



# Mollusks

## Human Impact

Populations of freshwater mussels have declined due to changes in flow rates from dam construction, increased silt deposition from excessive run-off, aquatic contaminants, and invasive species. Degraded habitat often lacks suitable native fish hosts for larval stages inhibit reproduction. This is extremely detrimental as practically all species of mollusks require a fish host. Mussels are filter-feeders and consume detritus in river systems. Therefore, mollusks clean aquatic systems but also concentrate contaminants like pesticides, heavy metals, and bacteria. Usually these animals prefer hard, high calcium waters, as found in the Blanco River.

The Texas Fatmucket mollusk is a threatened species found in several streams and rivers throughout Texas, including the four counties that comprise the Blanco basin. Here habitat is limited to gravel substrates including broken bedrock and coarse gravel in moderately flowing water (figure 25). Because the Fatmucket cannot tolerate impediments like dams and very slow-moving water, available habitat within the basin is limited and must be carefully managed to maintain flow and water quality (suspended solids and sediment loading), as well as substrate scouring rates.

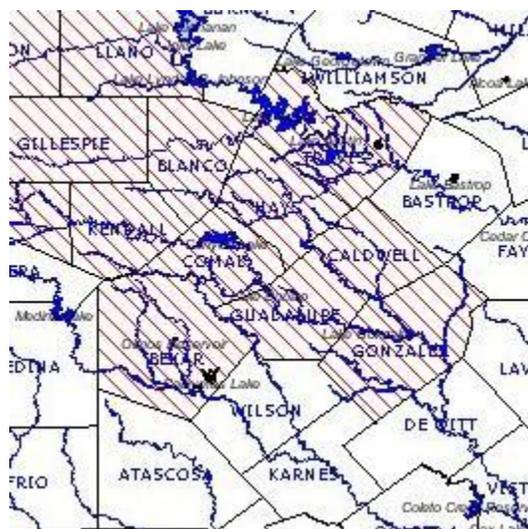


Figure 25 Potential or Known Presence of Threatened Texas Fatmucket

At least five other species of threatened or endangered mollusks are found in the Blanco River Basin (Table 8).



Table 8 Threatened, Endangered and Rare Mollusks (TWDB).

Common Name	Habitat Description	Location within Basin
Texas fatmucket	streams and rivers on sand, mud, and gravel substrates; intolerant of impoundment; broken bedrock and coarse gravel or sand in moderately flowing water; Colorado and Guadalupe River basins	Blanco, Comal, Hays, Kendall
Golden orb	sand and gravel in some locations and mud at others; intolerant of impoundment in most instances; Guadalupe, San Antonio, and Nueces River basins	Blanco, Comal, Hays, Kendall
Smooth pimpleback	small to moderate streams and rivers as well as moderate size reservoirs; mixed mud, sand, and fine gravel, tolerates very slow to moderate flow rates, appears not to tolerate dramatic water level fluctuations, scoured bedrock substrates, or shifting sand bottoms, lower Trinity (questionable), Brazos, and Colorado River basins	Blanco
False spike mussel	possibly extirpated in Texas; probably medium to large rivers; substrates varying from mud through mixtures of sand, gravel and cobble; one study indicated water lilies were present at the site; Rio Grande, Brazos, Colorado, and Guadalupe (historic) river basins	Blanco, Comal, Hays, Kendall
Texas pimpleback	mud, gravel and sand substrates, generally in areas with slow flow rates; Colorado and Guadalupe river basins	Blanco, Comal, Hays, Kendall
Texas fawnsfoot	little known; possibly rivers and larger streams, and intolerant of impoundment; flowing rice irrigation canals, possibly sand, gravel, and perhaps sandy-mud bottoms in moderate flows; Brazos and Colorado River basins	Blanco