

**Mississippi River Basin Panel (MRBP) on Aquatic Nuisance Species (ANS)
Meeting No. 3**

Columbia, MO

May 25-26, 2004

Assignments/Action Items Summary

Research and Risk Assessment Committee

- Develop an expert database and a database of current research projects.
- Plan a Risk Assessment Workshop in conjunction with the next MRBP meeting in January 2005.
- Develop a research priority list and white paper.
- Hold a Risk Assessment Workshop in conjunction with next MRBP meeting in January 2005.
- Sponsor a symposium at the 2005 Midwest Fish and Wildlife Conference in December.

Prevention and Control Committee

- Develop a matrix of priority ANS within the Mississippi River Basin (MRB) categorizing them for prevention, containment, or control.
- Develop a database of ANS program contacts within MRB states to facilitate rapid response plans.
- Develop a database of agencies responsible for water permits and pesticide regulations in each MRB state to facilitate rapid response plans.
- Support development of the Asian Carp Management and Control Plan
- Prepare an issue paper discussing the balance between fish passage and fish barriers within the MRB.
- Prepare an issue paper discussing harvest and marketing of ANS in the MRB (e.g., positive and negative impacts of developing a market for Asian carp).
- Develop a position paper supporting the clean list concept and national screening process for intentional importation of nonnative species into the U.S. and for new uses of nonnative species currently in the U.S.
- Encourage MRB states to participate in NAISA reauthorization efforts.
- Promote ANS Task Force participation in International Association of Fish and Wildlife Agency meetings to highlight ANS issues and NAISA reauthorization to state directors.
- Request clarification on the Lacey Act from the USFWS.

Education and Outreach Committee

- Develop Committee member's roles and responsibilities for participation and interaction with other committees on MRBP listed tasks.
- Inventory all existing information on invasives relative to the MRB.
- List all regulated/barred/prohibited invasives from each MRB state, including any web sites (URL's).
- Develop a market research/survey to determine MRB public awareness level of invasive species issues.

- Initiate needed products and identify correct messages, audience, and agency to deliver.
- Respond to other committees' needs/ideas.
- Coordinate activities with other panels and committees.
- Encourage additional states to conduct model boater survey.

National Aquatic Invasive Species Act (NAISA)

- Mion agreed to send out a NAISA summary to Panel members.

**Mississippi River Basin Panel (MRBP) on Aquatic Nuisance Species (ANS)
Meeting No. 3
DRAFT Minutes**

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Chairman Jay Rendall (MN) called the meeting called to order at 8:00 a.m.

Rendall said that this meeting had been called at the request of the Aquatic Nuisance Species Task Force (ANSTF), who would also be meeting in Columbia this week. He said that the Columbia location had been determined by them and that other meetings were piggy-backed on, including the Asian Carp Work Group and 100th Meridian meetings. He also said that the Missouri River Conference was being held at this location and that we would be joining them for a field trip and fish fry this p.m.

He said the ANSTF would meet tomorrow morning until 5 p.m. and then meet again on Thursday. He said that the Thursday morning meeting would be our turn to meet with them regarding Mississippi River Basin issues.

A few minutes were taken for introductions, then Rendall said that we will continue the practice of using these meetings to inform panel members of various aquatic nuisance species (ANS) issues, but we will also be starting to shift from lots of talk to more action. This is typical for the ANS panels he said. He said we will also continue with committee meetings to develop action plans. He said we need active Committee chairs and members, and that that level of effort will determine how fast we shift from lots of talk to more action.

Rendall said that Coordinator Rasmussen had sent the minutes of the last meeting out via email, and then he asked for any corrections or comments. He said the minutes included outlines of presentations made at the meeting and that many of the presentations provided excellent information. Hearing no comments he said we will assume that silence is consensus, and will dispatch with formal motions to accept the minutes.

He then asked Mike Hoff (USFWS) to discuss committee actions and plans. Hoff said we need to find open niches for things that aren't being done, but that need to be addressed. We need to enhance and add value to what is being done, he said. We also need to consider these things in answering our problems. He said that Rasmussen has summarized the differences in ANS distribution in the sub basins, and that Asian carp is the assemblage that is most important across the entire basin. He said the calendar for committee action begins at noon today as we begin to develop our annual work plans, and then start moving to the out years. He said that committee plans will be incorporated into panel work plans, and that a work plan can be as simple as a one page matrix or a lengthy document. He said we need to develop a list of activities, milestones, fiscal resource needed, etc. And he said we need a similar work plan for three years out, especially with regard to financial needs.

He said that Diane Alstman (USEPA) will take over as chair for the Education and Information Committee for current acting chairman Bryon Griffith (USEPA). He said that he (Hoff) will role up work plans of committees into our panel's work plan. This will be our input to the Task Force. He said we need to work closely with the Great Lakes and Gulf of Mexico panels. He said that we also need to develop an operations manual for the MRBP. He said that document will include planning material as well as procedures on how we will conduct our meetings, etc.

Rendall then asked for public comment. He said that anyone is invited to speak, and could come up at this time. No one came forward, so he moved on with Committee and Sub Basin Reports:

Education and Outreach Committee (EOC)

Rendall said that Marilyn Barret O'Leary (Louisiana Seagrant) was filling in for Steve Schainost (NE) at the meeting in New Orleans, and then Byron Griffith stepped in, but the sudden death of a staff member caused significant changes in his office and things had to be delayed. So today, he said, the committee is just starting from scratch. He said that in the past we have talked about doing an expanded field guide for ANS issues. Also, he said, we need to talk about partnering with *Bass Pro Shops*, *Cabelas* etc. on various projects.

Research and Risk Assessment Committee (RARC)

Cindy Kolar (USGS), Chairperson, said that at the last meeting the Committee developed short and long term goals. She said they also came up with a repository for information and late breaking news, etc., and that they are developing a list of potential funding sources to add to the Web Site. Also, she said, they talked about hosting a work shop on risk assessment, which would bring people together who are experts in the field. Additionally, she said, in the next several years the Committee would like to host a symposium on ANS issues in the Basin. She said we also need a pathways analysis to identify areas of concern, and we need to look at what species are of most concern, and to develop methods of looking at Asian carp population recruitment. She said the Committee also talked about the need to develop information on control strategies. She said the locks and dams could be used to slow or to quicken the spread of invasives, so we need to look at how they could be used. We also need more information on the economics of invasives. She said the Committee talked about what we could do to understand what species are where and when they got there. She said we need to use the USGS database for that, and to help keep it updated. So, she said, the Committee has a start on a work plan that we hope to finish today.

Prevention and Control Committee (PCC)

Kim Bogenschutz (IA), Chairperson, said that the Committee had a good meeting last time. She said that they began prioritizing ANS for prevention, containment and control within the basin and sub basins. She said, however, that they would wait for the sub basin reports to determine basin priorities. She said the Committee will develop a matrix for which species we can control and contain. Second, she said, we need to facilitate development of a Rapid Response Plan. She said that the Committee will let the RARC do that, and that the Committee supports development of the Asian Carp Management Plan. She said that we also need to identify tools to control ANS through an integrated pest management plan. Also, she said, we need to facilitate a monitoring plan for the basin. She said her Committee will help the RARC with development of pathways, and that her Committee plans to develop ANS issue papers (i.e. fish passage, marketability of Asian carp, etc.) and provide input to the ANSTF. She said the Committee will also encourage the states to respond to federal notices. The Committee plans to develop a policy on species introductions, relying on support from the RARC and EOC, and to eventually develop a Clean Species List. She said the Committee also plans to recommend improvements to state ANS regulations, and to encourage the states to participate in NAISA reauthorization. She said the Committee will also promote regulations prohibiting transport of ANS on public roads. And finally, she said the Committee will encourage the states to support panel activities.

Upper Mississippi River Conservation Committee (UMRCC)

Ron Benjamin said that he had just replaced Dan Sallee, and that he had little to report other than that the UMRCC considers the Asian carp, zebra mussel, round goby, and Asian watermilfoil as top priority ANS

concerns in the Upper Mississippi River sub basin.

Lower Mississippi River Conservation Committee (LMRCC)

Mike Armstrong said that the LMRCC hasn't met since the January MRBP meeting, that they plan to meet next month, and that the January MRBP meeting minutes pretty much reflect current thinking in the basin. He said that several states and agencies are taking part in the Asian Carp Work Group, and channeling a good deal of energy there. He said that three Asian carp species are proposed for Lacey Act listing, and that action on that issue will likely be tabled until after the November presidential election.

Arkansas Red River Sub Basins (ARRSB)

Mike Armstrong said that in Bobby Reed's absence, he could only say that essentially the same holds for the Arkansas/Red River sub basin as for the Lower Mississippi.

Missouri River Natural Resources Committee (MRNRC)

Steve Adams said that the MRNRC hasn't met since January, and will not meet until September. He said that the January MRBP meeting minutes reflect a good snapshot of problems in the Missouri River. He said that the issues getting the most attention are Asian carp and zebra mussels. He said that zebra mussels were confirmed in the South Dakota/Nebraska reach of the River and that this is a large issue now, and that we are looking for what can be done to stop their spread further upstream.

Ohio River Fish Management Team (ORFMT)

Joe Mion said that Gary Isbell did a good job summarizing ANS issues in the Ohio River at the last MRBP meeting. He said that prevention is a big issue, and that Asian carp, round goby, and zebra mussels are the species of greatest concern.

Tom Flatt said that the Ohio River states also recognize the lack of federal guidance for a screening process. Also, he said, that MICRA is concerned about this issue. He said that according to information passed along at the last Great Lakes Panel meeting everything will be stripped out of NAISA except for the ballast water issue, and that this is a concern. He said that nothing has changed since Asian carp came into the U.S., so all the panel's work is for naught until we turn off the ANS spigot. He said we need to emphasize to the ANSTF that action needs to be taken now. He said he thinks that the Secretary of the Interior already has the authority to develop clean species lists under the Lacey Act if they would use it. He said we really need leadership for prevention actions at the ANSTF. Mike Hoff said that the ANSTF really isn't an advocacy groups, but that individual entities can be. Flatt said we still need to ask them to take action. Rendall agreed that we need to make recommendations to the ANSTF. Marshall Meyers said that development of a screening process is underway, but we don't have enough state input. He said that the new bill does include screening, but that doesn't mean that some people aren't trying to take it out.

Rendall and Hoff then provided time for individual committee meetings. The planned field trip was cancelled due to rain, so the Panel adjourned for the day while the committees met into the afternoon.

The MRBP reconvened at 8:00 a.m. on May 26.

Greg Conover provided a sign up sheet for an order of Asian carp teeth, embedded in plastic, for anyone wanting a set for their office.

The Committees then reconvened their meetings from the 25th for another hour or so, before coming together for short presentations before the Panel.

Risk Assessment and Research Committee (RARC) Report and Work Plan (Kolar)

Roles and Responsibilities of the RARC:

- Identify research priorities for the Basin that address realized and potential biological and ecological effects of ANS.
- Foster research initiatives that further the understanding of the biology, ecology, and potential impacts of ANS; address pathways by which these invaders are dispersed; and promote control, eradication, baseline monitoring, and prevention of ANS.
- Be aware of and communicate to the MRBP on-going ANS research in the Basin.
- Review scientific proposals that researchers will submit to external funding agencies and identify those warranting a letter of support from the MRBP.

With regard to review of proposals the RARC suggests supporting worthy proposals and drafting letters of support for worthy proposals including the relation of the proposal to the research priorities identified by the MRBP. The RARC also suggests that two committees review proposals for which authors are seeking MRBP support: the RARC and the most appropriate of the other committees based on the content of the proposal. Also, should the number of proposals become overwhelming, the RARC acknowledges that not all may be reviewed by the MRBP. The RARC suggests that reviews be conducted on all proposals dealing with early detection/rapid response, and that review of additional proposals focus on those having basin-wide implications, that (1) deal with species of concern, (2) rank high on the identified research priority list, and (3) use innovative methods.

RARC thoughts on zebra mussel monitoring proposal currently placed before the Panel for review by the MRNRC:

- Clearly, this proposal is just the monitoring protocol of another agency that has been slightly adapted to be used for the Missouri River. Therefore, it is missing some elements that are essential to research proposals. If the authors plan to submit this proposal elsewhere, they should consider adding the elements outlined in the bullets that follow.
- Proposals should provide clear objectives and goals of the proposed work. Zebra mussel monitoring is typically done because the results will affect some element of an education, outreach, or research program. Without knowing how the results of this monitoring program will be used, it is difficult to assess whether the proposed methods will accomplish those programmatic goals. Similarly; without knowing the certainty with which the authors want to be sure that zebra mussels are present or absent, which should be laid out in the objectives of the program; it is impossible to determine if the proposed methods are appropriate. For instance, it would seem that this is a very low intensity monitoring program. If goals of the program were to be 99% certain as to whether zebra mussels were present, then sampling is too sparse. If, however, program goals are to be 50% certain, then the monitoring effort may be appropriate.
- Methods for assessing Asian clams and other mussels. Methods are not provided for how Asian clams and 'other mussels' will be assessed.
- Justification for freezing mussels. Standard methods for zebra mussel sample processing involves fixing in 70% ethanol. Justification for freezing could be included for clarification.
- It was difficult to determine if the authors are looking for one year of support, or if the program would continue beyond the current field season.
- This comment ties into the lack of context for the proposed monitoring program. What do the authors hope to get out of this monitoring program? What will be the deliverables?

RARC thoughts on funding research by the MRBP:

- The MRBP should not consider funding unsolicited research proposals, particularly before a policy is developed regarding such funding.
- Panel funds would be better spent investing in Panel infrastructure and identified priority needs.
- The role of the MRBP is more suited to providing letters of support for priority research needs to external funding entities.

With regard to the funding request for \$10,000 to assist the MRNRC with zebra mussel monitoring, Kolar said that the comments provided above apply. Bogenschutz said that the PCC also looked at the proposal, and that her Committee would like to see more upstream samples to determine upstream extent of veligers (i.e. presence/absence). Also, she said, there is a need to tie actions to the monitoring. If they find them what are they going to do? Mion said that we would want to coordinate any research we fund very tightly, and that we wouldn't want people just asking for funding randomly. Rendall agreed that if we were going to do that we would want to ask for a grant for this sort of thing. Kolar said that if we fund research we would want to ask the questions that need to be answered. Hoff said that one of the projects or activities that the RARC is going to provide is a list of priority research needs. This list would be given to others for use in finding funding.

RARC Work Plan for 2004

Activity	Description	Milestones	Deliverables	Dollar Request
Expert database and database of current research projects	Database of those conducting research on ANS in the Basin including contact information, species that they are working with, aspects of the species they are examining (e.g., life history, genetics, behavior, diet, etc.), and how the research fits into the National Invasive Species Management Plan (e.g., prevention, control, outreach). This activity is envisioned as a web-based survey consisting of pull-down menus and a 'registration' process for researchers. This tool could be expanded to go beyond research to include types of outreach materials developed, database development, etc. If not set up initially for searching capabilities, this function would be included after initial roll-out.	(1) Develop web-based form (developed initially by Kolar and Zajicek, circulated among committee members). Time: by end of June (2) Coordinate serving on MRBP site (developed by CERC or UMESC and linked to the MRBP site). Time: by end of July (3) Post site and begin circulating link to solicit registration and data collection. Time: by mid-August	Website Database	Hopefully none. If time required to set up site, then some funds may be needed to off-set initial costs (maximum \$1,000)
Plan Risk Assessment Workshop in conjunction	Use of risk assessments is growing in importance in various stages of the invasion process (not only for prevention, but also for detection, impacts,	(1) Develop one paragraph or so for budget planning for those who might attend (Kolar initially,	Workshop Workshop proceedings	Cost probably about \$10,000. Will try to

<p>with the next MRBP meeting in January 2005</p>	<p>range, etc.). Although methods are quickly evolving, few people are familiar with their diversity, utility, and application to ANS issues. At this workshop, we will invite experts on risk assessments for ANS to present current tools and their application. The workshop will be held the day before the MRBP meeting, will be an all-day event, and will be open to those beyond participants in the MRBP meeting. Planning activities will be done by conference call with the RARC invited to participate. Potential speakers include: Richard Orr on the RAM Process; someone from EPA using environmental risk assessments; Paul Zajicek (held workshop using the entire RAM procedure to evaluate sturgeon culture in FL), Cindy Kolar on quantitative risk assessments, someone on GARP or Species Analyst</p>	<p>out to Committee for approval). Time: end of May.</p> <p>(2) Solidify goals and objectives of workshop (Kolar initially, out to Committee for approval). Time: mid-July</p> <p>(3) Develop flyer for national AFS meeting and other venues. Time: mid-July</p> <p>(4) Develop invited speaker list and invite speakers (Kolar initiate, Committee develop together). Time: September</p> <p>(5) Develop agenda (Committee together). Time: September</p>		<p>leverage with Introduced Fish Section of AFS entities near the next meeting location. Could charge registration for non-MRBP members and advertise broadly. USGS may also co-sponsor.</p>
<p>Research priority list and white paper</p>	<p>Identify and prioritize research needs in a short white paper (maybe 3-5 pages). This document would be posted on the web to help people become aware of current issues; suggest funding initiatives; and identify priority research proposals.</p>	<p>(1) Further develop research questions (Kolar initiate; Committee input). Time: mid-June</p> <p>(2) Finalize priorities. Time: mid-July</p> <p>(3) Develop draft white paper (initiated by Kolar, committee member take over—volunteers?). Time: November/December</p> <p>(4) Submit draft white paper to MRBP. Time: January meeting</p>	<p>‘Marketing tool’ and information sharing</p>	<p>None</p>

Hold Risk Assessment Workshop in conjunction with next MRBP meeting in January 2005	See previous			Nothing additional to 2004 request
Sponsor a symposium on ANS research in the Basin at the 2005 Midwest Fish and Wildlife Conference in December	Symposium would reach more of a management focused audience than at the ANS session, typically hosted by the Introduced Fish Section at the national meeting of the AFS.		Symposium Could consider publishing a proceedings	Costs might include \$10,000 for travel costs of researchers, but would probably be less (many will be close). Wouldn't have to offer travel costs—could be virtually no cost.

ANS Risk Assessment Workshop Announcement

The Mississippi River Basin Panel on ANS (MRBP) will host an ANS Risk Assessment Workshop in conjunction with the next panel meeting, which will be held in January 2005 in a location yet to be determined. Experts conducting risk assessments on ANS from around the country will be invited to share their knowledge with workshop participants. Goals of the workshop will include communicating: (1) the purpose and objectives of risk assessment for ANS, (2) presenting existing methodologies, and (3) providing examples of practical implementation of these methodologies to assess various risks associated with ANS. Further workshop details will be posted on the MRBP website as they are developed. The workshop will be open to all interested parties and will not be limited to MRBP members. A registration fee may be required for non-MRBP members.

Prevention and Control Committee (PCC) Report and Work Plan (Bogenshutz)

Roles and Responsibilities of Committee:

- Prioritize ANS for prevention, containment, and control within the MRB and each sub-basin of the MRB.
- Facilitate a rapid response plan for MRB invasions.
- Identify integrated pest management for ANS within the MRB.
- Facilitate a monitoring plan for ANS within the MRB.
- Develop ANS issue papers.

- Develop an MRB policy on introductions.
- Recommend improvements to state and federal ANS regulations.

Prevention and Control Committee (PCC) Work Plan for 2004

Activity	Milestones	Deliverables	Funding Request
Develop a matrix of priority ANS within the MRB categorizing them for prevention, containment, or control.	December 2004	Matrix of priority ANS within the MRB including state ranks of priority, distribution, severity of impacts, pathways, availability of information	\$0
Develop a database of ANS program contacts within MRB states to facilitate rapid response plans.	September 2004	Database containing contact information for ANS program personnel in each MRB state	\$0
Develop a database of agencies responsible for water permits and pesticide regulations in each MRB state to facilitate rapid response plans.	December 2004	Database containing agency and contact information for personnel in each MRB state responsible for water permits and pesticide regulations	\$0 unless Panel wants to hire a student to contact and compile
Support development of the Asian Carp Management and Control Plan. Several MRBP members are on the planning team, and many more were participants in a workshop to develop actions and priorities for the plan.	November 2004	Asian Carp Management and Control Plan submitted to ANS Task Force	\$0 unless Panel wants to support travel
Prepare an issue paper discussing the balance between fish passage and fish barriers within the MRB.	May 2004	Issue paper reported to ANS Task Force	\$0
Prepare an issue paper discussing harvest and marketing of ANS in the MRB (e.g., positive and negative impacts of developing a market for Asian carp).	November 2004	Issue paper reported to ANS Task Force	\$0
Support the clean list concept and national screening process for intentional importation of nonnative species into the U.S. and for new uses of nonnative species currently in the U.S.	November 2004	Letter to the ANS Task Force supporting clean list and screening process legislation	\$0
Encourage MRB states to participate in NAISA reauthorization efforts.	August 2004	(1) Letter template for states to send to Congressional delegation requesting support of NAISA	\$0

		(2) NAISA summary to each state MRBP representative	
Promote ANS Task Force participation in IAFWA meetings to highlight ANS issues and NAISA reauthorization to state directors.	May 2004	Request that ANS Task Force send a representative to the IAFWA meeting in September, 2004	\$0

Education and Outreach Committee (EOC) Report and Work Plan (Schainost)

Roles and Responsibilities of Committee

- Respond to other MRBP committees' identified education and outreach needs and ideas.
- Develop/coordinate outreach products as will be outlined in the Committee's work plan.
- Increase coordination and partnership opportunities on outreach products and all committee activities within all MRBP states.

Education and Outreach Committee (EOC) Report and Work Plan for 2004

Activity	Milestones	Deliverables	Funding Request
Develop Committee member's roles and responsibilities for participation and interaction with other committees on MRBP listed tasks. <u>Potential Tasks:</u> A. Initiate needed products and identify correct messages, audience, and agency to deliver. B. Respond to other committees' needs/ideas (Example: Water garden BMP's outreach products). C. Coordinate activities with other panels and committees.	6 months or next meeting	List of Committee tasks and coordinated activities.	??
Inventory all existing information on invasives relative to the MRB. <u>SubTask:</u> A. List of all regulated/barred/prohibited invasives from each MRB state, including any web sites (URL's).	6 months or next meeting	Database of existing products/activities	??
Develop market research/survey to determine MRB public awareness level of invasive species issues.	1 year (Produce survey and coordinate results)	Survey and Summary/Conclusions of Survey	\$35,000

Steve Schainost reported that he has resumed responsibilities as EOC Chairman. Schainost also said that the Committee needs to have each state conduct a boater survey of awareness similar to those already completed by Minnesota and Wisconsin. He said that Marshall Meyers will work with Kolar on updating any listing of species so people aren't hurt by lists that aren't up to date. Dennis Reicke said that we should have a brochure which states that this may not be a complete listing, so as to ensure that people consult the appropriate state codes. Meyer said another problem is that Web Site URLs change all the time, so we need to protect people against someone else's mistake. Rendall said that the Executive

Committee needs to address this.

Flatt said we need to draft a statement for Chairman Rendall to present to the ANSTF this week on the need for species screening if it is not going to be included in NAISA. Also he said, there could already be language in the Lacey Act to do this. He said further that he felt that the ANSTF should participate at International Association of Fish and Wildlife Associations (IAFWA) meetings to bring ANS issues before them. Mion said that he would send out a NAISA summary to the Committee. It was generally agreed also that we should request a legal review of the Lacey Act. Rendall said we also need to get a FWS interpretation, these will help to better decide if we should even be using the Lacey Act. Hoff said that there might be a letter coming from the FWS trying to clarify some of this, but that the MRBP recommendation should go forward anyway at least requesting a clarification on Lacey Act enforcement.

Flatt said that a national screening process is needed, and that the Secretary of the Interior probably already has authority to develop such a screening process. He said that he thinks the Panel is well within its role to do this. Meyers said that a screening process is underway now. He said that the "Clean List Concept" was defeated in 1972, so we don't want to use the "clean species list" words. Flatt disagreed, saying that he feels that the aquaculture folks want this. Meyers said we need a list of criteria, not a clean list. Flatt said perhaps we should call it an exempt list. Rendall agreed that we need to stay away from the clean list. He said that the White House Executive Order National Invasive Species Council (NISC) work plan addresses this. Meyers said that the joint ANSTF Risk Assessment Committee and NISC Committees plan to have combined screens out this year to be tested, and that the pathway analysis is further along. He said that they are soliciting information actively now from the states. Mion said that screening and classification mean very different things. Flatt said that what we're talking about here is a general statement about species before they come into this country. This is critical, he said. Emphasis needs to be on what is coming into the U.S., interstate transport is different. Reicke said that if the species is already here, but needs to be used for some different purpose, that should also be covered. Meyers said import may be banned, but a species may still be allowed to be cultured here, this is incredibly complex, and we don't want to raise too many red flags. Hoff said we also need to address enforcement, this needs to be in Tom's statement. Flatt said that this needs to be a recommendation to the ANSTF. Rendall said we won't have that drafted today, but we can work on it via email, etc. Flatt disagreed, saying that we need to give it to them today. Then he drafted and gave Rendall a statement to present at the ANSTF meeting. Meyers said that this wouldn't hurt the process that is underway. Rendall agreed.

Hoff then introduced a draft fish barrier statement. Rendall said that fish passage is important, but invasive species passage is not. Barriers, he said, may be appropriate in some places, but not in others. Kolar said we need a statement about efficacy and the need for research on barriers. Mion felt that that need is implied. Troxell said that barriers are already being employed out west, and that we could learn from those experiences. Mion said that maybe our statement should say that the panel supports "development" and use of barriers to cover Kolar's concerns. The need for such a statement was agreed to by consensus. Flatt said we need to be careful, however, that we don't endorse any barrier anywhere, so we need to add definition to the kinds of barriers we endorse. Rendall agreed that we could develop this further via email. Troxell said that we could do the same thing with the harvest issue paper. Rendall said that members should get their comments to Bogenschutz, who will put it all together.

Hoff asked if the Committee talked about a Rapid Response Plan. Bogenschutz said yes, we talked briefly about that, but it depends on what comes out of the risk assessment committee. Hoff said we will also need money for this, contingency funds for national response will be needed. He said we probably need to host a session of the Panel on needs for rapid response planning. Bogenschutz said the ANSTF needs to provide a NAISA update at the IAFWA. Also, last July, she said, when forming committees we

talked about establishing a policy committee, and we probably need one now.

Rendall then went over his report to the ANS Task Force (to be presented later in the day) with other MRBP members present. Points included in that presentation follow:

Meetings in 2004:

- Second meeting in January - New Orleans, LA
- Third meeting in May - Columbia, MO

Members:

- Membership 46 plus alternates
- 21 interested parties
- Total of 71 in coordination directory
- Others interested

Species Priorities:

- Asian carp are the top basin-wide ANS problem, followed by the zebra mussel
- Other priority species of the sub-basins are round goby, Eurasian milfoil, hydrilla, white perch, New Zealand mud snail, purple loosestrife, curly-leaf pondweed, and salvinia species

Issue Priorities:

- Developing state plans is a priority in many states
- Increasing federal funding to implement plans is a priority of the states with existing plans and with those preparing plans

Recommendation/Priority

- There is a national need to increase awareness and skills in conducting risk assessments due to the increasing need for them and the fact that there are a limited number of individuals that are qualified to do them.

Panel Progress and Direction

- The panel continues to make progress as we move into our second year
- Committees are finalizing their responsibilities, work plans, and budget needs
- The Panel has filled the void in the center of the country and are on track to help fulfill our responsibilities

Examples of Prevention and Control Committee Projects:

- List of priority species/matrix status
- Position statement on barriers and fish passage
- ANS harvest issue paper
- Position statement supporting national screening process for intentional importation into the US
- Request clarification on Lacey Act from USFWS

Examples of Research Committee Projects:

- Database of experts and current research
- Risk assessment workshop at next MRBP meeting
- Research priority list
- Sponsor a symposium on ANS research at 2005 Midwest Fish and Wildlife Conference

Examples of I&E Committee Projects:

- Identify products, messages, audiences
- Coordinate with other panels
- Inventory of I&E products on ANS
- List of regulated invasives in each state
- Encourage additional states to conduct model boater survey

Rational:

- States are limited in their responses to international and interstate commerce as well as funding projects outside of their borders, so federal leadership and funding is needed in several areas.

Recommendations:

- The panel recommends that the Task Force place a high priority and strong focus on prevention-especially on introductions into the country, as well as interstate, interbasin, and intrabasin spread of ANS.
- The Task Force and regional panels should continue to seek coordination across panels, such as joint panel meetings of adjacent panels with shared areas and work toward finalizing standard operating procedures.
- National prohibitions (with listed exceptions) on transport of aquatic plants and priority ANS on public roads would be helpful.
- MRBP recommends establishment of a national contingency fund for rapid response

Request:

- The MRBP requests that the ANSTF provide an update on NAISA to the IAFWA-Fisheries and Policy Committee and Legislative Committee in Atlantic City, NJ in September 2004 to elevate the agency heads interest in addressing ANS issues.

Panel Support:

- The Panel appreciates the funding support from the ANSTF/USFWS and will be requesting funds to continue our efforts for a second year.

Rendall told MRBP members that he was very pleased with the progress that we've made in the last couple of days. We have come a long way in one year, he said. He then passed out an ANS brochure that Minnesota has prepared for the other members to see. He said that changes can be made and each member can order copies customized to their entity if they wish. He said the target audience is water recreation participants, and the target price is 5 cents each, depending on the size of the order. He said that this brochure is a "takeoff" of the Wisconsin Sea Grant brochure. He then opened up the program for formal presentations.

Bobby Wilson (TN) made a presentation on crayfish in the Southeast entitled: "*A Survey of State Policy Regarding Non-Indigenous Crayfish Management*". Notes from that presentation follow:

Objectives of the Survey:

- Identify states with established non-native species
- Evaluate state control of the crayfish pet trade
- Evaluate state control of the commercial sale of crayfish as bait
- Evaluate state control of crayfish importation
- Evaluate state control regarding intrastate introduction

Methods of the Survey

- Developed a questionnaire regarding the following topics:
 - Naturalized non-indigenous crayfish populations (impacts if known)
 - State regulation over the crayfish pet trade
 - State regulation regarding commercial sale of crayfish as bait
 - Regulation regarding importation of crayfish
 - Regulation of intrastate introductions (movements between watersheds)
- Sent the questionnaire (or attempted) via email to appropriate governing agencies in each state (only one mailing was attempted for each state)

Response to survey:

- Twenty-nine states responded to the survey (AL,AK,AR,CA,CT,DE,IA,IL,IN,KS,KY,

LA,MD,MN, MO,NC,ND,NH,NM,NY,OH,OK,OR,TN,TX,UT,VA,WI, and WY)

- U.S. Occurrence of Non-indigenous Crayfish: 16 (32%) without and 34 (68%) with (Data Source: Keith A. Crandall Ph.D., Brigham Young University).
 - Associated impacts:
 - Displacement of native species,
 - Alteration of aquatic habitat,
 - Impacts to early life stages of some fishes who depend on aquatic vegetation
- Responding State Positions on Regulating the Crayfish Pet Trade: 12 (41%) yes and 17 (59%) no.
 - Most common methods of regulation:
 - Permitting System
 - Prohibited List
 - Total Prohibition
- Responding State Positions on Regulating the Commercial Sale of Crayfish as Bait: 18 (62%) yes and 11 (38%) no.
 - Most common methods of regulation:
 - Requiring a bait dealer license
 - Prohibited list for sale
 - Total Prohibition
- Responding State Positions on Importation of Crayfish: 16 (55%) yes, 11 (38%) no, and 2 (7%) don't know.
 - Most common methods of regulation:
 - Permitting System
 - Prohibited List
 - Total Prohibition
- Responding State Positions on Intrastate Introductions: 17 (59%) yes, 11 (38%) no, and 1 (3%) don't know.
 - Most common methods of regulation:
 - Total Prohibition
 - Permitting System

Tennessee's Current Non-Indigenous Crayfish Status:

- Rusty crayfish Current Watershed Distribution:
 - Clinch River
 - Powell River
 - Holston River
 - Nolichucky River
 - Clear Fork Cumberland River
- Virile crayfish Current Watershed Distribution:
 - Tennessee River
 - Holston River
 - Nolichucky River
 - French Broad River

Tennessee's Current Concerns Regarding Introduced Species:

- Displacement of Native Crayfish Species
- Potential Impacts to naturally functioning ecosystems
- Potential impacts to sport fisheries (documented Rusty Crayfish impacts to smallmouth bass and walleye fisheries in Ontario)

What's at Risk for Tennessee?

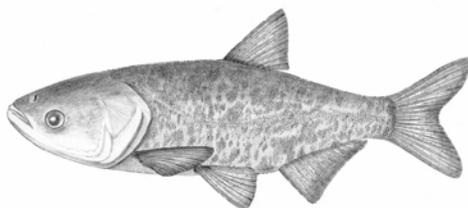
- Tennessee is the hub of crayfish diversity in the Southeastern U.S. (~ 78 species)
- Nine endangered species (1 federally), two state threatened species, and one in need of management
- Impacts to other aquatic resources

What are Tennessee's Management Alternatives?

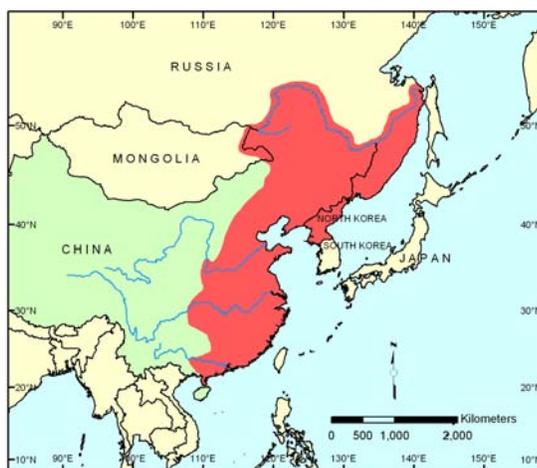
- Education - Develop educational literature that describes the consequences of non-native introductions
- Prohibited List - Do We Need A Banned List or Approved List? Include invasive crayfish species on the "Banned in Tennessee" list: Rusty Crayfish (*Orconectes rusticus*) and Virile Crayfish (*Orconectes virilis*)
- Managing Bait Dealers, Pet Dealers, and Commercial Aquaculture:
 - Develop a committee that addresses and reviews non-native species issues on a case by case basis.
 - Require more stringent controls on the bait and pet trades (Inspections).
 - Implement a permitting system for commercial vendors of crayfish.
 - Department of Agriculture Regulation? (Need to investigate).
 - Do away with a "Banned List" and go to "Approved List".
- Current Tennessee Wildlife Resources Agency Developments to Control Expansion of Invasive Crayfish Species (Chemical Treatment); Class: Pseudohalogenic Compound Cyanigen, Chemical Structure: C₆H₆
-

Kolar then made a presentation on largescale silver carp entitled: "*Bigheaded Carps, Genus Hypophthalmichthys (Pisces: Cyprinidae): Status of Biological Synopses and Risk Assessments*". Notes from that presentation follows:

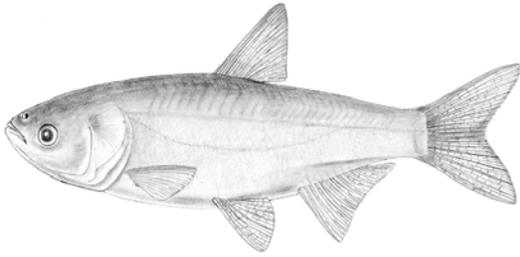
Three Species of *Hypophthalmichthys*:



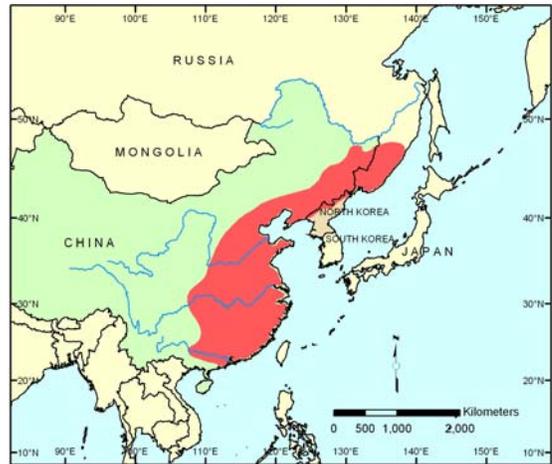
Bighead carp, (*H. nobilis*)



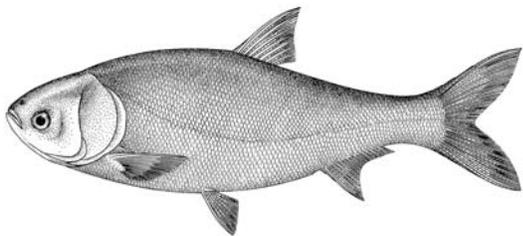
Native Range of *H. nobilis*



Silver carp, (*H. molitrix*)



Native Range of *H. molitrix*:



Largescale silver carp, (*H. harmandi*)



Native Range of *H. harmandi*:

Biology and Natural History of the three *Hypophthalmichthys* species:

	Bighead	Silver	Largescale silver
Temperature	< 2-38C	< 2-40C	??
Mature	3-4 yrs	3-4 yrs	1-2 yrs
Spawning	April-June	May-July	May-August
Fecundity	0.3 - 1 mil.	0.1-4.3 mil.	??
Diet	zooplankton	phytoplankton	plankton (noc.)
Growth	18-23kg	18-23kg	faster than silver

Rendall then gave an update on the Upper Mississippi River Asian carp barrier project. He said the final report is available on the Minnesota Department of Natural Resources web site. He said that there is no silver bullet, but we could use a combination of methods. He said that a bubble barrier was recommended to deter fish from going into the locks along with sound at the gates, and then pheromones could be used to attract fish to a point for capture. He said that potential barrier sites include Upper Mississippi River locks and dams 19, 15, 14, and 11; as well as tributaries like the St. Croix River. Hoff said that pheromone testing is going on right now.

Member Updates

Meyers said that private industry will be launching the “Responsible Aquarist Campaign” in September for fish, aquatic animals and plants. He said further that Canada, Mexico and New Zealand want to use this concept. He said that a logo will follow the *Stop Aquatic Hitchhikers* example. It will appear on fish bags, aquaria, and web sites; as well as in power point presentations. The national roll out, he said, will disseminate information. He told MRBP members to contact him for further details. He also said that we are looking for different people in different states to partner with us. He said we need to inform outdoor water gardeners as well, so contact him if you are able to help out. He said we are also working on surrender centers for ANS.

Flatt said that an ANS plan for Indiana was approved in November. He said that the one year funding proposal revolves around a full time coordinator and aquatic invasive plant control. Boat registration fees are being targeted as a funding source. Until a coordinator is hired, Flatt said that he will be the MRBP member.

Schlueter said that North Dakota developed a brochure that is being mailed out to every boater. He said they also have an ANS video going out to every fishing tournament director, and that North Dakota is pushing education as a means of prevention. He said that ANS information is being pushed everywhere possible. He said that the North Dakota ANS Plan will be completed by November. He also said that meetings with the legislature are going on, and that minnow regulations are being looked at regarding importations. He said that his agency is also checking on and working with bait dealers on this.

Wilson said that the crayfish material presented earlier was about it for Tennessee. He said that now that Marilyn O’leary is the Southeast Region Coordinator for ANS, Tennessee will begin working closely with her.

Shearer said that South Dakota’s efforts have mostly focused on outreach and education. Billboards have been placed on interstate highways regarding stopping aquatic hitchhikers, and travel information stations will go in at Ft. Randall Dam and at the Oahe Reservoir dam. Missouri River monitoring will go on this year at Oahe, Sharpe and Francis Case reservoirs.

Troxell said that the cyprinid key being worked on by the FWS and USGS will be in review stages by October and is to be distributed to all the states. He said it may also be available on the USGS web site.

Adams said that Kansas is trying to get approval for a person to work on ANS, and that his state is also working on the Lewis and Clark celebration. He said the recent discoveries of zebra mussels in the Missouri River and in an interior Kansas reservoir are major concerns.

Reicke said that Mississippi will begin work soon on an ANS plan. The Mississippi Department of Environmental Quality will lead the effort. He said that this is good, and that the Louisiana plan will be used as a guide. He said that the state’s Executive Director is supporting the effort, but that a new governor was elected, and all non-civil servants were asked to resign. The lead person on the ANS plan

was one of these people, so that is expected to set the effort back. He said that fortunately the new governor supports plan development, but it needs to be restarted with a presentation to the governor. He said that hopefully such a plan could be completed in two years.

McElroy said that Louisiana is in their second year of ANS Management plan development, and it will be out for public comment within the next 90 days or so. He said that legislative work is being handled through an advisory council which will work through the governor's office on policy issues, and that things are dropping into place. He also said that the sampling strategy being implemented on large rivers is now starting to pay off. He said Louisiana is using different gear types as well as working with commercial fishermen. He said that this is how they detected the black carp. The commercial fishermen are using 6-7 ft. hoop nets run in tandem. He said that the state is working with the USGS on the black carp ploidy issue, but that blood samples from fish caught so far have not been usable because the fish had been dead too long.

Ryce said that the Montana ANS management plan was signed off on in 2002, and that an ANS coordinator was hired about three months ago and she is that person. She said that a policy was developed stating that every boat used for a fishing tournament in Montana had to be washed prior to launching. She said this looked great on paper, but it is a logistical nightmare in practice. Montana has about two dozen tournaments each year, and she attends all of those tournaments now. She said it has provided a good way to get 1-2 minutes each with all anglers. She said that Montana is also getting good information out on the 100th meridian program. She said that fire season is just about to start in Montana, and you wouldn't normally think of ANS as being an issue with fire fighting, but when aircraft dip large amounts of water from water bodies to fight fires this is a huge way to spread ANS. So, she said, we have developed protocols for fire conditions. She said Montana is also monitoring Eurasian watermillfoil, mud snails, and zebra mussels. She expressed concern that the state's traveler information centers may not be working.

Mion said that Ohio is working with the Great Lakes Fishery Commission on alternatives to TFM for lamprey control. He said that a barrier is planned for one stream and a couple of other alternatives are being considered. He said that Ohio has also been involved in looking at potential hydraulic connections between Lake Erie and the Ohio River. He said that a series of canals exist and still many extant canals are in existence. He said Ohio is working very hard to find functional connections and to block them as an ANS dispersal mechanism. He said that Ohio listed all snakehead species on the prohibited live possession list. He said that recently Ohio had to slip into the jack-booted thug mode in order to confiscate snakeheads from a dealer in NE Ohio. He said the dealer had a large display aquarium with a sign on it saying you could pay a dollar to feed goldfish to the snakehead. He said that enforcement officers tried to confiscate the fish, but when they returned with a warrant the tank was gone. It had been moved to a back room. He said that the dealer wouldn't pay a fine, so now he is going to court. Mion said that the "no possession" laws are pretty tight in Ohio. He said that Ohio is also working on updating the state ANS management plan. It has been in place since 1997.

Flatt said that Indiana also had its first snakehead bust, so the state is now pursuing the issue under federal law to get a higher penalty, but possession is not illegal under federal law.

Kolar said that her lab in La Crosse, WI has an ANS initiative, and that they will be holding a workshop at the end of June to look at agency and entity priorities and how the lab fits in.

Bogenschutz said that Iowa passed a new ANS law this year, so now state officials will be able to list species that they want to include, but a rule has yet to be approved by the state legislature.

Martin said that Wisconsin's major effort has been on water craft inspections. He said that three Lake

Michigan inspection stations have been developed as part of the Sea Grant program. He said that guidance manuals have been developed on procedures. He said that Wisconsin has found hybrids of Eurasian watermilfoil in some state lakes. He said further that Wisconsin has a major effort underway through their biannual budget process to increase their ANS budget and to tie it more to the state's terrestrial and forestry programs. Beall added that Wisconsin has a variety of outreach products, and that they conducted a survey of regional boaters to try to better understand where they get their information from and what motivates them.

Schainost said that Nebraska has established an outreach effort along the Missouri River to help track the zebra mussel infestation, including providing information in utility bills to educate the general public on the ANS problem. He said that Nebraska is also conducting a major public use survey along the Missouri River.

Rendall said that Minnesota has passed new legislation which drops use of the term "exotic" in favor of the term "invasive". He said also that it will now be a "gross misdemeanor" to purchase or sell of ANS. Substantial penalties are also being imposed for not draining boats or for hauling away infested water. He said that the northern snakehead has been designated as prohibited, and that all snakeheads will soon be designated as such. He said that Minnesota has a new video on ANS plant problems, and that Minnesota's "invasive species awareness month" is coming up.

Armstrong said that 3-4 years ago Arkansas passed a new body of ANS regulations. He said that under these regulations, any species not on the state's "Clean List" has to go through the legislative process. He said that this process was tested this past year when a fish farmer wanted to bring in the greaser fish from California. Our decision was no, and that decision held, he said, so the process worked, and we felt good about that. He said they have also been trying to identify loopholes in the law. For example, what does it mean to culture species? What is possession? What does raising a species mean? He said that recently Ontario prohibited live bighead carp possession, and because of the speed with which that decision came, 250,000 bighead carp are on hand in Arkansas private fish farms. So there is a concern that these fish will be released by their owners instead of euthanized. In the meantime, fish farmers are looking for another market for those fish.

Hoff and Rendall said that we need to be thinking about our next meeting. Should it be in January and where should it be? Should it be a joint meeting with another panel? They also said that an election needs to be held because their terms as MRBP Chairman and Vice Chairman are due to expire on July 1. He said that we will ask for nominations and hold email elections.

The meeting adjourned at 12:00 p.m.

**Mississippi River Basin Panel (MRBP) on Aquatic Nuisance Species (ANS)
Meeting No. 3
Attendance List**

Columbia, MO
May 24-25, 2004

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