## WHERE MOSQUITOFISH ARE USED

Mosquitofish can be used in these and other mosquito-breeding sources.



Horse Troughs



**Ponds and Fountains** 



**Unmaintained Swimming Pools** 

# OUR MOSQUITOFISH PROGRAM

Mosquitofish are readily available through the District's service request program. Mosquitofish are stocked by our statecertified technicians to help ensure that the fish are being placed in the appropriate habitats and conditions. If you would like to request mosquitofish for your pool or pond, please contact the District at (916) 380-5444.



#### **COMPATIBLE FISH**

Mosquitofish are compatible with koi and all varieties of pond goldfish, such as common goldfish, comets, shubunkins, omadas and fantails. Bass, bluegill and catfish will eat mosquitofish. Mosquitofish can be kept in a tank with swordtails, platies, and common guppies.



## FIGHT THE BITE

by practicing the District's 3Ds of protection:

- **1. DRAIN** any standing water that may produce mosquitoes.
- 2. DEFEND yourself against mosquitoes by using an effective insect repellent, such as DEET, Picaridin or Oil of Lemon Eucalyptus. Make sure you follow label directions!
- 3. Contact the **DISTRICT** for help.
  We are here to serve you. Call us at (888) 768-2343, or visit us online at www.placermosquito.org.

Your tax dollars hard at work

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The Placer Vector Control District is concerned about protecting and preserving the environment. We strive to cut down on waste and use eco-friendly materials wherever possible.

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# ABOUT **MOSQUITOFISH**





The Placer Mosquito and Vector Control District strives to reduce mosquito and other vector populations, promote awareness of vectors and vector-borne diseases, and decrease health risks to residents in Placer County.

Since 2001, the District has worked diligently to:

- educate and inform the public about current and emerging mosquito and vector-borne diseases
- inspect, reduce and eliminate mosquito breeding sources in Placer County
- employ Integrated Vector Management strategies and techniques to reduce vector populations and protect public health from mosquitoes and mosquitoborne diseases
- use public funds efficiently and responsibly to achieve the District's mission

### **ABOUT MOSQUITOFISH**

Mosquitofish, Gambusia affinis, are indispensable to mosquito control programs throughout the world. This relative of the common guppy feeds primarily on aquatic insects, and are effective predators of mosquito larvae in many diverse aquatic habitats throughout the world. A comparatively small species, the full-grown females are typically under  $2\frac{1}{2}$  inches. The muted silver and light olive green color is common in both

They have a voracious appetite; an adult mosquitofish can eat up to 150 mosquito larvae in an 8-hour period. This makes them an excellent biological tool for mosquito control because the fish consume the larvae before they have a chance to develop into adult mosquitoes.

Once mosquitofish are introduced into a mosquito-breeding source, they can live up to two years. Mosquitofish are live-bearing fresh water fish and a female can bear young three to six times per summer. There are 10 to 300 live fry per brood, depending on the age and size of the female.

If mosquito larvae become depleted, mosquitofish will eat whatever is available, including other aquatic insects, algae, terrestrial insects that fall into the water, as well as fish food.

Other fish such as bass, bluegill and trout may prey on mosquitofish, reducing their effectiveness as mosquito predators.

#### **FEEDING**

Mosquitofish are opportunistic feeders; they will eat just about anything. During warmer months, they usually do not need supplemental feeding. In fact, supplemental feeding can reduce their appetite and effectiveness.

If there is no natural food, such as in a new pond, you can feed them a small amount of fish flake food.

#### **TEMPERATURE**

Mosquitofish can tolerate water temperatures between 33°F and 104°F, but they prefer temperatures between 77°F and 86°F.

They are often found at the shallow, unshaded region of a pond. Although algae may build up and become unsightly, limited amounts of algae will not harm the fish.

These hardy fish should survive throughout several seasons and reproduce to provide continuous biological control of mosquitoes.

## APPLICATIONS Mosquitofish ar

Mosquitofish are stocked by state-certified technicians. In general, mosquitofish are stocked in very small numbers because they quickly reproduce to the maximum population levels that a particular habitat may sustain. If supplemental feed is needed, especially in temporary situations where very few natural food organisms exist, almost any live or dry feed (even crushed dog biscuits or chicken feed) may be sparingly applied. In small, confined mosquito sources, such as bird baths and cattle water troughs, 10-15 adult fish will provide rapid mosquito control and soon reproduce to increase their numbers. Larger sources, like small ponds and ditches, are usually stocked at a minimum rate of 0.1 pounds of fish per surface acre in the spring.



#### What is a vector?

A vector is an insect or any other animal capable of transmitting a disease or causing harm to people or animals.

