

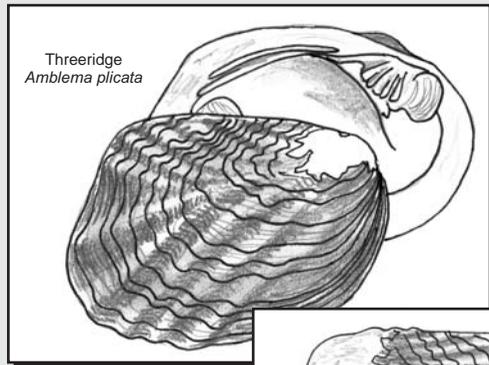
Texas Mussel Watch Workshops

No special equipment is needed to monitor for mussels, but volunteers must attend a workshop to receive a monitoring manual and other materials to help mussel identification.

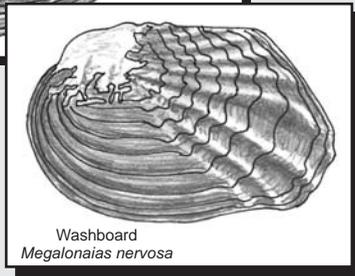
Monitoring workshops are scheduled in different parts of the state. For information about the workshop schedule, fill out and return the form to the right or contact:

Texas Nature Trackers
4200 Smith School Road
Austin, TX 78744

For more on mussel monitoring,
check this Web site:
www.tpwd.state.tx.us/mussels



Threeedge
Amblema plicata



Washboard
Megaloniaias nervosa

Mussel illustrations by
Robert G. Howells

Texas Mussel Watch

Name _____

E-mail _____

Address _____

City _____ Zip _____

Phone _____

Please notify me about the schedule for Texas Mussel Watch workshops.

Texas Parks and Wildlife Department maintains the information collected through this form. With few exceptions, you are entitled to be informed about the information we collect. Under Sections 552.021 and 552.023 of the Texas Government Code, you are also entitled to receive and review the information. Under Section 559.004, you are also entitled to have this information corrected.

For more information about Texas freshwater mussels:

Freshwater Mussels of Texas, by Robert G. Howells, Raymond W. Neck and Harold D. Murray. Available by calling the Inland Fisheries Division of TPWD, 1-800-792-1112.

For more information about other Texas Nature Tracker volunteer monitoring projects, visit the TPWD Web site at:
www.tpwd.state.tx.us/nature



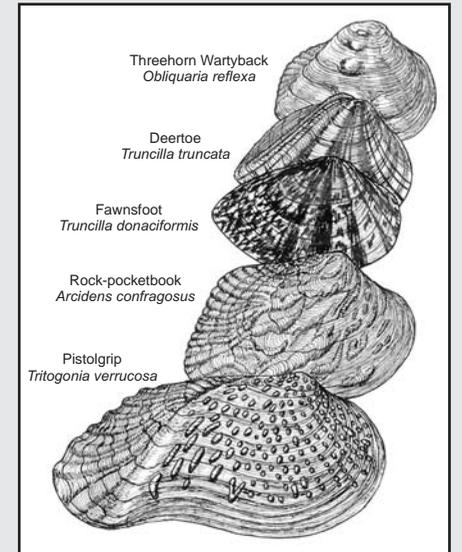
4200 Smith School Road
Austin, Texas 78744

PWD BR W7000-589 (8/07)

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TEXAS PARKS AND WILDLIFE

Texas Mussel Watch



Threehorn Wartyback
Obliquaria reflexa

Deertoe
Truncilla truncata

Fawnsfoot
Truncilla donaciformis

Rock-pocketbook
Arcidens confragosus

Pistolgrip
Tritogonia verrucosa

Freshwater Mussels in Texas

Freshwater mussels are one of the most imperiled groups of animals in the U.S. Texas hosts more than 50 species of native freshwater mussels. Because scientists have only recently become aware of the severe decline in mussel populations, some species may have become extinct before their decline was even documented. Although there are many mussel species considered rare in Texas, only one mussel species, the Ouachita rock-pocketbook mussel, which has been found only in two tributaries of the Red River, is listed as endangered.

Texas Mussel Watch
4200 Smith School Road
Austin, Texas 78744



Why the Decline in Freshwater Mussel Populations?

- ☞ Changes in flow rates of rivers and streams due to droughts, floods or building of dams
- ☞ Increased deposition of soft silt due to excessive run-off
- ☞ Scouring of stream beds during storm events
- ☞ Increased amounts of aquatic vegetation
- ☞ Lack of suitable native fish hosts for larval stage
- ☞ Aquatic contaminants
- ☞ Introduction of exotic species

Adult mussels can range from less than one inch in length to nearly 12 inches long. Some species have thin shells and a lifespan of only five or six years, while others have thick shells and can live well over 50 years.

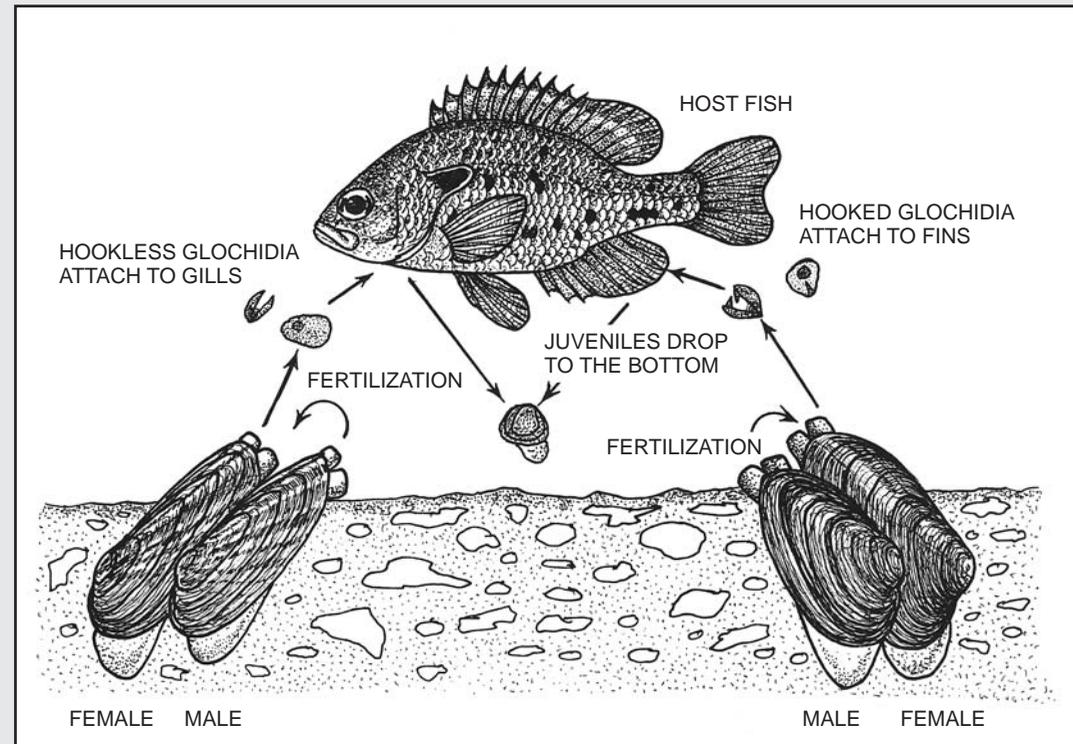
Shells vary both on the inside and outside of mussels, depending upon the mussel species. Color, texture and shape variations in shells are used to help identify different types of mussels.

In Texas, commercial musselers sell mussel shells to buyers in Japan that use bits of the shells in the cultured pearl industry. One species, the Tampico pearlymussel, is famous for producing freshwater pearls and supports a small industry.

Mussel Biology

Freshwater mussels feed by filtering algae and small particles from the water. Most species have a larval stage that is parasitic on fish. Larvae are released by the female mussel and must locate a certain fish species or die. They usually attach to the host fish's gills or fins where they remain for a few weeks or months. Larval mussels rarely harm infected fish under natural conditions. If essential fish species are removed from the habitat, mussels will not be able to reproduce.

Texas Freshwater Mussel Reproductive Cycle



Losing our freshwater mussels would mean...

the loss of an important indicator of the health of aquatic ecosystems. Mussels are often the first species to vanish when environmental conditions change or decline. As filter feeders, mussels concentrate substances that are dissolved in the water. Mussel tissues can be examined to check for many toxic chemical pollutants of our rivers, lakes and streams. Healthy mussel populations mean purer water for humans and countless aquatic plants and animals.

How do Volunteers Help?

Volunteers can play an important role in helping us understand freshwater mussels in Texas because resources for mussel research are limited and Texas is vast. Additionally, volunteers spread across the state can be on hand when local events cause sudden changes in water levels or water clarity, exposing mussels.

Texas Mussel Watch volunteer data can help us determine:

- 1) the distribution and relative abundance of different freshwater mussel species
- 2) changes in the distribution and abundance of mussel species over time
- 3) the presence of exotic mussels



Become a Texas Mussel Watch Volunteer!

Identifying mussel species in the field is fun and challenging. Most mussel monitoring can take place along the shores or in shallow water, especially when water levels are lower than normal during droughts or during the draw downs of reservoirs. Monitoring can take place incidentally as volunteers encounter mussels, but regular visits (once or twice a year) to a particular water body are encouraged.