Amistad National Recreation Area



On behalf of the National Park Service, welcome to Amistad National Recreation Area! I hope while you're here you discover the magic of this special park.

Lake Amistad offers boating, fishing, and swimming opportunities that are unsurpassed anywhere else in the United States. Yet invasive species like the zebra and quagga mussel pose a threat to our enjoyment of Lake Amistad if they become established.

Fortunately, today Lake Amistad remains free of zebra and quagga mussels. But we need your help to keep it that way. Please do your part by reading this important pamphlet before launching your boat. Learn what you can do to prevent these aquatic hitchhikers from hitching a ride on your boat.

The National Park Service is working closely with our partners in the business community and in government to prevent the spread of invasive mussels. But ultimately, our success in keeping Lake Amistad free of mussels depends on you!

Best wishes for a fun filled and safe visit to Amistad National Recreation Area. Thanks for your help keeping zebra and quagga mussels out of Lake Amistad.

> Sincerely, Christopher Ryan Superintendent

Thank you for your help



HITCHHIKERS!

Prevent the transport of nuisance species. Clean <u>all</u> recreational equipment. www.ProtectYourWaters.net

You can make a difference!



Mussels cover a boat propeller (Photo: National Park Service)



Preserve Lake Amistad

Don't Move a Mussel



Photo by Amy Benson, U.S. Geological Survey

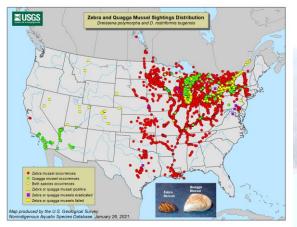
What you should know about invasive mussels



An education and preservation initiative of the National Park Service

About the Threat

Zebra and Quagga Mussels



Fast Facts about Zebra and Quagga mussels:

Zebra and quagga mussels are aquatic nuisance species that were accidentally introduced into the Great Lakes region of North America from Russia and the Ukraine sometime in the late 1980's.

If these invasive mussels are accidentally introduced into Lake Amistad, they could rapidly spread to potentially coat every available surface, clog pipelines, damage machinery, harm fishery resources, change the reservoir ecosystem and foul the water with their waste.

Zebra and quagga mussels are filter feeders. The removal of significant amounts of phytoplankton from the water can cause a shift in native species and disrupt the ecological balance of a lake.

Since zebra mussels were fist found in Texas in 2009, 28 lakes in five river basins can be classified as fully infested (TPWD, June 2021) meaning they have an established, reproducing population.

Quagga mussels have been detected in Lake Amistad. Quagga mussel larvae have been detected in 4 different water samples, which means that Lake Amistad is now designated Positive for quagga mussels (TPWD, 2022). Zebra and quagga mussels reproduce quickly and in large numbers. Once established, they are virtually impossible to eliminate. They can survive out of water for several days in hot weather and up to a month in cool, wet weather.

Rules to Prevent Spread of Zebra and Quagga:

It is a violation of 36 CFR 2.1 (a)(2) to introduce wildlife, fish, or plants including their reproductive bodies in the park.

Update July 1, 2014: In the state's ongoing effort to combat the spread of invasive zebra mussels, new rules require that all boats operating on public fresh water anywhere in Texas be drained after use.

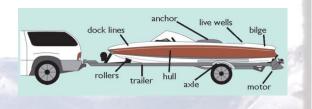
Persons leaving or approaching public fresh water are required to drain all water from their vessels and on-board receptacles.

Possession or transportation of zebra mussels in Texas is a Class C misdemeanor for the first offense, punishable with a fine of up to \$500. A second offense is a Class B misdemeanor, punishable with a fine of up to \$2,000, a jail sentence of up to 180 days or both.

If you see a violation, report it to Texas Parks and Wildlife at (800)792-4263. Amistad's website has been updated to include a variety of information about the quagga and zebra mussels.

For additional information about invasive mussels, visit the following web sites:

www.protectyourwaters.net www.nps.gov/amis www.texasinvasives.org/zebramussels What can you do to prevent the accidental introduction of Zebra and Quagga Mussels into Lake Amistad?



- 1. Before heading to Lake Amistad, use a local commercial car wash facility to flush motors, bilges, and live wells. It takes water at least 140 degrees to kill mussels, so this washing won't kill them but may reduce the numbers.
- 2. Air Dry your clean and drained boat and other equipment for at least **7 days** before launching in new waterways.
- 3. No matter what lake you are at, when you take your boat out for the last time, but before leaving the area, it is now a good practice to completely drain the water from the motor, live well and bilge a safe distance from shore.
- 4. Some personal watercrafts have the capability of taking in large amounts of water in an internal ballasting system. This water could support the microscopic mussel larvae or veliger while the watercraft is transported from one lake to another. This water should be drained, and the ballasting system allowed to dry for 7 days before launching at Lake Amistad.
- 5. Remove all visible plants and mud from the boat and trailer before leaving the area.
- 6. Do not reuse bait once it has been exposed to lake water. Dispose of used bait in the garbage.
- Use Amistad CD3 units to Clean Drain and Dry your boat, they are located at Box Canyon and Rough Canyon Boat Ramps.

