Zebra What?

By

H. A. (Joe) Pase III Texas A&M Forest Service (retired)

What has a striped shell, lives in the water, and is causing problems in some North and Central Texas lakes? I doubt that you guessed zebra mussel, but that is the correct answer. Non-native species

of plants and animals are being spread all around the world, and Texas is not exempt from this problem. When introduced to an area outside their native range, these plants and animals often become established and replace native flora and fauna. Many people are familiar with Chinese tallowtree which has invaded most of the coastal areas of Texas as well as many inland areas. Japanese climbing fern, Chinese and Japanese privet, giant reed, and mimosa are a few examples of other invasive non-native plants already well established in many parts of Texas. Several other exotic invasive species are knocking at our door, like emerald ash borer, walnut twig beetle, and Asian longhorned beetle.

The zebra mussel is a more recent introduction to Texas. The cold winter of 2013-2014 has had many of us wishing for spring when we can enjoy outdoor activities like hiking, boating, fishing, and camping.



Adult Zebra Mussel (Amy Benson, U.S. Geological Survey, Bugwood.org)

Many Texans frequent the numerous excellent public (and private) recreation lakes in Texas, and as a result, it is important for them to be aware of the zebra mussel and how to prevent its spread.

Originally from the Balkans, Poland and the former Soviet Union, zebra mussels were first found in the US in the late 1980s and within 10 years had colonized all five Great Lakes as well as the Mississippi, Tennessee, Hudson, and Ohio River basins. They have been found in more than 600 lakes or reservoirs in the U.S. in at least 29 states. University of Texas at Arlington biologist Bob McMahon has said the mussel is by far the most costly aquatic freshwater invasive species ever introduced into U.S. waters.

In April 2009, the first adult zebra mussel in Texas waters was confirmed in Lake Texoma. Since then, they have become established in Lake Ray Roberts and have been found in Lake Lavon, the Red River, the Trinity River and Sister Grove Creek. Now 47 counties in North and Central Texas are under regulation by the Texas Parks and Wildlife Department to slow the spread of zebra mussels. According to the online National Atlas of the United States, "Once zebra mussels become established in a water body, they are impossible to eradicate with the technology currently available."

The rapidly reproducing mussels can have serious economic and recreational impacts on Texas reservoirs. They are known to have caused alarming declines in populations of fish, birds and native mussel species. They can clog public-water intake pipes, harm boats and motors left in infested waters,

clog water-cooling systems, annoy boat-dock owners by completely covering anything left under water, and make water recreation hazardous because of their sharp shells.



Wisconsin: a shopping cart is completely encrusted after just a few months in zebra mussel infested water. (James F. Lubner, University of Wisconsin Sea Grant Institute, Bugwood.org)

In January 2014, commissioners for the Texas Parks and Wildlife Department unanimously approved adding 30 counties in North and Central Texas to the 17 North Texas counties already regulated. The move is aimed at protecting the Trinity, Brazos, Colorado and Guadalupe River basins, all of which are traversed by Interstate 35. It is a Class C misdemeanor statewide to possess or transport zebra mussels, intentionally or unintentionally.

The 30 new counties under regulation are Archer, Bastrop, Bell, Bosque, Burnet, Clay, Comal, Comanche, Coryell, Eastland, Ellis, Erath, Falls, Fayette, Freestone, Hamilton, Hays,

Henderson (west of State Highway 19), Hill, Johnson, Leon, Limestone, Llano, McLennan, Navarro, Robertson, Somervell, Travis, Wichita, and Williamson. This is in addition to the 17 North Texas counties already under regulation (Collin, Cooke, Dallas, Denton, Fannin, Grayson, Hood, Jack, Kaufman, Montague, Palo Pinto, Parker, Rockwall, Stephens, Tarrant, Wise, and Young).

The Texas Parks and Wildlife Commission approved rules requiring anglers and boaters leaving or approaching public waters in the above counties to take all reasonable steps to drain all water from their vessel, including live wells, bilges, motors, and any other receptacles or water intake systems. This applies to all types and sizes of boats, whether powered or not, personal watercraft, sailboats, or any other vessel used on public waters. You can't always see zebra mussels because their larvae are invisible to the naked eye and they can survive for days in water trapped in a boat. The only way to be sure you're not carrying zebra mussels to another body of water is to always clean, drain and dry your boat, trailer and gear. There are additional rules related to fishing tournaments. See the Texas Parks and Wildlife website

http://www.tpwd.state.tx.us/newsmedia/releases/?req=201 40123c&nrtype=all&nrspan=2014&nrsearch= for details. For information about cleaning your water craft, see the Texas invasive species website http://texasinvasives.org/zebramussels/

What does the zebra mussel look like? Adults are only about 1 ½ inches across and develop a distinctive zebrastriped shell. Zebra mussels are usually found in large clusters and lie flat on a smooth surface, unlike many other mussels that stand erect. Also, there are other mussels that



Adult Zebra Mussel (Amy Benson, U.S. Geological Survey, Bugwood.org)

look similar to the zebra mussel, so if you suspect you have found zebra mussels, contact Texas Parks and Wildlife immediately for confirmation.

Having an informed public is one of the best ways to prevent or slow the spread of Zebra mussels and other non-native invasive pests. Hopefully, with your help, the actions the Texas Parks and Wildlife Department have taken will keep the zebra mussel out of other Texas lakes, rivers, and streams.

(Adapted from Texas Parks and Wildlife and Texas Invasives.org information sheets on the internet.)

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