

**Mississippi River Basin Panel (MRBP)  
on Aquatic Nuisance Species  
Renaissance Nashville Hotel  
Nashville, Tennessee  
January 24-25, 2008**

**MEETING NOTES**

**24 January 2008**

**Welcome and Introductions**

Kim Bogenschutz (MRBP Co-Chair, Iowa Department of Natural Resources) welcomed the attendees and introduced Gary Myers (Director, Tennessee Wildlife Resources Agency) who welcomed the attendees to Nashville.

**Review of Last Meeting and Minutes, Overview and Logistics of this Meeting, Model State Natural Resources Agency Screening Process Workshop, Committee Meetings**

After a brief review of the last meeting and an overview of this meeting, the remainder of the day was spent on a workshop developing a model state natural resources agency screening process and committee meetings. The working draft version of the "Model for a State Natural Resources Agency Risk Assessment and Risk Management Process" was emailed to MRBP members on March 24, 2008. Members recommended to serve on ANS Task Force Committees are as follows: Eileen Ryce, Prevention Committee; Jason Goeckler, Control Committee; Jay Rendall, Communication, Education, and Outreach Committee; Sue Thompson, Research Committee. Committee reports and work plans are attached as appendices.

**25 January 2008**

**EXCOM Actions since Last Meeting**

Jerry Rasmussen (MICRA and MRBP Coordinator, U.S. Fish and Wildlife Service) retired January 3, 2008 although he is continuing to deal with some funding and paperwork issues. Interviews for a replacement will probably be held in February.

A Risk Assessment Workshop was held on August 21-23, 2007 in Kansas City, Missouri with over 20 attendees. Information presented during the workshop will be available on the MRBP website.

Brian Canaday resigned as Co-chair due to his change in jobs. Doug Keller was elected First Team co-chair.

**Budget Update, MICRA Update**

Kim Bogenschutz reiterated the budget update that Chris O'Bara (MICRA Chair, West Virginia Division of Natural Resources) mentioned yesterday. Each of the six Regional Panels get \$50,000 year after submitting work plans. The Panels determine their use of the funds. The MRBP uses our funds for projects and some meeting expenses. The MRBP may have to use some of our funds to pay or partially pay for the Coordinator.

**ANSTF and AFWA Invasive Species Committee Updates**

Regional Panel Principals met in November the day before the ANSTF meeting to focus on use of panel funds. The ANSTF relies on the regional Panels to submit recommendations and come up with plans. The focus of the ANSTF Meeting was climate change. The MRBP submitted 5 recommendations.

1. The Aquatic Nuisance Species Task Force (ANSTF) should recognize VHS and other pathogens as ANS and encourage states to include them in their ANS management programs.
2. The ANSTF should approve the Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States and immediately move forward with implementation.
3. The ANSTF should work with its partners to ensure that the full amount of funding authorized for state management programs is appropriated. Additionally, the minimum amount of funds granted to each state on an annual basis should support a fully dedicated, permanent ANS coordinator.

At the May 2007 meeting, the ANSTF requested that the Regional Panels develop recommendations regarding 1) existing state management plan (SMP) guidelines, 2) modifying the SMP process to improve interstate/regional cooperation, and 3) alternative SMP funding approaches. MRBP members discussed these topics at their June 2007 meeting and discovered it was difficult to reach agreement on recommendations because states are at various stages of ANS program development. Regarding SMP guidelines, MRBP members agreed that an aquatic portion of a comprehensive state invasive species management plan should be accepted by the ANSTF. It was recognized that at the current level, there is no satisfactory method to distribute the funding. Equal distribution may seem most agreeable; however, some states cannot maintain their current programs with the decrease in funds that occurs each year as additional state plans are approved. The full amount of funding authorized for state management programs needs to be appropriated annually. That would allow each state with an approved plan to receive the minimum amount of funding annually to support a fully dedicated, permanent state ANS coordinator and a consistent ANS program. If full funding is achieved, the MRBP would recommend modifying the SMP process to support regional single-species management plans. These single-species plans would only be considered for funding after each state receives their allocation.

4. The ANSTF should encourage agencies to incorporate commercial harvest guidelines while developing tools to manage and control ANS. (See attached guidelines.)
5. Last but not least, the ANSTF should ask the U.S. Fish and Wildlife Service (USFWS) to provide a document to the Regional Panels on the elements that need to be submitted with grant requests to receive Panel funds.

The Regional Panels have different administrative and operating structures, and the scopes of work and supporting documentation submitted for their annual funding requests are not uniform. The current system seems to work in most cases; however, written guidance provided to the Regional Panels by the USFWS would improve the understanding by Regional Panel coordinators and chairs of the elements required for grant approval. The guidance would be especially beneficial when Panel leadership changes.

Notes from the ANS Task Force meeting are available on their website:  
<http://anstaskforce.gov/default.php>

The AFWA Invasive Species Committee is 2 years old. Members represent state and federal agencies. The Chair is a member of ISAC, and the Vice Chair is a member of the ANS Task Force. Kim would like to see more aquatic invasive species people involved with the committee. Projects of the committee included supporting Weed Awareness Week in Washington DC and

supporting a recreational boating bill to counteract the E.P.A. rule about boat discharge. The committee recognizes that boats need to be cleaned and drained, but not permitted.

### **Boater and Angler Survey Updates**

Eileen and Jason:

Kansas and Montana each got \$5,000.00 for boater surveys. Money went to printing and mailing costs. Included in the survey was a self-stamped card. Four hundred surveys went out that included questions on level of awareness of ANS, usefulness of outreach methods, changes in their actions, and willingness to donate money for ANS, possibly a \$1 a year up to \$50. Kansas had a 20% return rate. Kansas developed the database, and Montana will take care of data entry. Final results will be available in June 2008.

### **Tennessee ANS Program**

Bobby Wilson Power Point (do not have copy)

State ANS Management Plan final draft is ready. The Governor will then be asked to sign it before going to the ANS Task Force for approval.

### **Pennsylvania ANS Program**

Sue Thompson (do not have copy)

Department of Agriculture runs their task force in conjunction with 6 other agencies within the state. The state also has an Invasive Species Council that includes public members, businesses, and educational groups. Their state ANS Management Plan was approved by the ANS Task Force.

Iowa got additional state funding from a boating registration fee increase. Minnesota has added fees to nonresident fishing licenses and boaters for funding.

### **Mississippi ANS Program**

Dennis Riecke (handouts)

Focus in Mississippi is on information/education. Boat renewals all include information on ANS. Department of Environmental Quality leads their task force. Plan to make industrial-type use of silver carp to reduce numbers and also encourage business and industry.

Next meeting is a joint meeting with the Great Lakes Panel on June 17-19, 2008, in Milwaukee, Wisconsin. Meetings will be held on the 17<sup>th</sup> and 18<sup>th</sup> with possible field trips on the 19<sup>th</sup>. Ideas for field trips include the Clipper Ship, the Art Museum, and a Milwaukee Brewers game.

### **Member Updates**

Jay Rendall (MN): Electronic copies of Minnesota's annual report are available by emailing Jay. The Minnesota DNR has an operational order in place for all divisions to prepare a plan to prevent the introduction and spread of invasive species. Minnesota's program is growing. They have their own Invasive Species Unit with 5 coordinators, 9 part-time officers, and 75 watercraft inspectors.

Eileen Ryce (MT): They found their first case of Eurasian watermilfoil in June. Montana Department of Fish, Wildlife and Parks has no say when it comes to invasive plants. The State of Montana has given that responsibility to the counties. New Zealand Mudsnails populations have decreased dramatically. Legislative action now sponsored by a lake association for a program similar to Iowa or Minnesota's will go before the legislature in 2009.

Jason Goeckler (KS): Kansas did a bait survey about kinds of bait used, methods of bait disposal, and bait identification with pictures of fish for the respondents to identify. Zebra mussels were found near Topeka. They are trying to get legislature to obtain stable funding.

Kim Bogenschutz (IA): Found a boat with zebra mussels attached to it in Lake Rathbun, making it Iowa's 3<sup>rd</sup> lake with zebra mussels if a population is found. Iowa DNR did an angler survey in 2007. Sixty percent of the anglers indicated that they were unaware of ANS; however, the majority of the respondents were shore anglers. We need to target them differently. Of those anglers who were aware of ANS, 80% indicated that they take action to prevent their spread.

### **Asian Carp Management and Control Plan Update and Minnesota Asian Carp Prevention Plan**

A USFWS Triploid Grass Carp Inspection and Certification Program (Program) Workshop will be conducted on August 27-28, 2008, in St. Louis, Missouri. Lodging will be provided to help state representatives attend. The purpose is to draw federal, state, and producer partners together for information and improvement. Suggestions and ideas for the workshop are welcome. The Program started in 1995/96. There is a legislative act to collect fees to implement this Program. MICRA recommended a review of the Program and wants to get input from the industry for support.

The ANS Task Force approved the final Asian carp management plan in November. The plan is available on the ANS Task Force website. An implementation team is to be formed and chaired by the USFWS. A Co-chair was recommended to be a revolving state representative. There are 3 unresolved issues in the plan: 1) use of triploid black carp on aquaculture facilities, 2) use of grass carp on aquaculture facilities and farm ponds in watersheds with self-sustaining populations of grass carp, 3) transport of live bighead and grass carp.

The Minnesota DNR was given a mandate by their legislature to have in place by November 1, 2007, a plan to prevent introduction of Asian Carp into their state. Minnesota deals more with prevention than management of the species. Jay used an appendix from the national plan and adapted that to his own state using the highest pathways, issues, and actions. There are sections on current Minnesota strategies, additional recommendations, photos, long term management ideas, an implementation table, references, a conclusion, and a summary. The public needs to realize that this plan still may not eliminate the problem entirely, but it will hopefully slow down the process and reduce the numbers. The plan is available at [http://files.dnr.state.mn.us/natural\\_resources/invasives/aquaticanimals/asiancarp/110107\\_plan.pdf](http://files.dnr.state.mn.us/natural_resources/invasives/aquaticanimals/asiancarp/110107_plan.pdf)

### **Old Business:**

Discussion occurred on doing something for Jerry or giving him a retirement gift (e.g., muskie rod). Jerry was there from the beginning of the MRBP and provided many services (e.g., budgets, notes, bills, meeting arrangements). The MRBP could possibly pay his expenses to the Milwaukee meeting. Should we approach Jerry about being a Member-At-Large?

We need to update our membership list and fill vacancies.

### **New Business:**

The National Governor's Association developed a paper on screening organisms for importation into the US.

The Barataria-Terrebonne National Estuary Program Louisiana will be conducting a rapid assessment of aquatic invasive species within the estuary in the summer of 2008. They need volunteers for the week of August 4-8 and need to know potential participants by January 31, 2008.

**Outreach and Education Committee  
2007 Activity Report  
14 January 2008**

**“Field Guide to Aquatic Nuisance Species”**

We agreed to hire Mandy Beall to take care of the details on finishing these two items. Specifically, finalizing the layout and text, getting copyright approvals for illustrations, collating orders, etc. The deliverable item was print-ready copy and \$18,000 was budgeted.

[14 Jan 2008: Mandy had a new baby at the time of the last meeting and has only recently indicated that she could get back to work on this project.]

**ANS and Boater surveys**

The “Aquatic Nuisance Species and Boater Survey” was designed to collect information about our public’s knowledge of ANS, where they get their information, and their boating activities. Designed as a phone or mail survey, it has proven useful in directing (or redirecting) agencies information programs. It was suggested that the survey, in addition to the individual states, would prove valuable to the MRBP in addressing it’s public outreach efforts. We proposed to offer to cost/share the completion of more surveys in more states to get a more complete, basin-wide picture of the situation.

[14 Jan 2008: A letter was sent to each of the states to find out how many would wish to do their own survey if the MRBP offered to help fund them. Responses were received from six states (IA, MO, KS, OK, MT, and IN). Of these, two states were definitely interested in conducting a survey, and were each provided with \$5,000 to conduct surveys. In return, the MRBP is to get a copy of their results.]

**ANS video footage – Phase I**

The proposal was to develop a library of stock video footage. Occasionally, the need to produce a video news release or similar product arises but no video footage is quickly available. Obtaining video footage can be limited by the season of the year, lack of funds, lack of expertise, copyrights, or similar problems. The result is that the same footage is being used repeatedly which is starting to get old. The proposal is to develop this library as a means of making more video footage available to all that can be accessed easily and on (relatively) short notice. The development of this library was put into next year’s plan and has two phases. In phase I, a letter will be sent to all the MRBP states asking the following questions: Does this sound like a good idea? Does your state have video footage available that they would be willing to contribute? What do you have? What format is it in? What kind of video footage do you need? Phase I was a polling question and did not have a budget.

[14 Jan 2008: The polling letter was sent out on 19 June and 11 responses were received. Of these, all were positive that the library was a good idea. However there were many questions on where it would be housed, maintained, etc.] (Note: It is presumed that the MRBP would only serve by providing a listing of what video footage was available and who had it. We would not physically maintain a library of video footage. Simply, if someone was looking for some specific type of video footage, they could go to the website to see what was available and who to contact to obtain same.)

**ANS video footage – Phase II**

In phase II, footage would be shot to fill the identified gaps. Phase II is an action item for which we suggested budgeting \$20,000.

[14 Jan 2008: Because of budgetary problems this past year, no action was taken on Phase II.]

**Contact major sporting goods retailers about putting an ANS message in their catalogs.**

At the last meeting, it was proposed that we investigate the possibility of contacting major sporting goods catalog retailers to see if they would be willing to put ANS messages in their catalogs. A letter has been sent out but, at the time of the meeting, no responses had come back. It was decided to keep this in next year's workplan and to expand to other retailers. The membership will be polled for suggested names of other major, national catalog retailers to contact.

[14 Jan 2008: As of this time, no responses have been received to the letters sent out.]

**Investigate potential for partnering with boat manufacturers**

The idea was that we partner with major boating manufacturers in the production of handout materials that would carry the ANS message as well as the manufacturer's advertising. This could include such items as punchout boats, floating keychains, can cozies, etc. Items that could be produced cheaply and handed out at sport or boating shows. This was carried into next year's plan so that it could be pursued to see if there was any interest.

[14 January 2008: No activity to report.]

**Interest in reprinting the "Stop Aquatic Hitchhikers" brochure**

Last year, the "Stop Aquatic Hitchhikers" brochure had been produced and delivered to all the states. This had proved to be a popular item and requests had been received to reprint this. Because reprinting is not as simple as it sounds, it was decided to conduct another poll of the MRBP states to gauge interest in another print run. Till then, states with excess brochures will be encouraged to share their surplus. It was also stated that an individual state could borrow the template and make their own print run if they so wished.

[The polling letter was sent out on 19 June and 13 responses were received including seven "yes" and six "no". Since the poll was completed, there has been additional interest in having more brochures printed.]

**Partnering with NGO's like Wildlife Forever and BASS**

We discussed the possibility of partnering with NGO's like Wildlife Forever and B.A.S.S. In this case, these entities are primarily active at the state level. We will continue our contacts with them with an emphasis on how the MRBP can expand their state contacts.

[14 Jan 2008: No activity to report.]

**Revise guidelines on the handling of ANS, pathogens, etc.**

It has been observed that the public is often confronted with conflicting advice on what they can do to slow the spread of ANS (dry boat 2days, 5 days, 7 days, etc.) In addition, new ANS have arrived on the scene (e.g. VHS) for which the old guidelines will not work. The suggestion has been made to look at revising the guidelines into a single, unified, national message and that the MRBP facilitate putting together a group to look at this revision. The group should include persons who were instrumental in writing the original guidelines as well as including experts on pathogens.

[14 Jan 2008: No activity to report.]

### **Production of hydrilla and Brazilian elodea watchcards**

The final item that was brought up was to develop new watchcards for Hydrilla and Brazilian elodea. This was thought to be a good idea since there are forms that can survive in far northern waters as well as southern. Specifically, these now have the potential to be basin-wide problems. An email poll will go out to the states to gauge interest in production of these watchcards.

[14 Jan 2008: The polling letter went out on 19 June and 13 responses were received. These included 10 "yes" and three "no" votes. A hydrilla watchcard template is being developed by Pat Charlebois.]

**Outreach and Education Committee  
24 January 2008  
Nashville TN**

**Workplan for 2008**

<b>Activity</b>	<b>Milestones</b>	<b>Deliverables</b>	<b>Funding Request</b>
"Field Guide to Aquatic Nuisance Species"	1 Aug	Print-ready copy, print and distribute	\$18,000
ANS and Boater surveys	Next meeting	State survey results	Up to \$5,000 per state
ANS Video footage – Phase II	1 Oct	Shoot additional footage	\$20,000
Investigate potential for partnering w/ boat manufacturers (e.g. punchout boats, floating keychains)	No date	Level of interest	None
Contact major sporting goods retailers about putting message in catalogs	No date	Level of interest and conditions	None
"Stop Aquatic Hitchhikers" brochure reprint	ASAP	Email poll of states to get orders for print run	None
Wildlife Forever and B.A.S.S.	No date	Continue contacts and see if they want to expand their state contacts. Wildlife Forever may be our contact for getting message into catalogs.	None
Hydrilla and Brazilian elodea watchcards	31 July	WI/IN Seagrant is designing. Print-ready copy	\$15,000

**Prevention and Control Committee  
Activity Report  
January 16, 2008**

The following activities were completed through interaction with committee members and Panel ExComm:

- October 29, 2007 -- Submitted Recommendation requesting ANSTF to recognize VHS and other pathogens as ANS and encourage states to include them in their ANS management programs.
- November 2, 2007 – Submitted Recommendation letter encouraging ANSTF to approve the revised *'Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States'* (Plan) for implementation.
- November 2, 2007 – Submitted “Guidelines for Developing Commercial Harvest Policy for Aquatic Invasive Species” to ANS Task Force to encourage management agencies to incorporate commercial harvest guidelines while developing tools to manage and control ANS.
- November 7, 2007 – Requested ANSTF to work with its partners to ensure that the full amount of funding authorized for state management programs is appropriated. Included in this request was a recommendation that ANSTF accept an aquatic portion of a comprehensive state invasive species management plan if that portion of the plan meets the designated criteria.

**Prevention and Control Committee  
Budget Request  
February 20, 2008**

The following items are requested for consideration of MRBP funding during FFY '08.

- VHS Mock exercise using ICS. We are in early stages of planning a mock exercise for in late summer between Illinois and Iowa shared waters. Since this is early planning, the logistics and detailed expenses are unknown but expected to be \$5 - \$10K. Likely, this will be closer to the lower end of the estimate. Work is being supported with Bill Bolen through Great Lakes.
- Asian Carp Telemetry Project – MRBP could purchase 10 radio tags for AC in the upper Illinois River to assist with the ongoing monitoring project between USFWS and INHS that supports rapid response and monitoring for the barrier. Cost is approx. \$3K for 10 tags.
- Common Carp Coordination Symposium – Peter Sorensen (Univ. of Minn.) requested support (\$5K) some time ago. MRBP agreed that national coordination is needed, but local pressures / rules and laws often usurp any true actions.
- Triploid Grass Carp Inspection Program Review – Last year, PCC recommended \$10K for initiating an external review of the TGC inspection program. For various reasons, this process has met with some difficulty.
- Travel support – Unknown at this time. Members have expressed a need for occasional travel support. This issue is being discussed within ExComm, and recommendations will be drafted for Panel review.

Total - \$23,000

**Final Agenda  
24-25 January 2008  
Renaissance Nashville Hotel  
Nashville, Tennessee**

**Thursday, January 24**

**7:30 Continental Breakfast, Registration**

**8:00 Welcome and Introductions**

Kim Bogenschutz, Iowa Department of Natural Resources, MRBP Co-Chair  
Gary Myers, Director, Tennessee Wildlife Resources Agency  
Short Introduction of Participants/Members

**8:20 Review of Last Meeting and Minutes, Overview and Logistics of this Meeting** (Kim Bogenschutz, Co-Chair; Bobby Wilson, Tennessee Wildlife Resources Agency)

**8:30 Model State Natural Resources Agency Screening Process Workshop** (Introduction by Mike Hoff, Immediate Past Co-Chair)

**10:00 Break**

**10:15 Model State Natural Resources Agency Screening Process Workshop (continued)**

**12:00 Lunch**

**1:30 Committee Meetings** (Committee Chairs – Moderators)

**3:15 Break**

**3:30 Committee Meetings (continued)**

**4:15 Committee Updates and Reports**

Research and Risk Assessment (Duane Chapman, USGS)  
Education and Outreach (Steve Schainost, Nebraska Game and Parks Commission)  
Prevention and Control (Steve Shults, Illinois Department of Natural Resources)

**4:45 Public Comment Period**

**5:00 Adjourn for Day**

**Friday, January 25**

**7:30 Continental Breakfast**

**8:00 EXCOM Actions since Last Meeting** (Kim Bogenschutz, Co-Chair, Doug Keller, Co-chair, Mike Hoff, Immediate Past Co-Chair)

**8:20 Budget Update** (Kim Bogenschutz, Co-Chair)

**8:25 MICRA Update** (Chris O'Bara, West Virginia Division of Natural Resources, MICRA Chair)

**8:45 ANSTF and AFWA Invasive Species Committee Updates** (Kim Bogenschutz, Co-Chair)

**9:00 Tennessee ANS Program** (Bobby Wilson, Tennessee Wildlife Resources Agency)

**9:20 Pennsylvania ANS Program** (Sue Thompson, Pennsylvania Fish and Boat Commission)

**9:40 Mississippi ANS Program** (Dennis Riecke, Mississippi Department of Wildlife, Fisheries and Parks)

**10:00 Break**

**10:20 Member Updates**

**11:00 Asian Carp Management and Control Plan Update** (Greg Conover, USFWS) and **Minnesota Asian Carp Prevention Plan** (Jay Rendall, Minnesota Department of Natural Resources)

**11:30 Old Business**

**11:40 New Business**

**11:55 Wrap-Up**

**12:00 Adjourn**

## **Mississippi River Basin Panel Member Updates January 2008**

### **Arkansas (Submitted by Brian Wagner, Arkansas Game & Fish Commission)**

Arkansas continues to move ahead on drafting our state ANS Plan. Currently our Task Force is working on writing strategies and editing the various sections together that form the plan. We anticipate one more Task Force meeting in March to work on the plan and hopefully a complete draft plan sometime this summer.

We have been responding to the discovery of zebra mussels in Bull Shoals Lake in north Arkansas. This has resulted in public information efforts in the area. Even though the discovery involved only 2 small mussels, it has attracted great attention within Arkansas Game & Fish. We maintain a net-pen aquaculture facility on the lake, where catfish and trout are grown out to catchable size for stock around the state. A protocol has been developed for our fish-haulers to follow in order to decontaminate stockings in-transit so that we do not spread the mussels to additional waters.

Researchers at the University of Arkansas are studying crayfish in the South Fork Spring River system in north Arkansas. The ringed crayfish has been introduced from an adjacent basin and is displacing some of the native species. The researchers are seeking to discover the mechanism for this displacement – so far several possibilities have been eliminated but no firm answer has been found. As a byproduct of the past year's surveys, they documented the ringed crayfish's spread downstream several more miles to near Salem, Arkansas. The ringed crayfish is thought to have been introduced into the upper tributaries of the South Fork in Missouri, possibly as unused fishing bait.

### **Illinois (Submitted by Steve Shults, Illinois Department of Natural Resources)**

Illinois continues to facilitate development of dispersal barriers for aquatic nuisance species in the Chicago waterways by supplying radio-transmitters to track common carp, and periodic monitoring of the waterway. Illinois Department of Natural Resources (DNR) staff have also participated in a committee to plan for maintenance and activation of Barriers I and II. DNR has conducted responses to invasive plant species by treating expansive infestations of Eurasian water milfoil in Spring Lake (Tazewell County).

Recently, Illinois began a project in cooperation with DNR Region V staff, US Forest Service, and the River to River Cooperative Weed Management Area staff to respond to regional infestations of selected aquatic plants. As part of this ongoing project, staff have been trained in identification of invasive aquatic plants, voucher specimens are being collected, and current distribution data are being cataloged to create baseline maps. We also intent to post various signs at boat ramps, and develop Watch cards in response to additional species.

### **Indiana (Submitted by Doug Keller, Indiana Department of Natural Resources)**

2007 marked the second consecutive year of Brazilian elodea eradication efforts at 109 acre Griffy Lake. Prior to eradication it was easy to fill sampling rakes with Brazilian elodea. In the spring of 2007 only two small sprigs of the plant were found; a hint that

continued vigilance was required. During an August 2007 intensive plant survey no Brazilian elodea was found. While it is still too early to claim victory over the species in Griffy Lake, at least the plant is to a non-detectable level and may have been eradicated. Plant surveys will continue in the coming years to determine if there is any re-growth which will force additional treatments.

Hydrilla was discovered in 735 acre Lake Manitou in August 2006. A multi-year eradication plan was developed between DNR and SePRO Corporation. Implementation of that plan began in the spring of 2007. Sonar was immediately applied after hydrilla growth was observed in the spring. The last hydrilla vegetative material observed in Manitou was the middle of June, just one month after treatment began. Lethal fluridone levels were maintained through at least October. The telling sign in determining whether the battle with hydrilla is being won is to watch the tuber bank in the sediment. Pre-treatment versus late summer 2007 tuber densities were compared. It appears as though the tuber bank has been reduced by more than 80% in the first year. While we have made great strides at reducing hydrilla at Lake Manitou in the first year, we still have a long way to go to achieve our goal of zero tubers and complete elimination of hydrilla. At least two more years of whole-lake Sonar treatments are anticipated. Total cost for Manitou in 2007 was much lower than anticipated, a mere \$350,000. Expected costs were around \$500,000, but fortunately little precipitation fell during the summer which reduced the amount of chemical necessary to maintain a lethal level for 180 days.

Indiana DNR along with IL-IN SeaGrant continue to work with folks in the aquatic plant trade and other interested parties to assess the risk of plants known to occur in trade. Eventually we hope to develop a white and black list of aquatic plants

#### **Iowa (Submitted by Kim Bogenschutz, Iowa Department of Natural Resources)**

Iowa has two interior lakes with known infestations of zebra mussels. Zebra mussels were first reported in Clear Lake in 2005 and in Lake Delhi in 2006. The zebra mussel population in Clear Lake exhibited exponential growth in 2007. Thousands of juvenile zebra mussels were counted throughout the lake during a survey in August 2007 compared to a total of about 12 zebra mussels found at scattered locations during the same survey in 2006. Preliminary data for Maquoketa River veliger samples show peak veliger abundance in August 2007 comparable to the highest numbers observed in the Mississippi River in 2007. A boat transported from the Mississippi River to Lake Rathbun in June 2007 was removed from the water in October 2007 with adult and juvenile zebra mussels attached to the hull. Lake Rathbun is home to the DNR's largest fish hatchery and will be monitored in 2008 for the presence of zebra mussels.

Three new infestations of Eurasian watermilfoil were discovered in Iowa in 2007. DNR Fisheries staff chemically treated two Eurasian watermilfoil infestations and five brittle naiad infestations in 2007.

Bighead carp have been reported throughout southern Iowa on small tributaries of both the Mississippi and Missouri Rivers. A new location reported in 2007 was below Prairie Rose Lake which is a tributary to the East Branch West Nishnabotna River. Silver carp had only been sampled in the Mississippi and Des Moines Rivers in Iowa until 2007 when they were identified in the Chariton River below Lake Rathbun.

The ANS programs of the Minnesota DNR, Wisconsin DNR, Iowa DNR, Minnesota Sea Grant, and Wisconsin Sea Grant cooperated on a Stop Aquatic Hitchhikers outreach project that is implemented and evaluated several outreach methods aimed at recreational boaters in Iowa, Minnesota, and Wisconsin. Outreach methods gas pump toppers, billboards, flying banners, newspaper ads, television and radio PSA's, rest area displays, signs, watercraft inspectors, and a traveler information system. Surveys conducted by watercraft inspectors in 2006 and 2007 asked interviewees about the logo, sources of information about ANS, and actions regarding ANS. The project will conclude in 2008 with a report on the effectiveness of the various outreach methods.

A telephone survey of Iowa anglers conducted in November and December 2007 included questions on ANS awareness and prevention. Active anglers are more aware of ANS than casual anglers; however, 60% of all anglers indicated that they are unaware of ANS. On a brighter note, 82% of those who are aware and fish from a boat either take preventive steps to prevent transport or do not move their boats between waterbodies.

The ANS Program secured permanent funding in 2005 when the Iowa Legislature passed an increase in boat registration fees and appropriated half of the increase to the ANS Program. The increased boat registration fees took effect in FY07 increasing our annual operating budget to about \$700,000. The ANS staff for FY08 consists of 1 full-time Coordinator, 1 full-time Technician, 4 seasonal Natural Resources Aides, and 5 seasonal Water Patrol Officers.

**Kansas (Submitted by Jason Goeckler, Kansas Department of Wildlife and Parks)**

The Kansas Aquatic Nuisance Species Management Plan was approved by the ANSTF in May 2005. The goals of the plan are to prevent new introductions of ANS to Kansas, prevent dispersal of established populations of ANS, eradicate or control to minimize the adverse ecological, economic, social, and public health effects of ANS, educate all aquatic users of ANS risks, and to support research ANS in Kansas. The coordinated efforts contained within the plan are designed to protect residents of Kansas and the state's aquatic resources from the multitude of potential losses associated with ANS plants and animals.

**Major Accomplishments**

Continue to monitor zebra mussel reproduction in El Dorado Reservoir with monthly plankton tows. The first major die-off was observed in 2007.

Zebra mussels were discovered in Winfield City Lake in December 2006, Cheney Reservoir, and Perry Reservoir in 2007. Monitoring and outreach activities are underway.

Research is also being conducted to determine risk of zebra mussel transport from El Dorado Reservoir and Winfield City Lake via recreational boaters (bilge and livewell sampling). Survey will also evaluate educational campaign effectiveness.

Continue to distribute educational materials to El Dorado Reservoir users.

Continue to monitor (Portland samplers and/or plankton tows) all department waters and the Kansas/Missouri River at KC for presence of zebra mussels.

Numerous ANS press releases were produced to inform the public about various ANS.

Continue to include large section in fishing regulations dedicated to ANS.

Conducted boater surveys as part of the 100th Meridian survey program.

Surveyed silver carp in the Kansas River

Present ANS information to outdoor groups including anglers, boaters, sailors, and college students.  
Distribute ANS prevention materials to registered fishing tournaments.  
Zebra mussel information was posted on popular fishing websites.  
Stop Aquatic Hitchhiker signs maintained at all boat ramps across Kansas.  
Distributed educational material to Kansas bait dealers about the emerging fish virus Viral Hemorrhagic Septicemia (VHS).  
Diploid grass carp were added to the prohibited species list.  
HACCP training was provided to multi-agency and multi-state natural resource management staff.  
HACCP plans have been written for stream survey crews as well as fish hatchery operations.  
Human dimension research is being conducted to evaluate baitfish use in Kansas and how to eliminate this vector for ANS spread.  
Human dimension research is being conducted to determine Kansas boater knowledge of ANS and activities related to preventing ANS spread.  
Asian tapeworm was discovered in the wild.  
Largemouth bass virus was discovered in the wild.  
Eurasian watermilfoil was discovered in several new locations.  
Wild fish health testing is being conducted.  
A multi-agency VHS Task Force has been formed to prevent its spread into Kansas.  
Assist several communities with ANS infested water sources outline necessary management techniques.  
ANS Coordinator serves as Vice-Chair of the Western Regional Panel on ANS.  
Designed and placed informational signage at infested waters.

The primary programmatic need is for additional funding for ANS management. Available funds limit all ANS activities within the program. Continual drop in federal funds through the ANSTF limits funds available for operations and are predicted to be inadequate to cover the salary of the ANS Coordinator. More stable funding is essential for continuation and success of the program.

### **Kentucky (Ryan Oster, Kentucky Department of Fish and Wildlife Resources)**

Kentucky has a final draft of its ANS Management Plan virtually completed, just need to incorporate a very small number of comments from a few reviewers. Once this is completed (which should be done prior to this meeting), we will place the ANS Management Plan on the Kentucky Department of Fish & Wildlife Resources webpage for a 30-day "Public Comment" period. Once the comment period is complete, we will incorporate any public comments and then submit the ANS Management Plan to the Federal ANS Task Force. In the immediate future, we will begin working on a Terrestrial Nuisance Species (TNS) Management Plan.

As far as aquatic nuisance species in the state, we continue to see large numbers of silver and bighead carp in the lower reaches of the Ohio River, lower Tennessee River (below Kentucky Lake), and lower Cumberland River (below Lake Barkley). Asian carps are present in both Kentucky Lake and Lake Barkley as a result of migration through navigational locks in both systems. *Didymosphenia geminata* "rock snot" has been found in our premiere trout tailwater fishery (Cumberland tailwater below Lake Cumberland) and we have begun efforts to educate the public about its presence and

how best to prevent its spread to other trout systems. We continue to stay alert concerning the spread of VHS into the state from outside sources.

### **Minnesota (Submitted by Jay Rendall, Minnesota Department of Natural Resources)**

An increasing number of waters on the Canadian border are infested with spiny waterfleas. In fall 2007, zebra mussels were found in a chain of four lakes in the Twin Cities area, most likely due to water diversion. An adult bighead carp was found in Lake Pepin (Mississippi River). Brazilian elodea was found in a Minneapolis lake, likely the result of an aquarium dumping. Eurasian watermilfoil was discovered in Union Lake, the first infestation in northwest Minnesota.

In response to these new infestations, MN DNR and its partners have undertaken new prevention and management efforts in 2007. MNDNR in collaboration with Sea Grant, Extension, U.S. Forest Service, Wildlife Forever, U.S. Fish and Wildlife Service, and others used billboards, radio and newspaper ads, news releases, brochures, stickers, AIS cards, and lawn banners for statewide implementation of the *Stop Aquatic Hitchhikers!*<sup>TM</sup> campaign. Interagency collaboration by MNDNR, MN Sea Grant, NPS-Voyageurs National Park, Canadian Fisheries and Oceans, and local groups to raise public awareness featuring the *Stop Aquatic Hitchhikers!*<sup>TM</sup> logo and messages along the northern border to help curb the spread of spiny waterfleas.

In October, officials at the St. Croix Weigh Station and DNR conservation officers observed and responded to the illegal movement of zebra mussels through the state. A North Dakota company hauling a piece of pumping equipment from a reservoir in Vermont had its trailer impounded in Minnesota when it was found the pump contained an estimated 5,000 - 10,000 zebra mussels. The officers ordered the pump to be cleaned before it was moved through the state.

MNDNR and MN Sea Grant have been involved with the several entities on issues related to viral hemorrhagic septicemia (VHS). MNDNR has drafted a VHS plan and also developed a state plan to prevent introduction of Asian carp into the state that 'steps down' parts of the national Asian carp plan ( see [www.dnr.state.mn.us/invasives/aquaticanimals/asiancarp/index.html](http://www.dnr.state.mn.us/invasives/aquaticanimals/asiancarp/index.html)).

MNDNR's Invasive Species Program funding will increase to over \$4 million per year allowing for: greatly increased enforcement – adding 10 Conservation Officers (5 FTEs) in FY09; expanding watercraft inspections; terrestrial management on DNR lands; prevention grants; and aquatic plant management grants.

Sea Grant released a new pocket guide, *A Field Guide to Fish Invaders of the Great Lakes Region*, which compares invasive fish to native look-a-likes to accompany AIS-HACCP training workshops and materials. The DNR's annual report on invasive species for calendar year 2007 is available at:  
<http://files.dnr.state.mn.us/eco/invasives/annualreport.pdf>.

### **Mississippi (Dennis Riecke, Mississippi Department of Wildlife, Fisheries and Parks)**

Past & Current Activities

Represented the Mississippi Department of Wildlife, Fisheries & Parks on the Mississippi Aquatic Invasive Species Task Force. Between October 2004 and November 2007 seven task force meetings have been held. Mississippi decided to use Louisiana's plan as a template and hired the authors of the Louisiana plan (Tulane / Xavier Center for Environmental Research personnel) to coordinate plan development.

Coordinated future funding for continuing the development of a State Management Plan for Aquatic Invasive Species. Reviewed drafts of the plan and submitted comments on the plan. Work on plan was stalled for 1 year (2007) until additional funding was secured.

Represented the Mississippi Department of Wildlife, Fisheries & Parks at the Gulf & South Atlantic Panel on Aquatic Invasive Species meetings held twice a year since 2004.

Attended Hazard Analysis Critical Control Points Workshop in August 2006 in Memphis, TN sponsored by the Southeast Aquatic Resource Partnership.

Solicited volunteers for Taxonomic Expert Database.

Submitted GSARP Research Priorities for Panel and Mississippi.

Attended Mississippi Exotic Pest Plant Council Meetings to inform them of Panel and State ANS efforts and have them review nonnative plants in Mississippi list generated by USGS.

Authored "Alien Invaders" article which was published in *Mississippi Outdoors* magazine - March/April 2007 issue.

Recommended that the Miss. Dept. of Agriculture & Commerce deny the issuance of aquaculture permits for the culture of Red Claw Crawfish until a risk assessment and through literature review are submitted by the applicants.

Purchased rotenone and helped plan the pond eradication work performed by Pam Schofield, USGS in October 2006 at the former Custom Pack facility which cultured tilapia and was destroyed after Hurricane Katrina.

In 2006, we received 10,000 copies of the *Help Stop Aquatic Hitchhiker* brochures from the Mississippi River Basin Panel on Aquatic Nuisance Species which we distributed to our 19 State Fishing Lakes and 7 Agency district offices.

In 2007, 10,000 *Bighead and Silver Carp WATCH* identification cards received from the Mississippi River Basin Panel on Aquatic Nuisance Species which we distributed to our 19 State Fishing Lakes and 7 Agency district offices.

The Mississippi Department of Wildlife Fisheries and Parks used the logo, the picture of the boat trailer with the aquatic plants hanging off of it and the bullet statements under the text: "When you leave a body of water" to print 81,000 cards in August of 2005. We reprinted 81,000 cards in June 2007. These cards were distributed to 24 state fishing lakes and 7 MDWFP offices and mailed to each person who registered a boat in Mississippi or renewed their boat registration. The logo and text have appeared in 375,000 copies of our annual Outdoor Digest of Hunting, Fishing and Boating regulations since the 2005-2006 edition (3 years - 2005/2006; 2006/2007; 2007/2008).

The Mississippi Department of Wildlife Fisheries and Parks is a partner organization for the USFWS Stop Aquatic Hitchhikers! campaign and the Habitattitude campaign. Links to both campaigns are on the department's website ([www.mdwfp.com](http://www.mdwfp.com)). Under the Mississippi Museum of Natural Science portion of our website there is a section on impacts of exotic species and informational links.

Links to the Mississippi River Basin Panel on Aquatic Nuisance Species and the Gulf and South Atlantic Panel on Aquatic Invasive Species websites are on the department website.

The Mississippi Museum of Natural Science has a permanent exhibit on exotic species.

The Mississippi Department of Marine Resource has been monitoring and treating Giant Salvinia (*Salvinia molesta*) in the Pascagoula River system.

The Mississippi Department of Marine Resource has secured Mississippi Coastal Impact Assistance Program funding to hire a Conservation Resource Biologist under a 4 year contract to form an Aquatic Nuisance Species Advisory Council and begin implementation of action items contained in the Mississippi State Management Plan for Aquatic Invasive Species.

#### Future Activities

Complete the Mississippi State Management Plan for Aquatic Invasive Species in 2008 and submit it to the Governor, Regional Panels and National ANS Task Force for comment .

Compose freshwater fishing bait regulations to specify what bait can be legally, sold, possessed, transported and used in Mississippi.

Amend administrative Public Notice to prohibit the possession of live snakeheads and Asian swamp eels in Mississippi. Currently only live walking catfish and piranhas are prohibited in Mississippi.

Adopt list of approved, restricted and prohibited species as specified in MS Code 49-7-80. Amend list of approved, restricted and prohibited species as specified in the public notice that regulates aquaculture activities in Mississippi.

Pursue licensing of retail bait outlets selling live freshwater fishing bait.

Modify the *Help Stop Aquatic Hitchhiker* brochures developed by Minnesota and distributed by the Mississippi River Basin Panel on Aquatic Nuisance Species to include contact information for the states in the Gulf and South Atlantic Panel on Aquatic Invasive Species. Have it translated into Spanish for use by Mexico. Print and distribute to member states and Mexico.

#### **Oklahoma (Ashley Foster, Oklahoma Department of Wildlife Conservation)**

##### Status of Oklahoma ANS Management Plan

To date, the ODWC has created and filled an ANS coordinator position. A state plan has been drafted, and subsequently two stakeholder meetings have been held. The third and last stakeholder meeting is scheduled for February 2008. After comments from the last stakeholder meeting are received, a second draft of the plan will be sent to the ANSTF for a friendly review by 15 March 2008.

##### Golden Algae

A fish kill occurred in the upper Red River arm of Lake Texoma in March 2007. The ODWC continues to monitor golden alga cell counts on Lake Texoma. To date, the ODWC has funded \$2.5 million in golden alga research, and has committed another \$3.5 million over the next five years.

##### Hydrilla

Hydrilla has been found in three state lakes: Sooner, Arbuckle, and Murray. The founding population at Sooner has been treated with herbicide, and monitoring continues.

##### Zebra Mussels

An Oklahoma Zebra Mussel Task Force meeting was held on 10 August 2007. At this meeting it was stated that "there was a major die-off in 2006 with very low numbers in 2007" in lake Oologah.

Regarding the Zebra Mussel Die-Off in Kansas and Oklahoma  
(Information obtained from Everett Laney, Biologist, USACE)

It's been agreed upon that many of the Zebra Mussels were nearing the end of their life cycle when the two hot and dry 2005-2006 summers hit. The two hot summers were probably enough, since all age classes experienced a significant die-off. The survivors, although few, reproduced throughout the mild and wet 2007 year. However, the high flows in 2007 probably hindered optimum reproduction survival, since many veligers probably settled at high elevations and were stranded when the waters receded. We do expect the densities to rebound eventually, especially if this 2008 year is mild also. If 2008 is another hot one, the population may be set back again.

#### HACCP Plans

HACCP plans were drafted in 2006, and went in effect for 2007 for the following ODWC activities:

- Electrofishing
- Hatchery Pond Production
- Gill Netting, Trap Netting, and Seining
- Habitat Development
- Water Quality Testing
- Bass Tournament Fish Handling
- Fish Kill Investigations
- Fish Transfers

#### Outreach

The Oklahoma Aquarium in Jenks has created a display to educate the public about ANS in Oklahoma. Zebra Mussels are the key emphasis of the display.

#### **South Dakota (Submitted by Andy Burgess, South Dakota Game, Fish and Parks)**

The past year has been an eventful one for ANS management in South Dakota. During 2007, South Dakota carried out its first control measures for ANS infestations. In Eastern South Dakota, Brittle Naiad has been found in a heavily used lake and chemical spot treatment was carried out by SD Game, Fish and Parks (SDGFP) aimed at its potential spread. SDGFP along with SD State University have been performing nutrient treatments to a section of Rapid Creek in the Black Hills area as a way to increase overall stream productivity in this designated trout stream that has been strongly impacted by *Didymosphenia geminata* blooms. An interagency committee has been formed to begin work on an ANS management plan for SD. Two meetings have been held and a plan outline has been formed from which a first Management Plan draft will be created in the months to come. In conjunction with this effort, SDGFP has contracted with SDSU to draft a Risk Assessment Plan for the State which will inform planning and management as the state plan is drafted. On Jan 3, SDGFP hosted a meeting with representatives from the Commercial Bait industry to discuss changes in bait import regulations as well as address concerns for VHS and other ANS. On Jan 4, personnel from MN Sea Grant provided a day-long AIS HACCP training for SDGFP Fisheries, SDSU researchers, and commercial bait and hatchery owners and operators. Sampling for zebra mussel adults and veligers have failed to find evidence indicating their spread below Fort Randall and Gavins Point dams on the MO River during 2005-2006. Sampling of 2007 veliger samples is currently underway.

**West Virginia (Frank Jernejcic, West Virginia Division of Natural Resources)**

West Virginia has not conducted any specific ANS-related activities other than routine fishery surveys and permit reviews.

**Wisconsin (Submitted by Ron Martin, Wisconsin Department of Natural Resources)**

A Port of Milwaukee onshore ballast water treatment feasibility study report was completed in mid-October by Brown and Caldwell via a contract with the WDNR. The ballast water would be treated using filtering screens and ultraviolet light to kill organisms. The onshore treatment offers a less expensive option to address the ballast water problem for the smaller ships that enter Wisconsin ports. Governor Doyle recently dedicated \$6 million to construct ballast water treatment systems (like the kind designed for the port of Milwaukee) for the harbors of Milwaukee, Green Bay and Superior in order to address the problem of ballast water in Wisconsin.

Hydrilla was discovered in late summer in a small pond in northeast Wisconsin. The WDNR, the Department of Ag, Trade, and Consumer, local county officials and the landowner developed a plan to eradicate the invasive plant. The pond was chemically treated with an aquatic herbicide and other area waters were surveyed to assure that the plant hadn't spread to nearby waters. The pond was drawn down for the winter months with the goal being to freeze the hydrilla tubers and propagules.

The WDNR has completed a draft rule on invasive species control. The rule classifies existing and new invasive species based on established criteria. The rule places restrictions on the purchase, sale, possession, transportation, and cultivation of invasive species that are classified as prohibited or restricted. It allows for the conditional possession of some invasive species when authorized by a permit from the WDNR. The WDNR has just completed holding public meetings on the draft rule to obtain input from stakeholders and interested parties. The rule will be revised based on the public comments received and then taken to the DNR's Natural Resources Board in April 2008.