

Pennsylvania Invasive Species Council
**Aquatic Invasive Species
Management Plan**



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As Shamelessly Stolen From Sarah Whitney
PA Department of Environmental Protection
Pennsylvania Sea Grant
Office of the Great Lakes



Invasive Species of Concern in PA



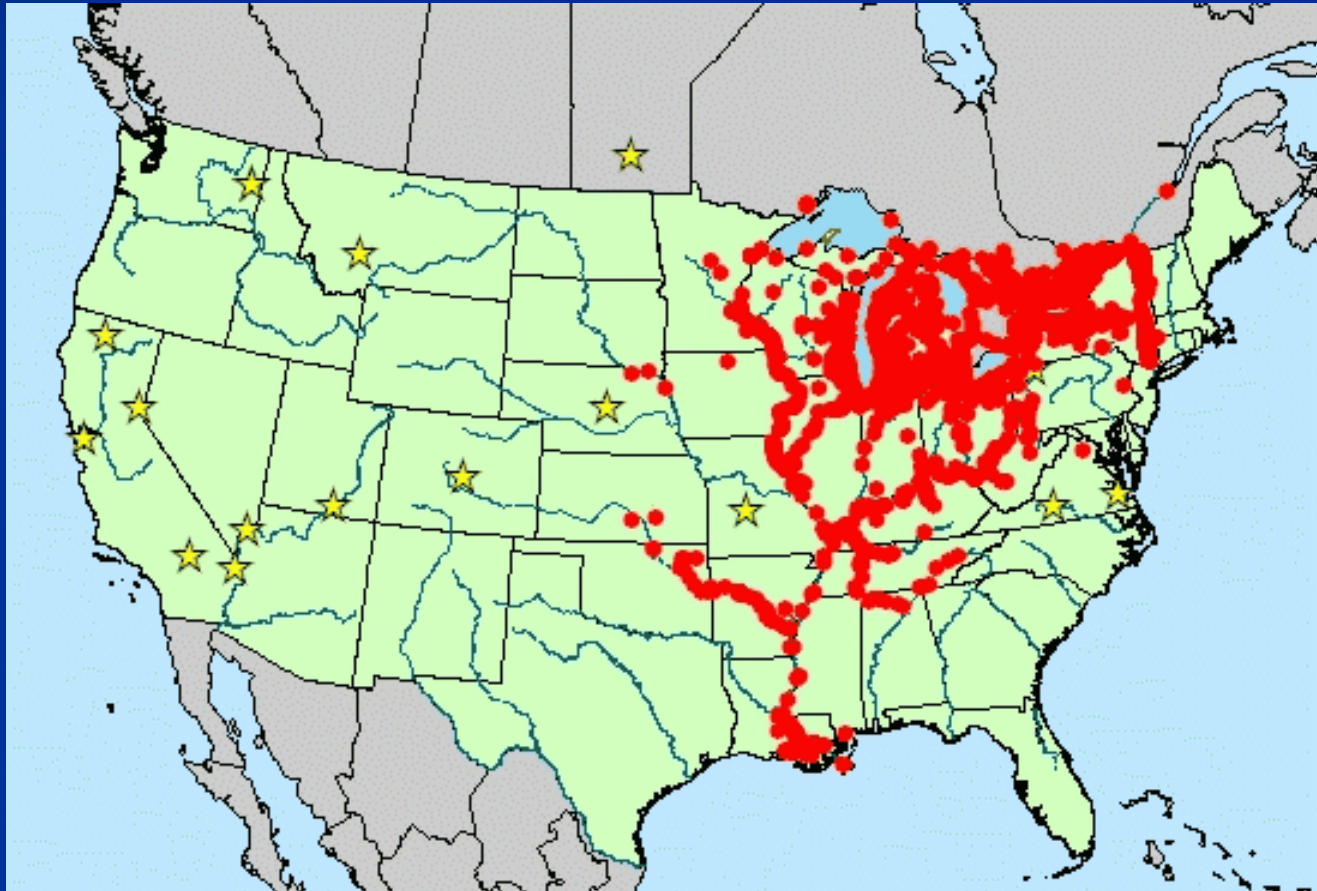
Mollusks

- *Zebra mussel*
- *Quagga mussel*
- *Asiatic clam*



Zebra Mussel Range Expansion

Credit: USGS



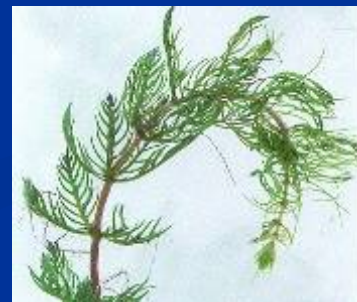
ZEBRA MUSSEL RECORDS IN PENNSYLVANIA



Invasive Species of Concern in PA

Plants

- *Purple loosestrife*
- *Phragmites*
- *Japanese knotweed*
- *Eurasian watermilfoil*
- *Water chestnut*
- *Hydrilla*



Invasive Species of Concern in PA

Fishes

- *Round Goby*
- *Sea Lamprey*
- *Flathead Catfish*
- *Northern Snakehead*



PA Invasive Species Council



Executive Order 2004-1

■ Purpose:

- Advise the Governor on and direct the development and implementation of a **comprehensive** state invasive species management plan.
- Provide guidance on prevention, control, and rapid response initiatives.
- Facilitate coordination among federal, regional, state, and local efforts.

Setting the Road Map:

- A Workshop for Developing Pennsylvania's Invasive Species Management Plan
- October 26-27, 2005
- 65 participants

Setting the Road Map: A Workshop for Developing Pennsylvania's Invasive Species Management Plan



October 26, 2005 10 a.m. - 5:30 p.m., and
October 27, 2005 9 a.m. - 12:30 p.m.

Hilton Garden Inn, 1221 East College Avenue, State College, Pennsylvania, United States: 16801

Who should attend: Members of the Pennsylvania Invasive Species Council, resource managers, policy makers, recreational and commercial user groups, conservation and environmental groups, and others interested in developing a plan to prevent and control the introduction and spread of aquatic and terrestrial invasive species in Pennsylvania.

Why: Each year, invasive species impose significant impacts to the ecological and economic health of Pennsylvania. Zebra mussels have invaded Lake Erie and some inland waters, and kudzu and giant hogweed threaten agricultural lands and natural areas around the Commonwealth. In addition, Pennsylvania's economy and biodiversity are threatened by the potential invasion of emerald ash borer and Asian longhorned beetle as well as other unknown species which could cause significant additional damage.

Coordination of management activities, with an emphasis on prevention, early detection, and rapid response, will increase the effectiveness of tackling our invasive species problems. A coordinated management plan will also help leverage federal funding. The workshop will highlight success stories, and identify gaps, unmet needs and means to overcome obstacles that impede the prevention and control of invasive species within Pennsylvania. This workshop will support the goals of Executive Order 2004-1 to develop and implement a comprehensive invasive species management plan for the Commonwealth of Pennsylvania.

Registration: This workshop is free, however pre-registration is required. The registration deadline is Tuesday, October 11, 2005. Please email, mail or fax your completed registration form to Sarah Whitney, PA Sea Grant, 1450 Edgmont Ave., Suite 150, Chester, PA 19013, email: swhitney@psu.edu, fax: 206-202-5212. Please contact Sarah Whitney (telephone 610-304-8753) if you have further questions.

Hotel Reservations: A block of rooms has been reserved at the Hilton Garden Inn State College, 1221 East College Avenue, State College, Pennsylvania, United States 16801. Phone: 814-272-1221. The rate is \$89 single or \$99 double, plus tax. The block is reserved under the group name Pennsylvania Sea Grant; rooms will be held until Tuesday, October 4, 2005.

Sponsored By: The workshop is organized by Pennsylvania Sea Grant with planning support from the departments of Agriculture, Environmental Protection, Conservation and Natural Resources, Health, and Transportation, and the Fish and Boat Commission and Game Commission. Funding for the workshop was provided in part by the Great Lakes Commission.

PA Invasive Species Council

- Working Groups –
 - AIS Management Plan
 - Terrestrial Management Plan
 - Funding



Developing the Pennsylvania AIS Management Plan

- **Goal:** To minimize the harmful ecological, economic, and human health impacts of aquatic invasive species through the prevention and management of their introduction, expansion and dispersal into, within and from Pennsylvania.

Developing the Pennsylvania AIS Management Plan

- **Aquatic invasive species:** Non-native species that threaten the diversity or abundance of native species, the ecological stability of infested waters, human health and safety, or commercial, agricultural, aquacultural, or recreational activities dependent on such waters.

Developing the Pennsylvania AIS Management Plan

- A. Based on ANSTF Guidance
- B. Based on Great Lakes Model State Management Plan
 - Introduction
 - Existing Authorities and Programs
 - AIS in Pennsylvania
 - **Management Objectives, Strategies and Actions Proposed**
 - Program Implementation and Evaluation

Pennsylvania AIS Management Plan

- **Objective 1: Leadership, Policy and Coordination**

Provide leadership and coordination for AIS issues in Pennsylvania among local, state and federal agencies and organizations, and ensure that state policy effectively promotes the prevention, early detection and control of aquatic invasive species in Pennsylvania.

- **Objective 2: Prevention**

Identify vectors and mechanisms and minimize the introduction and spread of aquatic invasive species into and throughout Pennsylvania.

Pennsylvania AIS Management Plan

- **Objective 3: Early Detection**

Detect new introductions of aquatic invasive species in Pennsylvania before they have a chance to become established in the ecosystem.

- **Objective 4: Rapid Response**

Develop a system for early response to eradicate or contain target species before the species can become permanently established.

- **Objective 5: Monitoring and Inventory**

Monitor and inventory existing infestations of aquatic invasive species in Pennsylvania.

Pennsylvania AIS Management Plan

- **Objective 6: Control and Management**

When feasible, control and eradicate established aquatic invasive species that have significant impacts in Pennsylvania. Reduce the harmful effects resulting from AIS infestations by managing those that cannot be eradicated.

- **Objective 7: Research and Risk Assessment**

Increase research efforts on AIS species, issues and impacts to support AIS management, control and eradication in PA.

- **Objective 8: Education and Outreach**

Educate the general public and people involved in the business, trade, research and government sectors about AIS issues so that they do not facilitate the introduction or spread of AIS species.

Priority Actions

- **Hire a coordinator** (1.0 FTE) for the Pennsylvania Aquatic Invasive Species Program. Responsibilities will include coordinating PISC AIS subcommittee and interagency activities and reporting progress on implementing the plan on an annual basis. The AIS Program Coordinator will work with subcommittees and other agencies and partners to review functional roles, gaps in authority, and develop an integrated annual work plan and budget (Action 1B1).
- Develop a **model aquatic rapid response plan** for Pennsylvania. The Plan should address such components as organizational structure and communication, authority, outreach, decision support and rapid scientific assessment, and management options for control/eradication, implementation, adaptive management, and funding (Action 4A1).
- **Develop monitoring programs specific to pathways** and geography for high priority aquatic invasive species using agency, stakeholder and/or volunteer resources (Action 5D1).

Priority Actions – Cont.

- Through PISC, work with the Governor's Office, Legislature and other Council members and partners to **establish a permanent funding mechanism** for AIS management activities (Action 1D1).
- **Target outreach efforts** and prioritize key audiences to promote understanding of invasive species dispersal pathways and current risk assessments (Action 2E1).
- **Engage those conducting field work to be aware of key invasive species** that they may come across. Conduct training for field staff to ensure that they can easily identify aquatic invasive species. Implement a statewide monitoring network to assist in the early detection and monitoring of aquatic invasive species (Action 3B1).

Priority Actions – Cont.

- Facilitate the development and use of **research-based risk analysis** to determine the level of risk associated with introductions of certain potentially invasive aquatic species, with respect to the probability of entry through multiple pathways, potential to establish, ability to spread once established, and associated economic and ecological values, benefits and/or impacts (Action 2A1).
- **Implement cost-benefit analyses to prioritize control efforts** for both species and sites. Weigh all proposed actions against the “no-action” alternative (Action 6B1).

Priority Actions – Cont.

- **Partner** with AIS management programs in nearby states to facilitate the sharing of data and coordination of management activities. Pay special attention to “upstream” and “downstream” neighboring states to prevent the introduction and spread of aquatic invasive species (Action 1C1).
- **Develop a common AIS list(s)** using a defined process and standards. The process should address such topics as the process for adding and deleting species from the list over time, the criteria to be used for making listing decisions, the status the list has, if any, in regulatory proceedings, and the trade-offs between a legislatively generated list and one maintained by agency discretion and rule-making (Action 1C2).

Status

- Finalized in October, 2006
 - 1 year after SMP Workshop
- Signed by Governor Rendell November 3, 2006
- Approved by Task Force February 2007



WHEN A HORROR FROM THE DEEP HUNTS ON LAND, THERE IS NO PLACE TO HIDE

SCI FI PICTURES PRESENTS

SNAKEHEAD TERROR

STARRING BRUCE BOXLEITNER AND CAROL ALT

■ Start implementing the PA AIS Management Plan!

Lessons Learned

- Individuals are key to the process
- Be careful what you wish for
- Clear language is needed
- The ISMP elves are on permanent vacation