

# Zebra Mussel + AIS

## Douglas County Citizen's Committee

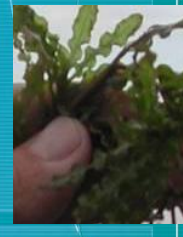
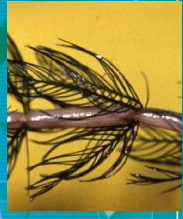
Summary Report & Recommendations  
Threats & Prevention Measures  
April 7, 2011

# Aquatic Invasive Species (AIS)

Definition:

Aquatic invasive species means a non-native species that can naturalize and:

1. Potentially cause economic, environmental or harm to human health; or
2. Potentially threaten natural resources or the use of natural resources in the county



# Purpose of this report

Update on Douglas County ZM + AIS activity

Update on DNR action

Update on MN Legislative action

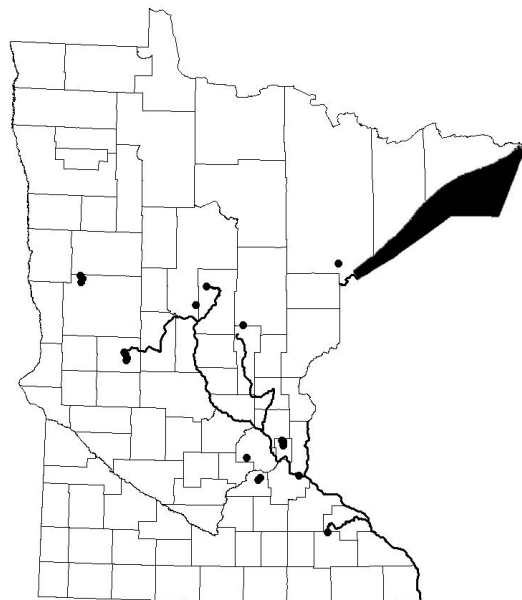
Seek action to reduce the risk of spreading AIS

- Recommend Containment Measures
- Recommend Eradication Measures

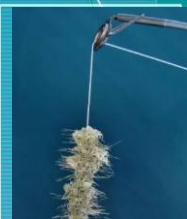
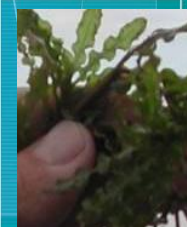
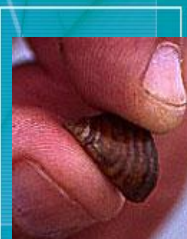
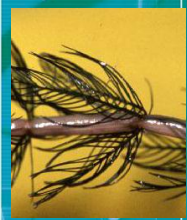


# Douglas County Zebra Mussel Infestations

- Lake Darling
- Lake Carlos
- Lake Le Homme Dieu
- Lake Geneva
- Lake Victoria

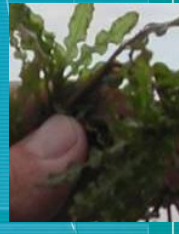


In essence: The CHAIN



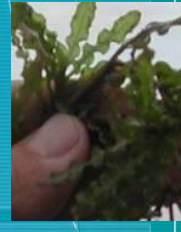
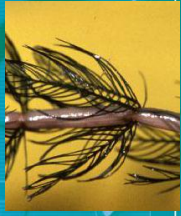
# Consequences of AIS

- **Ecology:** AIS compete with & displace native species
- **Recreation:** AIS degrade water quality & beaches interfering with recreation
- **Economics:** AIS damage & control costs in the U.S. is \$\$billions a year



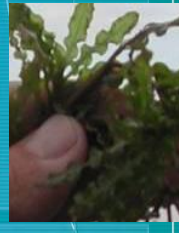
# How are AIS moved?

- **Human activity**
  - Intentional or
  - Unintentional transport



# Zebra Mussels (*Dreissena polymorpha*)

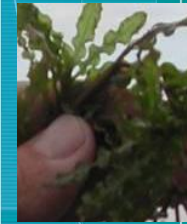
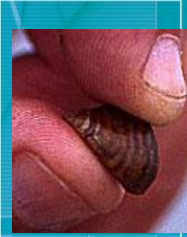
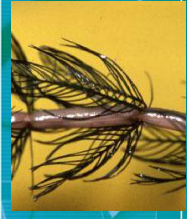
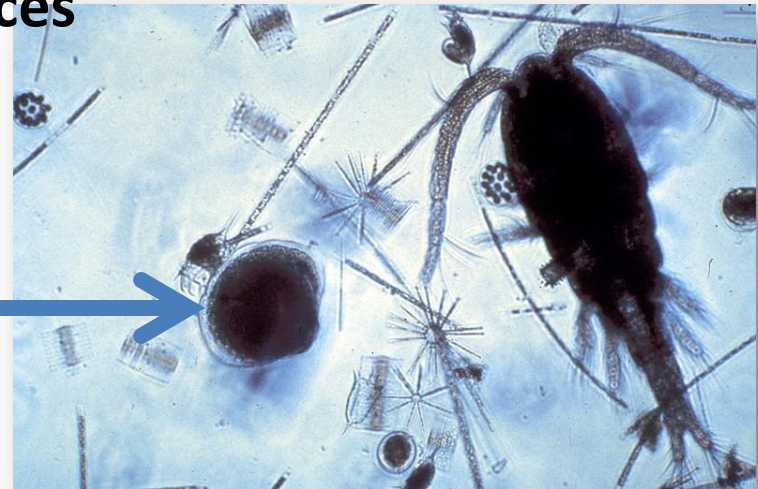
- **Native to Russia**
- **Filter feeders**
- **Disrupt food web dynamics**
- **Unique bivalve threads**
- **Attach to hard surfaces as boats, lifts, water pipes, docks, and rocks.**



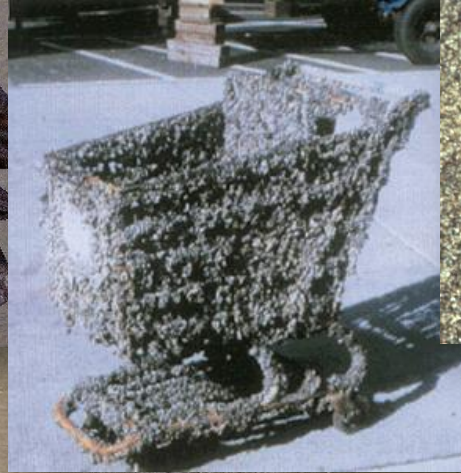
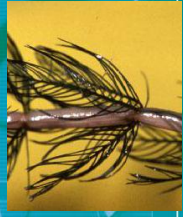
# Zebra Mussel Reproduction

- Females broadcast up to 1,000,000 eggs per year
- Reproduction at water temperatures near 54° F
- Veliger stage (feeding organ & shell forms)
- Settling stage (byssal threads have formed)
- Attach to hard surfaces

Veliger



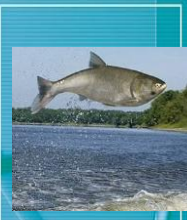
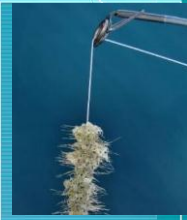
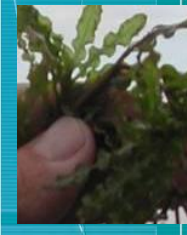
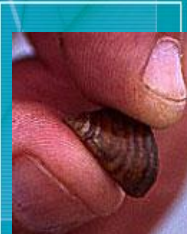
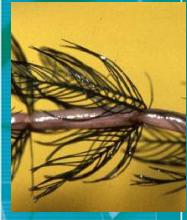
# Zebra Mussels (*Dreissena polymorpha*)



# Containment: Stop the Transport

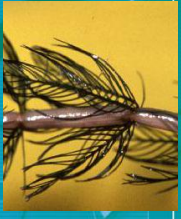
## Zero transport from / to all lakes

- **Press for pressure washing at accesses**
- **DNR partnered inspections**
- **Enforcement of 84D**
- **Public education**
  - **At public accesses**
  - **Schools, organizations, media, etc.**
- **PILOT: Washing station at Lake Geneva**



# Support MN Legislative Action

- **Support Bill SF0847**
- **Request funds from the Legacy Act be devoted to control, containment, eradication**
- **Request legislation to provide the DNR with aggressive tools to halt the spread of zebra mussels (inspection, education, and enforcement)**



# ZM control: a Douglas County priority

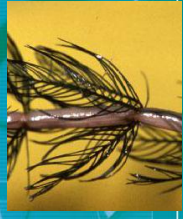
Discuss with County Commissioners their unanimous support to aggressively address the challenges of zebra mussels in Douglas County – and to demonstrate their commitment by all signing a letter of declaration.

This letter would state

- commitment to drafting local legislation that would
  - facilitate any and all testing of new methods, equipment, techniques, biological agents and chemicals that could lead to the absolute control if not the out right eradication of zebra mussels within the county.

Douglas County Commissioners might clearly voice their determination to be the first in the state with 100% inspection and decontamination requirements of all infested boat landings.

- And, encourage all Lake Association presidents sign this declaration letter with them.



# A demonstration of urgency

As a demonstration of urgency, Douglas County will initiate and fund small but meaningful pilot projects addressing decontamination and eradication on at least one Douglas County lake.

Funding of a pilot project through a combination of private and local government funds would vividly demonstrate our sense of urgency and suggest to our legislators that Douglas County will provide the greatest return on their ZM eradication investment.

We, the DCCC, recommend the first pilot project be Lake Geneva (north access).

We are prepared to discuss potential funding sources.



# One fun, easy step for all ages

Boaters, anglers, or aquatic recreational users all can benefit from this short, on-line educational training designed to teach four simple steps that you can follow to Stop Aquatic Hitchhikers! This training takes only a few minutes – and, at the end each gets a certificate (right to your printer) to demonstrate that you are doing your part.

Go to: <http://www.100thmeridian.org/default.asp>



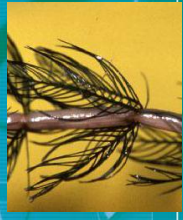
# Let us resolve to take action by the end of April 2011

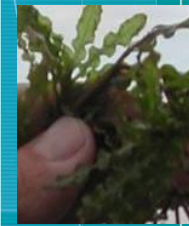
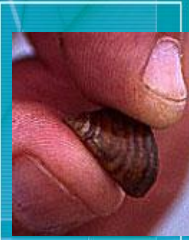
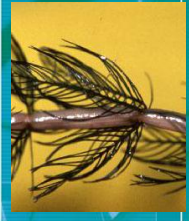
April 12, 2011, Douglas County Board of  
Commissioners regular meeting

- Provide summary report and items for their  
study and discussion

April 26, 2011, Douglas County Board of  
Commissioners regular meeting

- Action on recommendations in time for the  
2011 open water season





Thank you.