.S. Waterbird maps of significant areas for these two species groups. Greg and Ben have worked on both efforts, with Greg serving as chair of the NAWMP Science Support Team map committee and Ben providing GIS services. Ben has played an even larger role in the U.S. Waterbird map, working directly with national waterbird plan coordinator Jennifer Wheeler. The waterbird map is intended for use by the NAWCA council for grant scoring, whereas the waterfowl map is simply to identify the most important waterfowl areas during all life cycle periods. An additional NAWMP map effort is planned to refine conservation targeting while addressing fundamental objectives of the 2012 NAWMP.

Upper Midwest and Great Lakes LCC Science Coordination (Brad Potter)

The Landscape Conservation Cooperative (LCC) has been extremely active on many fronts during its first 18 months but the frantic pace has slowed a bit recently. They have 13 funded projects ongoing and Brad can provide summaries for each project upon request. In 2012 there will be no "request for proposals" (RFP) for the LCC, at least that is the plan at this time. The upcoming year will include refining priorities for the LCC. Principle investigators (PIs) from LCC-funded projects came together this week at the Midwest Fish and Wildlife Conference to share information. The goal was to better collaborate across projects, and they plan a follow-up meeting to continue this effort. The JV will be well represented as three of the LCC projects are being completed by members of the JV Science Team. Species vulnerability is a theme for many projects. Brad serves on a FWS "representative species" team. Regions will be provided guidance to develop a list of representative species must have an associated population objective. Also, the LCC is restoring the webinar series to share information.

September 2011 NAWMP Assessment (John Coluccy and Greg Soulliere) Barb Pardo, Greg Soulliere, and John Coluccy represented the JV during a triennial assessment by the NAWMP Committee during their August meeting. Barb covered the partner / Management Board coordination portion of the presentation and reviewed accomplishments related to building JV staff as well as bird habitat restored and acquired since the last (2006) assessment. Greg reviewed science foundation, concentrating on those areas where negative criticism was received in 2006. Much of his presentation included slides with NAWMP Assessment Team quotes from the 2006 evaluation followed by our response activities. For example:

- Transition from opportunistic to strategic conservation as reflected in our revised 2007 Implementation Plan.
- Development of JV regional population objectives for breeding, migration, and wintering periods.
- Use of focal species and determination of limiting factors when developing breeding habitat objectives.
- Use of duck use days and an energetic model to generate non-breeding habitat objectives.
- Use of various population survey data, coupled with digital spatial data to generate decision support maps for conservation partners.

John reviewed three primary research projects, partially financed by the JV and coordinated by DU, which addressed explicit research needs identified by the Science Team. Each project had management and JV planning implications to be used when developing the next version of the JV Waterfowl Habitat Conservation Strategy.

Bird-group committee break-out sessions

Rather than immediately breaking into four bird group subcommittees, the wetland-bird groups (Shorebirds, Waterbirds, and Waterfowl) gathered and shared common information regarding recent meetings and ongoing research and monitoring efforts. All committees then met separately on Thursday morning.

We adjourned for the day at 5:30.

8 December, 8:00 – 10:00 AM JV Science Team

Break-out session reports from bird-group committee chairs

Waterbirds Committee (Holm and Lewis, Co-chairs)

Great Lakes Pelagic Bird Surveys – In 2009, Kevin Kenoe (USGS) initiated a pelagic waterbird survey on selected areas of Lake Michigan with a focus on loons and botulism outbreaks (primarily on the MI side of Lake Michigan). Additional funding was secured through FWS Region 3 Migratory Bird Conservation programs in 2010 and 2011 and from a USGS initiative on wind energy. These additional funds allowed Kevin to collect information related to potential wind energy development and wintering sea duck distribution over a significant area of Lake Michigan. A secondary objective of this work involved obtaining a better understanding of the distribution and abundance of waterbirds during the non-breeding period. The Western Great Lakes Bird and Bat Observatory also received a FWS grant to monitor waterbird use of offshore waters, and they are focusing on the WI side of Lake Michigan. In addition, the Michigan Natural Features Inventory is completing similar work on Saginaw Bay, Lake Huron. Great Lakes pelagic bird surveys are being coordinated under the Midwest Coordinated Bird Monitoring Partnership and, eventually, environmental correlates of bird distribution and abundance will be assessed.

Great Lakes Common Tern Conservation Partnership – Francie Cuthbert (U of MN) received FWS funding to develop a binational partnership that is taking a more coordinated approach to Common Tern monitoring, research, and management on the Great Lakes. About 15 collaborators have formed a working group, and communication is facilitated by a periodic newsletter. The focus in 2011 was collecting information on colony size, location, productivity, and threats for as many sites as possible. The 2012 activities will include use of colony cameras, geolocators, and banding to better understand species' demographics.

Great Lakes Colonial Waterbird Survey – This binational survey has been conducted four times – about once a decade – since the 1970s. The most recent survey was completed during 2007-10 and more than a million birds, representing 16 species, were documented during the U.S. portion of the field work. The most recent survey cost about \$350,000 over the four year period. The survey is being redesigned to reduce costs and disturbance to nesting birds and to obtain more statistically rigorous population trend estimates. The new approach, which focuses monitoring on fewer key sites, will be tested in 2012 under a FWS grant.

Marshbird Monitoring – Status of 2007-09 pilot efforts in the JV Region to test the proposed sampling framework for the national marshbird monitoring program were reviewed as well as topics for the secretive marsh bird summit to be held in Spanish Fort AL, from 13-15 December. (Note: Greg Soulliere, Tom Cooper, and Katie Koch participated in this AL meeting. It was the third secretive marshbird summit, with this one focusing on the Conway survey protocol and an assessment of management implications / justification for expanding survey work. The meeting theme was establishment of a patchwork of survey efforts ["a quilt"] to monitor abundances, distributions, and population trends in a restricted budget environment.)

Finally, the committee briefly discussed an "interior" black rail workshop planned for May, in Wichita KS, with focus on status assessment and information sharing. The group may also address a listing petition for this species.

Black Tern Status – Several independent surveys suggest Black Terns are declining on the Great Lakes and elsewhere in the species' range. Habitat impacts from invasive species could be a factor, but there appears to be unused, suitable habitat in some areas, and wintering issues could also be a bottleneck for the species. A standardized, coordinated survey is needed, as is information regarding productivity, survivorship, and wintering ecology. Some data on presence/absence of Black Terns are collected through the marshbird monitoring program and that information should be evaluated to determine if it has utility for modeling or designing a better survey for the species. The 1999 Status Assessment and Conservation Plan for the Black Tern in North America should be updated.

The committee revised some of the waterbird research and monitoring priorities on the JV list, moving the date of completion of unfinished issues from 2012 to 2014. They thought reviewing the results of the marsh bird summit was necessary before finalizing

the update. Black Tern should be included in a regional / continental monitoring scheme, perhaps moving from a secondary species to a primary in the secretive marsh bird survey. In addition, the group briefly discussed international waterbird survey efforts in the Canadian Boreal Forest and in the Arctic. ISS counts are still recommended at concentration areas.

Shorebirds Committee (Russell, Co-chair)

The committee reviewed the western Lake Erie shorebird research project which is partially funded by the JV, with focused discussion on the bird marking portion of the study. Site fidelity was recorded, with birds marked in spring and returning to the same location in fall. On a related note, recently completed research found Pectoral Sandpipers staying 3-7 days at migration stop-overs and apparently finding adequate food. There is an interest in completing additional migration study work, perhaps using Killdeer and monitoring migration timing and food habits.

Landbirds Committee (Ewert and Will, Co-chairs)

The committee focused on two primary areas, revising the JV focal species list and population objectives. The following reasons were outlined for identifying focal species:

- Vulnerability to extinction in the JV region and where there are best opportunities to protect globally or regionally important species well represented in the region.
- Provide criteria to prioritize work (planning, protection, and management) for state wildlife action plans.
- Provide criteria to prioritize work for JV, state (in addition to state wildlife action plans), and other funding sources.
- Focusing conservation actions that are resource and time efficient and have the greatest probability of success in reversing population declines.

The following criteria were identified for defining focal species:

- Species of continental concern in our JV BCRs (PIF Watch List; regional density >1; threat score >1) or globally rare species that should be protected wherever they occur. Tom Will and Andy Forbes will prepare an initial list for committee review in January. The committee will have a webinar in February to finalize a focal bird list and in April to review population objectives.
- Species of Regional Concern based on BCR-specific PIF combined score (threshold values to be defined) or Species of Regional Stewardship based on BCR-specific PIF combined score (threshold values to be defined, e.g., PIF combined score >13; region responsibility >25% of population OR regional density >5 and 5% of population; threat score >1). Tom and Andy will prepare initial list, with first committee review in January, webinar in February, and final review by April.
- Priority and monitoring species (Caprimulgids and Strigids); other groups or species to add to this list?

The following categories were identified for bird species/community focal work:

• Wintering birds (e.g., Short-eared Owl, potentially Harris' Sparrow and American Tree Sparrow). Tom and Andy will derive a scoring method for winter birds to determine if any have globally significant wintering populations in the JV region.

- Stopover sites (criteria build from recently funded LCC-grant project). The focus would be on areas where many species of landbirds concentrate at stopover sites in the JV region. There may be at least one potential species to consider as a focal species for stopover sites, the Rusty Blackbird. Dave Ewert to define stopover site effort.
- Community level concern. Protect communities of birds where the JV has (or had) a disproportionate amount of the landscape supporting these bird communities (e.g., tall grass prairie, savanna, some forest communities, some wetlands). Need to talk with Ben Kahler regarding feasibility of conducting this spatial analysis.

The committee discussed, in general, setting population objectives within the JV region for focal species. This effort would be worthwhile considering Wayne's analysis of quasi-extinction probability, which integrates population size, variability in population size, and population trend to predict the probability, based on BBS data, that a species would become so rare as to no longer be detectable on the BBS. These extinction probability estimates will soon become a metric reported on the BBS analysis website. Wayne is preparing range-wide scale analyses for the 1966-2007 trend data (example available for Golden-winged Warbler in Wisconsin). Wayne will conduct analyses for grassland birds in BCR 22 and 23, and circulate Henslow's Sparrow and Cerulean Warbler examples (Golden-winged Warbler analyses will be part of the Golden-winged Warbler Status Assessment forthcoming in January/February). An additional committee webinar is tentatively planned to discuss how these analyses might be used to set population objectives for the JV.

Once the focal species list is revised the committee plans to review JV research and monitoring priorities and consider if, when, and how the JV Landbird Plan might be revised. Research and monitoring work completed since the landbird plan was finished will also be reviewed and incorporated.

Waterfowl Committee (Coluccy and Soulliere, Co-chairs)

The waterfowl committee reviewed status of the BCR 23 Blue-winged Teal project lead by Ron Gatti. After two years of building a pen-reared flock for decoy trapping, Ron is ready to complete the fourth and final year of teal research. Unfortunately, he has a funding shortfall, and the committee spent time discussing options to help with funding and even providing bodies (1-4 weeks) to assist with field work. Ron also offered 32 surplus decoy traps to other efforts once the 2012 trapping is completed.

The group discussed merits and shortcomings of three of the eight JV flex fund proposals related to waterfowl in preparation for the JV Technical Committee meeting. We also reviewed the NAWMP map of significant areas and how it should be further refined to better target conservation effort such as NAWCA grant projects. We discussed completing a Ring-necked Duck species account for the JV Waterfowl Habitat Strategy, and Charlotte Roy thought she would be able to do this in the future; she is currently completing a BNA account for this species.

Commitments from committees

Action item: By 20 January, Tom Will and Andy Forbes will prepare a draft revised JV focal species list for landbirds for review by the full Landbird Committee. This will be followed by a landbird focal species webinar in February, and final committee review of the list and population objectives in April, coordinated by Tom and Dave Ewert.

Action item: By 1 February, Ron will work with John and Greg to explore funding opportunities for the on-going BCR 23 Blue-winged Teal project, and Ron will work with John and Greg regarding assistants for field work.

JV Science Team meeting was adjourned at 10:00 AM.

8 December, 10:00 – 12:00 PM JV Technical Committee

Review and ranking for JV Flex-fund grant applications (Soulliere)

The JV Coordination Office received 8 flex-fund grant applications meeting criteria listed in the FY 2012 request for proposals (RFP). On 16 November 2011 Greg Soulliere provided Technical Committee (TC) members the following: 1) hard copies of each flexfund grant application, 2) a spreadsheet listing the titles, cost, and duration of each project, and 3) a copy of the 2012 flex-fund RFP. TC members were asked to refer to the RFP for application criteria then score each proposal high (1), medium (2), or low (3) for "Technical" (i.e., is proposal scientifically sound) and "Topic Value" (i.e., importance to overall JV goals). TC members were also sent an electronic copy of the spreadsheet and asked to fill-in their project scores and return the spreadsheet to Greg by 1 December.

Individual scores received from all 10 members were pooled to generate mean technical and topic value scores for each project, and these values were then used to develop an initial project ranking to begin our dialogue. Eight of 10 TC members were at the meeting and participated in discussion regarding these projects, resulting in the recommendations below (see pages 9-11). This information will be submitted to Barb Pardo who will collaborate with coordinators of other funding sources (e.g., FWS Midwest Migratory Bird Program) to support as many recommended projects as feasible during the coming year.

The JV Technical Committee meeting was adjourned at 11:45 AM.

JV flex-fund proposal ranking and discussion highlights (Also see spreadsheet with pooled technical / topic value scores):

Recommended for funding

Habitat Use by Spring Migrating Landbirds (U of Scranton); recommend funding. This proposal ranked highest (1 of 8, combined rank) in the initial review, and the TC supported its multi-tiered approach to evaluating habitat use by landbirds. Reviewers noted that authors plan on moving study sites to better take advantage of NEXRAD radar. There was discussion about whether shoreline habitats are really more important than inland sites, and the value of NEXRAD to help in this assessment. Concern was expressed regarding high costs for the isotope analysis (objective #4) and the need to further evaluate this part of the proposal based on available funds. Project authors were recognized for their experience with the isotope technique, and it would help address concerns related to use of shoreline vs. inland sites. Furthermore, some TC members felt this part of project was more of a technique evaluation rather than a key part of the proposal. Greg will contact PIs and discuss objective #4 in more detail and the potential to exclude it for a lower cost project.

Waterfowl Abundance and Productivity (U of MN); recommend funding.

Also ranking very high in the initial review (2 of 8, combined rank), this type of monitoring project may provide a substitute for the Prairie Pothole Region 4-square mile survey. Some questioned whether this work had already been done, but the answer was no; we have no such monitoring effort in the Great Lakes region. Greg noted the importance of this topic in the JV waterfowl plan and that it had only been addressed with individual short-term species-specific projects. The group discussed whether or not to expand from the transition landscapes of eastern MN and western WI to more forested areas, typical of the east two-thirds of the JV region. We determined the cost would likely increase significantly and focusing in the proposed area will still provide value as a pilot study.

Aerial Observers Guide to Waterfowl Identification (FWS); recommend funding.

Although initially ranked relatively low (5 of 8, combined rank) the TC discussed the critical nature of aerial survey data for waterfowl conservation planning and the need to train new observers due to loss of retiring survey veterans and their institutional knowledge. There was concern about how this project applies to the JV region and why we were solicited. However, our JV has become a national leader in many areas of waterfowl conservation planning and assisting with this low-cost project to help assure quality survey data reflects our continued interest in continental efforts. In addition, the population survey training photos and video should capture community types similar to those in our JV region. Greg will contact PIs and emphasize the need to include Great Lakes region waterfowl habitats, including river systems.

Scaup Conservation Action Plan (FWS); recommend funding at lower value.

The proposal ranked high (3 of 8, combined rank) and group discussion was generally favorable toward the project, with its integration of human dimensions work to

expand the scaup plan beyond a typical population / habitat conservation effort. The project builds on other work with Northern Pintail and American Black Duck plans, and has an important tie-in with the 2012 NAWMP revision currently underway. Concerns expressed by the TC included: what JV-specific outcome would result, and how much information will this provide to better understand scaup habitat management vs. feeding regulations development? Also, the group wondered why this was not submitted as a Science Support Partnership request (SSP grants are for USGS-FWS cooperative efforts). In the end, the TC thought the project was worth supporting, in large part due to the excellent records of the PIs and collaborators. Moreover, the JV region is important to scaup and our JV is increasingly playing a role in continental-scale planning efforts. However, we recommend a reduced level of funding (\$10,000 – 13,000 vs. \$26,275) by our JV since this is a continental effort.

Red-headed Woodpecker Habitat Use (INHS); recommend funding only if funds are available after higher priority projects are supported.

Ranking lower in the pooled scores (6 of 8, combined rank) this proposal was interesting because it compares use of two primary community types for a species with great area demands based on the JV Landbird Plan. However, the proposal was weak in describing methods and study areas, it did not reference the JV plan, sample sizes were small for a radio-transmitter study, and the project may help little in our understanding of habitat use by this species across the JV region. We discussed the need for better guidance in RFP wording, particularly the methods description in proposals. Depending on whether the JV has adequate funding for this project, Greg and members of the JV Landbird Committee can provide proposal authors feedback for project refinement and proposal resubmission.

Not recommended for funding

Migration Monitoring Protocol (Black Swamp BO); no-fund recommendation.

Initially ranking in the middle of the proposal group (4 of 8, combined rank), this project fell to a "no-fund recommendation" after TC discussion. The project budget was unclear, it lacked specificity in comparing monitoring approaches, and the protocols were short on detail. The TC was supportive of the idea/need, but this proposal lacked adequate information for a positive funding decision. It was noted the proposal was also received through the FWS Midwest Migratory Bird Program RFP process, where there were similar concerns: reviewers were supportive of idea, but authors have not achieved an adequate project to address the non-breeding landbird monitoring issue. The TC discussed whether developing one all-inclusive protocol was feasible, but they encourage the PIs to resubmit a refined proposal in the future, one with an explicit objective(s) and perhaps a portfolio of thoroughly described survey protocols to be tested. Greg and Dave will work with Katie Koch to develop a response that encourages resubmission with improvements and better collaboration with Katie in proposal development.

Prairie Bird Initiative (Audubon Chicago); no-fund recommendation.

Ranked near the bottom of the proposal list (7 of 8, combined rank), this project focused on the western portion of BCR 22. The TC had many concerns regarding the

proposal: very expensive relative to potential outcome, lack of a business plan in a proposal that espouses business concepts, lack of overall detail including what / how to monitor outcomes, inflated (Audubon) and inappropriate (CEC) match funds, and overall high uncertainty (risk of failure). Andy Forbes noted this topic has been discussed in Missouri for some time, and some preliminary outcome estimates should be available -- unclear as to why they weren't included in proposal. There was concern expressed about grassland bird monitoring protocol (hasn't this been done?) as well as lack of coordination between divisions within MDC. The TC is supportive of improved BCR-scale conservation implementation, but not what was outlined in this proposal.

Chimney Swift Conservation Assessment (Audubon MN); no-fund recommendation.

Ranked last in the initial scoring process (8 of 8, combined rank), the group thought the proposal lacked detail related to monitoring protocol, cost estimates, and it was simply unclear regarding project outcomes.

Action item: By 1 February, Greg and John will refine wording in the JV flex fund RFP requesting applicants to provide a greater level of detail so proposals can be better compared. Explicit wording in the proposal Methods section as well as the relationship of the project to current JV plans should be included.

Action Item: By 1 March, Steve Lewis and Greg (with help from Sean Kelly) will compile a list of all FWS / USGS grant opportunities, including their themes, criteria, and typical due dates.

Action Item: By 1 March, Greg will work with Barb Pardo to determine available JV funding and which of the above projects will likely be supported during FY 2012. Depending on funding status, Greg will also contact PIs for the "Habitat Use by Spring Migrating Landbirds" project to discuss Objective #4 (isotope analysis) and determine project cost without it, and he will contact PIs for the "Aerial Observers Guide to Waterfowl Identification" to encourage Great Lakes region community types be included in the project.

Meeting Minutes Submitted by Greg Soulliere, Science Team Chair