



State Wildlife Action Plans Meeting

January 10-12, 2006

A Final Summary Report to the Midwest Association of Fish and Wildlife Agencies
February 27, 2006

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Executive Summary

State Wildlife Action Plan development was an unprecedented effort between states and partners. Through a grant from the National Fish and Wildlife Foundation and Doris Duke Charitable Foundation, the Midwest Association of Fish and Wildlife Agencies set about to leverage that effort.

The centerpiece of MAFWA's grant was a 2-day meeting held in St. Louis, Missouri January 10-12, 2006. A total of 45 people attended the meeting, representing the National Fish and Wildlife Foundation, the U.S. Fish and Wildlife Service, the Midwest Association of Fish and Wildlife Agencies, the International Association of Fish and Wildlife Agencies, and all states in the region except North Dakota and Ohio. The meeting focused on identifying specific actions that, based on the collective priorities identified in the states Action Plans, would further fish and wildlife conservation in the region.

Through the use of a pre-meeting survey, interactive voting and breakout group discussions during the meeting both region-wide and priority projects were identified.

Region-wide priorities included:

1. Develop monitoring protocols (standardized techniques & frameworks) and compatible databases for at-risk species
2. Establish baseline information for species of conservation priority and other nongame species
3. Determine causes of populations declines
4. Work with partners and private land owners to prioritize and implement land protection, incentives (existing and new), acquisition, and restoration projects
5. Retain, tailor and focus existing private lands programs
6. Coordinate regional standard/unified landscape - land cover/vegetation/land use, both terrestrial and aquatic, classification and characterization map for the region, and a schedule for regular updates.
7. Produce geographic information system mapping with layers for wetlands, riparian areas, sensitive areas, public ownership, breeding bird data, fish and wildlife distribution and abundance, species ranges and aquatic habitat parameters, and incorporate with Gap Analysis Program
8. Coordinate regional management/action plans to prevent invasive species (flora and fauna), respond to invasive species, and development of more effective tools to combat invasive species.
9. Coordinate and integrate invasive species monitoring (GIS) and surveillance.
10. Form a State Wildlife Action Plan Working Group
11. Recommend changing legislation, grant parameters and agency focus to incorporate education and recreation under "conservation".

A total of 23 priority projects were selected and a lead person and next steps were identified for activities for the following species or habitat categories:

Mussel and Nongame Fish Monitoring and Conservation Planning

- Develop, adopt and implement a Great Rivers mussel monitoring protocol

Grassland Conservation

- Prairie pothole/grassland ecosystem functionality for SGCN species other than birds.
- Grand River grasslands
- Cherokee grassland
- Lake plain prairie
- Kankakee Sands
- Grand River National Grasslands
- Shortgrass prairie
- Convene a “conservation of reclaimed minelands” workshop

Driftless Area Conservation

Savannah Conservation

- Oak savanna (lupine/Karner Blue Butterfly) survey, restore, monitor.
- Northeast sand barrens grasslands

Great Lakes Shoreline Conservation

- Great Lakes shoreline coastal wetlands in western Lake Erie
- Great Lakes – Dunes/beaches/inter-dunal wetlands/nearshore aquatic (land-water transition)
- Grand Traverse Island protection – species and unique habitats

Northern Hardwood Conservation

Big River Conservation

- Confluence of Mississippi, Missouri and Illinois rivers
- Big river confluence of Ohio and Mississippi
- Restoration of hydrology and habitat (vegetation) of low gradient rivers and streams for aquatic/semi-aquatic species—all states
- Un-channelized Missouri river

Riparian/wetlands habitat conservation

- Iatan/Weston Missouri River Corridor
- Marmaton river
- Riparian corridor on Maumee River Riparian restoration
- Wabash river conservation corridor
- Wetlands Reserve Enhancement Program (WREP) along Ohio/Mississippi River
- Red river restoration

The lead person identified for the priority project will coordinate future work towards the development of blueprints for these regional and interstate conservation projects.

Figure 1. Member states of the Midwest Association of Fish & Wildlife Agencies

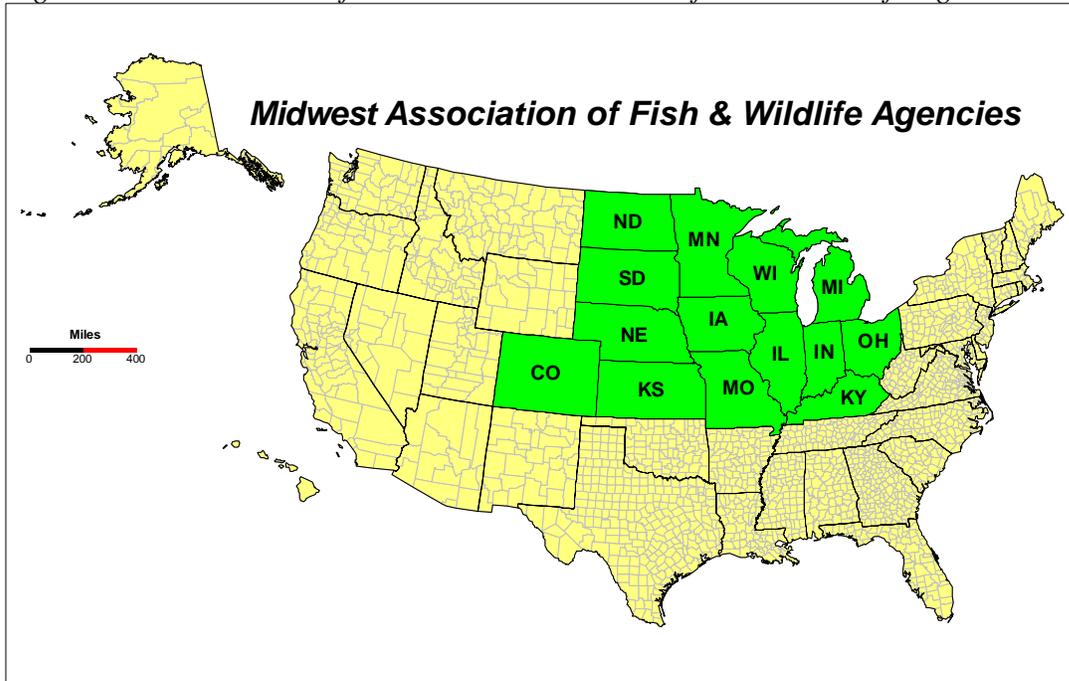


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Project overview

The MAFWA received funding from the National Fish and Wildlife Foundation/Doris Duke Charitable Foundation to identify and rank priority regional projects for future coordinated action, to foster partnerships among state fish and wildlife agencies in the Midwest and to develop blueprints for implementation of selected projects.

Towards that end MAFWA sponsored a meeting to identify and prioritize multi-state conservation actions that were identified in State Wildlife Action Plans within member states of the Midwest Region. The second phase of the project consists of follow-up meetings with appropriate stakeholders to build blueprints for action on selected cross-border conservation activities.

The Midwest Association's region includes the following states: Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin. Please note that this project only addresses collaborative efforts *within* the United States.

The initial meeting was on January 10-12, 2006 and sought to bring together agency personnel from each state within the region and the U.S. Fish and Wildlife Service to identify and rank priority conservation actions that require multi-state coordination. A total of 45 people attended the meeting, representing the National Fish and Wildlife Foundation, the U.S. Fish and Wildlife Service, the Midwest Association of Fish and Wildlife Agencies, the International Association of Fish and Wildlife Agencies, and all states in the region except North Dakota and Ohio (Appendix A).

MAFWA pre-meeting survey methodology

The states in the Midwest region used a wide diversity of approaches in development of their Wildlife Action Plans. The one component common to all plans was the foundational eight elements required by Congress. Three of these elements, “research and survey efforts”, “conservation actions” and “monitoring needs” are commonly funded under State Wildlife Grant funds, NFWF year 2 and 3 grants, and other programs. All Wildlife Action Plans identified actions and efforts needed for conservation of both habitat and specific species of greatest conservation need. All of the states focused their state Action Plans conservation issues within their state borders although many recognized the need for regional or interstate actions.

Regional efforts include those activities than require a broad approach that will both involve and benefit most of the states within MAFWA whereas interstate efforts are those activities which only involve a relatively small number of states in the region.

Rather than attempt to interpret every states conservation priorities and determine which of these actions require a coordinated response, D. J. Case and Associates developed an online survey (Appendix B) where states were asked to identify the top three regional and interstate priorities for research and survey needs, conservation actions, and monitoring efforts from both a wildlife and habitat perspective based on their State Wildlife Action Plan. This allowed states to begin thinking of implementation of their State Wildlife

Action Plan from a broader perspective and provide a basis for discussions at the regional meeting.

A total of 340 priorities were identified and these results are presented in Appendix C. For organizational purposes the responses were grouped by type of activity or approach. Many of the states' responses could have been included in several categories. The intent was not to rigidly interpret the responses but to help organize and structure them for future discussions. Similarly, the numbering on the list did not indicate a prioritized ranking. The responses were sequentially numbered to help meeting participants refer to specific conservation actions during the meeting.

The results were distributed to meeting participants in advance and they were asked to review the results of the regional/interstate survey and states Wildlife Action Plan executive summaries. During the meeting there were opportunities for participants to add additional conservation actions or clarify previous input.

During the review of the survey responses participants were asked to consider the following questions:

- What should be the criteria for prioritization?
- Do the survey results reflect the regional and interstate needs identified by your State Wildlife Action Plan?
- What is missing from the survey results?

Meeting participants were also asked to consider possible criteria for prioritization. These criteria could include biological and ecological importance, economic efficiency, continuation or expansion of existing efforts, conformity with possible granting specifications, implementation feasibility, and/or efforts that are high profile and have public/legislative interest and support.

Prior to the meeting the survey responses for habitat or species specific across the Midwest region and with neighboring states were aggregated into 118 priority topics under the following categories:

- Research and survey efforts
- Conservation actions
- Monitoring needs

These 118 topics were numbered sequentially and distributed to meeting participants (Appendix D). A PowerPoint presentation was developed with between seven and nine topics listed per slide. Utilizing TurningPoint software and remote voting devices meeting participants were given the opportunity to vote three times for their preference. Attendees were allowed to vote for either three different conservation actions once or could vote three times for their preferred priority. For each category the top three actions from each of the slides was combined to identify and rank the top three conservation actions within that category. The top three priorities from each of these categories were combined and meeting participants prioritized them using the same methodology. Voting results can be found in Appendix E.

Similarly during the pre-meeting survey states listed specific species and habitat actions that could be addressed with interstate collaboration. These conservation actions were grouped under the following habitat type or species:

- Prairie/Grasslands
- Aquatic systems
- Savannah/Forest and Individual Species

The priority ranking methodology was repeated for these conservation actions and the results are also included in Appendix E. Meeting participants did not rank categorical priorities against habitat or species priorities.

Break out groups

Three breakout sessions were held during the meeting. Notes from all of these breakout sessions are available in Appendix F.

During the first breakout session, participants were randomly assigned into four groups and were asked to discuss the priority actions identified above and criteria for future prioritization.

The second breakout session charged participants with identifying specific projects for interstate collaboration in the following habitats in the region:

- Missouri River
- Big Rivers – Upper Mississippi (& St. Croix) - MN, WI, IA, IL
- Great Lakes Group (MN, WI, MI, IN, IL)
- River Group Missouri, Mississippi, Illinois River
- Grasslands

The third breakout session involved state caucuses where states had the opportunity to discuss among themselves and with neighboring states specific interstate or regional projects, identify a lead person and outline next steps.

Relationship building was not only developed during the meeting, but also during the evening meals, when the “MAFWA dating service” and “Scavenger hunt I and II” were held. The first evening participants were charged with finding members of their group, selecting a restaurant, traveling there, sitting heterogeneously, holding discussions with each other during dinner, and returning to hotel as a group. Participants were divided into groups of adjoining states:

- KY/IN
- MI/WI
- IL/IA/MO (2 groups)
- KS/NE/CO
- SD/MN
- USFWS & others (or attach)

Groups then reported their discussions to all meeting participants the following morning.

The second evening participants were given a similar charge but were divided into groups by states that did not share a common border:

- KY/CO/WI
- IA/MI
- IL/NE
- IN/SD/KS
- MO/MN

Again, groups were asked to report their discussions the next morning.

Through the above methodology and resulting information the following region-wide priorities and priority projects were identified:

Region-wide Priorities

These are priorities that cut across habitats, species groups, and systems. The group recognizes that significant efforts are being developed and/or ongoing. As well, other regions in the country may share the same priorities.

1. Develop monitoring protocol (standardized techniques & frameworks) and compatible databases (with a mechanism for sharing data in a secure way) for at-risk species that can be used by all states in the Midwest to evaluate progress towards meeting State Wildlife Action Plan objectives. Mussels and herps as examples. Herps Survey and Monitoring Protocols.
 - Work with adjacent states to identify priority areas to survey and monitoring Species of Greatest Conservation Need, herps common to all plans.
 - There is a Herp inventory – would like to establish cooperation to expand past state borders.
Lead: Karen Kinkead
Next Step: Explore possibility
2. Establish baseline information (i.e. population status, distribution, abundance, limiting factors, life history requirements) for species of conservation priority and other nongame species.
3. Determine causes of populations declines (threat identification and evaluation - predators/competition, contaminants, climate change, habitat loss, fragmentation, and loss of connectivity).
4. Prioritize and implement land protection, incentives (existing and new), acquisition, and restoration projects that work with partners and private land owners toward conserving blocks of habitat and restoring ecological processes in areas of high species richness.

5. Retain, tailor and focus existing private lands programs (e.g., farm bill programs, county forest preserve districts) to the specific actions needed in priority locations.
6. Coordinate regional standard/unified landscape - land cover/vegetation/land use, both terrestrial and aquatic, classification and characterization (quantity, quality and status) map (using GIS and other remote sensing tools) for the region, and a schedule for regular updates.
7. Produce GIS mapping with layers for wetlands, riparian areas, sensitive areas, public ownership, breeding bird data, fish and wildlife distribution and abundance, species ranges and aquatic habitat parameters, and incorporate with Gap Analysis Program.
8. Coordinate regional management/action plans to prevent invasive species (flora and fauna), respond to invasive species, and development of more effective tools to combat invasive species.
9. Coordinate and integrate invasive species monitoring (GIS) and surveillance.
10. Form a State Wildlife Action Plan Working Group—draft description sent by Terry Little to meeting participants for review. Formation meeting in Iowa in March, so no one thinks it's a junket.
11. Recommend changing legislation, grant parameters and agency focus to incorporate education and recreation under “conservation”.

Priority Projects

Priority projects in the Midwest are reported from east to west, in no priority order. All habitats are important, these represent priorities for additional focused, coordinated action in Midwest region.

1. Mussel and Nongame Fish Monitoring and Conservation Planning

- Develop, adopt and implement a Great Rivers mussel monitoring protocol
Lead: Matt Thomas, KY
Next Step: Partner meeting

2. Grassland Conservation

Coordinate large grassland conservation efforts (all neighboring states) including establishing a tall grass prairie evaluation process, to include identification of core prairie – dependent species, disturbance regimes, description of reference areas and linkage to existing or future Farm Bill programs. Improve science-based, adaptive burning and grazing management of grasslands and establish a baseline for what constitutes a healthy grassland community. Bring in key habitat and SGCN information for existing Prairie pothole projects.

- Prairie pothole/grassland ecosystem functionality for SGCN species other than birds? ND-SD-MN-IA
 - Lead: Karen Kinkead, IA
 - Next Step: Coordinate exploratory meeting with FWS

- Grand River grasslands – MO-IA
 - Tallgrass prairie - focus on habitat on private land
 - Lead: Doug Harr, IA
 - Next Step: Stakeholder meeting and blueprint

- Cherokee grassland – MO-KS
 - Prairie wildlife, habitat work on grasslands
 - Need a stakeholder meeting
 - Lead: None
 - Next Step: None

- Lake plain prairie – WI-IL-IN-MI-OH
 - Lead: Amy Clark Eagle, MI
 - Next Step: Contact states to set up state meeting

- Kankakee Sands – IL-IN
 - Lead: Gary Langell, IN
 - Next Step: Explore feasibility

- Grand River National Grasslands – SD-ND
 - Lead: Dave Ode, SD
 - Next Step: Interagency meeting

- Shortgrass prairie – CO-KS-NE
 - Monitoring protocols
 - Baseline (population status and trends), habitat condition
 - Lead: Shane Briggs, CO
 - Next Step: Coordinate communications between states and partners regarding project feasibility

- Convene a “conservation of reclaimed minelands” workshop – IL-KY-IN-OH
 - Lead: Jeff Walk, IL
 - Next Step: Contact states about interest in meeting

3. Driftless Area Conservation

The driftless region located in WI-IA-MN-IL includes: bluffs, savannah, hill prairie, hardwood forest, cool-water streams, alglific slopes. Activities should include mapping and monitoring alglific talus slopes & sinkholes for rare and endangered species in the driftless area (Paleozoic Plateau in IA-MN-WI-IL) and in the Mississippi blufflands activities include – Identifying unprotected sites and the appropriate vehicle for protection (in WI-IA-MN-IL). Efforts should include:

- Tap into existing projects
- Focus on key habitats
- Identify focal SGCN for monitoring and survey
Lead: Emmett Mullin, MN
Next Step: Convene meeting of states

4. Savannah Conservation

- Oak savanna (lupine/Karner Blue Butterfly) survey, restore, monitor. MI-WI-OH-IN-IL-MO-MN-IA
Lead: Ray Rustem, MI
Next Step: Meeting of states
- Northeast sand barrens grasslands – MI-WI
Lead: Chuck McCullough, WI
Next Step: Meeting between WI and MI

5. Great Lakes Shoreline Conservation

- Great Lakes shoreline coastal wetlands in western Lake Erie – issues, restoration OH-MI-ON.
Lead: Liz Hay-Chmielewski, MI
Next Step: Contact Ohio for interest
- Great Lakes – Dunes/beaches/inter-dunal wetlands/nearshore aquatic (land-water transition) – WI-MI-MN-IL-IN-OH-ON
Lead: Owen Boyle, WI
Next Step: Meeting of states
- Grand Traverse Island protection – species and unique habitats – WI-MI
Lead: Eric Epstein, WI
Next Step: Meeting of states

7. Northern Hardwood Conservation

Implement northern hardwood (MI-IA-WI-MN-IL) or savannah Best Management Practices based on published literature (Phase 1), restore demonstration areas (Phase 2), and provide outcome/results (phase 3). Additionally, Modify timber harvest operations to accommodate habitat needs for SGCN - IA-MN-WI-IL-MO
Lead: None
Next Step: None

8. Big River Conservation

Monitor the effectiveness of conservation actions aimed at improving habitat conditions in big river ecosystems (Ohio and Mississippi Rivers) and improve the condition of border rivers, and restore endangered/extirpated populations of fishes and mussels.

- Confluence of Mississippi, Missouri and Illinois rivers– MO-IL

Lead: Joel Porath, MO

Next Step: Interagency meeting followed by partner meeting

- Big river confluence of Ohio and Mississippi—IL, KY
 - Lead: None
 - Next Step: None
- Restoration of hydrology and habitat (vegetation) of low gradient rivers and streams for aquatic/semi-aquatic species—all states
 - Lead: Kim Bogenschutz, IA
 - Next Step: Determine appropriate person to lead
- Un-channelized MO river – NE-SD-IA
 - Lead: Mark Humpert, NE
 - Next Step: Meeting of states
- 9. Riparian/wetlands habitat conservation
 - Iatan/Weston Missouri River Corridor – MO-KS
 - Floodplain restoration
 - Some \$ available, need more to get project moving
 - Lead: Amy Buechler, MO
 - Next Step: Hold stakeholder meeting
 - Marmaton river – MO-KS
 - Need a stakeholder meeting to discuss restoring hydrology and next steps
 - Lead: None
 - Next Step: None
 - Riparian corridor on Maumee River Riparian restoration MI-OH
 - Lead: Liz Hay-Chmielewski, MI
 - Next Step: Contact Ohio for interest
 - Wabash river conservation corridor. Joint meeting with IN, IL, NGO and federal conservation partners. Focus – conservation needs for fish, mussels, reptiles, amphibians and migratory birds, mammals and bottomland hardwood community. Inventory of what we have (protected lands), Determine what we would like to have, evaluation protocols
 - Lead: Katie Smith/Brant Fisher, IN
 - Next Step: Contact potential stakeholders to assess interest
 - Wetlands Reserve Enhancement Program (WREP) along Ohio/Mississippi River with states bordering these rivers. Tribes too?
 - Lead: Brian Smith, KY
 - Next Step: Assess interest of partners
 - Red river restoration – MN-ND
 - Continue/expand river restoration efforts

- Move to watershed restoration activities
Lead: Emmett Mullin, MN
Next Step: Assess level of interest with ND

Next steps and blueprint development

The lead person identified for the priority project will coordinate future work towards the development of blueprints for these regional and interstate conservation projects.

Meeting evaluation

At the conclusion of the meeting attendees were asked to evaluate the meeting and process. The complete results of the evaluation are located in Appendix G. Ninety seven percent of respondents indicated that they had the opportunity to identify conservation actions with their neighboring states or colleagues in the region. Almost 95% indicated that the prioritized action items will allow them to collaborate with other states in the Midwest Region. On a scale of 1 to 10 (with 1 being the lowest and 10 being the highest) attendee responses average an 8.3 for the meeting's overall success towards launching collective efforts among states in this region.

Draft report comments and edits

A draft of this document was distributed to all meeting participants for review and comment. The draft was edited based feedback from five participants who submitted comments. These comments and edits are located in Appendix H.

Appendix A: Meeting participants

| First Name | Last Name | Organization | Title | Phone | Email |
|-------------------|------------------|---|--|-------------------|----------------------------------|
| Kim | Bogenschutz | Iowa Department of Natural Resources | AIS Program Coordinator | 515-432-2823 | kim.bogenschutz@dnr.state.ia.us |
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Appendix A: Meeting participants

| | | | | | |
|---------|-----------------|--|---|-------------------|-------------------------------|
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Appendix A: Meeting participants

| | | | | | |
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**Midwest Association of Fish and Wildlife Agencies
State Wildlife Action Plans
Regional/Interstate Pre-meeting Survey**

Please submit a response by November 22, 2005.

Name*:

State*:

E-mail:

* required field

All fish and wildlife agencies in the Midwest Association have been invited to a facilitated meeting in January. However, we need your input before the meeting to help identify starting points for discussions regarding priority regional and interstate conservation actions identified in the State Wildlife Action Plans (Conservation Strategies).

Some issues will best be addressed completely within state borders. Others might gain efficiencies from interstate efforts between neighboring states. Still others might benefit from a truly regional approach. This survey and the following meeting will help determine these needs and opportunities. We are asking you to identify what issues your plan identified in your state that you believe will need a coordinated regional/interstate response.

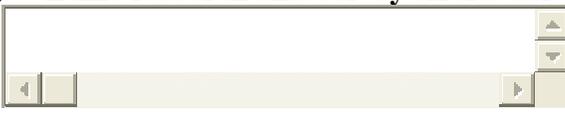
Your responses will be used to guide the discussions at the Midwest Association's SWAP meeting January 10-12 in St. Louis, Missouri.

1) Regional issues: These are opportunities and issues that can be best addressed from a broad approach. These may include institutional, structural or procedural needs. The Midwest Association's region includes the following states: Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin. Please note that this project only addresses collaborative efforts *within* the United States.

From the perspective of your State Wildlife Action Plans please identify **the top three needs** in the following areas to assist in restoration and improved conservation of **wildlife species** across the Midwest region.

Appendix B: Pre-meeting online survey

1a) Wildlife research and survey efforts across the Midwest region.

1st A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

2nd A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

3rd A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

1b) Wildlife conservation actions across the Midwest region.

1st A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

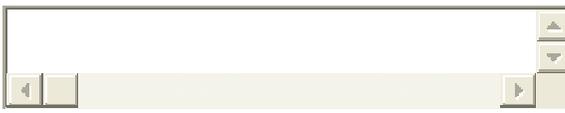
2nd A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

3rd A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

1c) Wildlife monitoring needs across the Midwest region.

1st A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

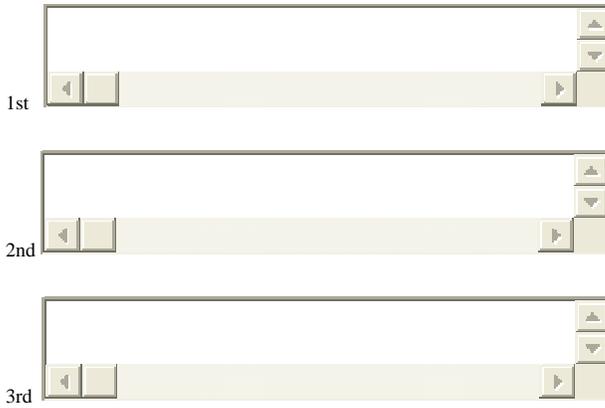
2nd A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

3rd A horizontal bar chart with a light beige background. The bar is approximately 25% filled from the left. On the left side, there are two small square boxes, one containing a left-pointing arrow and the other containing a right-pointing arrow. On the right side, there are two small square boxes, one containing an up-pointing arrow and the other containing a down-pointing arrow.

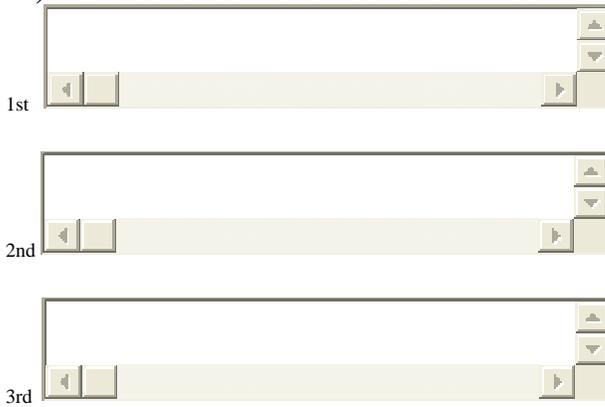
From the perspective of your State Wildlife Action Plans please identify the **top three needs** in the following areas to assist in restoration and improved conservation of **habitats** across the Midwest region.

1d) Habitat research and survey efforts across the Midwest region.

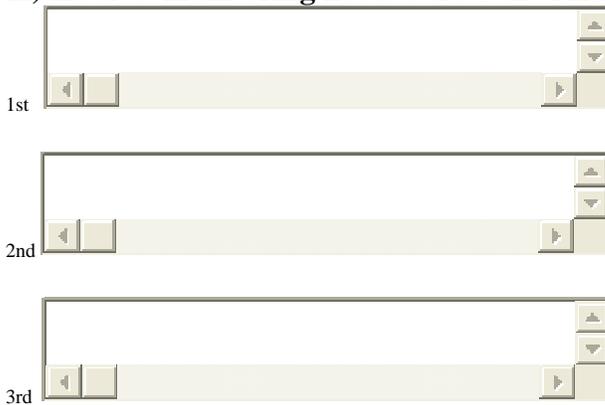
Appendix B: Pre-meeting online survey



1e) Habitat conservation actions across the Midwest region.



1f) Habitat monitoring needs across the Midwest region.



2) Interstate issues: These opportunities and needs address specific potential efforts across state lines. These efforts will be utilized to develop blueprints of interstate collaboration and coordination between state, federal, and local government, nonprofit organizations, and local communities. Please note that this project only addresses collaborative efforts *within* the United States.

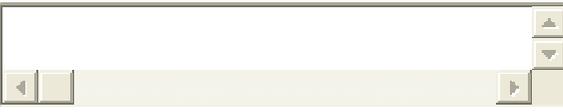
From the perspective of your State Wildlife Action Plans please identify **the top three**

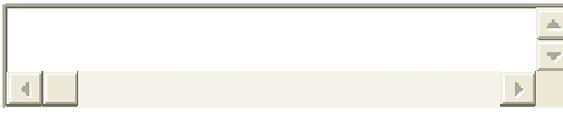
Appendix B: Pre-meeting online survey

needs in the following areas to assist in restoration and improved conservation of **wildlife species** with your neighboring states.

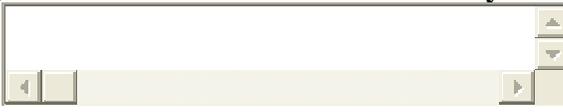
2a) Wildlife research and survey efforts with your neighboring states.

1st 

2nd 

3rd 

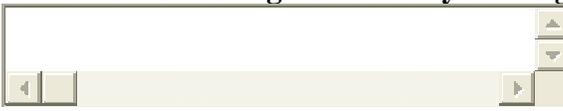
2b) Wildlife conservation actions with your neighboring states.

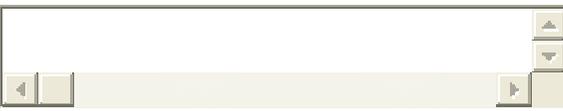
1st 

2nd 

3rd 

2c) Wildlife monitoring needs with your neighboring states.

1st 

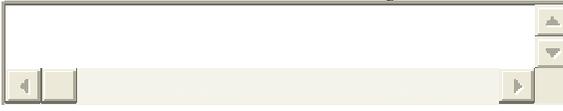
2nd 

3rd 

From the perspective of your State Wildlife Action Plans please identify **the top three needs** in the following areas to assist in restoration and improved conservation of **habitats** with your neighboring states.

Appendix B: Pre-meeting online survey

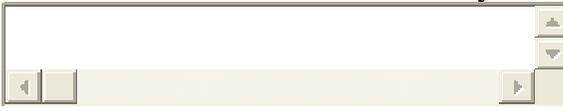
2d) Habitat research and survey efforts with your neighboring states.

1st  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

2nd  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

3rd  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

2e) Habitat conservation actions with your neighboring states.

1st  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

2nd  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

3rd  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

2f) Habitat monitoring needs with your neighboring states.

1st  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

2nd  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

3rd  A horizontal bar chart with a light beige background. The bar is approximately 80% full. On the left side, there are two small square boxes. On the right side, there are three small square boxes stacked vertically, each containing a triangle pointing up or down.

Thank you for your time!

Appendix C: Individual pre-meeting survey responses

Pre-meeting survey results

Results of the States' responses are compiled below to begin identifying relative priorities in the following areas:

- 1) Midwest Regional issues:
 - 1a) Wildlife research and survey efforts
 - 1b) Wildlife conservation actions
 - 1c) Wildlife monitoring needs
 - 1d) Habitat research and survey efforts
 - 1e) Habitat conservation actions
 - 1f) Habitat monitoring needs
- 2) Interstate issues:
 - 2a) Wildlife research and survey efforts
 - 2b) Wildlife conservation actions
 - 2c) Wildlife monitoring needs
 - 2d) Habitat research and survey efforts
 - 2e) Habitat conservation actions
 - 2f) Habitat monitoring needs

1) Regional issues: These are opportunities and issues that can be best addressed from a broad approach. These may include institutional, structural or procedural needs. The Midwest Association's region includes the following states: Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin. Please note that this project only addresses collaborative efforts *within* the United States.

Regional Species Needs

From the perspective of your State Wildlife Action Plans please identify **the top three needs** in the following areas to assist in restoration and improved conservation of **wildlife species** across the Midwest region.

1a) Wildlife research and survey efforts across the Midwest region.

Habitat requirements/management

1. More studies of at-risk species that look at habitat requirements and distribution across the region. (NE 1st priority)
2. Associating Species of Conservation Concern with their primary habitat in the regional context, as opposed to marginal habitat associations (MO 1st priority)
3. Habitat management effects on herptiles, especially those federally listed/candidate species (IA 1st priority)
4. Cooperative studies of wildlife response to management practices, such as burning and grazing of tallgrass prairie, both in areas with intact habitats and areas that are heavily-impacted by development (SD 2nd priority)
5. Reserve system design and connectivity--are our reserves large enough and connected enough (particularly north-south and across state borders) to sustain large, wide-ranging mammals and to accommodate potential northerly range shifts of wildlife due to climate change. (WI 2nd priority)

Life history

6. Establish baseline information (i.e. population status, distribution, abundance) for species of conservation priority and other nongame species. (ND 1st priority)
7. Compilation of available info on terrestrial invertebrates, and evaluation of how to fill in the gaps (IL 1st priority)
8. More information about less understood species in greatest conservation need taxonomic groups, e.g. invertebrates, aquatic animals (MN 1st priority)
9. Conduct life history studies and propagation research for at risk species of fish, mussels, amphibians, and reptiles. (KY 2nd priority)

Appendix C: Individual pre-meeting survey responses

10. Limiting factors (food, shelter, water, breeding sites) (IN 2nd priority)
11. Distribution/status of reptiles and amphibians (IL 2nd priority)
12. Data on species populations and distribution is incomplete. (KS 2nd priority)
13. Research on life history requirements of at-risk species that is coordinated regionally to take into account geographical differences. (NE 3rd priority)
14. Relationship and dependence on specific habitats (IN 3rd priority)
15. Distribution/status of freshwater mussels (IL 3rd priority)
16. Survey at risk species of animals that have not been recently or adequately surveyed. (KY 3rd priority)
17. Understanding of the wildlife species that persist or are being produced in "domesticated habitats". (MO 3rd priority)

Threats

18. Threats (predators/competition, contaminants) (IN 1st priority)
19. Determine causes of populations declines in at risk aquatic species. (KY 1st priority)
20. Some nongame species populations are declining, and some suitable available habitat is not being used. (KS 1st priority)
21. Effects of wind turbine siting on ground-nesting species of greatest conservation need (SGCN), especially birds. (IA 2nd priority)
22. Conduct research to investigate and produce decision support models for understanding, controlling, and eliminating or containing epizootic events (MI 2nd priority)
23. Effects of dams on fish/aquatics passage. (IA 3rd priority)
24. Regional threats/ problems facing species, e.g., global climate change (MN 3rd priority)

Monitoring/research coordination

25. Need for better coordination in habitat monitoring efforts, with less emphasis on single-species surveys (SD 1st priority)
26. Create a central repository of research and survey information. (ND 3rd priority)
27. In general, more long-term studies and better opportunities for cooperative studies across state boundaries are needed (bureaucracy often defeats such efforts). (SD 3rd priority)

Invasive Species

28. Develop models to predict the next likely invasive species threat (MI 1st priority)
29. Need more data on the effects of invasive exotic plants on individual wildlife species and their habitats (WI 3rd priority)

Migratory habitat

30. Migratory bird stopover habitat--where are the remaining sites, what condition are they in, how are migrants affected by loss, degradation, fragmentation, and isolation of stopover sites? (WI 1st priority)
31. More information about important migration corridors and staging areas (MN 2nd priority)
32. Identify important migratory routes and stopover sites and protect these areas (MI 3rd priority)

Human dimensions/education/outreach

33. Human dimensions research to track attitudes, knowledge, etc. of the public related to wildlife across the region. (NE 2nd priority)

Other

34. For each of North Dakota's 100 species of conservation priority, we identified more specific additional research and survey efforts needed. These should be further reviewed and prioritized. (ND 2nd priority)
35. Description of "guilds" of wildlife species characteristic of primary habitats or systems, similar to or building on PIF lists. (MO 2nd priority)
36. Continue to develop recovery plans for all species on the state sensitive species lists. (KS 3rd priority)

Appendix C: Individual pre-meeting survey responses

1b) Wildlife conservation actions across the Midwest region.

Habitat management

37. Identify priority habitats utilized by species for conservation. (ND 1st priority)
38. Missouri River floodplain restoration (MO 1st priority)
39. Improve the quality of existing habitat - moderating and/or introducing disturbances, enhancing vegetative composition/structure (IL 1st priority)
40. Watershed protection and management in the Mississippi-Ohio and Missouri river basins. (IA 1st priority)
41. Tallgrass prairie - management of existing stands and restoration where needed to contribute to landscape needs (SD 1st priority)
42. Protecting migration routes (IN 2nd priority)
43. Tallgrass prairie / grassland habitat restoration (MO 2nd priority)
44. Riparian/wetlands habitat (SD 2nd priority)
45. A variety of entities control significant land and water management capabilities and actions that can be implemented to enhance nongame species. (KS 2nd priority)
46. Habitat protection (IN 3rd priority)
47. Savanna restoration (MO 3rd priority)
48. Restoration of rare habitats - in Illinois, too little grassland, wetland and successional habitat exists to meet goals, even if existing habitat was optimally managed (IL 3rd priority)
49. Work with partners to prioritize and implement land protection, acquisition, and restoration projects that work toward conserving blocks of habitat and restoring ecological processes in areas of high species richness. (KY 3rd priority)

Information sharing/coordination mechanisms

50. Increased flow of information from taxonomic experts to field biologists on species occurrences, life history requirements, management needs, etc. (NE 1st priority)
51. Better coordination and partnership between federal and state agencies and NGOs that share an interest and obligation in relevant wildlife problems. (WI 1st priority)
52. Habitat, population and life history work demands attention beyond just the Dept. of Wildlife and Parks' obligation. (KS 1st priority)
53. Regional identification, prioritization, and management of important population centers, e.g., source, sink populations (MN 2nd priority)
54. Develop a comprehensive summary of significant knowledge gaps for SGCN and prioritize research, survey and monitoring needs to fill the gaps (MI 2nd priority)

Wildlife management

55. Population management (IN 1st priority)
56. Augment, expand, and reintroduce extirpated at risk species, especially mussels. (KY 1st priority)
57. Explore the effects of management practices and conservation actions on nongame species. (ND 2nd priority)

Invasive species

58. Regional coordination to address invasive species movement (MN 1st priority)
59. Develop and implement strategies to prevent new introductions of invasive species into the Great Lakes Basin (based on predictive models) (MI 1st priority)
60. Coordinated effort to prevent invasive species, respond to invasive species, and development of more effective tools to combat invasive species (IL 2nd priority)
61. Implement invasive species management/action plans (flora and fauna) (IA 3rd priority)
62. Develop a strategy to improve legislation and enforce existing policies in regards to invasive species (MI 3rd priority)

Appendix C: Individual pre-meeting survey responses

Human dimensions/education/outreach

63. Coordinated development of educational programs/materials on at-risk wildlife and habitats that is appropriate for multiple audiences across the region. (NE 2nd priority)
64. Facilitate increased buy-in and support for all-wildlife conservation by wildlife biologists (game and nongame) throughout the region. (NE 3rd priority)
65. Education. Create informational brochures, use tools such as television, radio, newspapers, magazines, and public forums to educate the public on the need for conservation of fish and wildlife resources and habitat. (ND 3rd priority)
66. Increase awareness of Midwestern wildlife conservation issues through outreach and education. (WI 3rd priority)
67. Lack of wildlife viewing programs inhibits development of public understanding and support of nongame programs. (KS 3rd priority)

Programs

68. Retention and improvement of USDA programs that conserve/expand available habitats. (IA 2nd priority)
69. Encourage management of at risk species on private lands that benefit the most species through creation and use of incentive programs. (KY 2nd priority)
70. More effective integration of rare species needs into current private lands programs by state and federal agencies (SD 3rd priority)

Regulatory

71. More aggressively develop and promote smart growth, conservation planning, and establishment of local conservation development ordinances. (WI 2nd priority)

1c) Wildlife monitoring needs across the Midwest region.

Monitoring protocols

72. Develop monitoring protocol for at-risk species that can be used by all state's in the Midwest to evaluate progress towards meeting CWCS objectives. (NE 1st priority)
73. Reptiles monitoring (standardized techniques) (IN 1st priority)
74. Develop standardized monitoring methodology & frameworks. (IA 1st priority)
75. Standardized herptile survey methodology that can be conducted by most states (SD 1st priority)
76. Establish standardized surveys for nongame, particularly amphibians, reptiles, and mammals. (ND 2nd priority)
77. Non-anuran amphibian monitoring (standardized techniques) (IN 2nd priority)
78. Decisions on how to monitor guilds of birds as per PIF habitat associations (MO 2nd priority)
79. Modification of existing monitoring to additional species and/or inclusion of habitat variables to increase usefulness (IL 2nd priority)
80. Standardized bat survey methodology that can be conducted by most states and a mechanism for sharing data in a secure way (SD 2nd priority)
81. Develop intense monitoring in priority areas. (KY 2nd priority)
82. Establish standardized monitoring methodologies and compatible databases. (KY 3rd priority)
83. Bat monitoring (standardized techniques) (IN 3rd priority)

Coordination/information exchange

84. Coordinate monitoring efforts among agencies (e.g. prairie dog monitoring between the NDGF and USFS) and share information. (ND 1st priority)
85. Long-term trends for species that represent regional priorities (MO 1st priority)
86. Regional endemics/ regionally important species (MN 1st priority)
87. Focus on TNC "targets" from their Ecoregional plans where the high priority species (high global ranks) coincide with those SGCN identified in state plans. (WI 1st priority)

Appendix C: Individual pre-meeting survey responses

88. Long term monitoring of at risk species to detect population trends, especially for species that lack long term data sets, in particular aquatic species and herps. (KY 1st priority)
89. Develop an accessible database that will allow for regional tracking of wildlife abundance and distribution throughout the region. (NE 2nd priority)
90. Identify and monitor regionally-shared species of greatest conservation need. (IA 2nd priority)
91. Coordinating monitoring beyond state boundaries (MN 2nd priority)
92. Monitor status and trends of the priority threats in the State and region at multiple scales and use the data to evaluate conservation actions (MI 2nd priority)
93. Take a regional approach to monitoring the health and status of amphibian populations. (WI 2nd priority)
94. Develop new or share existing successful models for using citizens to monitor at-risk species. (NE 3rd priority)
95. Create a central repository of monitoring information. (ND 3rd priority)
96. Coordination among states, and scales within states - lots of info is being collected, but most people who need the info cannot access it (IL 3rd priority)
97. Implement regionally (or nationally) compatible & accessible databank for species (& habitats) (IA 3rd priority)
98. Increase cross-jurisdictional communication and coordination of wildlife disease monitoring. (WI 3rd priority)
99. Expand and coordinate databases concerning species of greatest conservation need and their associated habitat characteristics. (KS 3rd priority)

Invasive species

100. Track the abundance, distribution and initial appearance of invasive species (MI 1st priority)

Ecosystem monitoring

101. Monitor the response of representative wildlife species to "processes" that regulate systems as well as monitoring where those processes are absent (MO 3rd priority)
102. Long-term studies conducted across state boundaries of grassland birds and responses to habitat changes and drought patterns (SD 3rd priority)

Species distribution

103. Document nongame wildlife use of different habitat types and identify essential habitats of mammalian and other species that need increased conservation, further study, and/or management. (KS 1st priority)
104. Distribution information of the full range of species (MN 3rd priority)
105. Monitor condition and protection status of identified migratory routes and stopover sites (MI 3rd priority)

Other

106. How to link what we control (habitat, regulations, etc.) to desired results we cannot control (wildlife populations) (IL 1st priority)
107. In urban areas, determine the status or requirements of nongame wildlife through urban, regional, or statewide habitat inventories, and develop area where a large number of people will benefit from associated values. (KS 2nd priority)

Regional Habitat opportunities

From the perspective of your State Wildlife Action Plans please identify the **top three needs** in the following areas to assist in restoration and improved conservation of **habitats** across the Midwest region.

Appendix C: Individual pre-meeting survey responses

1d) Habitat research and survey efforts across the Midwest region.

Habitat classification/Information collection

108. Standard landscape - land cover/land use classification map for the region, and a schedule for regular updates(MN 1st priority)
109. Unified classification and characterization of vegetation (SD 1st priority)
110. Use GIS and other remote sensing tools to further refine the quantity and quality of habitat.(ND 1st priority)
111. Inventories of high quality remnant natural communities, both terrestrial and aquatic (MO 1st priority)
112. Extent and condition of successional and open woodland habitats (IL 1st priority)
113. Identify critical habitats for regional SGCN. (IA 1st priority)
114. Which habitats are chronically under-surveyed throughout the region? Which are under-represented on public and other protected lands?(WI 1st priority)
115. Data on species habitat needs in incomplete. (KS 1st priority)
116. Development of a more unified habitat classification system for terrestrial and aquatic habitats across the region and adoption and use of such a system by field biologists. (NE 2nd priority)
117. Wildlife value of remaining native and agricultural grasslands - how much are secure during nesting season, how much provides winter cover, how much is in larger/wider patches, how much is overgrazed, dominated by invasive, etc. (IL 2nd priority)
118. Identify structural features, landscape configurations and other critical habitat components for SGCN/ (IA 2nd priority)
119. Range of Natural Variation models - identification of landscape/habitat condition benchmarks (MN 2nd priority)
120. Improve classification systems as needed to ensure that they reflect the current state of knowledge (e.g., wetlands, river/stream) and provide common criterion for all partners to use (MI 2nd priority)
121. Distribution and abundance (fragmentation) (IN 3rd priority)
122. A common language for talking about types of streams with similar biota - based on size, water temperature, gradient, etc. (IL 3rd priority)
123. Significantly more surveys are needed to identify degraded prairie and savanna sites with restoration potential. (WI 3rd priority)
124. Develop a state biodiversity plan to include inventory and monitoring and community restoration strategies. (KS 3rd priority)

Coordination/Information sharing

125. New research or better sharing of existing research that evaluates management directed at at-risk habitats/species. (NE 1st priority)
126. Region-wide trends in primary habitats..... positive and negative (MO 2nd priority)
127. Better coordination with federal entities that are conducting such efforts (an example - HABET Office in North Dakota); this should be a priority both for state and federal entities (SD 2nd priority)

Life history

128. Relationship/dependence on specific site conditions (IN 1st priority)
129. What are the region-wide effects of over-abundant white-tailed deer populations on SGCN habitat and our ability to maintain/restore that habitat? (WI 2nd priority)
130. Regional threats/problems to key habitats (MN 3rd priority)

Habitat modeling

131. Continue to develop and improve habitat models to predict changes over time and responses to potential threats, and to identify appropriate metrics/indicators for monitoring (MI 1st priority)

Appendix C: Individual pre-meeting survey responses

132. Document or model historic natural disturbance patterns (e.g., fire and flooding) and assess their potential for restoration (MI 3rd priority)

Management impacts

133. Explore the effects of management practices and habitat manipulation on nongame species. (ND 2nd priority)
134. Determine the effectiveness of conservation practices and incentive programs. (KY 2nd priority)
135. Urban areas represent significant opportunities to build understanding and support for nongame programs. (KS 2nd priority)

Threats

136. Determine extent of impacts to terrestrial and aquatic habitats by human activities. Determine the extent and effects of habitat loss, fragmentation, and loss of connectivity on at risk species. (KY 1st priority)
137. Threats (land use change/competition, contamination/global warming) (IN 2nd priority)
138. Determine the effects of sedimentation on aquatic habitat integrity. (KY 3rd priority)

Invasive Species

139. Research to better understand the extent of spread and impacts of invasive species on natural communities across the region. (NE 3rd priority)

Programs

140. Impacts of loss of CRP and other farm bill-related conservation programs. (IA 3rd priority)

1e) Habitat conservation actions across the Midwest region.

Programs

141. Re-vamping and fine-tuning of existing and new farmbill conservation title programs to increase the benefits of these programs to at-risk species.(NE 1st priority)
142. Need for incentive programs to reward landowners who are good land stewards and whose operations are compatible with wildlife habitat/rare species needs (SD 1st priority)
143. Maintain and strengthen provisions in the federal Endangered Species Act that protect habitat; improve enforcement of habitat protection under the ESA. (WI 1st priority)
144. Need to integrate actions identified in state action plans into federal Farm Bill programs (SD 2nd priority)
145. Better integrate at-risk habitat conservation within private lands programs. (NE 3rd priority)
146. Tailoring and focusing existing programs (e.g., farm bill programs, county forest preserve districts) to the specific actions needed in priority locations (IL 3rd priority)
147. More aggressively develop and promote smart growth, conservation planning, and establishment of local conservation development ordinances. (WI 3rd priority)

Funding

148. Find sources of non-federal match for implementation of habitat conservation. The 50-50 match is going to be difficult. (ND 2nd priority)

Habitat protection/restoration

149. Protect native prairie and wetlands where possible. (ND 1st priority)
150. Corridor development/protection (IN 1st priority)
151. Missouri River floodplain restoration (MO 1st priority)
152. Improve the quality of existing habitat - moderating and/or introducing disturbances, enhancing vegetative composition/structure (IL 1st priority)

Appendix C: Individual pre-meeting survey responses

153. Improve science-based, adaptive burning and grazing management of grasslands (IA 1st priority)
154. Important migration corridors, staging areas (MN 1st priority)
155. Improve upland habitat protection and restoration through acquisition, incentives (existing and new), and other methods in priority areas. (KY 1st priority)
156. Habitat is being altered in ways that are detrimental to species needs. (KS 1st priority)
157. Improve riparian zone protection and restoration through acquisition, incentives (existing and new), and other methods in priority areas. (KY 2nd priority)
158. Promote habitat restoration and improve restoration techniques (IN 2nd priority)
159. Tallgrass prairie / grassland habitat restoration (MO 2nd priority)
160. Restoration of rare habitats - in Illinois, too little grassland, wetland and successional habitat exists to meet goals, even if existing habitat was optimally managed (IL 2nd priority)
161. Improve habitat management in, and associated with, the Mississippi/Ohio and Missouri River systems (IA 2nd priority)
162. Improve habitat conservation on private lands. (IN 3rd priority)
163. Savanna restoration (MO 3rd priority)
164. Improve aquatic habitat protection and restoration through acquisition, incentives (existing and new), and other methods in priority areas. (KY 3rd priority)
165. Habitat improvement and preservation are not assured for key habitats. (KS 3rd priority)

Invasive Species

166. Develop and implement strategies to prevent new introductions of invasive species into the Great Lakes Basin (based on predictive models) (MI 1st priority)
167. Increased control of the introduction and spread of invasive species. (NE 2nd priority)
168. Invasive species decrease the quantity and quality of key habitats for species of greatest conservation need. (KS 2nd priority)

Coordination/Information sharing

169. Distribution of habitats across the region (MN 2nd priority)
170. Develop a comprehensive summary of significant knowledge gaps for landscape features (habitats) and ecological processes and prioritize research, survey and monitoring needs to fill the gaps (MI 2nd priority)
171. Establish a cooperative system of protections, designations, or management that captures representative examples of the full variety of landscape features (habitats) and associated wildlife (MI 3rd priority)

Human dimensions/education/outreach

172. Develop education tools and demonstration areas that promote the benefits of prescribed fire and address the public's fears and liability concerns. (WI 2nd priority)
173. Education. Create informational brochures, use tools such as television, radio, newspapers, magazines, and public forums to educate the public on the need for conservation of fish and wildlife resources and habitat. (ND 3rd priority)

Other

174. Reduce/reverse impacts of siltation and eutrophication of aquatic systems. (IA 3rd priority)

1f) Habitat monitoring needs across the Midwest region.

Monitoring protocols

175. Development of a rapid assessment technique for habitats that can be used by field biologists.(NE 1st priority)
176. Development of a set of standard habitat parameters to facilitate comparisons across state lines.(IN 1st priority)

Appendix C: Individual pre-meeting survey responses

177. How to monitor restored habitats (MO 1st priority)
178. Implement coordinated, standardized monitoring methodology.(IA 1st priority)
179. Classify/define standardized habitat types. (IA 2nd priority)
180. Creating meaningful regional indicators that reflect state level habitat indicators (MN 2nd priority)
181. Develop new citizen-monitoring initiatives for data that can be collected in ways analogous to the Breeding Bird Survey. (WI 3rd priority)

Coordination/information sharing

182. Compile and examine the variety of habitat monitoring going on throughout the state. (ND 1st priority)
183. Conduct an evaluation, including biological and cost factors, of habitat monitoring techniques for major habitat types and make these results available to state agencies that have not yet implemented systematic habitat monitoring (SD 2nd priority)
184. Identify the habitats that most commonly emerge as priorities in the state plans: what are the regional trends in patch size, connectivity, composition, and structure for these key habitats? (WI 2nd priority)
185. Monitor specialized habitats in priority conservation areas. (KY 3rd priority)
186. Expand and coordinate databases concerning species of greatest conservation need and their associated habitat characteristics. (KS 3rd priority)

Trends land use/land cover

187. Continuation of land cover data at 5-10 year intervals (satellite imagery and/or aerial photography) (IL 1st priority)
188. Updated land use/land cover maps, regularly updated. Do change assessments every 5 years (MN 1st priority)
189. Produce geographic information system mapping with layers for wetlands, riparian areas, sensitive areas, public ownership, breeding bird data, fish and wildlife distribution and abundance, species ranges and aquatic habitat parameters, and incorporate with Gap Analysis Program. (KS 1st priority)
190. Development of a regional remote sensing system to detect changes/losses to habitats important to at-risk species. (NE 2nd priority)
191. Monitor long term trends for representative species (MO 2nd priority)
192. Quantifying changes in the condition of habitats (IL 2nd priority)
193. Monitor successional changes in forest and grasslands. (KY 2nd priority)
194. Create a regional map of critical habitats. (NE 3rd priority)
195. Updated inventory of wetlands (IL 3rd priority)
196. Need to investigate existing efforts where particular sites are monitored long term and determine if this approach would be useful in the Midwest; this evaluation must also include a funding evaluation to avoid setting up a monitoring program that is not implemented (SD 3rd priority)

Programs

197. Need to continue monitoring existing Farm Bill programs for their impact to native wildlife species and habitats and make changes as needed (SD 1st priority)

Invasive species

198. Track the abundance, distribution and initial appearance of invasive species(MI 1st priority)

Management effectiveness

199. Are current management activities "working" with respect to the key habitats of SGCN highlighted in the plans? (WI 1st priority)
200. Monitor riparian habitat conditions, especially in relation to conservation actions. (KY 1st priority)

Appendix C: Individual pre-meeting survey responses

201. In urban areas, determine the status or requirements of nongame wildlife through urban, regional, or statewide habitat inventories, and develop areas where a large number of people will benefit from associated values. (KS 2nd priority)
202. Tying habitat monitoring to responses to individual species (MO 3rd priority)
203. Monitor impacts of management techniques/issues to implement adaptive management (IA 3rd priority)

Threats

204. Monitor status and trends of the priority threats in the State and region at multiple scales and use the data to evaluate conservation actions (MI 2nd priority)
205. Identify, quantify and monitor sites, sources and composition of significant contamination (MI 3rd priority)

2) Interstate issues: These opportunities and needs address specific potential efforts across state lines. These efforts will be utilized to develop blueprints of interstate collaboration and coordination between state, federal, and local government, nonprofit organizations, and local communities. Please note that this project only addresses collaborative efforts *within* the United States.

Neighboring States Species opportunities

From the perspective of your State Wildlife Action Plans please identify **the top three needs** in the following areas to assist in restoration and improved conservation of **wildlife species** with your neighboring states.

2a) Wildlife research and survey efforts with your neighboring states.

Coordination/information sharing

206. Develop forums where researchers from neighboring states can communicate and collaborate more frequently with each other and field biologists. (NE 1st priority)
207. Coordinate projects so as to possibly get more of a regional perspective.(ND 1st priority)
208. Unknown. The issue may be of coordination of on-going efforts rather than starting new efforts. (IN 1st priority)
209. Partner on research and survey efforts for SGCN that we know are moving across state boundaries. (WI 1st priority)
210. Develop list of priority species to collaborate on to do conduct research and surveys. (NE 2nd priority)
211. Identify those species in need of individual attention, where habitat linkage is weak or unknown, or where habitat protection is insufficient to achieve conservation goals. (WI 2nd priority)
212. Implement research and survey actions to collect data needed to fill significant knowledge gaps for wildlife species (MI 3rd priority)
213. Survey at risk species of animals in common with neighboring states that have not been recently or adequately surveyed. (KY 3rd priority)

Life history

214. Migratory bird, during migration, beyond waterfowl: shorebirds and songbirds (IL 1st priority)
215. Determine habitat use by and threats to SGCN for which basic life-history information is unavailable (MI 1st priority)
216. Establish baseline population data for aquatic species in big river ecosystems (Ohio and Mississippi Rivers). (KY 1st priority)
217. Determine life-histories of at risk species, needed to facilitate conservation actions. (KY 2nd priority)
218. How to understand migratory birds and wintering stop over sites (MO 3rd priority)

Appendix C: Individual pre-meeting survey responses

- 219. Dependence of Eastern massasauga (and other species?) upon crayfish burrows (IA-WI-IL-MO) (IA 3rd priority)
- 220. Identification of the distribution of species peripheries, and extending the peripheries into natural ranges, e.g., whooping crane into MN (MN 3rd priority)
- 221. What are habitat needs of species that are wide ranging, or where ranges shift (unpredictably?) over time? (WI 3rd priority)
- 222. Data are incomplete about species populations, distribution and habitat needs. (KS 3rd priority)

Specific habitats

- 223. Movement of Missouri River fishes (MO 1st priority)
- 224. Mississippi River, St. Croix River Corridors (MN 1st priority)
- 225. Red River Corridors (MN 2nd priority)

Trends

- 226. Trends in grassland wildlife across state lines (MO 2nd priority)

Threats

- 227. Where and why are prairie lepidoptera declining (all neighboring states). (IA 1st priority)
- 228. Overgrazing has negative impacts on the flora and fauna of the Tallgrass Prairie. (KS 1st priority)
- 229. Annual burning has negative impacts on the flora and fauna. (KS 2nd priority)
- 230. Impacts of carp on other species in shallow lakes (IA-SD-MN-WI-IL). (IA 2nd priority)
- 231. Develop and adhere to standards for timing of dredging activities to minimize adverse effects to spawning and migrating Great Lakes fish and nesting (MI 2nd priority)

Human dimensions/education/outreach

- 232. Human dimensions research to track attitudes, knowledge, etc. of the public related to wildlife across state borders. (NE 3rd priority)

Other

- 233. We found this section redundant of section 1 (SD 1st priority)

2b) Wildlife conservation actions with your neighboring states.

Coordination/information sharing

- 234. Increased flow of information from taxonomic experts to field biologists on species occurrences, life history requirements, management needs, etc. (NE 1st priority)
- 235. Share ideas, what's worked and what hasn't worked for wildlife conservation. (ND 1st priority)
- 236. Compare and evaluate at-risk species list from neighboring states. (NE 2nd priority)

Habitat protection/restoration

- 237. Recover and improve grassland habitats (MO 1st priority)
- 238. Improved watershed protection and management (all neighboring states). (IA 1st priority)
- 239. The increase of urban, suburban and rural homes is reducing native habitat. (KS 2nd priority)
- 240. Investigate the potential for doing one or several cross-border habitat conservation projects that benefit one or several common at-risk species. (NE 3rd priority)
- 241. Coordinated large grassland conservation efforts (all neighboring states) (IA 3rd priority)

Appendix C: Individual pre-meeting survey responses

Wildlife restoration

- 242. Improving condition of border rivers, and restoring endangered/extirpated populations of fishes, mussels (IL 1st priority)
- 243. Work with neighboring states to enhance mussel populations. (KY 1st priority)
- 244. Initiate/continue translocation/ reintroduction projects for SGCN with historic range, modern distribution, and genetic considerations that merit such actions. (WI 2nd priority)
- 245. Establish an aquatic conservation facility to hold rare species for research. (KY 2nd priority)
- 246. Reintroduce, translocate, and augment rare species. (KY 3rd priority)
- 247. Develop conservation/management plans for rare species that ensure maintenance of a viable population (MI 3rd priority)

Invasive Species

- 248. Work to negate or restrict potential invasive species introduction pathways (MI 1st priority)
- 249. Prevention/control of invasive species in larger rivers and Great Lakes (IL 2nd priority)
- 250. Invasive species are rapidly spreading. (KS 3rd priority)

Habitat management

- 251. Timber harvest modifications to accommodate habitat needs for SGCN (IA-MN-WI-IL-MO). (IA 2nd priority)
- 252. Identify and resolve management conflicts between SGCNs (e.g. between forest interior species and early successional specialists). (WI 1st priority)

Threats

- 253. Develop containment strategies for pathogens which pose significant threats to wildlife species or the plants on which they depend (MI 2nd priority)

Other

- 254. Unknown (IN 1st priority)
- 255. The public needs to be better informed about wildlife and outdoor recreation to support the needs of all wildlife species and habitats. (KS 1st priority)
- 256. Take advantage of existing conservation plans with a regional perspective (e.g., TNC's Ecoregion Plans, Partners in Flight spin-offs) (WI 3rd priority)

2c) Wildlife monitoring needs with your neighboring states.

Monitoring protocol

- 257. Develop coordinated monitoring protocol for at-risk species that share borders. (NE 1st priority)
- 258. Coordinate monitoring efforts including the timing, species, etc. (ND 1st priority)
- 259. Establish monitoring protocols and long term monitoring sites with neighboring states for big river ecosystems. (KY 1st priority)
- 260. Establish monitoring protocols for amphibians, reptiles and certain mammals. (KY 2nd priority)
- 261. Develop coordinated monitoring protocol for at-risk species using shared habitats. (NE 2nd priority)
- 262. Develop new or share existing successful models for using citizens to monitor at-risk species. (NE 3rd priority)

Coordination/information sharing

- 263. The issue maybe more of someone compiling and analyzing data that is already being collected than of specific monitoring needs. (IN 1st priority)

Appendix C: Individual pre-meeting survey responses

Species Monitoring

264. Migratory birds, beyond waterfowl (IL 1st priority)
265. Long-term monitoring of declining eastern forest birds (IA-MN-WI-IL-MO). (IA 1st priority)
266. Target SGCN that cross state boundaries (e.g., migratory birds, large mammals) and share same or similar habitats. (WI 1st priority)
267. Coordinated interstate monitoring of mussels in Miss. River system (IA-MN-WI-IL-MO). (IA 2nd priority)
268. Monitor migratory-bird use of Great Lakes features, both as stopover and as staging areas (MI 2nd priority)
269. Monitor species that are sensitive to management actions deemed necessary (and cost effective) to manage habitat (e.g. fire and butterflies, certain herps). (WI 2nd priority)
270. Amphibian declines (all neighboring states). (IA 3rd priority)
271. Conduct more specific and strategic monitoring for individual species that are imperiled, known indicators of ecological integrity, or known to have specific requirements that are not assessed by landscape feature (habitat) monitoring (MI 3rd priority)

Threats

272. Develop and implement pathogen and disease survey systems for private aquaculture, the bait industry, the shipping industry, recreational boaters, nurseries and other private/captive wildlife industries (MI 1st priority)
273. Disease monitoring. surveillance (chronic wasting disease, avian flu, West Nile Virus, et al) (IL 3rd priority)
274. Increase cross-jurisdictional communication and coordination of wildlife disease monitoring. (WI 3rd priority)

Invasive species

275. Use GIS to track invasive species. (KS 1st priority)
276. Invasive species monitoring, surveillance (IL 2nd priority)
277. Monitor the impact of invasive species on wildlife populations. (KS 2nd priority)
278. Develop and implement techniques of monitoring invasive species that can be used by laymen. (KS 3rd priority)
279. Monitor populations and effects of non-native species. (KY 3rd priority)

Neighboring States Species opportunities

From the perspective of your State Wildlife Action Plans please identify **the top three needs** in the following areas to assist in restoration and improved conservation of **habitats** with your neighboring states.

2d) Habitat research and survey efforts with your neighboring states.

Coordination/information sharing

280. New research or better sharing of existing research that evaluates management directed at at-risk habitats/species. (NE 1st priority)
281. Implement research and survey actions to collect data needed to fill significant knowledge gaps for landscape features (habitats) (MI 2nd priority)

Survey protocols

282. Develop science-based indicators and benchmarks for measuring the condition of each landscape feature (habitat) (MI 1st priority)
283. Development of a more unified habitat classification system for terrestrial and aquatic habitats across state borders and adoption and use of such a system by field biologists. (NE 2nd priority)
284. Conduct basic inventories to catalog associations between landscape features (habitats) and the species that depend on them (MI 3rd priority)

Appendix C: Individual pre-meeting survey responses

Life history

- 285. Amount of habitat required by SGCN for grassland-wetland (prairie pothole) ecosystems (IA-MN-SD-WI) (IA 1st priority)
- 286. There is a lack of data on species present, and habitat needs. (KS 3rd priority)

Threats

- 287. Conduct research on the causes and impacts of water quality declines in the Ohio Rivers system. (KY 1st priority)
- 288. Some management practices on public and private lands have negative impacts on the Tallgrass Prairie flora and fauna. (KS 1st priority)
- 289. Lack of properly applied prescribed burning has negative impacts on habitat due to encroachment of woody species. (KS 2nd priority)
- 290. Study impact of impoundments on big river ecosystems. (KY 2nd priority)

Management effectiveness

- 291. Determine the effectiveness of conservation practices and incentive programs. (KY 3rd priority)

Habitat surveys

- 292. Significantly more surveys are needed to identify degraded prairie and savanna sites with restoration potential. (WI 1st priority)
- 293. Quad-state (IA-MO-NE-KS) tallgrass prairie restoration & management (IA 2nd priority)
- 294. Dam (and other) Impacts to large river systems and their SGCN. (WI 2nd priority)

Invasive species

- 295. Research to better understand the extent of spread and impacts of invasive species on natural communities across the region. (NE 3rd priority)
- 296. Compare methods for canarygrass (and other invasive veg) removal/reduction (all neighboring states). (IA 3rd priority)
- 297. Control methods for key invasive plants, e.g. garlic mustard, glossy buckthorn, reed canary grass. (WI 3rd priority)

Other

- 298. Unknown (IN 1st priority)

2e) Habitat conservation actions with your neighboring states.

Invasive species

- 299. Collaborate on the control of the introduction and spread of invasive species. (NE 1st priority)
- 300. Work to negate or restrict potential invasive species introduction pathways (MI 1st priority)
- 301. Improve cross-border coordination of invasive exotic plant early-warning and eradication programs. (WI 1st priority)

Specific habitats

- 302. Coordinated improvement of border rivers (OH, MS), and cross-border rivers (Kankakee with IN, Sugar, Pecatonica with WI) (IL 1st priority)
- 303. Improve management of shallow lakes for fish and/or wildlife SGCN (IA-MN-SD-WI-IL). (IA 1st priority)
- 304. Investigate the potential for doing one or several cross-border habitat conservation projects. (NE 2nd priority)
- 305. Regional network of large grassland management areas (IL 2nd priority)
- 306. Identify shared landscapes for priority conservation (all neighboring states). (IA 2nd priority)

Appendix C: Individual pre-meeting survey responses

307. Maintain the existing diversity of wetland resource types across a landscape (MI 2nd priority)
308. Maintain or re-establish connectivity of contiguous habitats (hemlock-hardwood forests on northern border, peatlands in NW, prairies/ savannas in S) across state borders. (WI 2nd priority)
309. Work with partners to prioritize and implement land protection, acquisition, and restoration projects that work toward conserving blocks of habitat and restoring ecological processes in areas of high species richness. (Examples: gating important caves and developing a multi-state WRP). (KY 2nd priority)
310. Reduce fragmentation of forest (IA-MN-WI-IL) and grassland habitats (all neighboring states). (IA 3rd priority)
311. More Driftless Area protection over range of scales needed to achieve effective conservation of SGCN and the habitats upon which they depend. (WI 3rd priority)

Coordination/information sharing

312. Need support, forums for interstate work (MN 1st priority)
313. Create a forum whereby land managers from neighboring states can communicate about successes and failures in their respective states. (NE 3rd priority)
314. Use relatively undisturbed habitats in priority areas to guide restoration. (KY 3rd priority)

Regulatory

315. Work with appropriate entities to develop regulations on dredging, operation of locks and dams, flow patterns, and power plants. (KY 1st priority)

Threats

316. Develop action plans to prevent environmental contamination from identified sites and sources (MI 3rd priority)
317. Wind farm placement and operations could cause negative impacts on flora and fauna. (KS 1st priority)
318. Conversion of existing habitat to croplands is destroying native flora and reducing the habitat for wildlife. (KS 2nd priority)
319. The widespread broadcast spraying of herbicides in an effort to control invasive species harms native species. (KS 3rd priority)

Other

320. Unknown - (IN 1st priority)

2f) Habitat monitoring needs with your neighboring states.

Monitoring protocols

321. Establish a baseline for what constitutes a healthy grassland community. (KS 1st priority)
322. Use Dept. of Agriculture surveys to monitor habitat and land use change over time. (KS 2nd priority)
323. Develop monitoring systems that can be shared between neighboring states to assess impacts of conservation. (NE 2nd priority)

Specific habitats

324. Create and distribute a regional map of critical habitats (NE 1st priority)
325. Border rivers - Mississippi, Wabash, Ohio (IL 1st priority)
326. Monitor SGCN in Loess Hills/Missouri River alluvial plain (IA-SD-NE-MO-KS). (IA 1st priority)
327. Monitor water quality of Ohio River and its tributaries. (KY 1st priority)
328. Monitor the effectiveness of conservation actions aimed at improving habitat conditions in big river ecosystems (Ohio and Mississippi Rivers). (KY 2nd priority)

Appendix C: Individual pre-meeting survey responses

- 329. Map and monitor aglific talus slopes & sinkholes for rare and endangered species in the driftless area (Paleozoic Plateau in IA-MN-WI-IL) (IA 2nd priority)
- 330. Oak regeneration south of Tension Zone in forest and savanna systems (oak is being "mined", silvicultural practices are exacerbating the problem). (WI 2nd priority)
- 331. Monitor microsite habitats (e.g., goat prairies) for changes and effects on SGCN (IA-MN-WI-IL-MO). (IA 3rd priority)

Data gaps

- 332. Track existing significant data gaps and actions intended to fill those gaps (MI 1st priority)

Trends

- 333. Trends in sensitive habitat types (use state plans as a guide), e.g., patch sizes, successional and developmental stages, isolation, and ownership. (WI 1st priority)
- 334. Periodically map the spatial extent of landscape features (habitats) and assess all occurrences and high quality occurrences to determine loss or gain (number of occurrences and/or acreage) (MI 2nd priority)
- 335. Development of a remote sensing system to detect changes/losses to habitats important to at-risk species across state borders. (NE 3rd priority)
- 336. Monitor condition of landscape features (habitats) (MI 3rd priority)
- 337. Create analytical tools to track habitat changes. (KY 3rd priority)
- 338. Produce GIS mapping with layers for wetlands, riparian areas, sensitive areas, public ownership, breeding bird data, fish and wildlife distribution and abundance, species ranges and aquatic habitat parameters, and incorporate with GAP. (KS 3rd priority)

Invasive Species

- 339. Invasive species impacts to community composition, structure, function (which species, where, how much, etc.) (WI 3rd priority)

Other

- 340. Unknown (IN 1st priority)

Research and survey efforts across the Midwest region and with neighboring states.

1. More studies of at-risk species that look at primary habitat requirements (structural features, landscape configurations) and distribution across the region. (NE 1st priority) (OH 2nd priority) (MO 1st priority) (IA 1st priority) (KS 1st priority) (IA 2nd priority)
2. Habitat management effects, conservation practices and incentive programs on wildlife, especially those federally listed/candidate species (IA 1st priority) (SD 2nd priority) (ND 2nd priority)(KY 2nd priority)
3. Reserve system design and connectivity--are our reserves large enough and connected enough (particularly north-south and across state borders) to sustain large, wide-ranging mammals and to accommodate potential northerly range shifts of wildlife due to climate change. (WI 2nd priority)
4. Coordinated regional Standard/unified landscape - land cover/vegetation/land use, both terrestrial and aquatic, classification and characterization (quantity, quality and status) map (using GIS and other remote sensing tools) for the region, and a schedule for regular updates. (MN 1st priority) (OH 1st priority) (SD 1st priority) (SD 1st priority)(ND 1st priority) (MO 1st priority) (IL 1st priority)(WI 1st priority) (MO 2nd priority) (NE 2nd priority) (MI 2nd priority) (IN 3rd priority) (IL 3rd priority)
5. Range of Natural Variation models - identification of landscape/habitat condition benchmarks (MN 2nd priority)
6. Develop a state biodiversity plan to include inventory, monitoring and evaluation of community restoration strategies. (NE 1st priority) (KS 3rd priority)
7. Create a central repository of research and survey information. (ND 3rd priority)
8. In general, more long-term studies and better opportunities for cooperative studies across state boundaries are needed (bureaucracy often defeats such efforts). (SD 3rd priority)
9. Need to consider international boundaries. (OH 3rd priority)
10. Better coordination with federal entities that are conducting such efforts (an example - HABET Office in North Dakota); this should be a priority both for state and federal entities (SD 2nd priority)
11. Urban areas represent significant opportunities to build understanding and support for nongame programs. (KS 2nd priority)
12. Continue to develop and improve habitat models to predict changes over time and responses to potential threats, and to identify appropriate metrics/indicators for monitoring (MI 1st priority)
13. Document or model historic natural disturbance patterns (e.g., fire and flooding) and assess their potential for restoration (MI 3rd priority)
14. Establish baseline information (i.e. population status, distribution, abundance, limiting factors, life history requirements) for species of conservation priority and other nongame species. (ND 1st priority) (IN 1st priority) (IL 2nd priority) (KS 2nd priority)(IL 1st priority) (MN 1st priority)(KY 2nd priority)(IN 2nd priority) (NE 3rd priority)(IN 3rd priority) (IL 3rd priority) (KY 3rd priority)

Appendix D: Combined pre-meeting survey responses

15. Understanding of the wildlife species that persist or are being produced in "domesticated habitats". (MO 3rd priority)
16. What are the region-wide effects of over-abundant white-tailed deer populations on SGCN habitat and our ability to maintain/restore that habitat? (WI 2nd priority)
17. Determine causes of populations declines (Threat identification and evaluation - predators/competition, contaminants, climate change, habitat loss, fragmentation, and loss of connectivity) (IN 1st priority) (KY 1st priority) (KY 1st priority) (IA 3rd priority) (MN 3rd priority) (IN 2nd priority) (KY 3rd priority)
18. Some nongame species populations are declining, and some suitable available habitat is not being used. (KS 1st priority)
19. Effects of wind turbine siting on ground-nesting species of greatest conservation need (SGCN), especially birds. (IA 2nd priority)
20. Conduct research to investigate and produce decision support models for understanding, controlling, and eliminating or containing epizootic events (MI 2nd priority)
21. Research to better understand the extent of spread and impacts of invasive species on natural communities and individual wildlife species across the region. (NE 3rd priority) (WI 3rd priority)
22. Develop models to predict the next likely invasive species threat (MI 1st priority)
23. Migratory bird corridors, stopover/staging habitat--where are the remaining sites, what condition are they in, how are migrants affected by loss, degradation, fragmentation, and isolation of stopover sites? (WI 1st priority) (MN 2nd priority) (MI 3rd priority)
24. Human dimensions research to track attitudes, knowledge, etc. of the public related to wildlife across the region. (NE 2nd priority)
25. For each of North Dakota's 100 species of conservation priority, we identified more specific additional research and survey efforts needed. These should be further reviewed and prioritized. (ND 2nd priority)
26. Description of "guilds" of wildlife species characteristic of primary habitats or systems, similar to or building on PIF lists. (MO 2nd priority)
27. Continue to develop recovery plans for all species on the state sensitive species lists. (KS 3rd priority)
28. Impacts of loss of CRP and other farm bill-related conservation programs. (IA 3rd priority)

Conservation actions across the Midwest region and with neighboring states.

29. Habitat protection and improvement - moderating and/or introducing disturbances, enhancing vegetative composition/structure (IL 1st priority) (OH 1st priority) (IN 3rd priority) (IN 2nd priority)
30. Work with partners and private land owners to prioritize and implement land protection, incentives (existing and new), acquisition, and restoration projects that work toward conserving blocks of habitat and restoring ecological processes in areas of high species richness. (KY 1st priority) (KY 3rd priority)

Appendix D: Combined pre-meeting survey responses

- priority) (KY 2nd priority) (KY 3rd priority) (KS 3rd priority) (IN 3rd priority) (KS 2nd priority)
31. Corridor development/protection (IN 1st priority)
 32. Protection of important migration corridors, staging areas (MN 1st priority) (IN 2nd priority)
 33. Identify priority habitats utilized by species for conservation. (ND 1st priority)
 34. Increased flow of information from taxonomic experts to field biologists on species occurrences, life history requirements, management needs, etc. (NE 1st priority)
 35. Better coordination and partnership for habitat, population and life history work between federal and state agencies and NGOs that share an interest and obligation in relevant wildlife problems. (WI 1st priority) (OH 1st priority) (KS 1st priority)
 36. Regional identification, prioritization, and management of important population centers, e.g., source, sink populations (MN 2nd priority)
 37. Develop a comprehensive summary of significant knowledge gaps for SGCN and prioritize research, survey and monitoring needs to fill the gaps (MI 2nd priority)
 38. Distribution of habitats across the region (MN 2nd priority)
 39. Develop a comprehensive summary of significant knowledge gaps for landscape features (habitats) and ecological processes and prioritize research, survey and monitoring needs to fill the gaps (OH 2nd priority) (MI 2nd priority)
 40. Establish a cooperative system of protections, designations, or management that captures representative examples of the full variety of landscape features (habitats) and associated wildlife (MI 3rd priority)
 41. Augment, expand, and reintroduce extirpated at risk species, especially mussels. (KY 1st priority) (IN 1st priority)
 42. Explore the effects of management practices and conservation actions on nongame species. (ND 2nd priority)
 43. Develop and implement strategies to prevent new introductions of invasive species into the Great Lakes Basin (based on predictive models) (based on predictive models) (MI 1st priority)
 44. Coordinated regional management/action plans to prevent invasive species (flora and fauna) , respond to invasive species, and development of more effective tools to combat invasive species (IL 2nd priority) (MN 1st priority) (IA 3rd priority) (NE 2nd priority) (KS 2nd priority)
 45. Develop a strategy to improve legislation and enforce existing policies in regards to invasive species (MI 3rd priority)
 46. Coordinated development of educational programs/materials on at-risk wildlife and habitats that is appropriate for multiple audiences across the region. (NE 2nd priority) (ND 3rd priority) (WI 3rd priority) (KS 3rd priority) (ND 3rd priority)

Appendix D: Combined pre-meeting survey responses

47. Facilitate increased buy-in and support for all-wildlife conservation by wildlife biologists (game and nongame) throughout the region. (NE 3rd priority)
48. Develop education tools and demonstration areas that promote the benefits of prescribed fire and address the public's fears and liability concerns. (WI 2nd priority)
49. Maintain and strengthen provisions in the federal Endangered Species Act that protect habitat; improve enforcement of habitat protection under the ESA. (WI 1st priority)
50. Retention, tailoring and focusing existing private lands programs (e.g., farm bill programs, county forest preserve districts) to the specific actions needed in priority locations (IL 3rd priority) (NE 1st priority) (SD 2nd priority) (IA 2nd priority) (SD 3rd priority) (SD 1st priority) (KY 2nd priority) (NE 3rd priority)
51. More aggressively develop and promote smart growth, conservation planning, and establishment of local conservation development ordinances. (WI 3rd priority) (WI 2nd priority)
52. Find sources of non-federal match for implementation of habitat conservation. The 50-50 match is going to be difficult. (ND 2nd priority)

Monitoring needs across the Midwest region and with neighboring states.

53. Develop monitoring protocol (standardized techniques & frameworks) and compatible databases (with a mechanism for sharing data in a secure way) for at-risk species that can be used by all states in the Midwest to evaluate progress towards meeting CWCS objectives. (NE 1st priority) (IN 1st priority) (IA 1st priority) (SD 1st priority) (ND 2nd priority) (IN 2nd priority) (MO 2nd priority) (SD 2nd priority) (KY 2nd priority) (KY 3rd priority) (IN 3rd priority) (IN 1st priority) (IL 2nd priority) (IA 1st priority) (IA 2nd priority) (MN 2nd priority) (OH 3rd priority) (WI 3rd priority)
54. Development of a standardized rapid assessment technique for habitats that can be used by field biologists.(NE 1st priority)
55. Coordinate regional and interstate monitoring efforts among NGOs, state and federal agencies. (ND 1st priority) (IA 2nd priority) (OH 1st priority) (MN 2nd priority) (MO 1st priority)
56. Focus on TNC "targets" from their Ecoregional plans where the high priority species (high global ranks) coincide with those SGCN identified in state plans. (WI 1st priority)
57. Long term monitoring of at risk species to detect population trends, especially for species that lack long term data sets, in particular aquatic species and herps. (KY 1st priority)
58. Develop/expand and coordinate an accessible database that will allow for regional tracking of wildlife abundance and distribution throughout the region. (NE 2nd priority) (ND 3rd priority) (IL 3rd priority) (IA 3rd priority) (KS 3rd priority) (KS 3rd priority)
59. Monitor status and trends of the priority threats in the State and region at multiple scales and use the data to evaluate conservation actions (MI 2nd

Appendix D: Combined pre-meeting survey responses

- priority) (MN 1st priority) (WI 2nd priority) (MO 1st priority) (WI 3rd priority)
60. Develop new or share existing successful models for using citizens to monitor at-risk species. (NE 3rd priority)
 61. Conduct an evaluation, including biological and cost factors, of habitat monitoring techniques for major habitat types and make these results available to state agencies that have not yet implemented systematic habitat monitoring (SD 2nd priority)
 62. Identify the habitats that most commonly emerge as priorities in the state plans: what are the regional trends in patch size, connectivity, composition, and structure for these key habitats? (WI 2nd priority) (ND 1st priority) (KY 3rd priority)
 63. Monitor the response of representative wildlife species to "processes" that regulate systems as well as monitoring where those processes are absent (MO 3rd priority)
 64. Document nongame wildlife use of different habitat types and identify essential habitats of mammalian and other species that need increased conservation, further study, and/or management. (KS 1st priority) (MN 3rd priority)
 65. Monitor condition and protection status of identified migratory routes and stopover sites (MI 3rd priority)
 66. How to link what we control (habitat, regulations, etc.) to desired results we cannot control (wildlife populations) (IL 1st priority)
 67. In urban areas, determine the status or requirements of nongame wildlife through urban, regional, or statewide habitat inventories, and develop area where a large number of people will benefit from associated values. (KS 2nd priority)
 68. Continuation of land cover data at 5-10 year intervals (satellite imagery and/or aerial photography) (IL 1st priority) (MN 1st priority) (NE 2nd priority)
 69. Produce geographic information system mapping with layers for wetlands, riparian areas, sensitive areas, public ownership, breeding bird data, fish and wildlife distribution and abundance, species ranges and aquatic habitat parameters, and incorporate with Gap Analysis Program. (KS 1st priority)
 70. Need to continue monitoring existing Farm Bill programs for their impact to native wildlife species and habitats and make changes as needed (SD 1st priority)
 71. Monitor status and trends of the priority threats in the State and region at multiple scales and use the data to evaluate conservation actions (MI 2nd priority)
 72. Identify, quantify and monitor sites, sources and composition of significant contamination (MI 3rd priority)
 73. Track the abundance, distribution and initial appearance of invasive species (MI 1st priority)
 74. Invasive species monitoring (GIS) and surveillance (IL 2nd priority) (KS 2nd priority) (KS 1st priority) (KS 3rd priority) (KY 3rd priority)

Appendix D: Combined pre-meeting survey responses

Prairie/Grasslands

75. Wildlife value of remaining native and agricultural grasslands - how much are secure during nesting season, how much provides winter cover, how much is in larger/wider patches, how much is overgrazed, dominated by invasive, etc. (IL 2nd priority)
76. Significantly more surveys are needed to identify degraded prairie and savanna sites with restoration potential. (WI 3rd priority)
77. Tallgrass prairie - management of existing stands and restoration where needed to contribute to landscape needs (SD 1st priority) (MO 2nd priority)
78. Protect native prairie and wetlands where possible. (ND 1st priority)
79. Improve science-based, adaptive burning and grazing management of grasslands (IA 1st priority)
80. Amount of habitat required by SGCN for grassland-wetland (prairie pothole) ecosystems (IA-MN-SD-WI) (IA 1st priority)
81. Trends in grassland wildlife across state lines (MO 2nd priority)
82. Overgrazing has negative impacts on the flora and fauna of the Tallgrass Prairie. (KS 1st priority)
83. Significantly more surveys are needed to identify degraded prairie and savanna sites with restoration potential. (WI 1st priority)
84. Where and why are prairie lepidoptera declining (all neighboring states). (IA 1st priority)
85. Annual burning has negative impacts on the flora and fauna. (KS 2nd priority)
86. Quad-state (IA-MO-NE-KS) tallgrass prairie restoration & management (IA 2nd priority)
87. Regional network of large grassland management areas (IL 2nd priority)
88. Coordinated large grassland conservation efforts (all neighboring states) (IA 3rd priority)
89. Establish a baseline for what constitutes a healthy grassland community. (KS 1st priority)

Aquatic

90. Riparian/wetlands habitat (SD 2nd priority)
91. Watershed protection and management in the Mississippi-Ohio and Missouri river basins. (IA 1st priority)
92. Missouri River floodplain restoration (MO 1st priority)
93. Reduce/reverse impacts of siltation and eutrophication of aquatic systems. (IA 3rd priority)
94. Movement of Missouri River fishes (MO 1st priority)
95. Mississippi River, St. Croix River Corridors (MN 1st priority)
96. Red River Corridors (MN 2nd priority)
97. Impacts of carp on other species in shallow lakes (IA-SD-MN-WI-IL). (IA 2nd priority)
98. Develop and adhere to standards for timing of dredging activities to minimize adverse effects to spawning and migrating Great Lakes fish and nesting (MI 2nd priority)

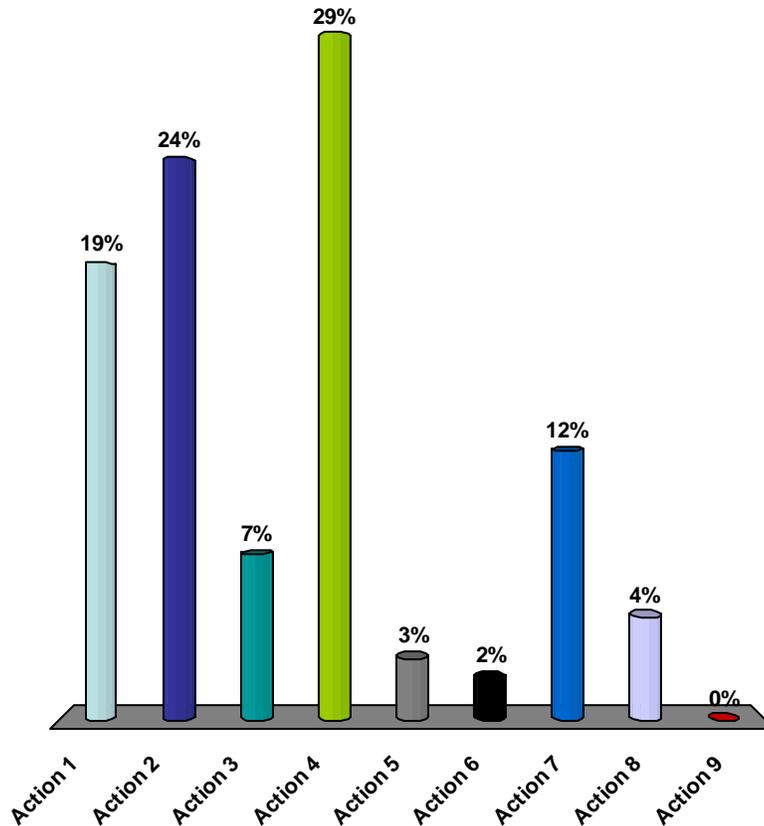
Appendix D: Combined pre-meeting survey responses

99. Compare methods for canarygrass (and other invasive veg) removal/reduction (all neighboring states). (IA 3rd priority)
 100. Control methods for key invasive plants, e.g. garlic mustard, glossy buckthorn, reed canary grass. (WI 3rd priority)
 101. Improving condition of border rivers, and restoring endangered/extirpated populations of fishes, mussels (IL 1st priority)
 102. Prevention/control of invasive species in larger rivers and Great Lakes (IL 2nd priority)
 103. Aquatic species do not recognize political boundaries, so efforts must be coordinated with states/provinces. (OH 1st priority)
 104. Coordinated improvement of border rivers (OH, MS), and cross-border rivers (Kankakee with IN, Sugar, Pecatonica with WI) (IL 1st priority)
 105. Improve management of shallow lakes for fish and/or wildlife SGCN (IA-MN-SD-WI-IL). (IA 1st priority)
 106. Border rivers - Mississippi, Wabash, Ohio (IL 1st priority)
 107. Monitor SGCN in Loess Hills/Missouri River alluvial plain (IA-SD-NE-MO-KS). (IA 1st priority)
 108. Monitor water quality of Ohio River and its tributaries. (KY 1st priority)
 109. Monitor the effectiveness of conservation actions aimed at improving habitat conditions in big river ecosystems (Ohio and Mississippi Rivers). (KY 2nd priority)
 110. Map and monitor aglific talus slopes & sinkholes for rare and endangered species in the driftless area (Paleozoic Plateau in IA-MN-WI-IL) (IA 2nd priority)
- Savanna
111. Savanna restoration (MO 3rd priority)
- Forest
112. Timber harvest modifications to accommodate habitat needs for SGCN (IA-MN-WI-IL-MO). (IA 2nd priority)
 113. Identify and resolve management conflicts between SGCNs (e.g. between forest interior species and early successional specialists). (WI 1st priority)
 114. Oak regeneration south of Tension Zone in forest and savanna systems (oak is being "mined", silvicultural practices are exacerbating the problem). (WI 2nd priority)
- Species
115. Dependence of Eastern massasauga (and other species?) upon crayfish burrows (IA-WI-IL-MO) (IA 3rd priority)
 116. Work with neighboring states to enhance mussel populations. (KY 1st priority)
 117. Coordinated interstate monitoring of mussels in Miss. River system (IA-MN-WI-IL-MO). (IA 2nd priority)
 118. State listed species distribution/abundance (spadefoot, hellbender, timber rattlesnake, Allegheny woodrat, Indiana bat, etc) (OH 1st priority)

Appendix E: Priority voting results

MAFWA Meeting Priority Voting results

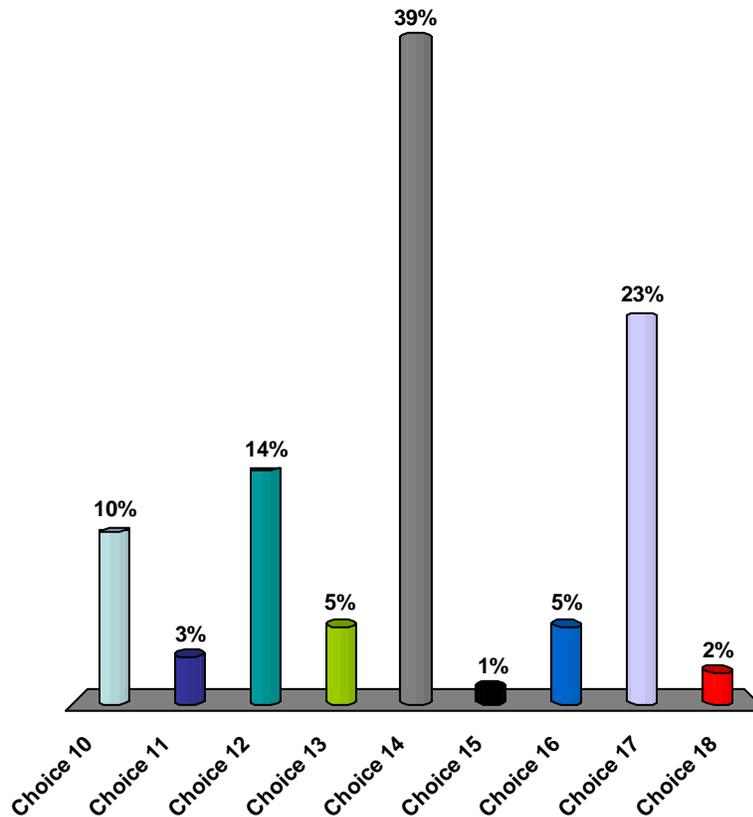
Slide 1) Research and survey efforts across the Midwest region and with neighboring states.



1. More studies of at-risk species that look at primary habitat requirements (structural features, landscape configurations) and distribution across the region.
2. Habitat management effects, conservation practices and incentive programs on wildlife, especially those federally listed/candidate species
3. Reserve system design and connectivity--are our reserves large enough and connected enough (particularly north-south and across state borders) to sustain large, wide-ranging mammals and to accommodate potential northerly range shifts of wildlife due to climate change.
4. Coordinated regional Standard/unified landscape - land cover/vegetation/land use, both terrestrial and aquatic, classification and characterization (quantity, quality and status) map (using GIS and other remote sensing tools) for the region, and a schedule for regular updates.
5. Range of Natural Variation models - identification of landscape/habitat condition benchmarks
6. Develop a state biodiversity plan to include inventory, monitoring and evaluation of community restoration strategies.
7. Create a central repository of research and survey information.
8. In general, more long-term studies and better opportunities for cooperative studies across state boundaries are needed (bureaucracy often defeats such efforts).
9. Need to consider international boundaries.

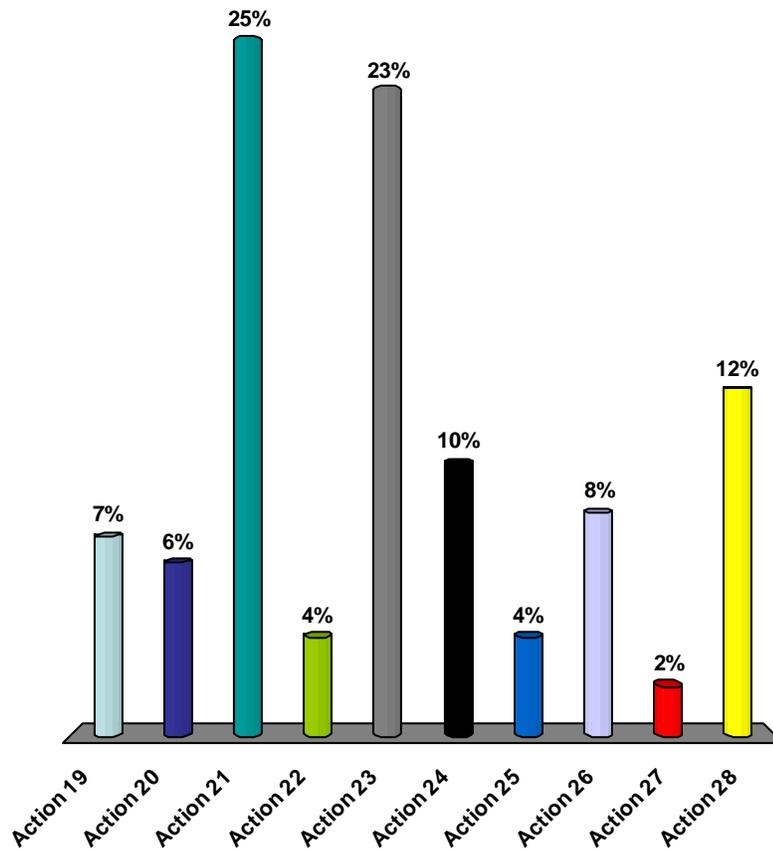
Appendix E: Priority voting results

Slide 2) Research and survey efforts across the Midwest region and with neighboring states.



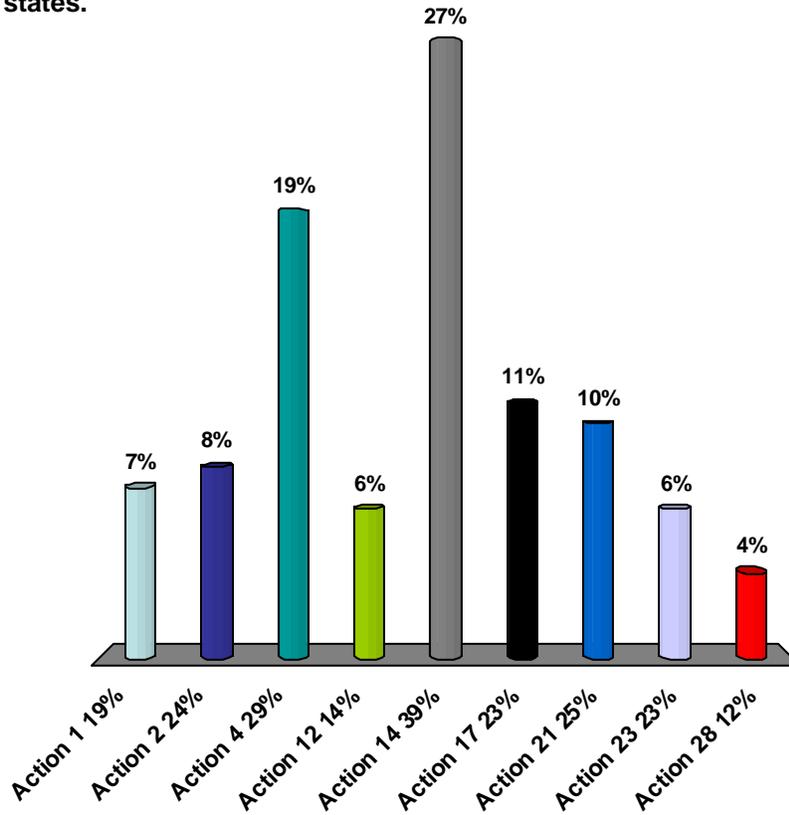
10. Better coordination with federal entities that are conducting such efforts (an example - HABET Office in North Dakota); this should be a priority both for state and federal entities
11. Urban areas represent significant opportunities to build understanding and support for nongame programs.
12. Continue to develop and improve habitat models to predict changes over time and responses to potential threats, and to identify appropriate metrics/indicators for monitoring
13. Document or model historic natural disturbance patterns (e.g., fire and flooding) and assess their potential for restoration
14. Establish baseline information (i.e. population status, distribution, abundance, limiting factors, life history requirements) for species of conservation priority and other nongame species.
15. Understanding of the wildlife species that persist or are being produced in "domesticated habitats".
16. What are the region-wide effects of over-abundant white-tailed deer populations on SGCN habitat and our ability to maintain/restore that habitat?
17. Determine causes of populations declines (Threat identification and evaluation - predators/competition, contaminants, climate change, habitat loss, fragmentation, and loss of connectivity)
18. Some nongame species populations are declining, and some suitable available habitat is not being used.

Slide 3) Research and survey efforts across the Midwest region and with neighboring states.



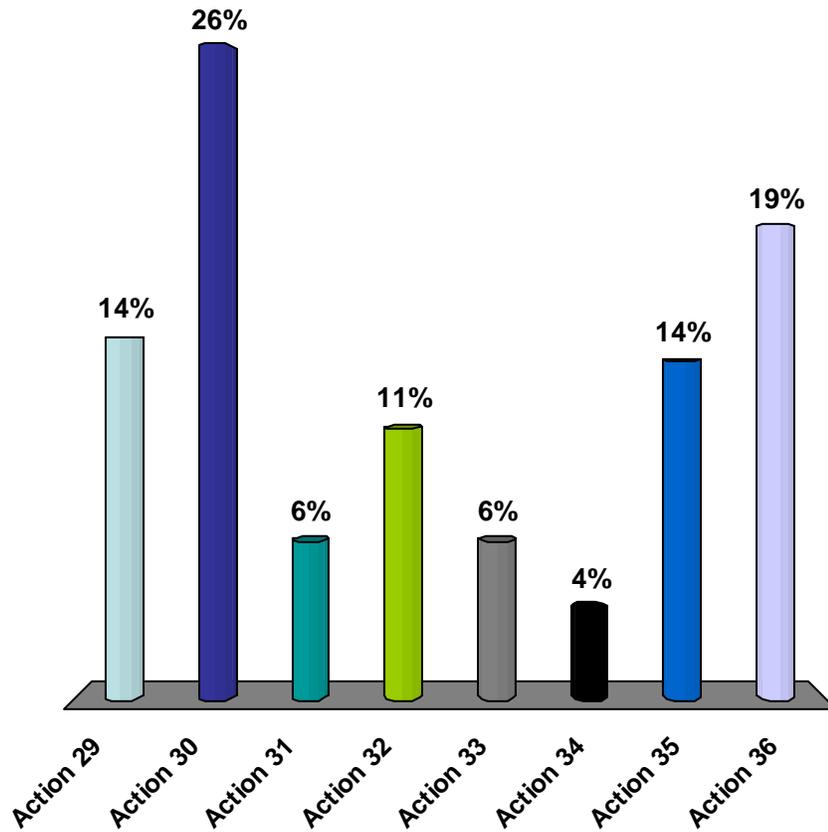
19. Effects of wind turbine siting on ground-nesting species of greatest conservation need (SGCN), especially birds.
20. Conduct research to investigate and produce decision support models for understanding, controlling, and eliminating or containing epizootic events
21. Research to better understand the extent of spread and impacts of invasive species on natural communities and individual wildlife species across the region.
22. Develop models to predict the next likely invasive species threat
23. Migratory bird corridors, stopover/staging habitat--where are the remaining sites, what condition are they in, how are migrants affected by loss, degradation, fragmentation, and isolation of stopover sites?
24. Human dimensions research to track attitudes, knowledge, etc. of the public related to wildlife across the region.
25. For each of North Dakota's 100 species of conservation priority, we identified more specific additional research and survey efforts needed. These should be further reviewed and prioritized.
26. Description of "guilds" of wildlife species characteristic of primary habitats or systems, similar to or building on PIF lists.
27. Continue to develop recovery plans for all species on the state sensitive species lists.
28. Impacts of loss of CRP and other farm bill-related conservation programs.

Slide 4) TOP 9 Research and survey efforts across the Midwest region and with neighboring states.



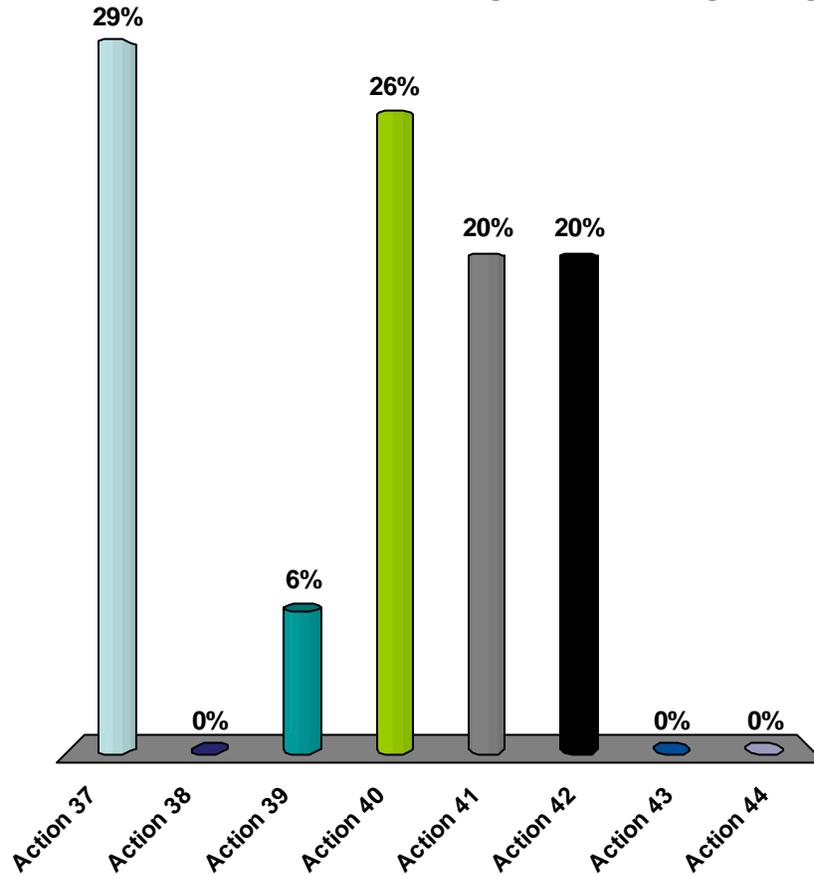
- 1) More studies of at-risk species that look at primary habitat requirements (structural features, landscape configurations) and distribution across the region.
- 2) Habitat management effects, conservation practices and incentive programs on wildlife, especially those federally listed/candidate species
- 4) Coordinated regional Standard/unified landscape - land cover/vegetation/land use, both terrestrial and aquatic, classification and characterization (quantity, quality and status) map (using GIS and other remote sensing tools) for the region, and a schedule for regular updates.
- 12) Continue to develop and improve habitat models to predict changes over time and responses to potential threats, and to identify appropriate metrics/indicators for monitoring
- 14) Establish baseline information (i.e. population status, distribution, abundance, limiting factors, life history requirements) for species of conservation priority and other nongame species.
- 17) Determine causes of populations declines (Threat identification and evaluation - predators/competition, contaminants, climate change, habitat loss, fragmentation, and loss of connectivity)
- 21) Research to better understand the extent of spread and impacts of invasive species on natural communities and individual wildlife species across the region.
- 23) Migratory bird corridors, stopover/staging habitat--where are the remaining sites, what condition are they in, how are migrants affected by loss, degradation, fragmentation, and isolation of stopover sites?
- 28) Impacts of loss of CRP and other farm bill-related conservation programs.

Slide 5) Conservation actions across the Midwest region and with neighboring states.



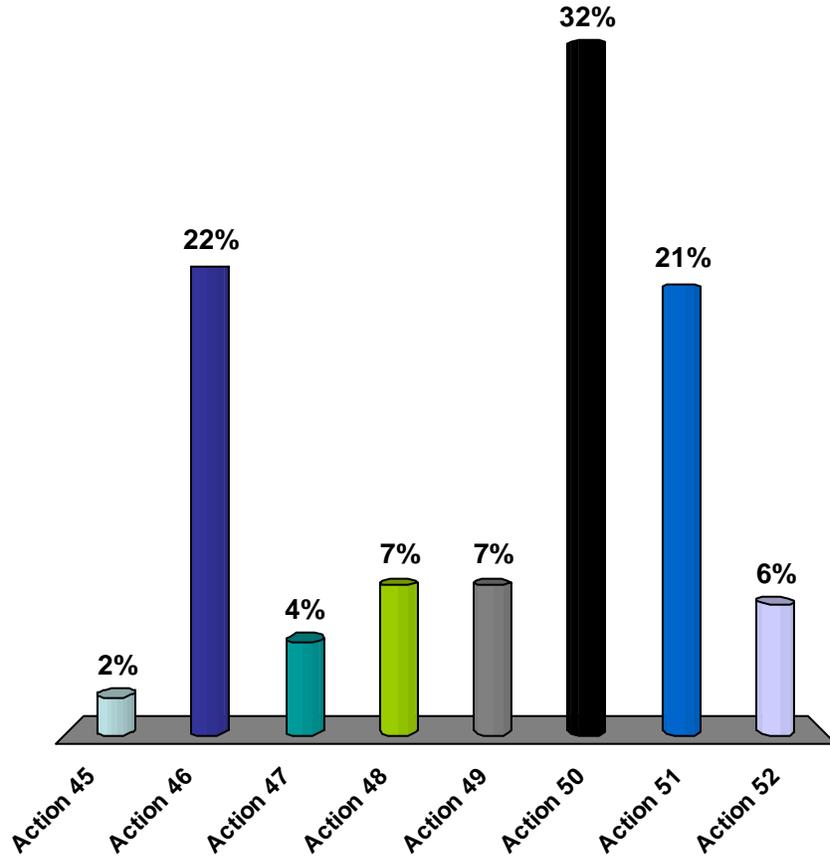
- 29. Habitat protection and improvement - moderating and/or introducing disturbances, enhancing vegetative composition/structure
- 30. Work with partners and private land owners to prioritize and implement land protection, incentives (existing and new), acquisition, and restoration projects that work toward conserving blocks of habitat and restoring ecological processes in areas of high species richness.
- 31. Corridor development/protection
- 32. Protection of important migration corridors, staging areas
- 33. Identify priority habitats utilized by species for conservation.
- 34. Increased flow of information from taxonomic experts to field biologists on species occurrences, life history requirements, management needs, etc.
- 35. Better coordination and partnership for habitat, population and life history work between federal and state agencies and NGOs that share an interest and obligation in relevant wildlife problems.
- 36. Regional identification, prioritization, and management of important population centers, e.g., source, sink populations

Slide 6) Conservation actions across the Midwest region and with neighboring states.



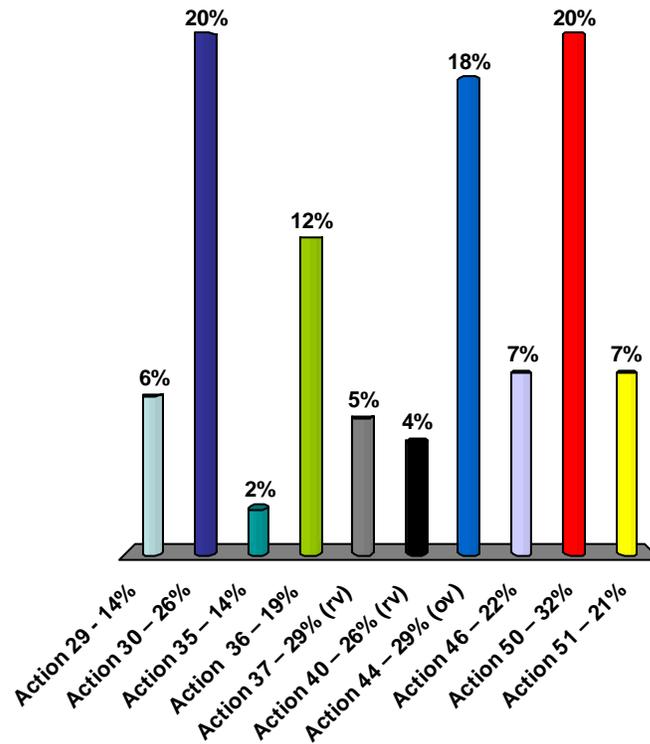
- 37. Develop a comprehensive summary of significant knowledge gaps for SGCN and prioritize research, survey and monitoring needs to fill the gaps
- 38. Distribution of habitats across the region
- 39. Develop a comprehensive summary of significant knowledge gaps for landscape features (habitats) and ecological processes and prioritize research, survey and monitoring needs to fill the gaps
- 40. Establish a cooperative system of protections, designations, or management that captures representative examples of the full variety of landscape features (habitats) and associated wildlife
- 41. Augment, expand, and reintroduce extirpated at risk species, especially mussels.
- 42. Explore the effects of management practices and conservation actions on nongame species.
- 43. Develop and implement strategies to prevent new introductions of invasive species into the Great Lakes Basin (based on predictive models) (based on predictive models)
- 44. Coordinated regional management/action plans to prevent invasive species (flora and fauna) , respond to invasive species, and development of more effective tools to combat invasive species

Slide 7) Conservation actions across the Midwest region and with neighboring states.



- 45. Develop a strategy to improve legislation and enforce existing policies in regards to invasive species
- 46. Coordinated development of educational programs/materials on at-risk wildlife and habitats that is appropriate for multiple audiences across the region.
- 47. Facilitate increased buy-in and support for all-wildlife conservation by wildlife biologists (game and nongame) throughout the region.
- 48. Develop education tools and demonstration areas that promote the benefits of prescribed fire and address the public's fears and liability concerns.
- 49. Maintain and strengthen provisions in the federal Endangered Species Act that protect habitat; improve enforcement of habitat protection under the ESA.
- 50. Retention, tailoring and focusing existing private lands programs (e.g., farm bill programs, county forest preserve districts) to the specific actions needed in priority locations
- 51. More aggressively develop and promote smart growth, conservation planning, and establishment of local conservation development ordinances.
- 52. Find sources of non-federal match for implementation of habitat conservation. The 50-50 match is going to be difficult.

Slide 8) TOP 9 Conservation actions across the Midwest region and with neighboring states.



29) Habitat protection and improvement - moderating and/or introducing disturbances, enhancing vegetative composition/structure

30) Work with partners and private land owners to prioritize and implement land protection, incentives (existing and new), acquisition, and restoration projects that work toward conserving blocks of habitat and restoring ecological processes in areas of high species richness.

35) Better coordination and partnership for habitat, population and life history work between federal and state agencies and NGOs that share an interest and obligation in relevant wildlife problems.

36) Regional identification, prioritization, and management of important population centers, e.g., source, sink populations

37) Develop a comprehensive summary of significant knowledge gaps for SGCN and prioritize research, survey and monitoring needs to fill the gaps

40) Establish a cooperative system of protections, designations, or management that captures representative examples of the full variety of landscape features (habitats) and associated wildlife

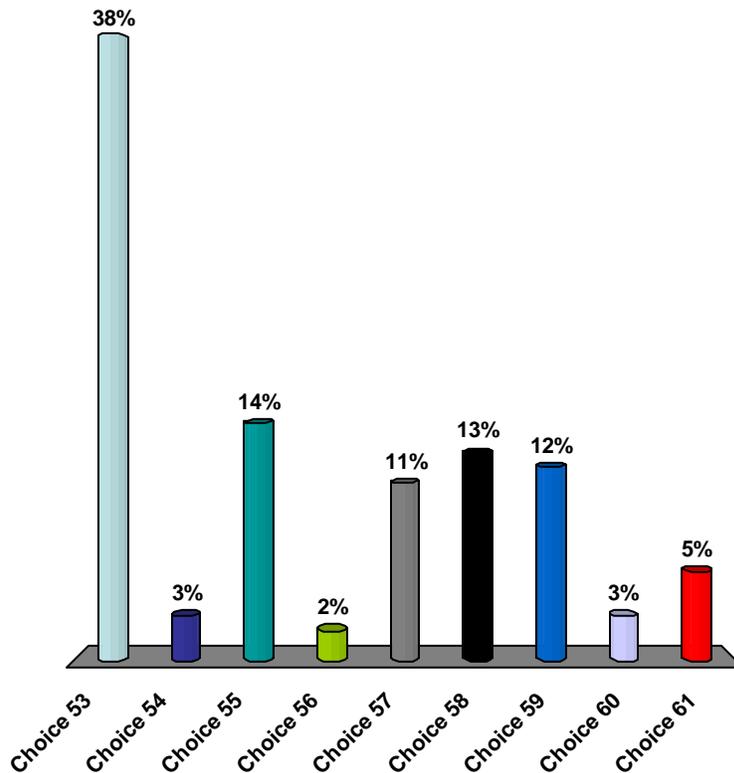
44) Coordinated regional management/action plans to prevent invasive species (flora and fauna) respond to invasive species, and development of more effective tools to combat invasive species

46) Coordinated development of educational programs/materials on at-risk wildlife and habitats that is appropriate for multiple audiences across the region.

50) Retention, tailoring and focusing existing private lands programs (e.g., farm bill programs, county forest preserve districts) to the specific actions needed in priority locations

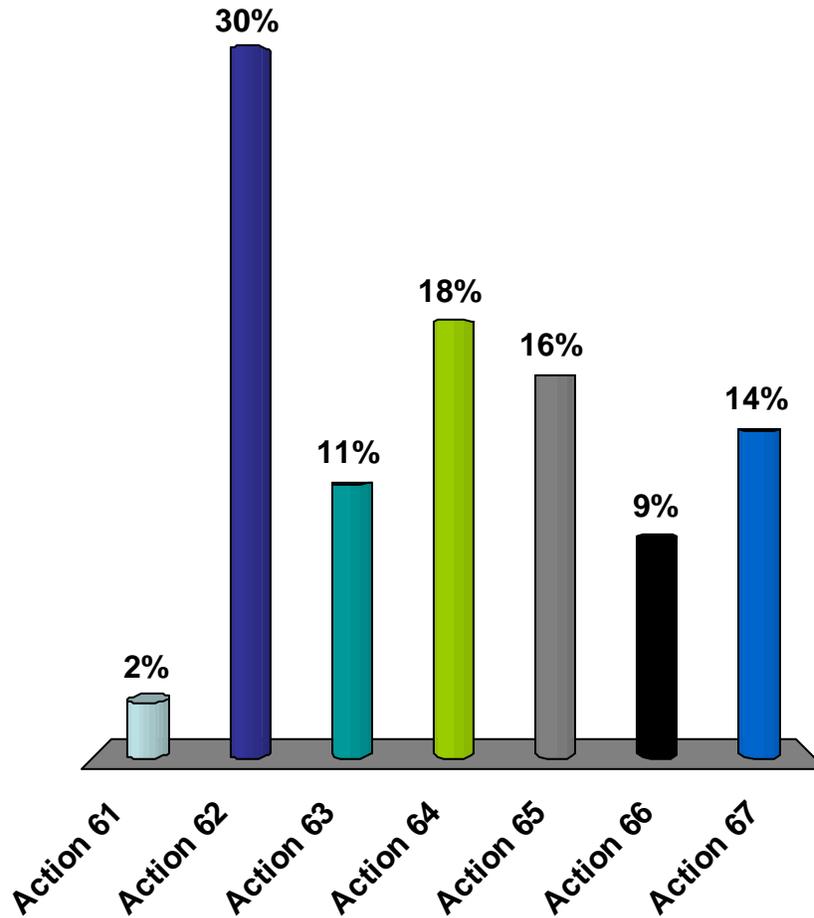
51) More aggressively develop and promote smart growth, conservation planning, and establishment of local conservation development ordinances.

Slide 9) Monitoring needs across the Midwest region and with neighboring states.



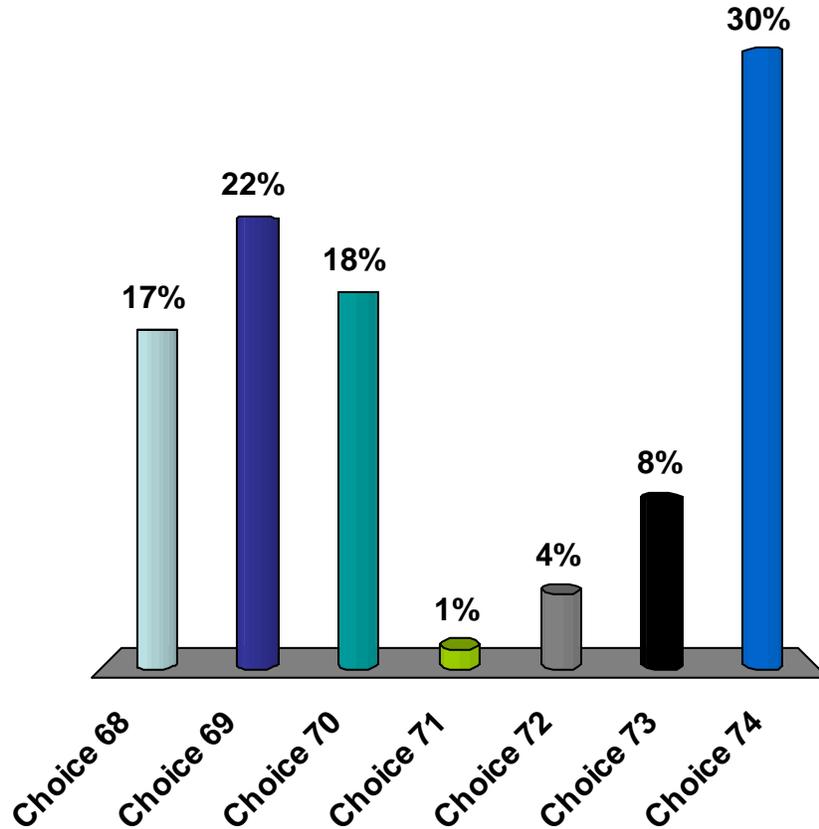
53. Develop monitoring protocol (standardized techniques & frameworks) and compatible databases (with a mechanism for sharing data in a secure way) for at-risk species that can be used by all states in the Midwest to evaluate progress towards meeting CWCS objectives.
54. Development of a standardized rapid assessment technique for habitats that can be used by field biologists
55. Coordinate regional and interstate monitoring efforts among NGOs, state and federal agencies.
56. Focus on TNC "targets" from their Ecoregional plans where the high priority species (high global ranks) coincide with those SGCN identified in state plans.
57. Long term monitoring of at risk species to detect population trends, especially for species that lack long term data sets, in particular aquatic species and herps.
58. Develop/expand and coordinate an accessible database that will allow for regional tracking of wildlife abundance and distribution throughout the region.
59. Monitor status and trends of the priority threats in the State and region at multiple scales and use the data to evaluate conservation actions
60. Develop new or share existing successful models for using citizens to monitor at-risk species.
61. Conduct an evaluation, including biological and cost factors, of habitat monitoring techniques for major habitat types and make these results available to state agencies that have not yet implemented systematic habitat monitoring

Slide 10) Monitoring needs across the Midwest region and with neighboring states.



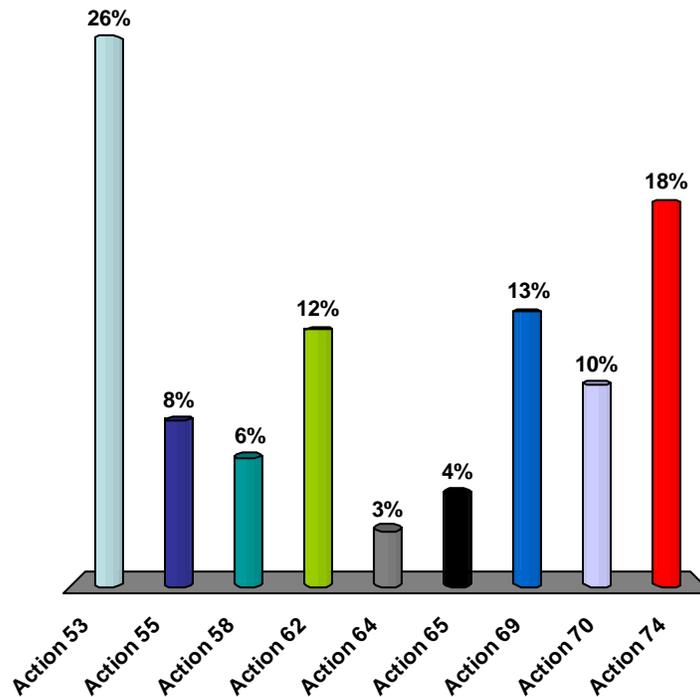
- 61. [no vote – repeated above]
- 62. Conduct an evaluation, including biological and cost factors, of habitat monitoring techniques for major habitat types and make these results available to state agencies that have not yet implemented systematic habitat monitoring
- 63. Identify the habitats that most commonly emerge as priorities in the state plans: what are the regional trends in patch size, connectivity, composition, and structure for these key habitats?
- 64. Monitor the response of representative wildlife species to "processes" that regulate systems as well as monitoring where those processes are absent
- 65. Document nongame wildlife use of different habitat types and identify essential habitats of mammalian and other species that need increased conservation, further study, and/or management.
- 66. Monitor condition and protection status of identified migratory routes and stopover sites
- 67. How to link what we control (habitat, regulations, etc.) to desired results we cannot control (wildlife populations)

Slide 11) Monitoring needs across the Midwest region and with neighboring states.



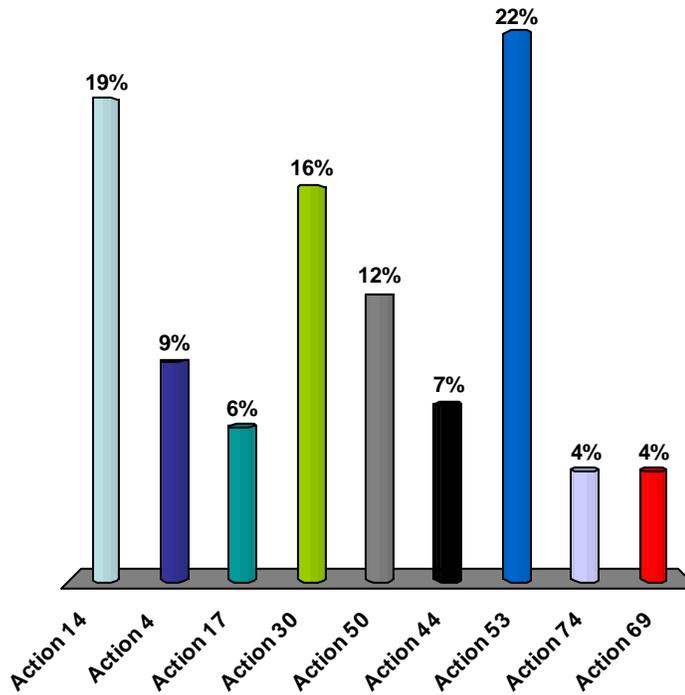
- 68. Continuation of land cover data at 5-10 year intervals (satellite imagery and/or aerial photography)
- 69. Produce geographic information system mapping with layers for wetlands, riparian areas, sensitive areas, public ownership, breeding bird data, fish and wildlife distribution and abundance, species ranges and aquatic habitat parameters, and incorporate with Gap Analysis Program.
- 70. Need to continue monitoring existing Farm Bill programs for their impact to native wildlife species and habitats and make changes as needed
- 71. Monitor status and trends of the priority threats in the State and region at multiple scales and use the data to evaluate conservation actions
- 72. Identify, quantify and monitor sites, sources and composition of significant contamination
- 73. Track the abundance, distribution and initial appearance of invasive species
- 74. Invasive species monitoring (GIS) and surveillance

Slide 12) TOP 9 Monitoring needs across the Midwest region and with neighboring states



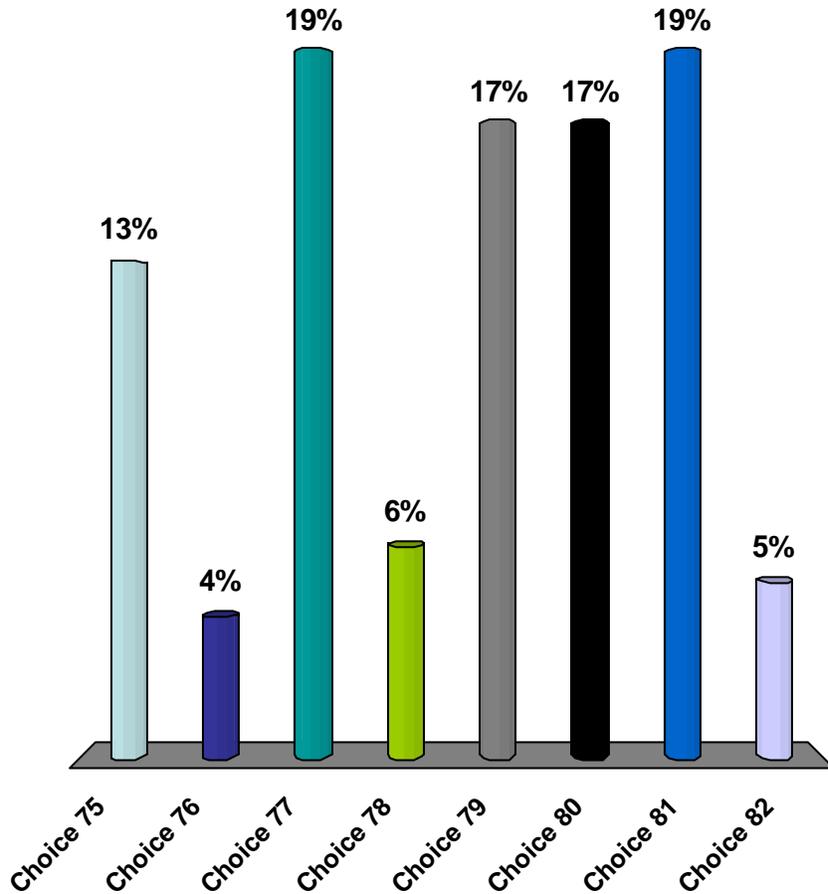
- 53) Develop monitoring protocol (standardized techniques & frameworks) and compatible databases (with a mechanism for sharing data in a secure way) for at-risk species that can be used by all state's in the Midwest to evaluate progress towards meeting CWCS objectives.
- 55) Coordinate regional and interstate monitoring efforts among NGOs, state and federal agencies.
- 58) Develop/expand and coordinate an accessible database that will allow for regional tracking of wildlife abundance and distribution throughout the region.
- 62) Identify the habitats that most commonly emerge as priorities in the state plans: what are the regional trends in patch size, connectivity, composition, and structure for these key habitats?
- 64) Document nongame wildlife use of different habitat types and identify essential habitats of mammalian and other species that need increased conservation, further study, and/or management.
- 65) Monitor condition and protection status of identified migratory routes and stopover sites
- 69) Produce geographic information system mapping with layers for wetlands, riparian areas, sensitive areas, public ownership, breeding bird data, fish and wildlife distribution and abundance, species ranges and aquatic habitat parameters, and incorporate with Gap Analysis Program.
- 70) Need to continue monitoring existing Farm Bill programs for their impact to native wildlife species and habitats and make changes as needed
- 74) Invasive species monitoring (GIS) and surveillance

Slide 13) TOP 9 Research and survey, Conservation Action and Monitoring needs across the Midwest region and with neighboring states



- 14) Establish baseline information (i.e. population status, distribution, abundance, limiting factors, life history requirements) for species of conservation priority and other nongame species.
- 4) Coordinated regional Standard/unified landscape - land cover/vegetation/land use, both terrestrial and aquatic, classification and characterization (quantity, quality and status) map (using GIS and other remote sensing tools) for the region, and a schedule for regular updates.
- 17) Determine causes of populations declines (Threat identification and evaluation - predators/competition, contaminants, climate change, habitat loss, fragmentation, and loss of connectivity)
- 30) Work with partners and private land owners to prioritize and implement land protection, incentives (existing and new), acquisition, and restoration projects that work toward conserving blocks of habitat and restoring ecological processes in areas of high species richness.
- 50) More aggressively develop and promote smart growth, conservation planning, and establishment of local conservation development ordinances.
- 44) Coordinated regional management/action plans to prevent invasive species (flora and fauna) respond to invasive species, and development of more effective tools to combat invasive species
- 53) Develop monitoring protocol (standardized techniques & frameworks) and compatible databases (with a mechanism for sharing data in a secure way) for at-risk species that can be used by all states in the Midwest to evaluate progress towards meeting CWCS objectives.
- 74) Invasive species monitoring (GIS) and surveillance
- 69) Produce geographic information system mapping with layers for wetlands, riparian areas, sensitive areas, public ownership, breeding bird data, fish and wildlife distribution and abundance, species ranges and aquatic habitat parameters, and incorporate with Gap Analysis Program.

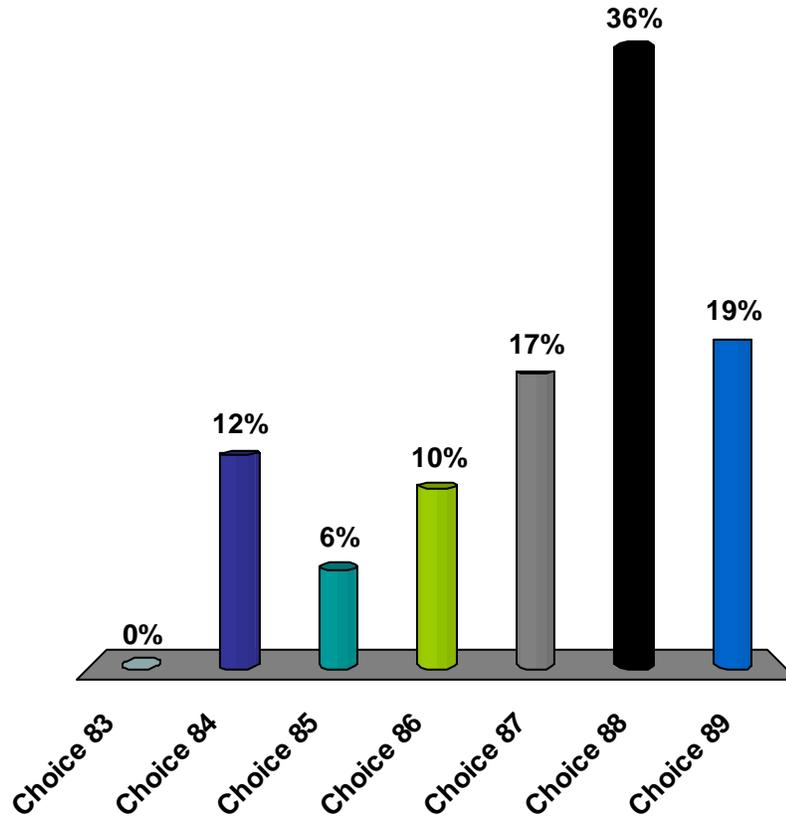
Slide 14) Prairie/Grasslands



- 75. Wildlife value of remaining native and agricultural grasslands - how much are secure during nesting season, how much provides winter cover, how much is in larger/wider patches, how much is overgrazed, dominated by invasive, etc.
- 76. Significantly more surveys are needed to identify degraded prairie and savanna sites with restoration potential.
- 77. Tallgrass prairie - management of existing stands and restoration where needed to contribute to landscape needs
- 78. Protect native prairie and wetlands where possible.
- 79. Improve science-based, adaptive burning and grazing management of grasslands
- 80. Amount of habitat required by SGCN for grassland-wetland (prairie pothole) ecosystems (IA-MN-SD-WI)
- 81. Trends in grassland wildlife across state lines
- 82. Overgrazing has negative impacts on the flora and fauna of the Tallgrass Prairie.

Appendix E: Priority voting results

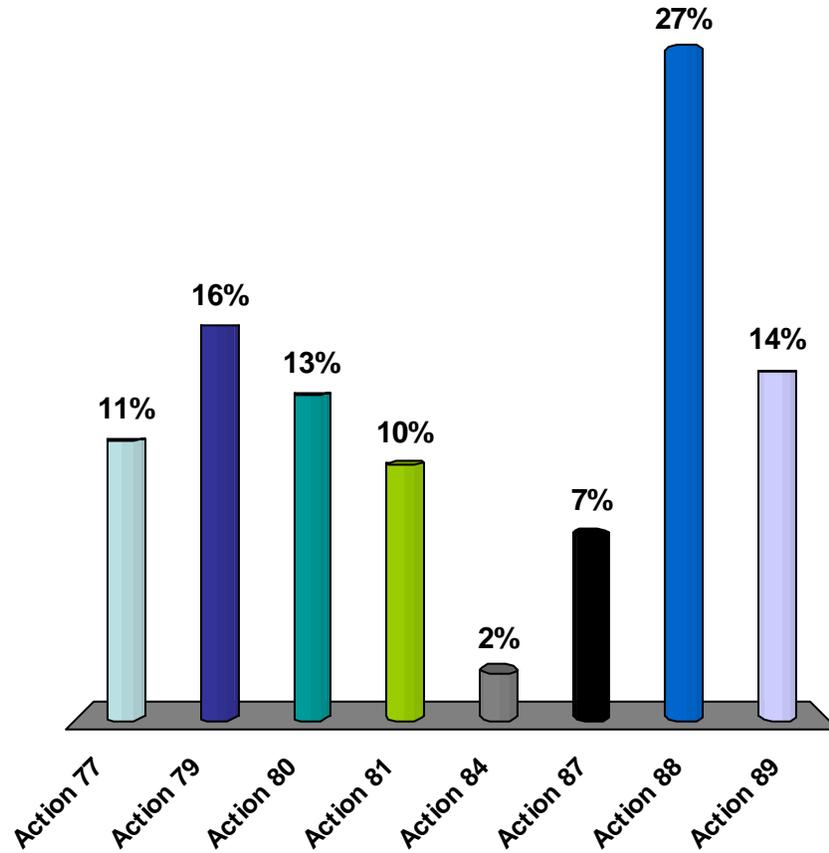
Slide 15) Prairie/Grasslands



- 83. Significantly more surveys are needed to identify degraded prairie and savanna sites with restoration potential.
- 84. Where and why are prairie lepidoptera declining (all neighboring states).
- 85. Annual burning has negative impacts on the flora and fauna.
- 86. Quad-state (IA-MO-NE-KS) tallgrass prairie restoration & management
- 87. Regional network of large grassland management areas
- 88. Coordinated large grassland conservation efforts (all neighboring states)
- 89. Establish a baseline for what constitutes a healthy grassland community. (KS 1st priority)

Appendix E: Priority voting results

Slide 16) TOP 8 Prairie/Grasslands



77) Tallgrass prairie - management of existing stands and restoration where needed to contribute to landscape needs

79) Improve science-based, adaptive burning and grazing management of

80) Amount of habitat required by SGCN for grassland-wetland (prairie pothole) ecosystems

81) Trends in grassland wildlife across state lines

84) Where and why are prairie lepidoptera declining (all neighboring states).

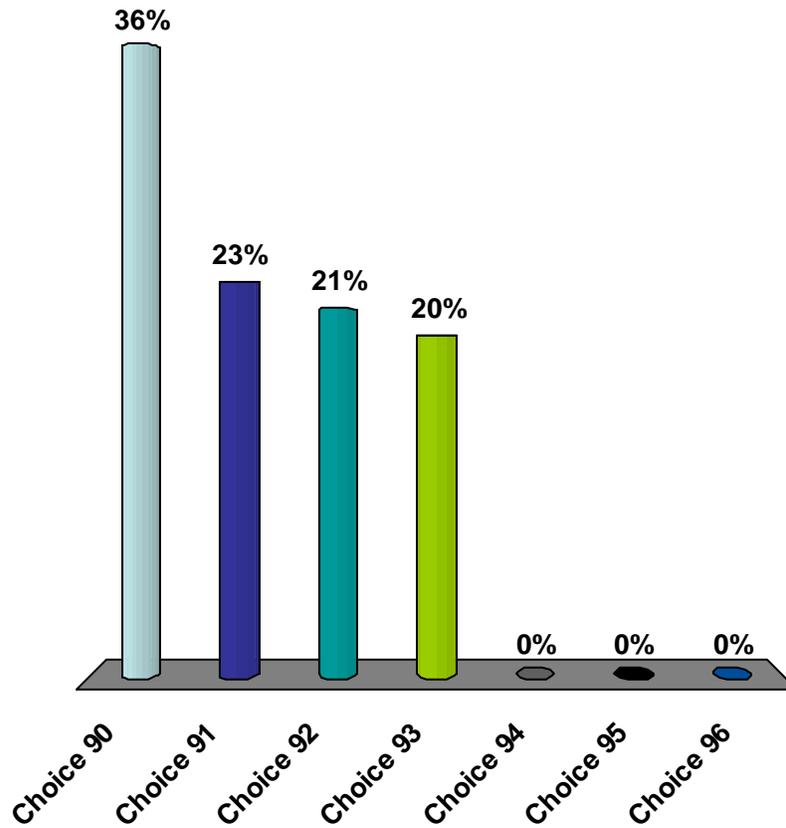
87) Regional network of large grassland management areas

88) Coordinated large grassland conservation efforts (all neighboring states)

89) Establish a baseline for what constitutes a healthy grassland community.

Appendix E: Priority voting results

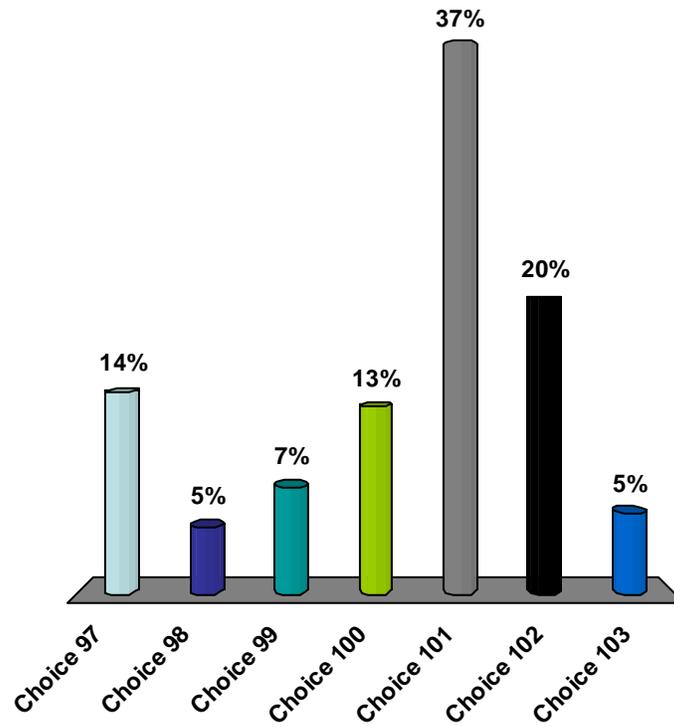
Slide 17) Aquatic



- 90. Riparian/wetlands habitat
- 91. Watershed protection and management in the Mississippi-Ohio and Missouri river basins.
- 92. Missouri River floodplain restoration
- 93. Reduce/reverse impacts of siltation and eutrophication of aquatic systems.
- 94. Movement of Missouri River fishes
- 95. Mississippi River, St. Croix River Corridors
- 96. Red River Corridors

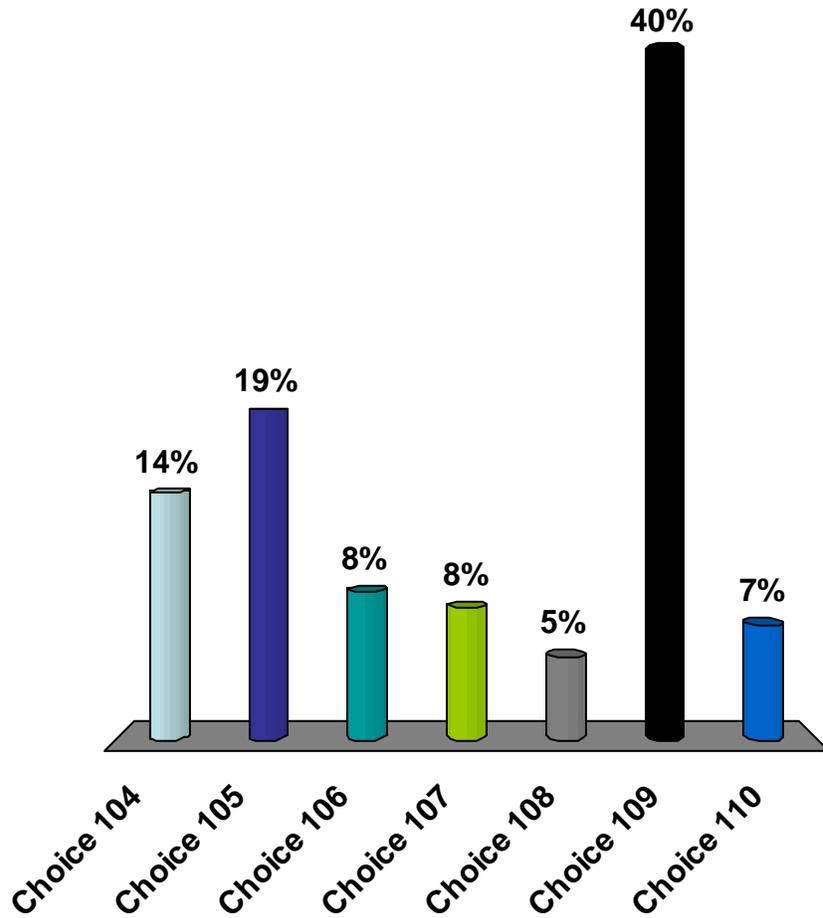
Appendix E: Priority voting results

Slide 18) Aquatic



- 97. Impacts of carp on other species in shallow lakes (IA-SD-MN-WI-IL).
- 98. Develop and adhere to standards for timing of dredging activities to minimize adverse effects to spawning and migrating Great Lakes fish and nesting
- 99. Compare methods for canarygrass (and other invasive veg) removal/reduction (all neighboring states).
- 100. Control methods for key invasive plants, e.g. garlic mustard, glossy buckthorn, reed canary grass.
- 101. Improving condition of border rivers, and restoring endangered/extirpated populations of fishes, mussels
- 102. Prevention/control of invasive species in larger rivers and Great Lakes
- 103. Aquatic species do not recognize political boundaries, so efforts must be coordinated with states/provinces.

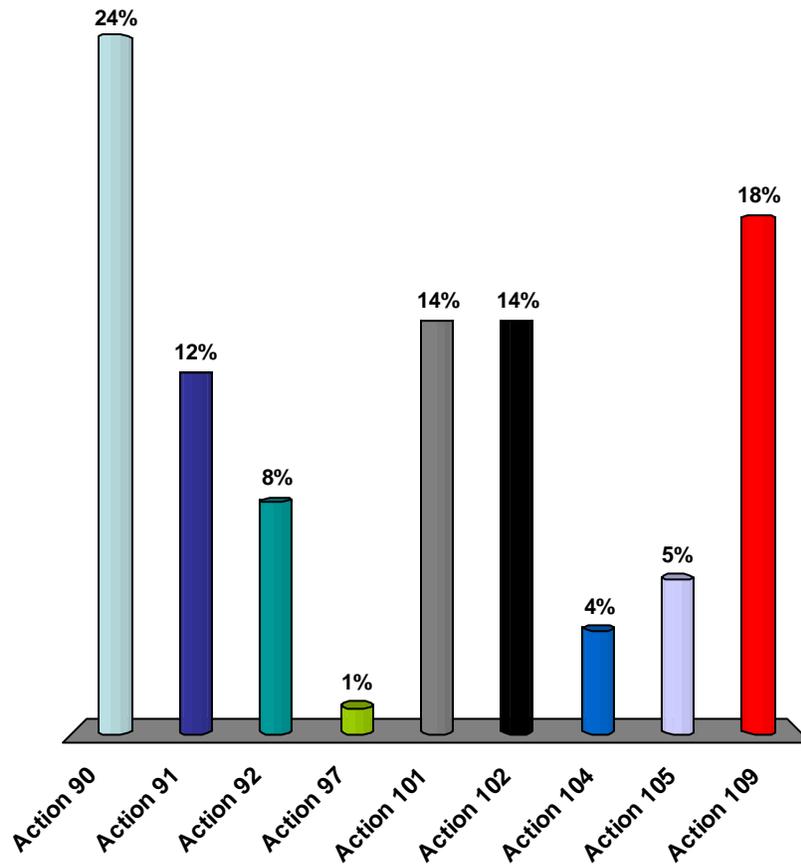
Slide 19) Aquatic



- 104. Coordinated improvement of border rivers (OH, MS), and cross-border rivers (Kankakee with IN, Sugar, Pecatonica with WI)
- 105. Improve management of shallow lakes for fish and/or wildlife SGCN (IA-MN-SD-WI-IL).
- 106. Border rivers - Mississippi, Wabash, Ohio
- 107. Monitor SGCN in Loess Hills/Missouri River alluvial plain (IA-SD-NE-MO-KS).
- 108. Monitor water quality of Ohio River and its tributaries.
- 109. Monitor the effectiveness of conservation actions aimed at improving habitat conditions in big river ecosystems (Ohio and Mississippi Rivers).
- 110. [not correct category, did not vote]Map and monitor aglific talus slopes & sinkholes for rare and endangered species in the driftless area (Paleozoic Plateau in IA-MN-WI-IL)

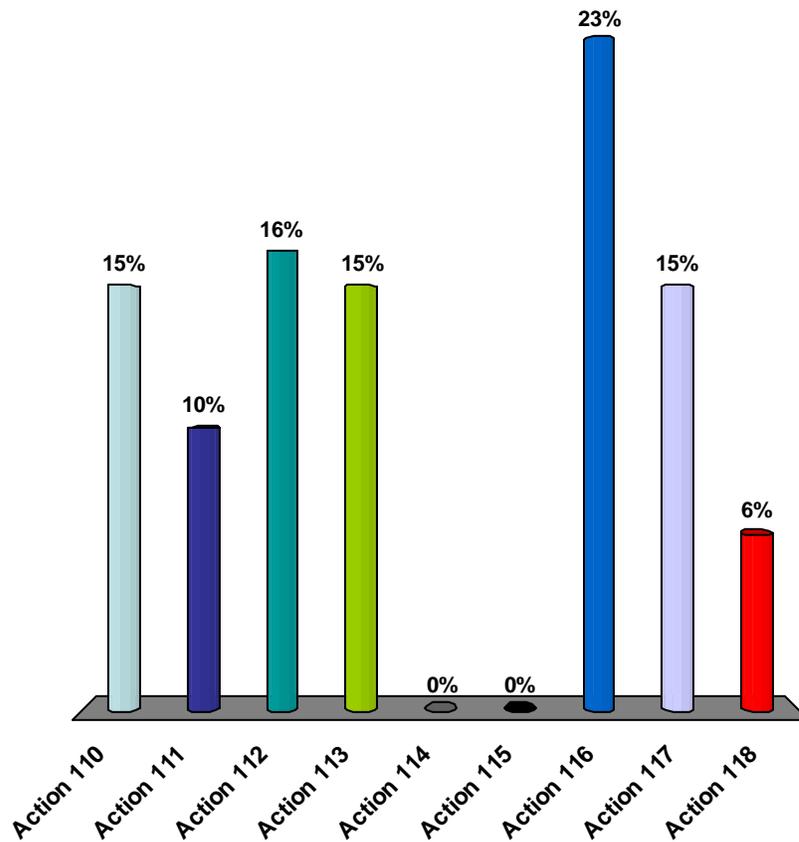
Appendix E: Priority voting results

Slide 20) TOP 9 Aquatic



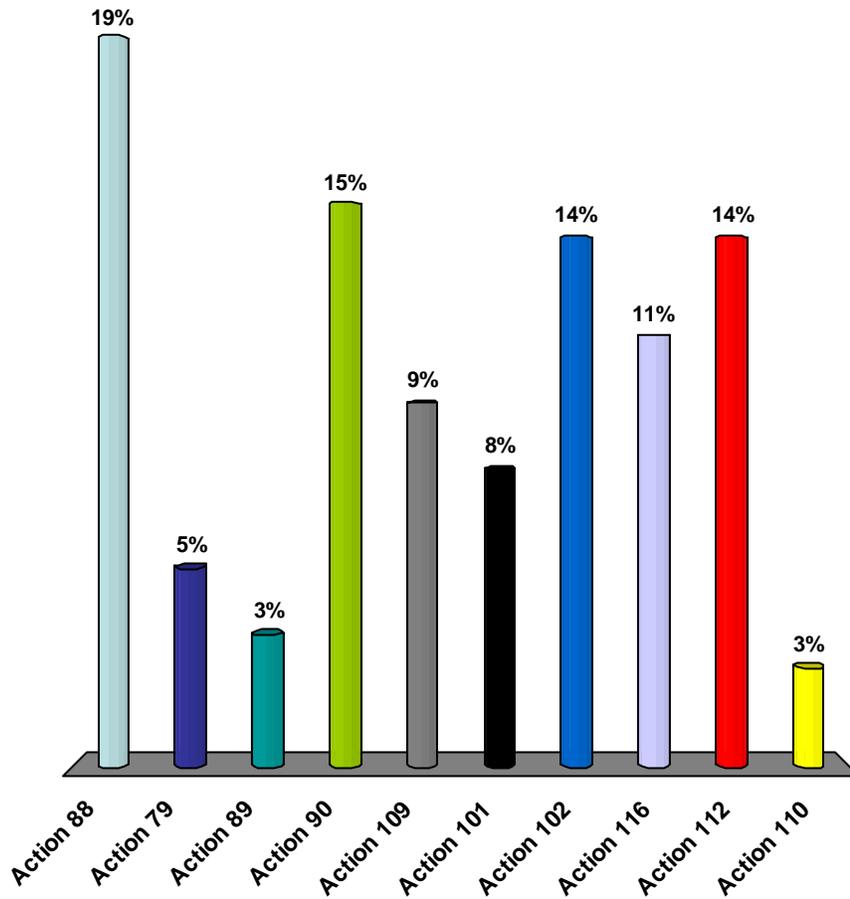
- 90) Riparian/wetlands habitat
- 91) Watershed protection and management in the Mississippi-Ohio and Missouri river basins.
- 92) Missouri River floodplain restoration
- 97) Impacts of carp on other species in shallow lakes (IA-SD-MN-WI-IL).
- 101) Improving condition of border rivers, and restoring endangered/extirpated populations of fishes, mussels
- 102) Prevention/control of invasive species in larger rivers and Great Lakes
- 104) Coordinated improvement of border rivers (OH, MS), and cross-border rivers (Kankakee with IN, Sugar, Pecatonica with WI)
- 105) Improve management of shallow lakes for fish and/or wildlife SGCN (IA-MN-SD-WI-IL).
- 109) Monitor the effectiveness of conservation actions aimed at improving habitat conditions in big river ecosystems (Ohio and Mississippi Rivers).

Slide 21) Savannah/Forest and Individual Species



- 110. Map and monitor aglific talus slopes & sinkholes for rare and endangered species in the driftless area (Paleozoic Plateau in IA-MN-WI-IL)
- 111. Savanna restoration
- 112. Timber harvest modifications to accommodate habitat needs for SGCN (IA-MN-WI-IL-MO).
- 113. Identify and resolve management conflicts between SGCNs (e.g. between forest interior species and early successional specialists).
- 114. Oak regeneration south of Tension Zone in forest and savanna systems (oak is being "mined", silvicultural practices are exacerbating the problem).
- 115. Dependence of Eastern massasauga (and other species?) upon crayfish burrows (IA-WI-IL-MO)
- 116. Work with neighboring states to enhance mussel populations. (KY 1st priority)
- 117. Coordinated interstate monitoring of mussels in Miss. River system (IA-MN-WI-IL-MO).
- 118. State listed species distribution/abundance (spadefoot, hellbender, timber rattlesnake, Allegheny woodrat, Indiana bat, etc)

Slide 22) TOP 9 Prairie/Grassland, Aquatic, Savannah/Forest and Individual Species



- 88) Coordinated large grassland conservation efforts (all neighboring states)
- 79) Improve science-based, adaptive burning and grazing management of grasslands
- 89) Establish a baseline for what constitutes a healthy grassland community
- 90) Riparian/wetlands habitat
- 109) Monitor the effectiveness of conservation actions aimed at improving habitat conditions in big river ecosystems (Ohio and Mississippi Rivers).
- 101) Improving condition of border rivers, and restoring endangered/extirpated populations of fishes, mussels
- 102) Prevention/control of invasive species in larger rivers and Great Lakes
- 116) Work with neighboring states to enhance mussel populations.
- 112) Timber harvest modifications to accommodate habitat needs for SGCN (IA-MN-WI-IL-MO).
- 110) Map and monitor aglific talus slopes & sinkholes for rare and endangered species in the driftless area (Paleozoic Plateau in IA-MN-WI-IL)

Appendix F: Notes from breakout groups

Results of The MAFWA dating service and Scavenger hunt

KY/IN

Identified River/ Mussel issues as a area of interest

MI/WI

Identified Barren Lands Inventory/ restoration activities and Great Lake Basin issues including species distribution and management

IL/IA/MO

Determines that there were a large number of thing that they needed to discuss and enjoyed good bonding time

KS/NE/CO

Determined that their next meeting would be held in Estes Park.

Began defining focus areas

Want to identify existing groups and efforts and find out what they are doing in interstate efforts and what are the next steps.

Discussed the importance of private lands and the Farm Bill

Explored the issue that farmers are running out of water and this may open conservation efforts in these areas.

SD/MN – IAFWA – NFWF

Discussed the prairie pothole region and the importance of Private lands Programs

Later at the bar with WI discussed the importance of invasive species, how healthy functioning landscapes can buffer impacts and the threat of climate change

At breakfast there was a discussion of how the State Wildlife Grants and traditional Pitman-Roberts funding can be merged for implementation of the Comprehensive Action plans.

Preliminary discussions at beginning of meeting:

Eric - Really missed the Canadians

Emmet – Asked who would be the best type of people to attend these types of meetings

Terry from Iowa felt that it would best be technical people and wildlife managers.

Katie Smith next step is to identify existing multistate efforts and determine how to dovetail them into these efforts

Criteria for prioritization

Breath of support

Conservation benefit what does it include?

 This thing would really move conservation forward

 Is what we are proposing going to change the trends?

Urgency of conservation need?

Consider future changes to Incorporating education and recreation under “conservation”

How to use funding sources

Measurability

Appendix F: Notes from breakout groups

Combine 1 and 9

Feasibility tied to breath of support

What do people think about how to meet our goals?

Use first criteria and then re rank based on those

Afternoon workgroup

Group 1

Which things must be done on the regional level 53, 50, 4, 44/74?

Habitat side 2nd page need to emphasize the tall grass prairie.

Started to talk about how to develop actionable items

Missing priority – overall way of maintaining databases (and inventory of information)

Group 2

Everything on this list is bigger than the Midwest but are things that could be addressed nationally.

Second page scale back down to

Great Lakes, River systems and grasslands should be the things addressed in blueprints

Group 3

Recommendations:

Have IAFWA develop monitoring protocols through working groups.

Birds done can be used as model for herps etc.

Aquatic invasives in the Great Lakes or river systems

Disease vectors and

Large river fragmentation and effects on migrations

ID common priority habitats and species. Across the region

Group 4

Broader ideas

Good ideas that reoccurring

Things that need regional action for success

Looking at things through the eyes of someone who can and will already be doing.

Regional vs interstate

Blue prints - ID regional assessment for flint hills region

Identify regional examples

Comments

There are regional collaboration (joint ventures) for various species groups

Question for Greg: Details about the contract timing and potential extension.

Three years of money for state coordinating money. Individual project life is 12 months>

There are other funding sources and foundations that these ideas can be sold. There is possibility for using SWG.

Do we want to come out of this meeting with a regional proposal for the May 15th NFWF.

Blueprint meetings multi-state meeting have \$1-2,000 per state

Appendix F: Notes from breakout groups

Who will be coordinating the “National” issues? IAFWA

There will be a level of specificity for individual projects for example: Flint hills

Habitat break out groups

Missouri River

River operation management – other groups should carry

Corp – invasive species – several panels MO river task force (priorities but others doing)

Chute restoration – focal area

Flood Plain Restoration – focal area

Monitoring protocol development for at-risk species – e.g. mollusks, reptiles amphibians

Inventory of selected species – e.g. mollusks

Divide up river into segments of responsibility

Compare species at-risk lists for all MO river states and look for commonalities – develop monitoring protocol.

Big Rivers – Upper Mississippi (& St. Croix) - MN, WI, IA, IL

- Blufflands protection: Prairies, cliffs, hardwood forests; many SGCNs (e.g. Timber Rattlesnake, Ottoe Skipper).
- Migratory bird management (lock, dam, pools, for waterfowl, shorebirds. Forests for passerines, raptors, others). It’s not completely redundant, we need a niche (banker?)
- Monitor fish, mussels, odonates that aren’t currently covered by an existing program. Ditto for aquatic invasives, especially in stretches of the river or tributaries that are ‘clean’.

Great Lakes Group (MN, WI, MI, IN, IL)

*Initial Caveat: Don’t replicate or usurp current institutions (e.g. aquatic invasives)

Potential Project Areas

- Shoreline, shallows, beaches, and dunes – “Transition Zone”.
 - Consistent inventory/monitoring techniques & measurements

Appendix F: Notes from breakout groups

- Migratory birds – I.D. stopover habitats; pathways; traps (including urban “wilderness”).
- Contaminants (related to ecotoxicology – sediments, water column)
- Land use patterns – Lakeshore development

Blueprint for the Great Lakes

*Migratory bird (shorebirds & land birds)

- Terrestrial stopover sites (and other near shore habitats)
 - Goal to I.D., evaluate condition, secure/expand habitat patches and populations
 - Lake Michigan
Huron
Superior
Erie
- | <u>Stakeholders</u> |
|---------------------|
| States |
| Tribes |
| Feds |
| NGO's |
| Provinces |

River Group

Missouri, Mississippi, Illinois River

Sub-Subcommittee Joel – MO
 Joel - IL

Identified the confluence of the MO, MS, & IL Rivers. Partners developed plan (e.g. state, federal, local, NGO's)

Potential Strategies for Partnership Project (let's begin work here... you gotta start somewhere).

- 1.) Restore enhance natural communities.
- 2.) Improve side channel and backwater habitats.
- 3.) Encourage local communities to conserve green space and deal with flood plain development.
- 4.) Improve quality of life of the citizenry that live, work and recreate in the confluence through education, workshops, festivals, field days, stream teams, etc.
- 5.) Control exotics.

Grasslands R Us

Potential stakeholder meetings

Grand River Grasslands (MO, IA)

Mineland Grasslands (IN, IL, OH, KY)

Appendix F: Notes from breakout groups

Northeast Sand Barrens (MI, WI)
Kankakee Sands (IL, IN)
Grand River National Grasslands (SD, ND)
Shortgrass Prairies (KS, NE, CO, etc.)
Northern Tallgrass Prairie/Potholes (SD, ND, MN, IA)
Lupine Savannah/Karners (MI, OH, IL, IN, WI)
Lakeplain Prairie (MI, OH)

Comments:

How much of the efforts are information related?
Next step what do we do with that information?
Determine where you are going to work and then look for the information.
Many of the regional efforts are already being done be perhaps we don't know about

What would be useful to do next?
Provide input to the MAFWA on results
There is no entity to give this to committees that report to Directors
Form a wildlife diversity committee (?)
Need some success stories of when states get together and work cross borders

Write down a project title and those states that are interested get together?

Species issues that don't relate to habitats?

Forest of timber issues
Invasives
Monitoring (national level?)
State by state caucus
State priorities that resonate for action

Savannahs
Mussels

Best high profile project, feasible, attention getting
Set yourself up to succeed not to fail
Examples to show of how to do this type of work.

Small groups/individuals work on project ideas.

State Caucus results

Wisconsin

- Specific projects under priorities
- NE sand barrens grasslands – MI/WI
- Karner habitats – WI/IN/MI/OH/IL
- Compiling know distribution of key invasives across all Midwest states

Appendix F: Notes from breakout groups

- Mississippi bluffslands – Identify unprotected sites and appropriate vehicle for protection
- Lake plain prairie – WI/IL/IN/MI
- Grand Traverse Island protection – species and unique habitats – WI/MI

South Dakota

- Develop, adopt and implement a Great Rivers mussel monitoring protocol
- Establish a tall grass prairie evaluation process, to include identification of core prairie – dependent species, disturbance regimes, description of reference areas and linkage to existing or future Farm Bill programs.
- Establish or unearth clearinghouses of existing information on species and habitats of concern.

Nebraska

- ID priority landscapes to work cooperatively with other states
- Pull together existing data
- Identify survey needs
- Implement conservation projects - protection

Missouri

- Confluence = (MO, IL)
 - Restore habitats/ communities (forests, wet prairies, wetlands)
 - Ready for \$
 - 36 different partners
- Grand River grasslands (MO,IA)
 - Tallgrass prairie - focus on habitat on private land
- Iatan/Weston Missouri River Corridor (MO, KS)
 - Floodplain restoration
 - Some \$ available, need more to get project moving
- Marmaton river (MO, KS)
 - Need a stakeholder meeting to discuss restoring hydrology, next steps
- Cherokee grassland ((MO, KS)
 - Prairie wildlife, habitat work on grasslands
 - Need a stakeholder meeting

Minnesota

- Site based interstate priority areas for the state
- Driftless area WI, IA
 - Tap into existing projects
 - Focus on key habitats
 - Identify focal SGCN for monitoring and survey
- Prairie pothole
 - Existing projects – bring in key habitat and SGCN information
- Red river restoration ND
 - Continue/expand river restoration efforts

Appendix F: Notes from breakout groups

- Move to watershed restoration activities

Michigan

- Oak savanna butterfly (lupine/KBB) survey, restore, monitor. WI-OH-IN-IL (others?)
- NE Sand barriers survey, restore, monitor WI
- Riparian corridor on Maumu River Riparian restoration OH
- Great Lakes shoreline coastal wetlands in western lake Erie – issues, restoration OH and ON.

Kentucky

- Ohio river and tributaries mussel and fish assemblage surveys, propagation of SGCN mussels, site ID for reintroduction or augmentation and establish long term monitoring sites.
- Work with adjacent states to identify priority areas to survey and monitoring SGCN herps common to all plans.
- Mined grasslands project discussed earlier.
- Wetlands Reserve Enhancement Program (WREP) along Ohio/Mississippi river with states bordering these rivers. Tribes too?

Kansas

- Recovery plans for T&E species – look into coordinating with neighboring states where species distribution cross state lines. Implementation of recovery plans – coordinate with neighbors where species cross lines.
- We have a Herp inventory – would like to establish cooperation to expand past state borders.
- Touch base with LIP people – coordinate criteria with CO and NE and acquire easements in eastern KS. Incorporate inventory and monitoring if not already in coordination of easements.
- Check with PLJV – piggyback projects for SGCN.

Iowa

- Is prairie pothole/grassland ecosystem restoration working for fauna other than birds? ND-SD-MN-IA
- Restoration of hydrology and habitat (vegetation) of low gradient rivers and streams for nongame aquatic/semi-aquatic species IA-IL-others(?)
- Northern hardwood (IA-WI-MN-IL) or savannah Best Management Practices based on published literature (Phase 1). Restoration of demonstration areas (Phase 2), and outcome/results (phase 3)

Illinois

- Midwest/Upper Mississippi - Mussel conservation blueprints
- Great Lakes – Dunes/beaches/land-water transition
- Driftless region: bluffs, savannah, hill prairie, forest, cool-water streams, alfic slopes

Appendix F: Notes from breakout groups

- Big river confluence (Illinois/Mississippi),(Ohio/Mississippi)
- Wabash river corridor

Indiana

- Wabash river conservation corridor. Joint meeting with IN, IL, NGO and federal conservation partners. Focus – conservation needs for fish, mussels, reptiles, amphibians and migratory birds, mammals and bottomland hardwood community. Inventory of what we have (protected lands), Determine what we would like to have, evaluation protocols
- Convene a “conservation of reclaimed minelands” workshop
 - How do you maximize conservation benefits
 - How do you
 - Restore habitats
 - Control invasives
 - Acquire the lands (priorities, funding sources)
 - Manage the lands (management activities/strategies/frequency)
 - Manage for diversity
 - Restore extirpated species (prairie chicken restoration)
 - How do they function as: Importance of minelands as:
 - Breeding habitat
 - Wintering habitat
 - Migratory habitat
 - Species diversity

Colorado

- Shortgrass prairie with adjacent states
 - Monitoring protocols
 - Baseline (population status and trends), habitat condition
 - Private lands conservation
 - Farm bill

Appendix G: Meeting evaluation results

MAFWA State Wildlife Action Plans Meeting Evaluation Results

of respondents = 36

| 1. Did you have the opportunity to identify conservation actions with your neighboring states or colleagues in the region? | | Response Total | Response Percent |
|--|--|----------------|------------------|
| Yes | | 33 | 97% |
| No | | 0 | 0% |
| I'm not sure | | 1 | 3% |
| Total Respondents | | 34 | |
| (skipped this question) | | | 2 |

Additional Comments:

1. But one of them involved a state which did not attend.

| 2. Do you feel that the process allowed the most efficient identification and prioritization of coordinated conservation actions? | | Response Total | Response Percent |
|---|--|----------------|------------------|
| Yes | | 14 | 40% |
| No | | 10 | 29% |
| I'm not sure | | 11 | 31% |
| Total Respondents | | 35 | |
| (skipped this question) | | | 1 |

Additional Comments:

1. Not at first. Seems better when we decided to put projects in there. I.e. regionwide and then specific projects under them.

2. Starting the afternoon of Wed, I felt we were really getting to projects.

3. I think the survey results could have been boiled down further. I would have preferred beginning with discussing the priority results 1st, then done the voting. I think your approach worked and either way is HARD.

| 3. Will the prioritized action items allow you to collaborate with other states in the MAFWA? | | Response Total | Response Percent |
|---|--|----------------|------------------|
| Yes | | 33 | 94% |
| No | | 0 | 0% |
| I'm not sure | | 2 | 6% |
| Total Respondents | | 35 | |

Appendix G: Meeting evaluation results

| | | | |
|--|--|-------------------------|-------------------------|
| | | (skipped this question) | 1 |
| 4. Were the necessary people in attendance to meet goals? | | | |
| | | Response Total | Response Percent |
| Yes | | 22 | 63% |
| No | | 8 | 23% |
| Don't know/No opinion | | 5 | 14% |
| Total Respondents | | | 35 |
| (skipped this question) | | | 1 |

Additional Comments:

1. Minus Ohio
2. I didn't think a lot of the states plans identified invasives and aquatics, but few of those people were there.
3. Needed info. more widely shared within our agency, so staff could provide all possible projects to share
4. But to get all those folks here would have meant a meeting 10x larger.
5. Need representation from OH

| | | | | | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------------------|-------------------------|
| 5. On a scale of 1 to 10, how do you feel this meeting met the overall objectives? Rate 1 to 10 (score with 1 representing the lowest score and 10 being the highest) | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Response Total | Response Average |
| 0% (0) | 0% (0) | 0% (0) | 0% (0) | 0% (0) | 6% (2) | 25% (9) | 47% (17) | 17% (6) | 6% (2) | 36 | 7.9 |
| Total Respondents | | | | | | | | | | 36 | 36 |

Additional Comments:

1. As much as could be done with available time.

| | | | | | | | | |
|---|-------------------|------------------|-------------|----------------|-------------|------------------|-----------------------|-------------------------|
| 6. Were the materials used at the meeting: | | | | | | | | |
| | no opinion | very poor | poor | average | good | very good | Response Total | Response Average |
| | 0% (0) | 0% (0) | 3% (1) | 8% (3) | 58% (21) | 31% (11) | 36 | 4.2 |
| Total Respondents | | | | | | | | 36 |

Additional Comments:

1. I thought the initial survey was too repetitive; it could have been a little shorter. The meeting materials we got beforehand were too much - not realistic to review. Again the priorities could have been lumped together more.

Appendix G: Meeting evaluation results

7. Was the meeting's facilitation:

| no opinion | very poor | poor | average | good | very good | Response Total | Response Average |
|--------------------------|-----------|--------|---------|----------|-----------|----------------|------------------|
| 0% (0) | 0% (0) | 3% (1) | 6% (2) | 39% (14) | 53% (19) | 36 | 4.4 |
| Total Respondents | | | | | | | 36 |

Additional Comments:

1. Dave and Tim did a great job!

8. Please provide any suggestions regarding facilitation that could improve future regional State Wildlife Action Plan meetings (agenda, discussion management, etc.):

1. Prior collaboration with neighboring states re: share projects
I didn't fill out the pre-meeting survey but the comments I heard were:
2. -instructions not clear
-repetitive
-need to identify more specific projects, not broad ideas
3. Excellent facilitation plans and skills. (from pre-meeting work to speed dating)
Excellent facilitation equipment (remote voting and computer tallying software/hardware)
Breakout groups sometimes need clearer guidance on what needed to be accomplished.
4. Original arrangement of priorities could have been ranked by assigning values to state priorities, eg. 1 pt for 3rd priority, 2 pts for 2nd priority, 3 pts for 1st priority - item with 3 states - 1st priority would have 9 pts. Then state could lump, split, rearrange up and vote on top X#
5. specific definition of "blueprint" at beginning of meeting would have been helpful.
6. Revamp pre-meeting survey to reflect true goals/outcomes of meeting. Have states come prepared with priority projects they would like to work with neighbors - not broad needs. Thanks.
7. Further boiling down of the action list would help. Of the 118, there were still several redundancies and a significant mix of scales. Do that first, then vote.
8. Also, I would have liked a bigger room. Also classroom style seating is a bummer. I prefer a circle/square. Also states voting (as Dennis Figg suggested) should have been just one person - so you force the state to discuss, compromise.
9. Learn from this meeting so some steps can be eliminated/improved/expanded. I think we had a lot of overlap in some places that ended up giving us the same products.
10. Better summary of the survey results before the meeting
11. Facilitation was excellent. Pre-survey was a bust, not useful.
12. This was a good first effort that should give you a good blueprint for conducting the other regional meetings.
13. Discussion of top 9 regional priorities bogged down.
14. Loved the voting.
15. More stat to state speed dating earlier on the process/agenda. Good to think to plan on large scale, but need more specific examples of what the outcomes needed is early in the agenda.
16. The days got awfully long for consistent focus - the "required" evening "dates" were fun but felt a little burdensome.

Appendix G: Meeting evaluation results

17. Establishing early whether looking for the overall strategies/individual projects/strategic/operational/for the various sessions.
18. Dave and Tim are very talented at meeting facilitation. Great job. A very productive and worthwhile meeting.
19. The starting questionnaire wasn't focused enough and it was the basis to start things. After that it was good.
20. Realizing this was the first meeting it should provide good guidance on structure at future meeting.
21. Initial survey was confusing and difficult-any way to simplify based on results here? Ask about region wide projects regardless of action type and then specific projects. Don't know.
 - a. Determine process before meeting with meeting chairs (don't ask group about which process)
 - b. verify "decisions" with the group before proceeding (thumbs up or down works)
 - c. have chairs respond to content questions, not facilitator
 - d. use group record to keep group focused (don't just read off a sheets of 8 1/2 x 11 inch paper.
23. Analysis of the 14 state plans beyond the pre-meeting survey would have been very useful. Specifically, and easiest, would have been a summary of the 14 SGCN lists to identify which species are truly regional priority. Ideally a similar analysis for regional priority habitats would be extremely useful, but given the variation in how states identified SGCN habitats. This analysis may not be realistic to expect pre-meeting.

| | |
|--------------------------|-----------|
| Total Respondents | 23 |
| (skipped this question) | 13 |

- 9.** On a scale of 1 to 10, how would you rate the meeting's overall success towards launching collective efforts among states in this region? 1 to 10 (score with 1 representing the lowest score and 10 being the highest)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Response Total | Response Average |
|--------------------------|--------|--------|--------|--------|--------|---------|----------|----------|---------|-------------------|---------------------|
| 0% (0) | 0% (0) | 0% (0) | 0% (0) | 0% (0) | 3% (1) | 14% (5) | 42% (15) | 31% (11) | 11% (4) | 36 | 8.3 |
| Total Respondents | | | | | | | | | | 36 | |

10. Additional Comments?

1. I'm one of the Feds, not a state agency employee so I think that I can't answer some of these questions on this evaluation.
2. Hotel: After housekeeping in room on first day, we were shorted towels and a cleaning sponge was left on bathroom counter. Otherwise, a good facility.
3. Glad to see the plan to start a Midwest Wildlife Action Plans Working Group.
4. Hotel - I was originally assigned room 409 - the heat/cooling vent in that room was covered with mold and the mold had even started growing out onto the adjacent wall. After I pointed it out they moved me to a new room where the tub faucet leaked continually, but at least there wasn't the threat of Legionnaires disease, or was there?
5. Hotel - Room 532 - Bathroom problems - tub handle feel off, mold in tub/shower, shower head did not work well (1/2 of water came out of tub faucet), tub/shower not clean upon arrival

Appendix G: Meeting evaluation results

6. I think opening up with the grant opportunities caused a distraction that never left people's minds. Even with later comments that this meeting was more than about the grant, I think people had difficulty straying from that idea. But still, good job!
7. Nice work.
8. Regarding #4: OH's absence made planning difficult; will have to follow-up with them outside this meeting.
9. Hotel - Hotel room just average, but staff very helpful and attentive.
10. Good location for concentration on our work without distraction - loved the voting machines!
11. I think the meeting objectives could have been better identified and explained in advance. I think the survey questionnaire needs to be refined to better get at the types of projects we want to address: interstate on-the-ground projects vs. large issues (revamp Farm Bill)
12. Hotel - no problem with room.
13. Hotel - no problem with room.
14. Be sure your attendees are encouraged to ask their agencies and partners about needed regional actions beyond their strategies. It will give the attendees an opportunity to provide more details on possible regional projects (blueprints).
Hotel - My room was great!
15. Participation by all states is critical; the absence of one state hampers efforts by neighboring states.
Hotel - light bulb was burned out
16. Best is yet to come!
Hotel - My room was fine.
17. Thanks.
18. Don't even mention the \$700,000 NFWF grant until the last day - it tended to drag down the tone of discussion... "how to I get the \$\$\$" (which isn't as big as Dave Chadwick demonstrated) vs. "what is the work that needs to be done in the Midwest"
19. Hotel - Room was fine. Had an odd smell, though (not smoke). Concierge service was terrific. We were stranded at E Port airport terminal and they would us at 1am. Whitney was exemplary.
20. Hotel - My non-smoking room had smoke smell. Otherwise accommodations were great. The hotel staff was incredibly helpful. Esp. Whitney and restaurant staff!!
21. A. You might consider reducing the length of the online survey. I experienced survey fatigue. Could limit survey to question 1a-f. Question two could relate to potential collaborative efforts your state is interested in pursuing with a neighbor.
B. Also, prioritization used on online survey should have been used to a greater extent and information could have been summarized more before the meeting and sent out for review to attendees. This could have streamlined the prioritization process at the meeting.
22. Hotel - The hotel was not good. Poor service in dining room, also wouldn't give receipts. Location was good. transportation both shuttled and hotel provided - very good. Staff at front desk did not appear to be trained and were not helpful.
23. Hotel - Room, nonsmoking room smelled like smoke. Had the room ozoned but smell returned in one day.
Thanks Dave!
24. Hotel - Staff at front desk were poorly trained and difficult to work with.
Exercise room became dangerously hot and humid and had non-functional equipment. Not "Hilton" quality experience.

Appendix G: Meeting evaluation results

25. Don't be afraid to use old facilitation techniques. This group had enormous potential. However, we only used a portion of the potential. Their energy got drained by the uncertainty in projects we were pursuing and ambiguous process.

26. I felt the meeting got progressively further from the action plans, and more into generation of new information by the participants - this is fine, but makes who is sent from each state much more important. Premeeting survey should include a question asking for interstate/regional projects. This would give participants a starting point at the meeting and allow for participants to gather suggestions from other agency staff prior to the meeting.
Hotel - My room had no hot water in the shower for 2 mornings.

| | |
|--------------------------|-----------|
| Total Respondents | 26 |
| (skipped this question) | 10 |

Appendix H: Draft summary report comments and edits

DJ Case received comments from five participants on the draft summary report (emailed to participants on February 9). Below is a list of participant comments followed by how DJ Case addressed them in the final meeting report.

Dennis Figg, Missouri

Well there you have it. Good job!

I did not look through all of the appendices, but as for the body of the report it look real good.

Only one thing that is not clear. Refer to Priority 11 on pages 1 and pages 8. I recall this recommendation came from Ken Brunson, and we understood his point. I don't understand the recommendation included here. Change what? Legislation? Granting? Agency focus? I think we need to add something here to make the intent clear. Thanks.

Barb Pardo, Minnesota

Just one change to draft report requested...please change my title (page 14) to "Joint Venture Coordinator".

Amy Buechler, Missouri

On page 11 and 71, please change "Iatan Missouri River" to "Iatan/Weston Missouri River Corridor."

Karen Kinkead, Iowa

I think it looks OK.

Owen D. Boyle, Ph.D., Wisconsin

Executive Summary – p.1

“Region-wide priorities:” (these are very general—call them “categories”?)

1. protocols
5. I thought we decided this was just part of #4?
6. This seems incomplete. landscape what? approach? classification? see the longer version on page 8. You can't just cut this one off at the dash.
8. This seems incomplete. ...prevent spread of invasive species into new areas and invasion of new invasive species.

I'd like to see the list of the 23 priority projects included in the Executive Summary as well, like this:

Mussel and Nongame Fish Monitoring and Conservation Planning

- Develop, adopt and implement a Great Rivers mussel monitoring protocol

Grassland Conservation

- Prairie pothole/grassland ecosystem functionality for SGCN species other than birds.

Appendix H: Draft summary report comments and edits

- Grand River grasslands
 - Cherokee grassland
 - Lake plain prairie
 - Kankakee Sands
 - Grand River National Grasslands
 - Shortgrass prairie
 - Convene a “conservation of reclaimed minelands” workshop
- Driftless Area Conservation
- Savannah Conservation
- Oak savanna (lupine/Karner Blue Butterfly) survey, restore, monitor.
 - Northeast sand barrens grasslands
- Great Lakes Shoreline Conservation
- Great Lakes shoreline coastal wetlands in western Lake Erie
 - Great Lakes – Dunes/beaches/inter-dunal wetlands/nearshore aquatic (land-water transition)
 - Grand Traverse Island protection – species and unique habitats
- Northern Hardwood Conservation
- Big River Conservation
- Confluence of Mississippi, Missouri and Illinois rivers
 - Big river confluence of Ohio and Mississippi
 - Restoration of hydrology and habitat (vegetation) of low gradient rivers and streams for aquatic/semi-aquatic species—all states
 - Un-channelized MO river
- Riparian/wetlands habitat conservation
- Iatan Missouri river
 - Marmaton river
 - Riparian corridor on Maumee River Riparian restoration
 - Wabash river conservation corridor
 - Wetlands Reserve Enhancement Program (WREP) along Ohio/Mississippi River
 - Red river restoration

A 2 page Executive Summary is acceptable and will give our administrators more of the vital information coming out of the meeting at a glance.

p.8

6. missing an open parenth somewhere.
11. need more info. here.

p.12

“Next Steps..”

Our administrators will want to see a lot more information here. What’s a blueprint and what is the blueprint development process going to look like? What has their staff committed themselves to by being named as “leads?”

Appendix H: Draft summary report comments and edits

Based on the above comments, DJ Case made the following edits to the final report:

- Region-wide priorities: (page 1)
- Priority 1. protocols (added “s”)
- Priority 6. Edited to “Coordinate regional standard/unified landscape - land cover/vegetation/land use, both terrestrial and aquatic, classification and characterization map for the region, and a schedule for regular updates.”
- Priority 8. Edited to “Coordinate regional management/action plans to prevent invasive species (flora and fauna), respond to invasive species, and development of more effective tools to combat invasive species.”
- Priority 11. (page 1 and page 8): added “legislation, grant parameters and agency focus” to better express the intent of the meeting participants.
- Included a list of the 23 priority projects in the Executive Summary
- Page 11 and 71, changed "Iatan Missouri River" to "Iatan/Weston Missouri River Corridor."
- Changed Barb Pardo’s title (page 14) to "Joint Venture Coordinator".
- Edited the text for grammatical errors

Also DJ Case did not make edits based on the below comments. Following each comment is the reasoning for not making changes.

- “Region-wide priorities:” (these are very general—call them “categories”?). *During the voting process at the meeting we ranked these priority Regional conservation actions. The term “category” was not used.*
- Region-wide priorities: (page 1) Priority 5. I thought we decided this was just part of #4? *This was discussed at the meeting and participants expressed the opinion of keeping them separated.*
- “Next Steps..” Our administrators will want to see a lot more information here. What’s a blueprint and what is the blueprint development process going to look like? What has their staff committed themselves to by being named as “leads?” *We feel that these “next step” questions are best to be articulated by the MAFWA when transmitting this report to directors and others.*