

GOLDEN ALGA in Texas



Magnified 1000x

Golden Alga Facts

- In Texas, the microscopic alga (an aquatic plant-like organism) *Prymnesium parvum* or *P. parvum* is commonly called GOLDEN ALGA.
- Golden alga occurs worldwide, primarily in coastal waters. In Texas, fish kills have only occurred in inland waters with high salt or mineral content.
- Golden alga was first confirmed in west Texas in 1985, although descriptions of fish kills as early as the 1950s in Texas resemble those caused by golden alga.
- Through 2006, over 31 million fishes were estimated to have been killed by golden alga in Texas. Most fish kills occur in fall or winter and are located in west and central Texas, west of IH-35.
- All species of Texas fishes may be affected, as well as freshwater mollusks, crayfish, gilled amphibians such as tadpoles, and certain plankton species. Generally small bait fishes die first.
- Fish kills caused by golden alga may last for days, weeks or months and can change locations daily. Affected locations within a river or reservoir may change rapidly; sometimes only a portion of the reservoir or river is affected.
- Research is ongoing to explore potential control or management actions. Some treatments have been effective on ponds and small reservoirs, but to date there is no effective tool to control golden alga in large reservoirs and rivers.

*"Guidelines for Golden Alga *Prymnesium parvum* Management Options for Ponds and Small Reservoirs (Public Waters) in Texas" can be found on the TPWD's Golden Alga Research and Management Web page.*

Reporting Golden Alga

To report fish kills or suspected golden alga at any time, call the Texas Parks and Wildlife Department communications dispatch at 512-389-4848 (Austin) or 281-842-8100 (Houston), or call your local game warden.

Recognizing Golden Alga Blooms

- Elevated concentrations (called blooms) of golden alga usually discolor the water, causing it to appear golden or yellow-brown. Foaming may occur when the water is agitated (for example, by wind action).
- *P. parvum* produces toxins that can affect gill-breathing organisms including fishes and freshwater mollusks. The most visible result of a fish kill caused by golden alga is dead and dying fishes of all species and sizes. Aquatic insects do not appear to be affected and may be alive during a toxic event. Large numbers of birds (including pelicans, cormorants, gulls, herons, and vultures) may be present and actively feeding on the dead and dying fishes.
- Dead fishes may have bloody gills, fins, and scales and may be covered in mucus; dying fishes may attempt to jump out of the water, may not avoid predators, and may swim slowly and congregate near the shore. Fishes also may seek refuge areas (springs, seeps, and other sources of freshwater) to avoid the effects of the toxins.



Health Tips

- The Texas Department of State Health Services has stated that golden alga is not known to cause human health problems, but people should not pick up dead or dying fishes for consumption.
- Mammals and birds have been observed eating dead fishes and drinking water within areas experiencing toxic golden alga blooms; no immediate harmful effects have been recorded. Complications, secondary infections or other effects may occur.
- Be careful of spines and bones from dead fishes on the shoreline. Puncture wounds can get infected. Swimming near dead fishes is not recommended since bacteria levels associated with decomposition may be high.

To learn more about golden alga and to check on locations of fish kills caused by golden alga, go to the TPWD harmful algal blooms Web pages at www.tpwd.state.tx.us/hab/ and click on **Golden Alga** on the left-hand side.

To receive additional copies of this brochure, please e-mail hab@tpwd.state.tx.us



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