

# Control Mosquito Larvae Before They Leave the Water and Start Biting

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Last summer West Nile outbreaks caused a great deal of worry among all of us in regards to mosquito suppression. 2003 is looking like a rainy year, so the possibility of large numbers of mosquitoes is very possible.

We can assume that West Nile is present in some mosquitoes that could be in our county. It's been found all around us according to the CDC. For more information on West Nile, you can go to [www.cdc.gov/ncidod/dvbid/westnile/](http://www.cdc.gov/ncidod/dvbid/westnile/).

Lots of folks are scared about West Nile, so let's assume that it's around us and we want to control those pests! What is the most important rule in ridding yourself of mosquitoes! **GET RID OF STANDING WATER**; mosquito larvae cannot develop in flowing water. The most economical method of decreasing the number of mosquitoes in your yard is to change the environment. Used tires are one of the best breeding sites. If you're saving tires for some reason, put them under a cover, other than that, recycle them. The county recycling center on Jones Mountain road will take them for \$2.00 each (regular car tires). Each year I'm asked what insecticide to spray them with to kill them in tires. Why do that! Get rid of those tires!

Around the yard **anything** that holds water should be turned upside down to prevent standing water, or removed and thrown away or recycled. Anything means coke cans, buckets wheelbarrows, old plastic turtle sandboxes, old hubcap collections, etc. Gutters should be inspected for clogs that prevent the flow of water and sometimes they are not hung properly so that they don't drain well. You've got to check!

What do you do about birdbaths? Clean them out weekly. This should be done for good bird health anyway. A splash of Clorox in the water will ensure that no bad bacteria are growing too. It takes quite a few days for a mosquito to go from a baby to adult. Break their life cycle by cleaning the birdbath.

You should be getting the idea now. Control the breeding areas of mosquitoes by draining their homes. Weekly flushing of wading pools, flower pots, etc will put a dent in their populations. I'm always asked about shrubbery and grass and why mosquitoes are there. They do not reproduce in leaves or tall grass or over-grown shrubbery. They hide in these places, avoiding the sun and await you, their next meal!

There are other things that are said to work in ridding your place from these pests, but don't. Mosquito plants do not repel mosquitoes. Garlic, herbal bracelets or ultra sound devices do not repel mosquitoes. Herbal repellents work for less than one hour. Traps that use light and or carbon dioxide to lure in mosquitoes attract more mosquitoes than they kill. These are the ones that burn propane gas to attract those pesky insects. If you decide to use one of these put it away from the house or give it to a neighbor.

## **For Personal Protection:**

Wear light-colored clothing when outside, because dark colors attract mosquitoes. Stay indoors at dawn and dusk when mosquitoes are usually most active. Wear a repellent containing DEET and treat clothing with a product such as Permanone mosquito repellent (containing permethrin).

If using citronella candles, orient them so that the breeze is directing the candle smoke toward you; the smoke is what repels mosquitoes.

Using products that attract the mosquitoes in water are called larvicides. Most use a bacteria called **(Bti) bacillus thuringiensis israelensis**. This is deadly to mosquito larvae yet harmless to people, pets, fish and wildlife. Some examples are:

**Bactimos Briquets** (active ingredient is Bti) is a sustained release floating formulation.

**Mosquito Dunks**: (active ingredient is Bti) is available at hardware, feed and seed stores, and garden stores. Each dunk treats 100 square feet.

**Mosquito Bits**: contain the same product as mosquito dunks, but small amounts can be used for smaller areas.

Some use **methoprene**, an insect growth regulator that prevents the mosquito from completing its life cycle. Examples are:

**Altoid 30-Day Briquets**: (active ingredient is methoprene, an insect growth regulator) it can be purchased from Adapco through a toll-free number (800-367-0659).

**Zodiac Preventative Mosquito Control**: (active ingredient is methoprene) it is available at pet stores.

Some film forms on the surface of the water that smothers mosquitoes. Agnique produced by Adapco is an example.

Another biological control option is stocking standing water (ditches, ponds, lily pools, etc.) With mosquito fish (Gambusia). These small minnows feed on mosquito larvae and reproduce so they maintain themselves and provide ongoing suppression. These tiny fish can be ordered on-line or from pet stores and can even be used to stock watering troughs. Pools left behind receding floodwaters are prime sites for using mosquito fish.

So there you go! There's more than you wanted to know about the pests. Always read and follow the label instructions to protect you and the environment. For additional information, call your Pickens County Extension Office at 706-253-8840.

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