

The BUZZ on pest control

by Jocelyn Hoch

When you begin gardening as a hobby you start to feel pretty humbled in this great big world full of mystery and magic. Thus taking you into a microcosm of observation. You begin to examine your plants closely, sometimes under microscope, trying to figure out what is eating them. As you stand there in blissful stillness, peacefully gazing at your plants pondering these thoughts, in comes a swarm of mosquitoes buzzing in your face. You swat, you grab bug spray, even get angry as they extract your blood. But do you ever think twice about those little vampires? You may observe some are large, some are small but do you ever wonder what species they are?

As it turns out, our local mosquito control dept of Sarasota is dialed in, boasting a total of 36 different species here in our county alone. From *Aedes albopictus* to *Culex quinquefasciatus*. Some of these use common wetlands plants as host nursery to breed more bloodsuckers. These plants, such as cattails which host coquillettidia perturbans, are considered vector species and are targeted for elimination by the county. The department collects 5-8,000 pupae every year trying to identify the bad ones so they can battle them with the correct pesticide. When you see their trucks driving up and down the street they are spraying our ditches with *Bacillus thuringiensis israelensis*, a natural bacteria that kills larvae.

Nearly as quickly as our roadside ditches fill with water, as if by a miracle, they are inhabited by astonishing levels of diverse life forms. Life truly does find a way. Upon closer inspection you may notice these wonderful little native fish called Rainwater kill fish or mosquito fish. The County has stocked our waterways with these. Like their name suggests these little guys eat millions of mosquito larvae, but sadly when the ditch dries out, they may die if they don't make it into to a local pond or waterway. A fun little conservation project you can help with is to rescue these little critters when the ditches begin drying up. Grab a bucket, a net and scoop out as many as you can catch and release them into a bigger water source.

All though some of Mosquito controls' practices are questionable, such as the use of aerial sprayed naled, a highly toxic organophosphate insecticide that is been banned in Europe, I feel confident knowing that the extra money we pay in taxes for mosquito control goes to a department doing a great job to protect us. There hasn't been a reported case of any major mosquito spread infection for over fifteen years in our county.

At home, you can take measures to prevent disease carrying mosquitos from birthing in your yard. Empty containers that hold standing water, get mosquito dunks (BTI), try placing spanish moss in your rain barrels, this will kill larvae due to its antimicrobial and antiseptic qualities. As it turns out we all contribute to disease breeding mosquitoes by leaving containers in our yards and clogged gutters are a big factor too, standing water of any kind is a wonderful place for mosquitos to breed. If you have bromeliads drip a few drops of natural soap in them so it kills mosquito larvae.

There are so many wonderful ways to deter pests around your home and here are some natural recipes to try yourself. Best bug spray that costs barely anything is a combination of lemongrass, peppermint, eucalyptus, and citronella essential oil, mix 20-30 drops of each in 4 oz bottle, fill the bottle w olive oil shake well and rub on. Fire ant & roach killer: Eucalyptus oil, peppermint, & citronella oil: combine 50% peroxide & 50% water in a spray bottle add 2 squirts of natural bio soap 7th generation works best (to emulsify oils) add 40 drops of eucalyptus & peppermint, 15 drop of citronella oil shake well and spray, kills pests on contact. This formula is a great deterrent to keep the ants out of your house, also makes a wonderful general use non

toxic cleaner kills airborne bacteria as well. A really nice combination I often use is lemon, eucalyptus, lemongrass , clove to refresh your couches and this kills dust mites and bed bugs too. All these things can be found at your local health food store for a very minimal cost, I use the "Now" essential oil products for cleaning. There are always natural non toxic solutions for home and health. For more home & garden solutions follow Ebb & Flow Farm on facebook . More to come on gardening as we approach planting time soon. And please check those rain barrels, gutters and dump containers. Perhaps if we simply allow mother nature to do her thing we wouldn't have to intervene so much.