

## Maintaining Your Mosquitofish

**Acclimation:** When you get the fish home, acclimate them to their new site. Place the container with the fish directly into the water for 20-60 minutes or until the pond's water and the container's water are nearly the same temperature. Then release the fish. *Gambusia* can tolerate 33 - 104°F water temperatures, but prefer 77 - 86°F.

**Food:** Mosquitofish seldom need supplementary food, but during the winter larvae may be scarce. In this case, tropical fish flakes are suitable, as well as dry dog or cat food. Overfed fish may not eat mosquito larvae and excess food may cause bacterial bloom toxic to the fish.

**Protection From Predators:** Provide large rocks and vegetation for shelter from predators such as raccoons, opossums, and egrets.

**Algae:** Small amounts are a good food source for the fish and shelter for fry, but if it gets too thick the fish might be unable to get to the mosquito larvae. Some algaecides are toxic to fish, so they should be used only if recommended by a knowledgeable aquaculturist. Materials and instructions may be obtained from local tropical fish shops and garden supply centers.

**Leaves:** Certain leaves, like pine, oak, and eucalyptus contain chemicals that are harmful to fish. Accumulation of these leaves makes the fish too sick to eat mosquito larvae. Make sure to remove these leaves from your water source.

## HOW TO GET FREE MOSQUITOFISH

GLACVCD provides FREE mosquitofish to district residents for placement on their property only.

Call the district before arriving to confirm there is an ample supply of mosquitofish for distribution. Fish are available at the Santa Fe Springs and Sylmer facilities.

### GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

District Headquarters	North Hollywood Branch
12545 Florence Ave, Santa Fe Springs, CA 90670 (562) 944-9656	16320 Foothill Blvd Sylmar, CA 91342 (818) 364-9589 By appointment only

Web site: [www.glacvcd.org](http://www.glacvcd.org)

Office Hours: Monday - Friday  
8:00am - 5:00pm

Containers for fish transportation are not provided.



## THE INDISPENSABLE MOSQUITOFISH AN EFFECTIVE WAY TO CONTROL MOSQUITOES



Mosquitofish (*Gambusia affinis*) were first introduced to California in 1922 for mosquito control. Instead of using insecticides to control mosquitoes, fish are an attractive alternative referred to as biological control. Mosquitofish are of economic importance because they feed on mosquito larvae and pupae. *Gambusia* are part of the integrated vector management strategies employed by the:

### GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT



## Sources Where Mosquitofish Are Placed

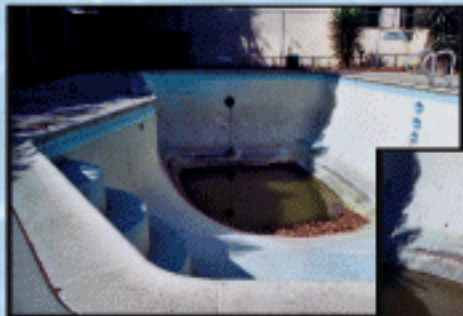
These fish are routinely stocked by Vector Control Specialists (VCS) to control mosquito populations in sources such as artificial lakes, irrigation ditches, and industrial ponds. By law, VCS can place fish in water sources other than those located on private property.

To avoid competition with sensitive amphibians and native fish species, we do not stock mosquitofish in habitats where such species are known to be present.

It is against California Department of Fish and Game regulations for private citizens to plant mosquitofish in waters of the state without a permit.

## **Residents are encouraged to stock *Gambusia* in the following sources:**

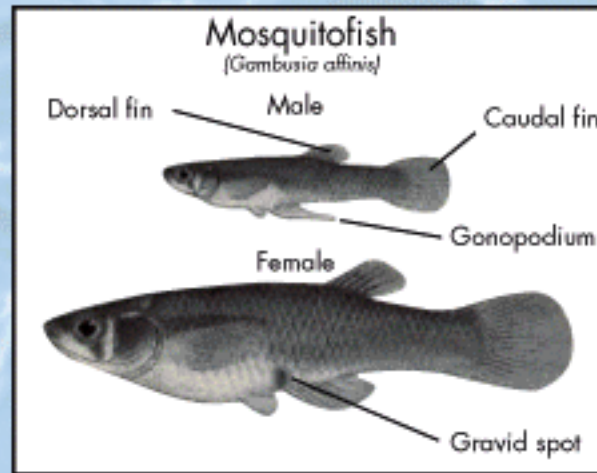
- Ornamental ponds: 6 - 10 fish per pond (depending on size)
- "Out-of-order" swimming pools: 15 - 30 fish per swimming pool.
- Animal watering troughs



A neglected residential pool being treated with mosquitofish.



A resident releases mosquitofish into an ornamental pond.



## Mosquitofish Description

### **Male:**

- Slimmer than female
- Characteristic gonopodium
- Length: 1.5 inches

### **Female:**

- Larger body than male
- Distinct gravid spot on the abdomen above the rear of the anal fin
- Length: 2.5 inches
- Give birth to live young

**Feeding Behavior:** *Gambusia* are omnivorous and have a voracious appetite for mosquitoes. A large female can consume hundreds of larvae per day. All sizes and ages of *Gambusia* readily feed on mosquito larvae. They also eat algae and small invertebrates.

**Habitat:** During the winter, the fish hibernate in the lower water depths, and reappear late spring when water temperature becomes warmer. The fish prefer sunlit areas of the pond and do not thrive in a heavily shaded pond.

### **Color:**

- Both sexes have a pale grey body, fading to muddy white on the belly.
- The dorsal and rounded caudal fin may exhibit dotted banding.



## Advantages of Using Mosquitofish Over Other Fish in Water Sources

- *Gambusia* are specific to consuming mosquito larvae. This is due to their upturned mouths naturally adapted for this purpose.
- Small, which enables them to inhabit shallow waters and penetrate dense vegetation growth where larvae and pupae hide.
- Broad tolerance to a wide range of environmental conditions such as temperature changes, salinity, organic pollution, and poor food supply.
- Relative lack of disease
- Easily maintained

### **Compatible Organisms**

Gold Fish, Koi, Carp

### **Non-Compatible Organisms**

Bass, Perch, Bluegill, Catfish, Frogs, Turtles and Crayfish