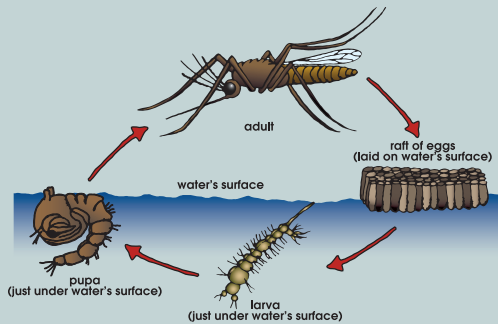
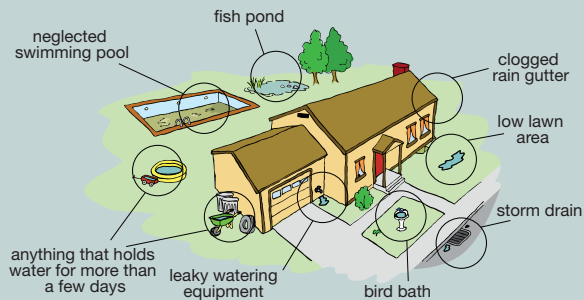


ARE YOU RAISING MOSQUITOES?

Mosquitoes complete their lifecycle in standing water. During summer months, they can mature from egg to adult in just five days! Mosquitoes may be growing in your own backyard. Wine barrels, backyard ponds, animal watering troughs and non-maintained or neglected swimming pools are all perfect areas where mosquitoes can develop from egg to biting adults.



Check these sources for mosquito production. If you see tiny worm-like creatures wiggling at the surface of the water, take a closer look to see if they are mosquito larvae. If they are, you may need to stock the mosquito source with mosquitofish. **You should not find mosquito larvae in swimming pools that are regularly filtered and chlorinated.**



ABOUT CONTRA COSTA MOSQUITO & VECTOR CONTROL DISTRICT

Protecting Public Health Since 1927

Early in the 1900s, Northern California suffered through epidemics of encephalitis and malaria, and severe outbreaks of saltwater mosquitoes. At times, parts of Contra Costa County were considered uninhabitable resulting in the closure of waterfront areas and schools during peak mosquito seasons. Recreational areas were abandoned and Realtors had trouble selling homes. The general economy suffered. As a result, residents established the Contra Costa Mosquito Abatement District which began service in 1927.

Today, the Contra Costa Mosquito and Vector Control District continues to protect public health with environmentally sound techniques, reliable and efficient services, as well as programs to combat emerging diseases, all while preserving and/or enhancing the environment.

Contra Costa Mosquito & Vector Control District Services for Contra Costa County Residents

MOSQUITOES

Inspection and control

TICKS

Tick identification

MOSQUITOFISH

For residential ponds

RATS AND MICE

Inspection and advice

YELLOWJACKETS

Ground-nesting only

SKUNKS

Inspection and assistance

BEEES

Inspection and education

PUBLIC EDUCATION

Literature and presentations

Rev. 07/21



CONTRA COSTA
**MOSQUITO
& VECTOR
CONTROL
DISTRICT**

Contra Costa Mosquito & Vector Control District
155 Mason Circle • Concord, CA 94520
(925) 685-9301 office • (925) 685-0266 fax
www.ContraCostaMosquito.com

MOSQUITOFISH



CONTRA COSTA
**MOSQUITO
& VECTOR
CONTROL
DISTRICT**

MOSQUITOFISH CARE

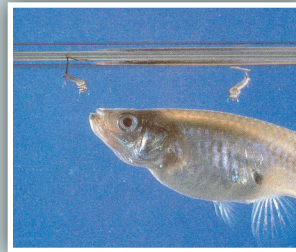
For newly established ponds, you must treat your pond water to remove chloramine, a combination of chlorine and ammonia added to drinking water by EBMUD and Contra Costa Water District. You can purchase chloramine treatment kits at aquarium or pet supply stores. You should not have to treat water used for topping off a pond due to evaporation as long as it is below 20 percent of the pond's volume.

PLACEMENT

During the District's Mosquitofish Service, a District employee will inspect the property, including the water feature, to determine if mosquitofish are appropriate to address the mosquito issue. If mosquitofish are suitable, the District employee will place the fish in the water feature. In the event mosquitofish are not suitable, the District employee will provide other options to resolve the mosquito issue.

FEEDING

Mosquitofish are opportunistic feeders; they will eat just about anything. During warmer months they usually do not need supplemental feeding; however if there is no natural food (a new pond or in the winter months) you should feed them a small amount of flake fish 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. Limited amounts of algae will not harm the fish, but may become unsightly. Most pet stores can supply directions on how to control algae in fish ponds. These hardy fish should survive throughout several seasons and reproduce to provide continuous biological control of mosquitoes.

HOW TO REQUEST MOSQUITOFISH

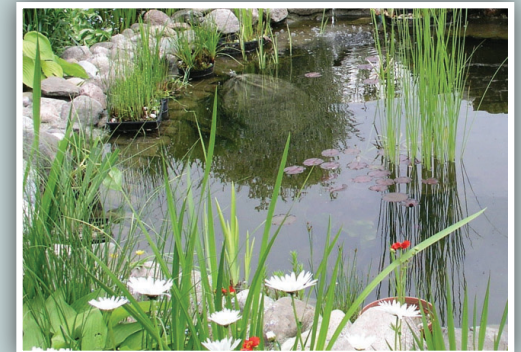
Contra Costa Mosquito & Vector Control District provides a Mosquitofish Service.

Contra Costa County residents can request Mosquitofish Service by calling the District at 925-685-9301 or online at www.ContraCostaMosquito.com. During the service, a District employee will perform an inspection and may place mosquitofish, if appropriate, in a water feature. There is no additional cost for the District's Mosquitofish Service.



COMPATIBLE FISH

Mosquitofish are compatible with koi and all varieties of pond goldfish, such as common goldfish, comets, shubunkins, omadas and fantails. Mosquitofish can be kept in a tank with swordtails, platies, and common guppies. Mosquitofish should not be located with bass, bluegill and catfish because they will eat mosquitofish.



MOSQUITOFISH

Gambusia affinis

Mosquitofish (*Gambusia affinis*) are live-bearing fresh water fish. They are closely related to guppies. These small fish (one to two inches long) are top swimmers that feed on insects and wind-blown organic debris at the surface of the water. They have a voracious appetite; an adult mosquitofish can eat several hundred mosquito larvae a day! This makes them an excellent biological tool for mosquito control because the fish gobble up the larvae before they have a chance to develop into adult mosquitoes.

As a natural predator of mosquito larvae, mosquitofish have been used for several decades in California. More than 1 million of these fish are produced each year at the Contra Costa Mosquito and Vector Control District's facility in Concord. State certified District employees routinely stock these fish in water bodies throughout the county. Some common places where fish are stocked include artificial lakes, irrigation ditches, marshes, storm channels, swimming pools, and natural and industrial ponds.

By law, only District employees may place fish in water sources other than those located on private property.