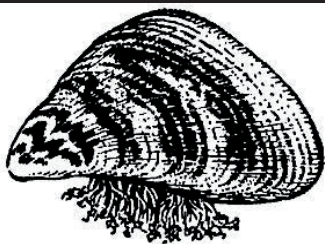


KEEP THE WEST



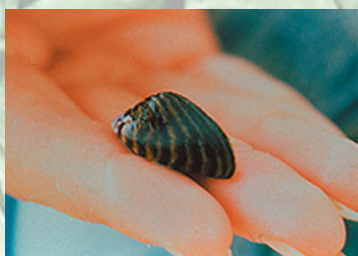
A ZERO ZEBRA



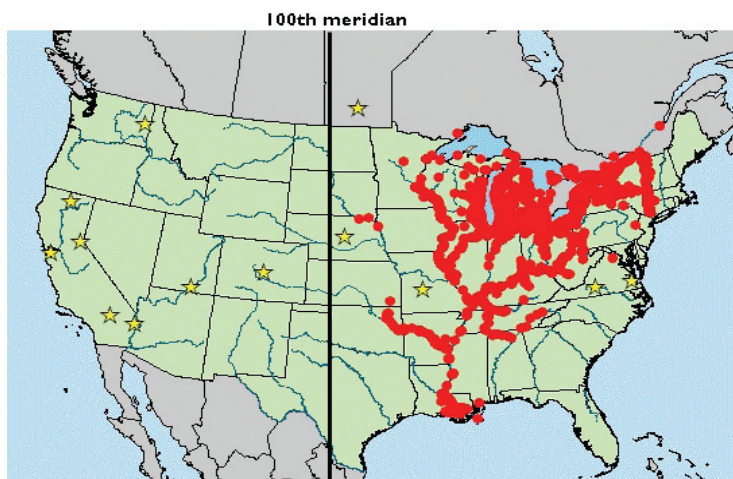
ZONE

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The zebra mussel poses a huge threat to the West. An invasive freshwater bivalve native to Russia, this species was first discovered in the Great Lakes in the late 1980s and has since spread to more than 20 states. This nuisance species has already caused billions of dollars worth of economic damage within the Great Lakes region alone. The westward spread of the zebra mussel could have a devastating effect on our economy and ecosystems.



Although not much larger than a thumbnail, rapid reproduction and its ability to attach to hard surfaces make the zebra mussel a detrimental species. Often found in vast densities, they can attach to each other, forming colonies up to one foot thick.



The red dots represent areas where water bodies are infested with zebra mussels. The yellow stars are located where live zebra mussels have been found on trailered boats coming from other areas.

Zebra mussel colonies in pipes constrict flow and reduce the efficiency of heat exchangers, power generators, fire fighting equipment, municipal water delivery systems, etc. In the West, hydropower facilities, irrigation systems, fish hatcheries, farms, golf courses, etc. risk serious infestations and billions of dollars in treatment costs.

Recreational boating and tourism can be affected as well. Mussels attached to hulls increase drag and damage engines. Shells and rotting mussels washed up after storms quickly degrade beaches. Fishing gear, dock pilings, swim ladders, etc. deteriorate rapidly when encrusted with mussels.

Fish and wildlife resources are also threatened. Colonization of rock cobble by mussels may impair the reproduction of salmonids and game fish. Zebra mussel colonies can consume nearly all of the microscopic plants and animals on which young game and forage fish depend on for survival.

Since their discovery in 1988, zebra mussels have spread from the Great Lakes region to more than twenty states. This rapid spread has been facilitated by canals, shipping traffic, and recreational boaters moving vessels and gear from infested waters to new locations that may have otherwise remained isolated.

The 100th Meridian Initiative, a cooperative effort, was formed by state, provincial, and federal agencies in order to halt the spread of zebra mussels.

For more information on how you can prevent further westward movement of zebra mussels and other invasive species please go to

www.100thmeridian.org

VOLUNTEERS NEEDED!

EARLY DETECTION IS CRITICAL

We are looking for volunteers with access to rivers, lakes or reservoirs to deploy zebra mussel colonization substrates. These substrates provide an ideal home for any zebra mussel larva floating by. We will provide the substrate and instructions. All you need to do is hang it off a dock or other structure, check it periodically, and report any suspicious looking organisms attached to the substrate.



It is important that we track the movement of zebra mussels as they move westward. Once a population becomes established it can be difficult, if not impossible, to eradicate it. Early detection of new populations is critical. With the help of volunteers we can set up an “early warning system” and be on the lookout for zebra mussels in the West.

WE NEED YOUR HELP!

Please fill out and mail in the card below if you are interested in volunteering or simply want more information on zebra mussels and other invasive species.

- I am interested in participating in the zebra mussel monitoring program. Please send me the colonization substrate and more information.
- I am not currently in a position to volunteer. However, I would like more information on invasive species threats to the West and other ways I can help

name _____

address _____

waterbody _____

e-mail (optional) _____

phone (optional) _____



Place
stamp
here

Center for Lakes and Reservoirs
Portland State University - ESR
Portland, OR 97207-0751