Giant Floater

Anodonta grandis


TPWD PHOTO

Giant floaters are freshwater mussels, or ***bivalves*** (invertebrates with two shells) that live on the bottom of freshwater streams, rivers, lakes and ponds. As one of more than 50 species of freshwater mussels found in Texas, giant floaters are very widespread.

Northern Pineywoods

Giant Floater

Anodonta grandis

APPEARANCE

Shell length: (from anterior to posterior ends) up to 6 inches (17 cm)

Distinguishing Characteristics

- Outside color of shell varies from tan to light brown, greenish-brown and dark brown.
- Inside color is pearly white, with a bluish, light pink or salmon tint.
- Concentric growth lines on outside of smooth shell
- Toothless hinge
- Prominent beak (raised area near the hinge)

LIFE HISTORY

Range: Widespread across North America. In Texas, giant floaters occur in all major river drainage basins.

Diet: Tiny aquatic plants and animals

Predators: Raccoons, turtles, water birds and fish species such as freshwater drum

Sexual maturity: Not known

Spawning season: From August to April or May

Eggs: Number varies depending on age and habitat conditions. Males release sperm directly into the water. Females take the sperm in through their siphons.

Incubation: Eggs located on a female's gills are fertilized and develop in a brood pouch until large enough to be released into the water.

Young: The free-floating larval stage of development is called the *glochidia* stage. When the glochidia come in contact with a particular fish species such as longnose gar, redfin shiners, or common carp, they attach to the gills of the fish and live as parasites for several months without harming the fish. When large enough, the juveniles drop off of the fish host, find a good place to dig in, and begin growing into adult mussels.

Life span: Four to ten years

HABITAT

Giant floaters settle in slow-moving steams or rivers and large ponds or lakes with a muddy or somewhat sandy bottom.

BEHAVIOR

Giant floaters are *filter feeders* (eat tiny plants and animals that they filter out of the water taken in through their siphons). Although they remain fairly stationary, partly buried in the muddy or sandy bottoms of quiet streams and ponds, some biologists speculate that giant floaters can generate gasses or trap air bubbles inside their shells and float from one location to another.

NOW YOU KNOW!

- Giant floaters have thin shells. Even large specimens are light weight.
- Some scientists speculate that mussel glochidia, which live as parasites on fish hosts, actually keep the fish from getting other more harmful parasites.
- Freshwater mussels are often the first species to vanish when environmental conditions change or decline. Drought, floods, or pollutants can have an immediate and sometimes long-lasting effect on mussel populations. Finding healthy mussel populations can mean a healthy aquatic environment for people and animals.

GIANT FLOATERS AND PEOPLE

As filter feeders, giant floaters will concentrate in their tissues anything dissolved in the water, including chemicals, heavy metals and other contaminants. Scientists can examine mussel tissue to check for many toxic chemical pollutants that are harmful to aquatic habitats and to people.

Humans have harvested giant floaters and other freshwater mussels to use as fish bait.

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