

HARMFUL ZEBRA MUSSELS IN MISSOURI RIVER COULD MEAN BAD NEWS FOR THE WEST

Zebra mussels could infest more western waters by clinging to recreational boats coming west for the Lewis and Clark Bicentennial

(PORTLAND, OREGON) -- The discovery of juvenile zebra mussels below two Missouri River dams in South Dakota has western water officials worried about a possible infestation in the West by this harmful species. They're asking boaters visiting the West for the Lewis and Clark Bicentennial to be extra vigilant about keeping their boats clean.

The zebra mussel is an exotic nuisance species native to the Caspian region of western Russia. It was most likely brought to the United States in the late 1980s in the ballast water of a foreign vessel. The zebra mussel damages ecosystems, native fish and shellfish, and has caused millions of dollars in damage to water intakes and pipes in 20 states in the East and the Midwest.

Until the discovery of juvenile zebra mussels in South Dakota last summer, the zebra mussel had not spread to western waters. The discovery is of particular concern because these mussels may have been transported into the Missouri River by recreational watercraft.

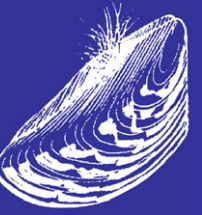
**This space reserved to list of the businesses participating in the
"Basin Watch" Program**

To see your business listed here in future editions, join us today!

PSMFC
Aquatic Nuisance Species Program
205 SE Spokane, Suite 100
Portland, Oregon 97202

Columbia River "Basin Watch" Newsletter

A 100th Meridian Partnership Program between resource managers, marinas and resorts and other water users to prevent the introduction of zebra mussels into the Columbia River



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What Is The Columbia River "Basin Watch" Program?

A team of scientists, managers and environmental leaders representing all of the involved state, federal and tribal agencies and a number of private organizations has been meeting for over a year in order to formulate a strategy to prevent the unwanted and unintended introduction of zebra mussels into the Columbia River Basin. Very early into this process, the team identified the need to work closely with those businesses that provide services to recreational boaters traveling from areas of North America that are already infested with zebra mussels, because it is almost certain that if an introduction occurs it will be from unknowingly transporting them on the hull, out-drive, trailer or from standing water located in the live-well or bilge of one of these boats.

I spent several weeks this summer traveling throughout the basin talking with and identifying all of those businesses most likely to have first contact with boaters that we have identified as presenting the highest risk. As a result of that work, we compiled a list of 190+ marinas, resorts, marine sales/ repair facilities and tackle shops that we hope will become public outreach and education partners in this critical effort to protect the natural resource and economic health of the Columbia Basin.

Here's what being a public outreach and education partner involves. First, if you are interested, please confirm your participation by calling Bill Zook at (360) 252-2700 or faxing him at (503) 595-3232. Once we have received your notification, I'll contact you by telephone and tell you about outreach materials and services we can provide to your business to make your participation as easy as possible. Once that has been determined, we will do everything in our power to support your continued participation by providing regular updates on issues of interest and by keeping you supplied with hand-outs and other outreach materials.

We need your help, so please join us!

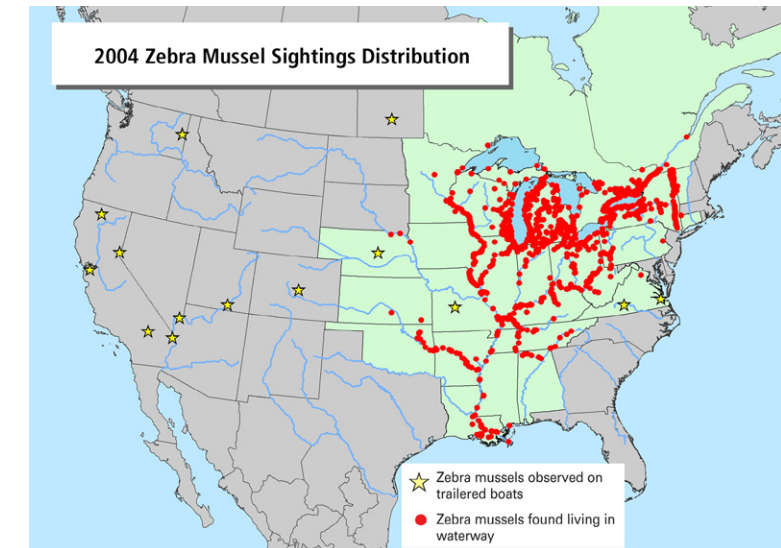
-- Bill Zook - Pacific States Marine Fisheries
Commission, Zebra Mussel Outreach Coordinator



Why Be Concerned About Zebra Mussels Now

Because of the large number of boaters expected to come west for the commemoration, the chances for a zebra mussel infestation are significantly higher than in other years. Your state and federal natural resource agencies and others are concerned about the introduction of aquatic nuisance species (ANS) such as zebra mussels and want all citizens to join the fight to prevent their spread.

Currently found in 20 states, the zebra mussel is an aquatic nuisance species native to the Caspian region of western Russia. It was first sighted in the United States in 1988, has few natural predators in the U.S., and reproduces very quickly. Zebra mussels most often move from one waterway to another by hitching a ride on commercial barges and recreational



boats and trailers. They stick to any solid object, such as a boat hull, a motor, or a pipe, and larvae can sometimes be found living in standing water found in live well or bilge. Zebra mussels can also attach to aquatic weeds. Adult zebra mussels can live outside of the water for up to 5 days.

Once introduced, the zebra mussel can clog powerplant, irrigation, and public water supply intakes and pipes; damage boat engines, blanket shorelines with their sharp shells that have a foul smell; consume available food for native species and smother native mussels. After zebra mussels have taken hold in a waterway, they are almost impossible to eradicate. They ultimately threaten our aquatic ecosystems, water-based recreational activities, and could cost taxpayers and businesses millions of dollars.

Here are some facts and suggestions that will help prevent the spread of zebra mussels during the Lewis and Clark Bicentennial:

Description

- A zebra mussel looks like a small clam with a D-shaped shell. Usually it has alternating dark and light stripes (thus the name).
- Usually the adult is the size of a fingernail.
- Usually found attached to hard surfaces in clusters.
- Young zebra mussels look like black pepper and feel like sandpaper when attached to a boat surface

How to prevent zebra mussels from hitching a ride.

As you leave a body of water:

- **Inspect** your boat and trailer.
- **Remove** any plants and animals.
- **Drain** lake or river water from your motor, live well, and bilge while on land.
- **Dispose** of unwanted live bait on land or in a trash receptacle.
- **Rinse** your boat, trailer, and equipment with high-pressure or hot water.
- **Dry** your boat and equipment for as long as possible (at least five days is preferable).

Zebra Mussels and the Lewis and Clark Bicentennial - What's The Connection?

In the next two years (2005-2006), tens of thousands of recreational boaters are expected to commemorate the 200th Anniversary of the Lewis and Clark Expedition in the Missouri and Columbia river basins.

One unintended, but potentially harmful, side effect of the Bicentennial could be the introduction of the zebra mussel into the lakes and rivers of the Western United States.

Look for radio messages from Lewis and Clark when you are on the trail. For more information on zebra mussels, visit www.protectyourwaters.com. This message is brought to you by the Pacific States Marine Fisheries Commission, U.S. Fish and Wildlife Service, and Bonneville Power Administration.



To Report a Zebra Mussel Sighting, You Can Do Any of the Following:

- Call 1-800-437-2744. This is the Bonneville Power Administration and Bureau of Reclamation Crime Witness Number, which also takes reports of zebra mussel sightings. They will then contact your state's fish and game agency to alert them of the sighting.
- Call your local state fish and wildlife agency and report the sighting. Often times, an agency representative will come to the scene. Contacts for your state are listed below:

Washington Department of Fish and Wildlife - 360-902-2700
 Idaho Department of Fish and Game - 208-334-3791
 Oregon Department of Agriculture - 1-866 - Invader
 Montana Department of Fish Wildlife and Parks - 406-444-2448

- Talk to the boat owner and encourage him/her to remove and properly dispose of the zebra mussels before placing the boat in any water body.



What is the 100th Meridian Initiative?

The 100th Meridian Initiative represents the first comprehensive and strategically focused effort, involving Federal, State, Tribal and Provincial entities, potentially affected industries, and other interested parties to begin addressing pathways to prevent the westward spread of zebra mussels and other ANS. Success will depend on the commitment and support of these groups to aggressively combat the introduction and spread of these destructive invaders.

The major pathway for zebra mussels to invade the West is not from the ballast water of ships but from boats, personal watercraft, and related equipment transported from infested to uninfested waters. Zebra mussels attach to hulls, trailers, and other exposed locations on boats, boating equipment, and personal watercraft. Their free-living larva can enter motors, live wells, or other moist areas. Adults may remain viable for more than 10 days when attached to boat hulls (Tyus, Dwyer, and Whitmore 1993). Their adaptability, their lack of natural predators, and the propensity of boaters to move their boats from one body of water to another have facilitated the rapid spread of zebra mussels throughout their current range.

The goals of the 100th Meridian Initiative are to: 1) prevent the spread of zebra mussels and other ANS in the 100th meridian jurisdictions and west and 2) monitor and control zebra mussels and other ANS if detected in these areas. These goals will be achieved by addressing seven components: 1) information and education, 2) voluntary boat inspections and boater surveys, 3) commercially hauled boats, 4) monitoring, 5) rapid response, 6) identification and risk assessment of additional pathways, and 7) evaluation.

For more information visit www.100thmeridian.org.

-- Reprinted from 'The 100th Meridian Initiative: A Strategic Approach to Prevent the Westward Spread of Zebra Mussels and Other Aquatic Nuisance Species', USFWS

We Have Help

While we plan and work to prevent an introduction of zebra mussels into the Columbia River Basin we will benefit from a number of other prevention efforts going on in other areas of the west. A work group comprised of state and federal water management agencies in the Missouri Basin planned and implemented a zebra mussel exclusion and containment strategy in 2003 that is sure to pay dividends to us in the Columbia Basin.

The Missouri River effort, also coordinated by the Pacific States Marine Fisheries Commission and U.S. Fish and Wildlife Service, resulted in the installation of 10 low-power radio stations strategically located on all of the major travel routes between infested areas and the west. These stations broadcast interesting and informative messages, similar to the "Clark and Lewis" spots played locally for Horizon Airlines, 24 hours a day. The message is to inspect and clean your boat if you are traveling between areas with zebra mussels and any western water. In addition, Missouri River marinas and resorts have been participating in a public education and outreach program for nearly two years and Public Service Announcements (PSA's) have been distributed to more than 9,000 radio stations in the United States and Canada. Similar efforts are also well underway in the Colorado River Basin.

Power Wash Poster


The poster depicted below was developed by the Columbia River Team to make it easier for boaters to locate the nearest boat wash facility if they are coming into the Basin from a state with zebra mussels. All marinas, resorts and businesses that may come into contact with out-of-region boaters will be provided with several copies of this poster and asked to fill-in specific directions from their place of business to the nearest wash facility capable of cleaning boats and to display the poster in a prominent location(s) on site. If you operate one of these businesses in the Columbia River Basin, please keep a eye out for these posters which are expected to be mailed directly to you early this spring. If you are interested in how you can join this effort as an outreach partner, please see the article on Page 1 (Columbia River "Basin Watch" Program) and follow the instructions there.

ATTENTION BOATERS AND ANGLERS

Zebra mussels can ruin your favorite fishing and boating areas

Clean your boat before you float!


Coming from a high risk area?



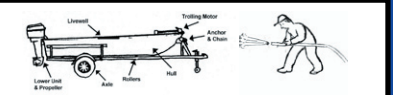
If you have been boating in an affected area, please take your boat to the nearest power wash facility (see directions), wash your boat, and inspect it carefully before launching.

You may not see young zebra mussels with your naked eye! You may be able to feel them by running your hand along the hull of your boat. A rough texture is a clue that zebra mussels may be attached. Always rinse out livewell and other areas where water and zebra mussel larvae may have collected.

Directions to the nearest power wash facility:



To report zebra mussels call 1-800-437-2744.



Collecting Information

Who is boating on our waters and where they are coming from?

All of the agencies and groups involved in efforts to prevent an introduction of zebra mussels into the Columbia Basin recognize the importance of conducting boater surveys. Trained personnel have been conducting voluntary boat inspections and boater surveys at highway stops located on 11 major highway corridors entering the west from infested areas and at marinas and launch ramps throughout the western U S

Boaters are surveyed to learn where their boat has been and their next destination etc... They each receive a brochure explaining the initiative and what actions they can take to prevent the spread of zebra mussels.

Because resource management agencies need valid data to make their decisions, data is being collected using a personal data assistant (PDA). Like the private sector, time is money; so, the quicker they obtain informa-

tion, the faster they can initiate actions. With aquatic invasive species, time is of the essence. The data collected is used to focus outreach and education efforts and to identify possible zebra mussel entry points before it's too late.

Information from boater surveys completed in the Columbia River Basin can be found on the 100th Meridian website (see below). The data there are based on surveys conducted between 1998 and 2003.

To learn more about this program visit the 100th Meridian PDA website at: <http://www.100thmeridian.org/PDA/default.asp>

-- Amy J. Gaskill, APR, US Fish and Wildlife Service, Fisheries Program, Outreach/Public Affairs Specialist

monthly and submit a reply report card (provided) to the Aquatic Nuisance Species Volunteer Coordinator at the Center for Lakes & Reservoirs to indicate signs of colonization. If there is a positive sighting, authorities are alerted and further steps are taken to determine the extent of colonization.

Questions about becoming a zebra mussel monitor should be submitted to Mary Pfauth, Zebra Mussel Volunteer Monitoring Coordinator at 503-725-2937 or invasivespecies@pdx.edu.

Becoming a Zebra Mussel Monitoring Volunteer

The Columbia River is a vital economic, biological, cultural, and recreational component to the Pacific Northwest. Preventing the spread of zebra mussels to the Columbia River and its associated waterways in Oregon, Washington, Idaho, Montana, and Wyoming is the primary objective of the Zebra Mussel Monitoring Network coordinated by the Center for Lakes & Reservoirs at Portland State University.

Monitoring is designed to detect the presence of zebra mussels as early as possible in any new water body. This early detection is the key to being able to respond in a manner that will minimize their future impact on that and other resources in the area. Like any other blight, detecting the presence of zebra mussels early is the most important factor in determining how damaging they will be within the Columbia Basin.

The Zebra Mussel Monitoring Network coordinates volunteers to respond in a manner that will minimize their future impact on that and other resources in the area. Like any other blight, detecting the presence of zebra mussels early is the most important factor in determining how damaging they will be within the Columbia Basin.

The Zebra Mussel Monitoring Network coordinates volunteers like yourselves, throughout the western U S who have access to lakes and rivers. Volunteers are provided a PVC substrate to hang on their docks and monitor for zebra mussel colonization and are asked to check them