# **BOATERS**

# ZEBRA MUSSELS HAVE ARRIVED WE NEED YOUR HELP TO STOP THEIR SPREAD



The zebra mussel is an exotic and harmful species that spread into the lower Susquehanna River in Maryland. It probably entered the watershed on boats, trailers, anchors, SCUBA gear, or in engines, live wells, bilge areas, bait buckets and coolers. First spotted in Maryland during November 2008 upstream from the Conowingo Dam, DNR biologists found more below the dam in early July 2010. Since then, an increasing number of adults and larval zebra mussels have been collected in the lower Susquehanna off Havre de Grace, just upstream of Conowingo Dam and on the Susquehanna flats. Zebra mussels are a form of biological pollution. They can multiply quickly and clog drinking water pipes and power plant cooling water intakes. They damage aquatic ecosystems by out-competing native fish and mussels for food and habitat. Although they have arrived in Maryland, you can help stop their spread.

## Why should boaters be concerned about zebra mussels?

Zebra mussels can:

Ruin your engine by blocking the cooling system and causing overheating.

Jam steering equipment or the centerboard wells on sailboats.

Increase fuel consumption when mussels attach to the hull and increase drag.

Require hull scraping and repainting.



#### How to identify them?

They look like small clams; yellow or brown with stripes, triangular in shape, usually about thumbnail size, often occur in clusters.

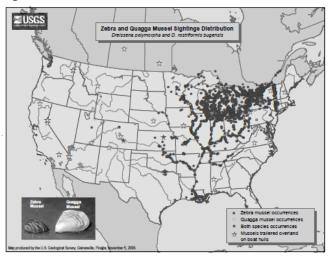


DON'T LET ZEBRA MUSSELS HITCHHIKE WITH YOU!

### What can you do?

Zebra mussels probably got into the Susquehanna River with boaters, canoeists, jet skiers, anglers, or divers who traveled from infested waters. If your boat, trailer, or other fishing or recreational gear was used recently in any water body, DNR needs your help to stop their spread. Below is a list of things you can do before launching your boat into Maryland waters or leaving the ramp.

A person may not import, transport, purchase, possess, propagate, sell, or release zebra mussels into state waters.



Dots represent confirmed collections or observations of adults, juveniles, or veligers, but not always established populations. Stars represent the discovery of the overland transport of zebra mussels on trailered boats.

**REMOVE** all visible mussels, aquatic plants, mud, and foreign objects from your boat, drive unit, propellor, trolling plates, anchor, and trailer; put debris in a trash can.

**DRAIN** all waters from live wells, bilge areas, bait buckets, SCUBA gear, and coolers.

**FLUSH** engine cooling system, drive unit, live wells, bilge areas, bait buckets, and coolers with hot water if available. If not, use tap water. DO NOT use chlorine bleach.

**RINSE** boat hull, trailer, and SCUBA gear with hot water or a pressurized spray.

**DUMP** left over bait in a trash can; do not release it to the water body.

**DRY** your boat, engine, trailer and all other gear in the sun for at least 5 days between

outings - longer if there are no other options to decontaminate. Adult zebra mussels can close and survive for up to a week on a boat hull, inboard engine, or trailer frame.

If you spot a suspected zebra mussel, freeze it in a plastic bag or preserve it in a small bottle of rubbing alcohol, then call Maryland Department of Natural Resources (Toll Free 1-877-620-8DNR extension 8615 or 410-260-8604). For more information, check out our website: http://www.dnr.state.md.us/invasives/ZebraMussel.asp

#### ZEBRA MUSSELS ARE ON MARYLAND'S "NOT-WANTED" LIST

A person may not import, transport, purchase, possess, propagate, sell, or release zebra mussels into state waters.

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