

## **Regional Panel Recommendations and Activities for the Aquatic Nuisance Species Task Force Meeting, North Charleston, South Carolina, April 29-30, 2008**

### **Panel Name – Mississippi River Basin Panel on ANS (MRBP)**

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### **High-Priority and/or Emerging Regional Issues:**

- The Aquatic Nuisance Species Task Force (ANSTF) should request that the U.S. Fish and Wildlife Service (USFWS) move forward with immediate implementation of the Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States (Plan). At the November ANSTF meeting, the USFWS said it would begin implementation of the Plan and host the first meeting of an implementation committee in February 2008. The MRBP recognizes that the USFWS Branch of Invasive Species has had staffing challenges this year; however, this important first step in implementing the Plan has not occurred to date. The MRBP fully supports the Plan and considers its implementation a high priority regional and national issue. Implementation needs requiring prompt attention include establishing a full-time coordinator position dedicated to implementation of the Plan, establishing an implementation committee, and exploring options to secure and direct the stable, long-term funding necessary to fully implement the Plan.

### **Key ANS activities from November 2007 to April 2008:**

#### **Panel**

- Jerry Rasmussen, the MRBP Coordinator, retired in January 2008. Jerry was with the MRBP since its inception. Greg Conover has recently replaced Jerry as the Mississippi Interstate Cooperative Resource Association (MICRA) Coordinator, and will also take on the role of MRBP coordinator.
- The MRBP held a meeting in Nashville, Tennessee, on January 24-25, 2008. This was the seventh meeting of the MRBP since becoming a Regional Panel in 2003. The meeting included a workshop to develop a State Model Risk Assessment and Risk Management Process (see State/Interstate activities below).
- The MRBP and MICRA are planning an Incident Command System (ICS) mock exercise using finding VHS in the Mississippi River Basin as the scenario. Goals of the exercise are to train attendees in rapid response using the ICS, to better prepare Mississippi River Basin natural resources agencies for a VHS finding, and to coordinate actions that minimize the spread of VHS from the Mississippi River and its tributaries to inland waters. All Mississippi River Basin state natural resources agencies will be invited to participate along with federal agencies and private organizations.

#### **State/Interstate**

- State Model Risk Assessment and Risk Management Process - This model risk assessment and risk management process (Process) was developed as a tool for use by state natural resources agencies to help determine classifications of species and the

need for management actions. The MRBP developed this Process so all its members and associates could provide their expertise in its development. Neither the entire Process, nor any part of it, is compulsory for any state agency to adopt.

- See attached member reports from MRBP January 2008 meeting.

**Panel Recommendations to the ANS Task Force:**

1. Voluntary Codes of Conduct – The Saint Louis Declaration of 2001 resulted in the original Voluntary Codes of Conduct. Five sets of codes were developed at that time for the following groups: government agencies, nursery professionals, the gardening public, landscape architects, and botanic gardens and arboreta. The Saint Louis Codes of Conduct were an important first step in responding to the global invasive plants species problem. This is a non-regulatory approach to reduce the introduction or spread of invasive species. The MRBP recommends that the ANSTF take the lead on an effort to develop Voluntary Codes of Conduct for aquatic plant and animal related industries such as the aquarium industry, bait industry, and the water gardening industry. The ANSTF could also modify the codes developed for government agencies to be more applicable to state and federal agencies working on aquatic nuisance species issues.
2. Common Carp - The ANSTF should adopt a resolution recognizing the common carp *Cyprinus carpio* as an aquatic nuisance species with national impacts. The common carp is one of the first and most damaging invasive fish in freshwater systems, especially inland shallow lakes, rivers, and wetlands, in the United States. Although this species is well-established, there are strategies for controlling its abundance in closed bodies of inland waters using integrated pest management procedures. A national control plan is not warranted; however, national support is needed to coordinate local efforts to control common carp by clarifying the problems posed by this species. The MRBP is willing to help organize a workshop to discuss and coordinate basic and applied research on the common carp and to provide space on the MRBP website dedicated to common carp in coordination with Asian carps. Government and private groups should also be encouraged to support long-term, innovative research on the common carp and other related invasive species.

## **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.