

Protecting the Native Freshwater Mussels

What are mussels?

Freshwater mussels are relatives of clams. They produce amazing shells from calcium carbonate in the water and provide food for other species. They have played an important role in the state's economy for a long time.

Native mussels live in the cleanest waters of the state and nation. They are dependent on host fish for successful reproduction. They siphon microscopic life from the water and incidentally take in other materials from the water, which may be harmful to them.

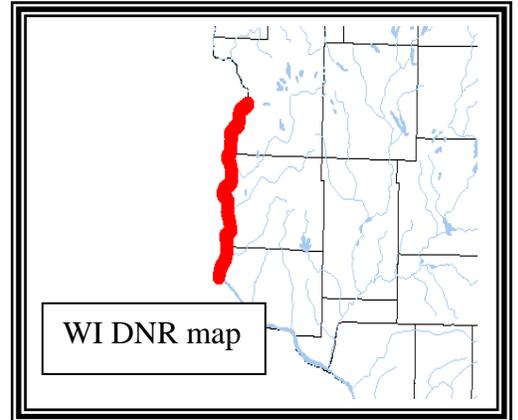
Freshwater mussels are among the most endangered groups of species on the globe. For more about these mussels see <http://www.fws.gov/midwest/mussel/>

Which are the federally endangered mussels in Wisconsin?

The "Winged mapleleaf" is the most endangered species in Wisconsin, being found in only one site on the St. Croix River. Its status is declining though work is proceeding to produce young mapleleaves in a lab setting to supplement the population.



Winged mapleleaf site on the St. Croix River

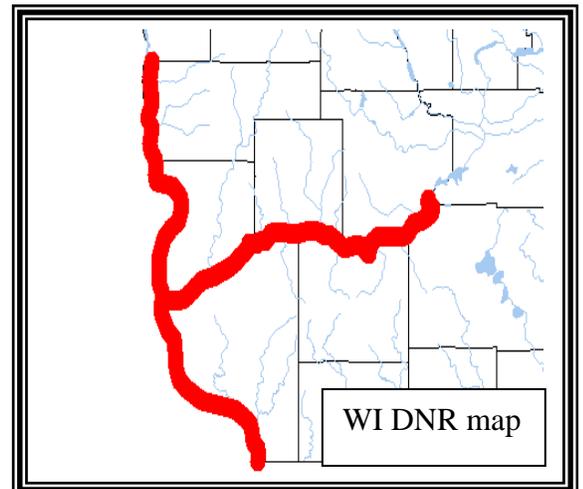


"Higgins' eye pearly mussel" is the other federally endangered species. It was doing fairly well until the non-native "Zebra mussel" invaded the Mississippi and St. Croix river system. Now the non-native "Quagga mussel" is also competing for food and space in those rivers.

For non-native, invasive mussel information go to <http://nas.er.usgs.gov/queries/FactSheet.asp?speciesID=95>



Higgins' Eye pearly mussel sites on the Mississippi and Wisconsin rivers



Which are the state endangered and threatened mussel species?

There are 17 more species of native mussels on the Wisconsin endangered and threatened species list.

See <http://www.dnr.wisconsin.gov/org/land/er/biodiversity/index.asp?mode=detail&Grp=19>

The concern

Invasive species and water quality are of concern. DATCP is committed to protecting the native mussels and their habitats from pesticide harm.

Herbicides and other pesticides are of importance in managing pest species including the invasive species which also harm the native freshwater mussels.

However, some pesticides are very toxic and may encounter species they are not meant to control. Some pesticides are mobile in soil or water, and may be long-lasting.

It is vital to be familiar with the characteristics of the pesticides to be used to prevent unintentional harm to non-pests as well as endangered and threatened species and their natural habitats.

The pesticide label is your best guide. You can also find additional pesticide information at:

<http://www.epa.gov/pesticides/>
<http://www.pesticide.org/factsheets.html>
<http://pmep.cce.cornell.edu/profiles/index.html>

How do landowners and managers help with species and habitat protection?

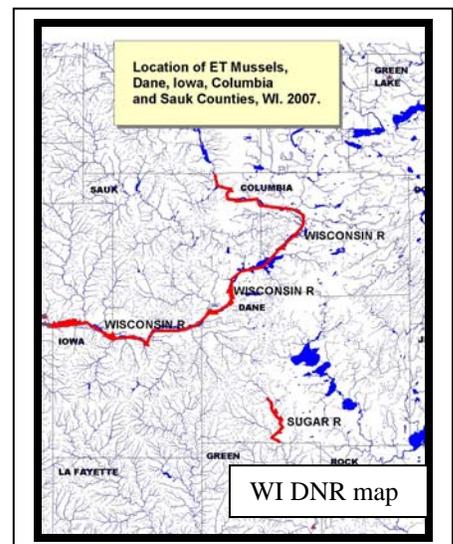
They:

- Follow the label and other laws governing chemical uses
- Minimize the use of chemicals and use less toxic substitutes near wet and water areas
- Avoid using wet places and their proximity for pesticide and waste storage
- Prevent runoff and aerial deposition during and after a pesticide application
- Plant dense vegetation at edges to stop chemicals from reaching wetlands and bodies of water

Your assistance is also very much appreciated.



What kinds of mussels are these? Try to identify them at <http://www.fws.gov/midwest/mussel/species.html>



Other endangered/threatened mussel sites in Wisconsin

**For Questions contact us at 608/224-4538 or 608/224-4547
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