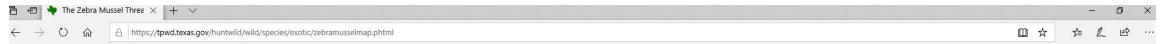


Current Zebra Mussel and Golden Algae Status in the Brazos River Basin

Presented by
Jenna Olson
Environmental Programs Coordinator

Meeting Date: April 11, 2019





- TexasInvasives.org
- Prohibited Fish, Shellfish and Aquatic Plants
- Protect Our Waters
- · The Snakehead Threat
- Nuisance Aquatic Vegetation
- · Grass Carp Permit Program
- USGS Exotics Database
- National Clearinghouse on Invasive Species
- Early Detection & Distribution Mapping System

Zebra Mussel Resources

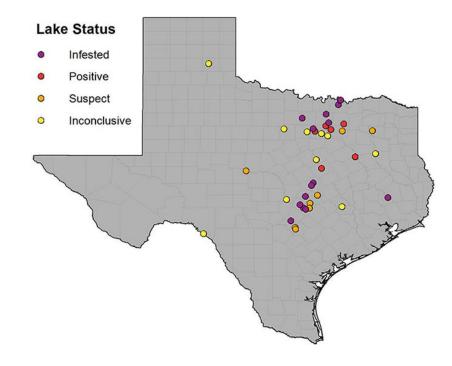


- · Report new sightings
- · Zebra Mussel images
- · Lake status map for marinas
- · Identifying Invasive Mussels (PDF)

The Zebra Mussel Threat

Invasive zebra mussels have devastating economic, recreational, and environmental impacts. The first Texas infestation was found in Lake Texoma in 2009. TPWD and partners closely monitor "positive" and "suspect" lakes, as well as other lakes we consider high risk for zebra mussel introductions.

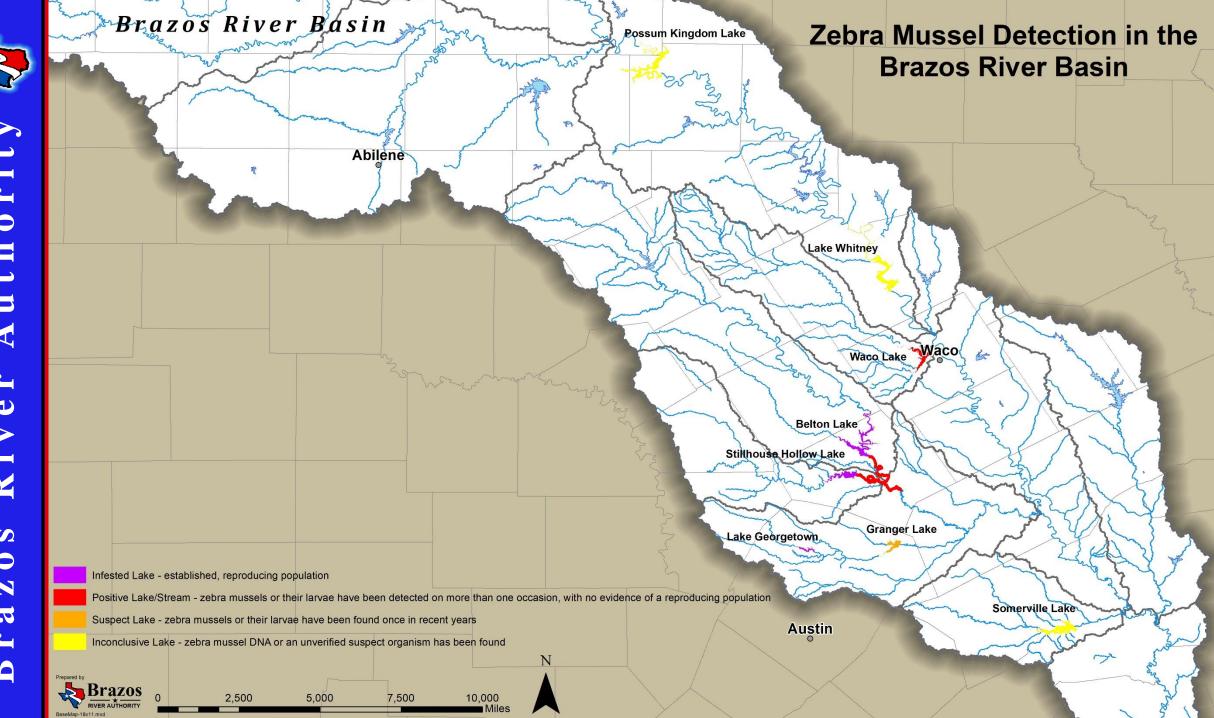
State regulations require draining of water from boats and onboard receptacles when leaving or approaching public fresh waters.



 Infested Lakes - Fifteen Texas lakes in five river basins can be classified as fully infested with zebra mussels, meaning the water body has an established, reproducing population: Austin, Belton, Bridgeport, Canyon, Dean Gilbert (a 45-acre Community Fishing Lake in Sherman), Eagle Mountain, Georgetown, Lady Bird, Lewisville,









January 2019 Golden Algae Results

LAB ID	SAMPLING DATE	SOURCE	SITE	DENSITY (cells/mL)	ITUs	COMMENTS
Pp 2101	1/7/2019	Whitney	Lofers Bend	0 / P. parvum ID	n/a	Mixed algal community
Pp 2102	1/7/2019	Whitney	McCown Valley Park	0 / BDL	n/a	Mixed algal community
Pp 2103	1/7/2019	Whitney	Steele Creek	1,000	0	Mixed algal community
Pp 2104	1/7/2019	Granbury	Dam	0 / P. parvum ID	n/a	Mixed algal community
Pp 2105	1/7/2019	Granbury	FM 51	0 / BDL	n/a	Mixed algal community
Pp 2106	1/7/2019	Granbury	US BUS 377	0 / BDL	n/a	Mixed algal community
Pp 2107	1/9/2019	Possum Kingdom	Dam	0 / BDL	n/a	Mixed algal community
Pp 2108	1/9/2019	Possum Kingdom	Johnson Rd.	0 / P. parvum ID	n/a	Mixed algal community
Pp 2109	1/9/2019	Possum Kingdom	Sandy Beach	2,000	0	Mixed algal community
Pp 2110	1/9/2019	Possum Kingdom	Deep Elm Arm	5,000	0	Mixed algal community

Interpretation of bioassay results (ITUs) are 0 = non-toxic, 1=slight/low toxicity, 5=moderate toxicity, and ≥25 = high toxicity BDL = below detectable limit



February 2019 Golden Algae Results

LAB ID	SAMPLING DATE	SOURCE	SITE	DENSITY (cells/mL)	ITUs	COMMENTS
Pp 2122	2/6/2019	Granbury	Dam	0 / P. parvum ID	n/a	Mixed algal community
Pp 2123	2/6/2019	Granbury	FM 51	0 / P. parvum ID	n/a	Mixed algal community
Pp 2124	2/6/2019	Granbury	US BUS 377	0 / BDL	n/a	Mixed algal community
Pp 2125	2/5/2019	Possum Kingdom	Dam	4,000	0	Mixed algal community
Pp 2126	2/5/2019	Possum Kingdom	Johnson Rd.	0 / BDL	n/a	Mixed algal community
Pp 2127	2/5/2019	Possum Kingdom	Sandy Beach	5,000	0	Mixed algal community
Pp 2128	2/5/2019	Possum Kingdom	Deep Elm Arm	21,000	0	Mixed algal community

Interpretation of bioassay results (ITUs) are 0 = non-toxic, 1=slight/low toxicity, 5=moderate toxicity, and ≥25 = high toxicity BDL = below detectable limit



March 2019 Golden Algae Results

LAB ID	SAMPLING DATE	SOURCE	SITE	DENSITY (cells/mL)	ITUs	COMMENTS
Pp 2154	3/18/2019	Possum Kingdom	Dam	0 / BDL	n/a	Low algal densities
Pp 2155	3/18/2019	Possum Kingdom	Johnson Rd.	0 / P. parvum ID	n/a	Mixed algal community
Pp 2156	3/18/2019	Possum Kingdom	Sandy Beach	0 / P. parvum ID	n/a	Mixed algal community
Pp 2157	3/18/2019	Possum Kingdom	Deep Elm Arm	70,000	0	P. parvum dominant
Pp 2158	3/21/2019	Granbury	Dam	0 / BDL	n/a	Mixed algal community
Pp 2159	3/21/2019	Granbury	FM 51	0 / BDL	n/a	Mixed algal community
Pp 2160	3/21/2019	Granbury	US BUS 377	0 / BDL	n/a	Mixed algal community

Interpretation of bioassay results (ITUs) are 0 = non-toxic, 1=slight/low toxicity, 5=moderate toxicity, and ≥25 = high toxicity BDL = below detectable limit