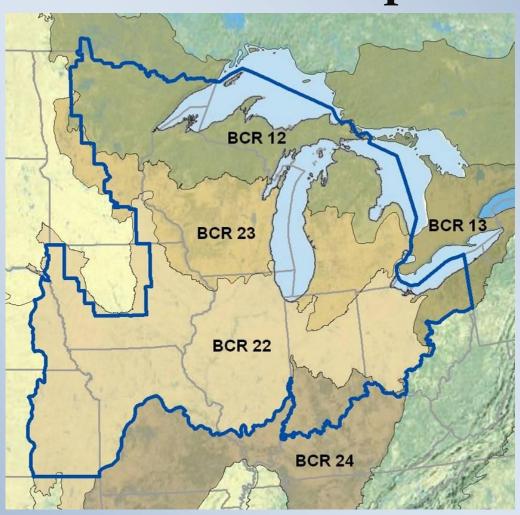


Upper Mississippi River and Great Lakes Region Joint Venture Science Office

2010 Annual Report



Third Annual Report: Developed to inform and update on the role, vision, and recent accomplishments of JV science staff and partner biologists forming the JV Science Team. We welcome feedback from our valued colleagues.

Joint Venture Science Office

JV Mission: The Upper Mississippi River and Great Lakes Region Joint Venture will deliver a full spectrum of bird conservation through regionally based, biologically driven, landscape-oriented partnerships.

Following JV Management Board direction, the Science Staff and Technical Committee will improve the scientific foundation of bird conservation within the JV region. Management Board technical priorities include:

- Apply scientific information to support strategic planning and implementation of all-bird conservation.
- Identify sources of uncertainty and evaluate biological assumptions of JV objectives.
- Provide a framework for coordinated habitat and population monitoring and evaluation.
- Maintain strong links among planning, implementation, and evaluation to improve delivery of all-bird conservation at multiple scales.

Science Staff Vision: Working with partners, the JV Science Office will help achieve regional population objectives for priority bird species and increase habitat conservation efficiency and effectiveness. JV scientists will integrate bird population and environmental trends in a proactive approach to conservation planning, design, and evaluation. Efforts will result in expanded bird viewing and hunting opportunities plus other societal values (improved water quality, flood reduction, and carbon sequestration) associated with healthy plant and wildlife communities. Superior outcomes will result from strong partner relationships built on trust, common purpose, and mutual support, exemplifying the synergy of an effective joint venture.

Contact Information:

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Joint Venture web site: www.UpperMissGreatLakesJV.org

2010 Bird-group Committees – The "JV Science Team"

The Joint Venture Science Team consists of 10 JV Technical Committee members plus several ad hoc members with expertise in bird habitat conservation and biological modeling. The Science Team was responsible for completion of the 2007 JV Implementation Plan and associated Birdgroup Strategies. With the exception of JV Staff (Potter and Soulliere), Science Team members serve on a voluntary basis. Their contributions and dedication reflect the best of the JV science partnership.

Waterfowl

John Coluccy, DU (co-chair)
Greg Soulliere, FWS (co-chair)
Mike Eichholz, SIU
Robert Gates, OSU
Ron Gatti, WI DNR
Dave Luukkonen, MI DNR
Doreen Mengel, MO DOC
Charlotte Roy, MN DNR
John Simpson, WPMC
Josh Stafford, IL NHS

Shorebirds

Tom Cooper, FWS (co-chair)
Bob Russell, FWS (co-chair)
James Cole, TNC
David Ewert, TNC
Robert Gates, OSU
Katie Koch, FWS
Brad Potter, FWS
Greg Soulliere, FWS

Landbirds

David Ewert, TNC (co-chair)
Tom Will, FWS(co-chair)
Andy Forbes, FWS
Melinda Knutson, FWS
Mark Nelson, USFS
Brad Potter, FWS
Greg Soulliere, FWS
Wayne Thogmartin, USGS

Waterbirds

Dan Holm, IL DNR (co-chair)
Steve Lewis, FWS (co-chair)
Mike Monfils, MNFI/MSU
Bob Russell, FWS
Greg Soulliere, FWS
Wayne Thogmartin, USGS

Primary Science Office Objectives and Accomplishments in 2010

Using a scientific process, identify habitat requirements for bird species of greatest concern in the JV region.

The JV Implementation Plan and associated bird-group strategies, completed in early 2008, provided the first list of explicit population and habitat objectives for priority bird species

(JV focal species) in the JV region. Several information gaps regarding breeding, migration, and wintering habitat requirements for birds were identified in the planning process. Lists of research and monitoring needs to improve habitat conservation were developed in 2008 and prioritized for each bird group during 2009. Waterfowl research and monitoring priorities were updated again in 2010.

Members of the JV Science Team and other bird conservation colleagues are currently completing research and monitoring projects based on this extensive list of evaluation needs. Science Office staff assisted in proposal development and, in some cases, data collection, analysis, and reporting.

Improve bird habitat conservation partnerships and incorporate an adaptive approach in planning.

In addition to collaboration at scientific meetings, oral and poster presentations were prepared for several events. JV plan information sharing remains a science office priority, and we received

many requests for science products to better target bird habitat conservation in the region.

A scientific planning approach was thoroughly incorporated into JV bird-group strategies and the JV All-bird Implementation Plan. Regular feedback on plan products, plus ongoing completion of evaluation needs identified in documents, will result in refinements (adaptation) to future plan iterations.

Provide quality customer service and technical assistance to partners.

Networking with the science community and members of the JV Management Board has improved our understanding of regional bird

conservation challenges, partner interests and available resources, and ongoing bird research, monitoring, and management initiatives.

JV Science Team members represent various agencies, organizations, and disciplines, and their 2010 efforts collectively enhanced the JV science foundation, largely on a volunteer basis. Keeping these partners engaged in JV bird conservation planning required regular communication (email, phone, and in person).

The JV science office is recognized for regional bird habitat planning expertise. Technical assistance and input to conservation initiatives was provided when requested. A strong relationship with researchers using spatial data and modeling has improved our ability to design desired landscapes and fueled discussion regarding potential data sources useful to future planning.

2010 Publications and Professional Reports

- Denton, J. C., C. L. Roy, G. J. Soulliere, and B. A. Potter. 2010 *In review*. Current and projected nest site abundance for cavitynesting ducks in the North Central United States. Journal of Wildlife Management.
- Denton, J. C., C. L. Roy, G. J. Soulliere, and B. A. Potter. 2010 *Draft*. Nest site availability for cavity-nesting ducks at 4 hardwood forests in the North Central United States.
- Koch, K. E., T. Will, G. J. Soulliere, B. Bartush, R. Mordecai, and R. Brady. 2010. Framework for the Midwest Coordinated Bird Monitoring Partnership: 2010-2012. U. S. Fish and Wildlife Service, Fort Snelling, MN, USA.
- Monfils, M. J., P. W. Brown, D. B. Hayes, G. J.
 Soulliere, and E. N. Kafcas. 2010 *In review*.
 Breeding Bird Use of Diked and Undiked
 Coastal Wetlands in Michigan. Journal of Wildlife Management.
- Petrie, M., M. G. Brasher, G. J. Soulliere, J. M. Tirpak, D. B. Pool, and R. R. Reker. 2010 *In review*. **Guidelines for Establishing Joint Venture Waterfowl Population Abundance Objectives.** North American Waterfowl Management Plan Science Support Team Report 3-10-2011.
- Potter, B. A. 2010. **2009 Upper Mississippi River** and Great Lakes Region Joint Venture Habitat Conservation Accomplishments. Report submitted to U.S. Fish and Wildlife Service, Fort Snelling, MN, USA.
- Potter, B. A., B. M Kahler, and G. J. Soulliere. 2010. **Development of decision support tools for the Wabash River and Sugar Creek Floodplain Initiative.** Report prepared for the Indiana Department of Natural Resources.
- Soulliere, G. J. and B. M. Kahler. 2010 *Draft*. **Harvest and hunting**, chapter *in* North American Scaup Conservation Plan. U.S. Fish and Wildlife Service, Fort Snelling, MN.

- Soulliere, G. S. and B. A. Potter. 2010. Upper Mississippi River and Great Lakes Region Joint Venture Science Office Annual Report 2009. U.S. Fish and Wildlife Service, Fort Snelling, MN, USA.
- Soulliere, G. J., J. M. Tirpak, and M. G. Brasher. 2010. Mississippi Flyway Council Technical Section and bird conservation Joint Ventures increase interaction at winter flyway meeting. North American Waterfowl Management Plan Science Support Team Newsletter – Spring.
- Soulliere, G. J., B. J. Frawley, R. B. Peyton, and P. A. Bull. 2010 *Draft*. Comparing opinions and satisfaction of a citizen advisory committee to other Michigan waterfowl hunter stakeholders.
- Thogmartin, W. E., B. A. Potter, and G. J. Soulliere. 2010. **Bridging the conservation design and delivery gap for wetland bird habitat conservation in the Midwestern United States.** Journal of Conservation Planning 7:1-12.
- Wires, L.R., S. J. Lewis, G. J. Soulliere, S. W. Matteson, D. V. "Chip" Weseloh, R. P. Russell, and F. J. Cuthbert. 2010. Upper Mississippi Valley / Great Lakes Waterbird Conservation Plan. A plan associated with the Waterbird Conservation for the Americas Initiative. Final report submitted to U.S. Fish and Wildlife Service, Fort Snelling, MN, USA.

2010 Professional Presentations and Posters

- Potter, B. A. January 2010. **Decision support tools for selection of Woodcock priority areas in Minnesota.** Presentation to Minnesota professional and private land managers group, Minneapolis, MN.
- Potter, B. A. January 2010. **Decision support tools for selection of Woodcock priority areas in Wisconsin.** Presentation to Wisconsin professional and private land managers group, Stevens Point, WI.
- Potter, B. A. December 2010. **Conservation** design: concepts and examples from bird conservation. Presentation at the 71st Midwest Fish and Wildlife Conference, Minneapolis, MN.
- Potter, B. A. April 2010. **Bird monitoring for decision making in a changing climate.**Presentation at the Michigan Ornithological Congress, Pelston, MI.
- Potter, B. A., P. Ruble, and T. Cooper. January 2010. **Upper Great Lakes Woodcock and Young Forest Initiative**. Presentation to U.S. Fish and Wildlife Service Midwest Regional Office, Fort Snelling, MN.
- Soulliere, G. J. February 2010. Establishing nonbreeding habitat objectives for diving ducks in the Upper Mississippi River and Great Lakes Joint Venture Region. Presentation to the Mississippi Flyway Council Technical Section, Little Rock, AR.
- Soulliere, G. J. May 2010. Upper Mississippi River and Great Lakes Region Joint Venture: Establishing Bird Monitoring Priorities. Presentation at Region 3 Coordinating for Midwest Bird Monitoring and Conservation meeting, Fort Snelling, MN.
- Soulliere, G. J. August 2010. Joint Venture

 Management Board 2010 Implementation
 Plan questionnaire highlights. Presentation to
 Upper Mississippi River and Great Lakes Region
 Joint Venture Management Board, St. Charles
 MO.

- Soulliere, G. J. August 2010. Evolution of the Upper Mississippi River and Great Lakes Region Joint Venture. Presentation to Upper Mississippi River and Great Lakes Region Joint Venture Management Board, St. Charles MO.
- Soulliere, G. J. September 2010. Establishing regional grassland bird habitat objectives for the Upper Mississippi River and Great Lakes Region Joint Venture. Presentation at the Region 3 Coordinated Bird Monitoring and Grassland Bird Workshop, La Crosse, WI.
- Soulliere, G. J., B. A. Potter, J. M. Coluccy, and B. M. Kahler. September 2011 Abstract Submitted and In Review. Establishing non-breeding habitat objectives for sea ducks in the Upper Mississippi River and Great Lakes Joint Venture Region. Poster for 3rd North American Sea Duck Symposium, Seward Alaska, USA.

Evaluation Projects With Significant JV Funding and/or Science Staff Collaboration

Recently recommended for funding (2011 first field season)

Body mass dynamics and foraging ecology of migrating shorebirds in the southwestern Lake Erie basin: autumn versus spring habitat limitation

This 3-year study aims to collect empirical data to help answer two questions: 1) Are migrating shorebirds limited by food resource abundance in estuary, managed marsh, and cropland habitats in the southwestern Lake Erie basin, and 2) Are migrating shorebirds more or less food/habitat limited in autumn compared to spring? Associated aspects of the project include determining duration of migratory stopover by different species and seasons, contribution of varied wetland communities to energetic needs, and factors affecting availability of specific foraging zones. Results from this research will provide information to refine the JV Shorebird Conservation Strategy. *Pls: Bob Gates and Paul Rodewald (OH State University), Mark Shieldcastle (Black Swamp Bird Observatory), James Cole (TNC), John Simpson (Winous Point Marsh Conservancy)*

Evaluating the Wisconsin strategic Grassland Bird Conservation Plan (phase II)

This 1-year monitoring study will evaluate JV conservation delivery effort and planning assumptions. It includes developing and implementing a pilot grassland bird assessment of WI Bird Conservation Initiative progress toward JV conservation goals. Expected outcomes include 1) evaluation of population objectives for JV focal grassland species (Henslow's Sparrow, Upland Sandpiper, Eastern Meadowlark, Grasshopper Sparrow, Greater Prairie-Chicken) based on habitat specific density estimates, 2) monitoring habitat change across focal landscapes, and 3) better understanding relationships between JV focal species population change and habitat change. *PI: Andy Paulios (WI DNR)*

Ohio Breeding Bird Atlas II (2006-2011): completion of statewide abundance surveys in the final field season

Ohio's second breeding bird atlas is a historic large-scale effort made possible only though the assistance of citizen volunteers and contributions from conservation groups, plus federal, state, and local governmental agencies in Ohio. This 1-year project will improve the value of data collected for an on-going state bird atlas update. By adding additional survey blocks (via additional survey personnel) to the existing effort, researchers will enhance information related to 1) current status and distribution of breeding birds, 2) evaluation of changes in bird distributions in the last 25 years, 3) estimates of statewide abundance/density for breeding bird species, 4) identification of sites supporting a high diversity of breeding birds or that support endangered and threatened species, and 5) Atlas partnerships with birding and bird conservation groups statewide. This information, particularly density estimates, will be used to refine the JV Landbird Conservation Strategy. *Pls: Paul Rodewald and Matthew Shumar (OH State University)*

New multi-year projects, 2010 was first field season (progress reports available)

Stopover ecology of American Golden-Plovers

This 2-year study of American Golden-Plovers will determine: 1) the duration of stay in east-central Illinois, a key migration stopover location 2) selection of stopover habitat and landscape use, 3) home range size during stopover, 4) average movement distances and landscape attributes related to movements while staging, and 5) carrying capacity of the agricultural landscape in east-central Illinois. With five transmitters attached during the 2010 field season, only 37 locations were collected. Project researchers intend to mark and track a total of 30 plovers, thus a significant increase in capture effort will occur in 2011. The American Golden Plover is a JV focal species used for shorebird conservation planning. Pls: Mike Ward, Ben O'Neil, Jill Deppe, Tara Beveroth, David Enstrom, and T. J. Benson (IL Natural History Survey)

Evaluating relationships between multi-scale habitat variables and marsh bird use of Great Lakes coastal wetlands

The 2-year project will use existing data sources to analyze relationships between marsh bird use and habitat variables in coastal wetlands, without the need for additional field surveys. Objectives include: 1) gather information from existing sources to develop a database linking bird occurrence and habitat data to facilitate the analysis of species-habitat relationships at three spatial scales (i.e., landscape, wetland, and patch), 2) conduct analyses for at least nine marsh bird species of high management concern at the landscape, wetland, and patch scales to explore possible relationships between habitat variables and marsh bird use, and 3) using models from the landscape- and wetland-scale analyses, coupled with digital wetland / land-cover data, develop spatially explicit predictions (maps) of distribution for the nine marsh bird species across the U.S. portion of the Great Lakes region. This information will be used for the next iteration of the JV Waterbird Conservation Strategy. The first objective was largely completed in 2010, developing the database needed to accomplish objectives two and three during 2011. *Pls: Mike Monfils (MI Natural Features Inventory), Dan Hayes (MI State University), and Brad Potter (UMRGL JV)*

Dunlin stopover ecology and shorebird management at inland sites in the Great Lakes region

This 2-year Dunlin project will evaluate: 1) stopover ecology during spring and fall migration, 2) compare habitat use at federal and state wildlife areas with different water level management, and 3) determine the best management strategies for providing quality stopover sites by in-depth data analysis of historic and contemporary use by shorebirds of the study area's impoundments in reference to water level manipulations. Dunlin is a JV focal species and information will be used when updating the JV Shorebird Conservation Strategy. Fall 2010 was the first field season and Dunlins were just beginning to arrive at the Shiawassee NWR study site when the annual report was completed. Arrangements were made to also monitor the neighboring Shiawassee River State Game Area (MI DNRE). Pls: Don Poppe, Tom Gehring, and Nancy Seefelt (Central MI University)

Distribution and abundance of diving ducks on Lake St. Clair, Detroit River, and western Lake Erie

The first field season of this 2-year study was completed, with development of waterfowl survey protocol and implementation and refinement of fall aerial surveys. In addition, data from 1974-2009 fall surveys of scaup and canvasbacks are being used to develop a model predicting spatial patterns in distribution based on lake characteristics and human disturbance. Researchers also plan to estimate aerial detection probabilities of diving ducks, plus test a spring diving duck survey that provides data comparable to fall surveys. Regional distribution and abundance of non-breeding waterfowl was identified as an important information gap in the JV Waterfowl Conservation Strategy. *PI: Dave Luukkonen (MI DNR)*

Foraging thresholds of spring-migrating dabbling ducks in central Illinois

The first field season of this 2-year project was completed. Researchers are experimentally estimating "giving-up-density" (GUD; when birds stop feeding in an area due to reduced forage abundance) of spring migrating dabbling ducks using moist-soil wetlands. GUD will be evaluated with respect to initial seed density (kg/ha), seed size, predation risk (visual obstruction near foraging sites), substrate type (e.g., sand or clay), and environmental covariates (e.g., temperature). Understanding GUD is critical to refinement of the JV energetics model used to generate non-breeding waterfowl habitat objectives. *PI: Joshua Stafford (IL Natural History Survey)*

Ongoing multi-year projects (progress reports available)

Migrant landbird stopover site quality and use on northern Great Lakes islands

The second year of this 3-year project was completed in 2010. Its focus is on migrant and resident Neotropical landbirds, documenting stopover site use of shoreline areas at islands on northern Lake Michigan. Researchers will determine site quality and importance of coastal areas as stopover sites by examining body condition, plus determine migration timing and duration of stay for different landbird species by sex and age class. This information gap was identified in the JV Landbird Conservation Strategy. *PI: Nancy E. Seefelt (Central MI University)*

An assessment of waterbird populations and breeding habitat requirements on northern Great Lakes islands

The second year of this 3-year project was completed in 2010. Researchers are documenting distribution and numbers of breeding waterbirds in the Beaver Island archipelago on northern Lake Michigan. The project has special emphasis on reproductive success of two JV focal species, Black-crowned Night-Heron and Common Tern. Primary objectives are to identify habitat requirements and apparent preferences, plus determine impacts (positive or negative) on these birds of cormorant control at multiple-species colonies. *PI: Nancy E. Seefelt (Central MI University)*

Enhancing breeding waterfowl monitoring and landscape characterization through geo-referenced data collection in Wisconsin and Michigan

2010 was the second field season of this 3-year project, recording GPS coordinates for each breeding duck pair observed during spring aerial surveys in MI and WI. Because of software malfunction and or insufficient training, the 2009 effort resulted in limited data collection. The 2010 field season was more successful, with >90% of fixed-wing transects (WI) and helicopter VCF segments (MI) having GPS points collected. Although there is growing concern regarding accuracy of data collected from fast moving (fixed wing) aircraft, 2011 surveys are scheduled for completion. Wisconsin also will experiment using hand-held GPS receivers by ground crews to collect GPS coordinates for waterfowl observed on ground-truthing segments of the survey. Analysis of all data will be completed following the 2011 field season to determine if this information can be used to assess landscape features selection by ducks breeding in the JV region. *PIs: Ron Gatti (WI DNR), Dave Luukkonen (MI DNR), John Coluccy (DU), and Greg Soulliere (UMRGL JV)*

Evaluating factors limiting blue-winged teal production and survival in the Great Lakes region

Originally intended to be a 4-year project, the timeframe for this study was extended. High prevalence of avian TB in purchased game-farm teal used for decoy trapping resulted in WDNR researchers establishing a pen-reared flock of disease-free birds in 2010 to complete the last project field season in 2011. Marked birds from 2007-2009 have provided good information on survival, vital rates, recruitment success, and habitat characteristics of breeding Blue-winged Teal; 2011 will be the fourth and final year of field work, and results of this effort will be used to refine the Blue-winged Teal habitat model in the JV Waterfowl Conservation Strategy. *PI: Ron Gatti (WI DNR)*

Vital rates of breeding waterfowl in the boreal forest of the Great Lakes region

2010 was the third and final field season of this 4-year project to improve survey techniques for breeding Ring-necked Ducks and determine hen survival, recruitment success, and habitat characteristics influencing hen success. Due to the remote locations and low nesting densities for this species, researchers have had significant challenges with sample sizes for nests, hens, and radio-tracked broods. Originally planned as a 3-year project (2 field seasons), additional funding for a third field season to increase sample size was requested and approved. The field work associated with this project has been completed, and a final report is being prepared. Information from this study will be used to develop a regional species account, as the Ring-necked Duck has been identified as a potential focal species in the JV Waterfowl Conservation Strategy. *PIs: Charlotte Roy and Christine Sousa (MN DNR) and Jody Kennedy and Elizabeth Rave (Bemidji State University)*

Combining radio telemetry and ground technologies to evaluate landbird migration and identify stopover locations along the upper Mississippi River system

The primary goal of this 2-year project is to understand migratory timing, spatial patterns, and stopover habitats of landbirds using the Upper Mississippi River system. This information gap was identified in the JV Landbird Conservation Strategy. A combination

of NEXRAD, land cover maps, radio telemetry, and physiological assessments (as an indicator of habitat quality) was used to evaluate site specific habitat use, stopover duration, and distances birds move between stopover sites. The field work associated with this project has been completed and a final report is being prepared. *PI: Pat Heglund (U.S. Fish and Wildlife Service)*

Great Lakes Colonial Waterbird Survey

Following three field seasons of data collection, 2010 was the reporting year of this project to inventory all breeding waterbirds on the Great Lakes, the forth such decadal census. A draft report currently in review provides: 1) estimates of regional population sizes for each species, 2) changes in population abundance and distributions, 3) estimates of colony size, 4) comparison of accuracy for ground and aerial counts, 5) comparison of estimates obtained from the traditional one-season count with an estimate of peak numbers obtained from several counts during a season, and 6) identification of a subset of sites to monitor on a more frequent basis in the future for detecting population trends. In addition, landscape features associated with waterbird colonies can be used for specieshabitat modeling in the next iteration of the JV Waterbird Conservation Strategy. *PIs: Francesca Cuthbert and Linda Wires (University of MN)*

Recently completed projects (final reports available)

Foraging ecology of fall migrating shorebirds in the Illinois River Valley

Data analysis and a final project report were completed in 2010 for this study of body condition, foraging habitat, and diet selection by fall migrating Killdeer, Least and Pectoral Sandpipers, and Lesser Yellowlegs. Results indicated 3 of 4 species were in good to excellent condition, with Killdeer having lower than expected fat scores. Shorebird diets were dominated by Diptera (flies) and Coleoptera (beetles), but abundant Oligochaeta (aquatic worms) appeared to be avoided. Food/habitat available on this river system was considered excellent when water levels were appropriate, and researchers speculate the region may support substantially larger shorebird populations. However, unpredictable hydrology may lead to seasonal habitat deficits and stress. *PI: Joshua Stafford (IL Natural History Survey)*

Perennial biomass feed-stocks as a new source of en route habitat for spring migratory birds

Following a single field season in 2010, this Michigan-based project evaluated the ability of switchgrass vs. mixed-grass prairie as spring migratory stopover habitat for birds. A total of 35 grassland bird species in prairie and switchgrass plantings were detected, including species of state and national conservation concern (e.g., Henslow's Sparrow). Mixed-grass prairie reconstructions were associated with increased arthropod food availability, and greater species richness and grassland specialist abundance, while switchgrass plantings were associated with a higher abundance of habitat generalists. Larger patch size was linked to increased likelihood of grassland specialists occurring in both feedstock types. The proportion of forest in landscapes surrounding plantings was negatively associated with all measures of species richness, species density, abundance and occurrence. Results demonstrate perennial biomass crops have potential to provide a

new source of habitat for migratory grassland birds, particularly where they replace contemporary biomass crops such as corn, and are cultivated in larger patches in relatively unforested landscapes. Pls: Bruce Robertson, Scott Sillett, and Robert Rice (Smithsonian Migratory Bird Center) and Doug Landis (MI State University)

Black Duck satellite radio (PTT) telemetry study: examining local and geographic habitat use patterns over the annual life cycle and connections among significant biomes

Field work was completed in 2009 and a preliminary final report was provided in 2010 (M.S. Thesis will be final report). This project investigated Black Duck habitat use, timing, and stop-over duration during migration and winter. Although only ½ of the 68 transmitters functioned through the complete spring migration period, researchers identified important black duck wintering and staging areas leading to improved decision-making with respect to ongoing habitat protection and management. Information regarding chronology and duration of stay (use days) will be used in conjunction with energetic carrying capacity models to refine JV waterfowl habitat objectives for the non-breeding period. A better understanding of PTT technology and Black Duck settling and breeding habitat was gained through this work. *PIs: Tina Yerkes (DU) and Jake Bowman (University of DE)*

JV Science Office Goals and Future Direction

Near-term (<2 years)

- Strengthen relationships with science entities important to JV mission, and collaborate on bird research and monitoring critical to regional bird conservation. Key science partners include the JV Science Team, North American Waterfowl Management Plan Science Support Team (NSST), Regional Coordinated Bird Monitoring (CBM) Team, and science partners associated with Landscape Conservation Cooperatives (LCCs).
- Promote use of JV planning tools, collect feedback regarding strengths and weaknesses of 2007 Implementation Plan, develop and refine GIS and other planning products useful to partners, and measure effectiveness of products to partners. Priority focus will be enhanced bird habitat delivery by partner organizations serving on the JV Management Board.
- Address concerns regarding JV science foundation identified in the North American Waterfowl Management Plan 2006 Assessment, and work toward comprehensive completion of science elements in the matrix of "Desired Characteristics of Joint Ventures."
- Expand knowledge of bird ecology, contemporary conservation practices, measuring landscape change, and the potential impacts of climate change on priority bird species. New information will be used to develop and refine JV bird species accounts, bird habitat conservation objectives, planning documents, and habitat accomplishment reporting.

Long-term (>2 years)

- Identify and integrate regional bird conservation priorities with societal initiatives developed to counter environmental threats. A primary focus will be mitigation and adaptation to landscape and climatic changes.
- Establish JV partnership as a national leader in bird conservation by continually improving scientific foundation, efficiency, and effectiveness of conservation initiatives in the JV region. Strategic Habitat Conservation (SHC) via planning-implementing-evaluating will be central to improving JV conservation approaches over time.

Science Office Personnel

Greg Soulliere: Greg has served as the JV Regional Science Coordinator since 2004. His goal is to improve the science foundation used for bird habitat conservation decisions, ultimately increasing the efficiency and effectiveness of the JV partnership. He has extensive field experience in waterfowl and wetland ecology and waterbird habitat management, and a growing understanding of the habitat requirements for other bird groups. He chairs the JV Science Team, a collection of scientists providing technical guidance to partners who deliver bird habitat conservation in the JV region.

Greg received a M.S. degree in Wildlife Management from the University of Wisconsin, where he studied the ecology of cavity nesting ducks. His B.S. in Wildlife Biology is from Michigan State University. Greg also completed an M.B.A. at Lake Superior State University, fueling an interest in human resources management and applying business concepts to conservation decisions.

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Brad Potter: Brad started as a Biological Technician with the JV Science Office in 2005 and was promoted to Wildlife Biologist/Spatial Modeler in 2009. His work for the Joint Venture centers on developing habitat and population models and spatial data management. Brad serves on the JV shorebird and landbird subcommittees, but assists in developing many JV science products. His career interests include using advancing technology and methods for landscape planning and designing models for Strategic Habitat Conservation.

Brad received a M.S. degree in Conservation Biology from Central Michigan University (CMU) where he studied wildlife crossing locations along highways in northern Michigan. He also received his B.S. degree in Biology at CMU, and it was there his interest in GIS applications for wildlife management began, using a spatial model to predict abundance and distribution of wolf habitat in Michigan's Lower Peninsula.

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Ben Kahler: Ben has been a Biological Science Technician with the JV Science Office since September 2010. His work involves assisting the JV partnership as well the FWS Ecological Services Program with wildlife habitat and population models and organizing and distributing GIS data.

Ben will earn his M.S. in Natural Resources with a Specialization in Wildlife Science this summer from The Ohio State University where he studied landscape and environmental features affecting the distribution of secretive marshbirds in Ohio's glaciated counties. He received a B.S. in Natural Resources with Distinction in Fisheries and Wildlife Management and a B.A. in Anthropology from The Ohio State University before serving three years as a Peace Corps volunteer in the Republic of Vanuatu. Ben's interests in applied resource conservation matured during his time in the Southwest Pacific. His work integrated geospatial applications for regional assessment and planning, with complimentary goals of food and water security, terrestrial and aquatic biodiversity, and wildlife habitat conservation.

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Upper Mississippi River and Great Lakes Region Joint Venture Science staff: Brad Potter, Greg Soulliere, and Ben Kahler.

