

# Gambusia



## The Plague Minnow



Gambusia is a feral fish damaging the ecosystems of Australia's Waterways. Gambusia should NEVER be released into ANY waterway, including outdoor ponds or farm dams.

**Other Names:** Plague minnow, mosquito fish, eastern gambusia and guppy.

**Introduction:** Gambusia is a feral fish that has been introduced into Australia. Gambusia were introduced from America in 1925 to control mosquitoes. They now compete with native aquatic animals, many of which are actually better at controlling mosquito populations. Research has found that gambusia are partly responsible for declining populations in, and loss of, some native fish and frogs species.



**Why are gambusia bad?** Gambusia are an aggressive predator. They compete for food with native fish and frogs, eat their eggs and attack and kill baby fish (fry) and tadpoles by nipping at their tails and fins. They also eat many different types of water bugs. In waterways where gambusia are present, numbers of other aquatic animals may be lower.

**Laws:** Because of their impact on native frogs, in New South Wales (NSW) gambusia have been declared a Key Threatening Process under the *Threatened Species Conservation Act 1995*. The NSW National Parks and Wildlife Service are developing a plan to reduce the impact of gambusia on our waterways.

Unfortunately gambusia are often sold in pet shops as feeder fish or to put into backyard ponds and from there they are sometimes released illegally into local creeks, allowing them to spread. It is illegal to release gambusia into any waterbody in NSW.

**Distribution:** Gambusia are now found in many Australian waterways. They are common in the Murray-Darling Basin and in most coastal catchments of NSW, Victoria and Queensland. They occur, but are not common in Western Australia, the Northern Territory and Tasmania. Once they are introduced into a waterbody they are extremely difficult to remove.

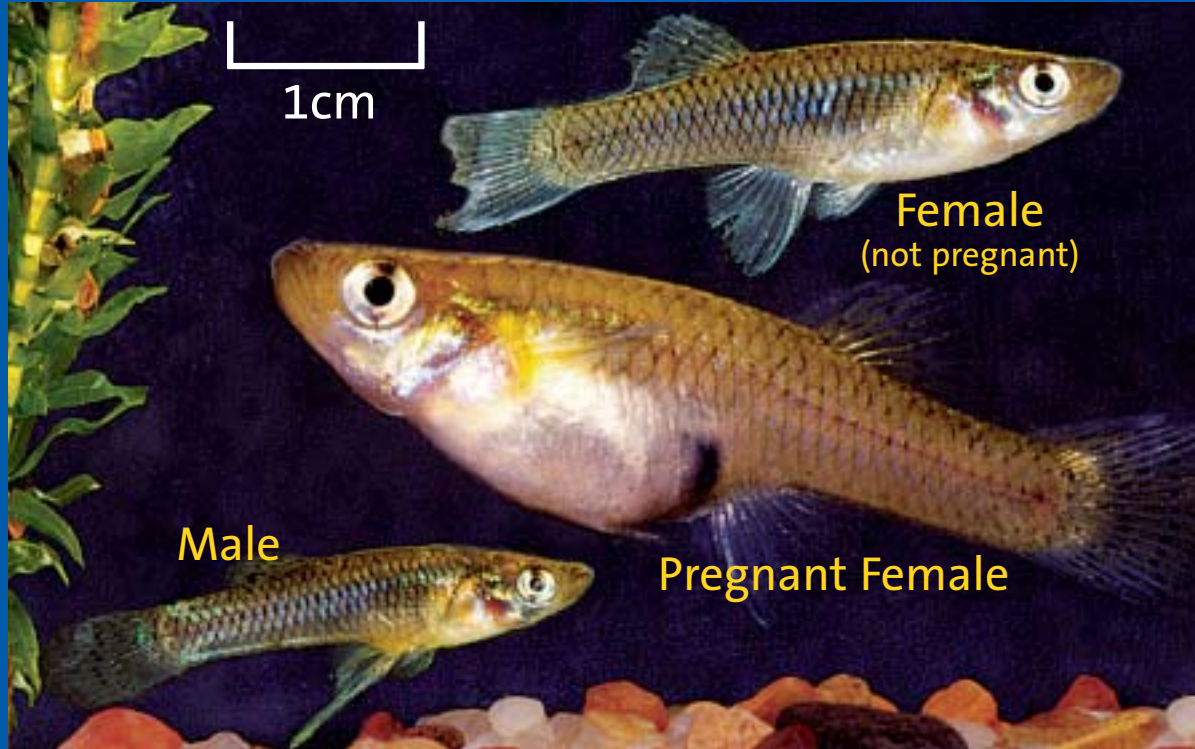
**Habitats:** Gambusia prefer warm, still or slow flowing water. However they are extremely tolerant of any water conditions, and can stand temperature ranges from -4°C (water under ice) to 44°C. They prefer freshwater but can live in saltier water and are commonly found in estuaries.

**Breeding:** Gambusia are very fast breeders. Unlike our native fish who lay eggs, gambusia give birth to live young. Breeding occurs from October to April when the water is warmer. They can breed several times in a year and can give birth to between 50 and 300 young at once.

# Identifying Gambusia



The easiest way to identify gambusia is to put the fish in a small glass jar or specimen container and look at it side-on.



## What to look for:

1. Gambusia are a small fish with green/olive colouration becoming grey with a bluish sheen on the sides and silver on the belly.
2. The females are larger than the males, with females growing up to 6cm long and males up to 3cm long. They have a deep rounded belly and flattened upper surface, especially the head.
3. They have an upturned mouth and big eyes.
4. Females have a distinguishing black marking on their bellies, which gets larger when pregnant.
5. Males are more flat with a longer anal fin, which is used as its breeding tool.
6. Gambusia have one small dorsal fin. The dorsal fin is behind the anal fin.
7. They school in large numbers on the surface of water, all swimming in different directions.
8. Gambusia are the only freshwater fish in NSW that gives birth to live young. All native freshwater fish in NSW give birth by laying eggs.

Other native fish that can be confused with gambusia:



Pacific blue eyes (*Pseudomugil signifer*)



Australian smelt (*Retropinna semoni*)



Firetail gudgeon (*Hypseleotris galii*)



Dwarf flathead gudgeon (*Philypnodon sp.*)