

## News from the Watershed

### Mosquitoes: Don't let them ruin your summer fun!

Summer in Florida brings up images of outdoor activities such as laying on sandy beaches, enjoying outdoor barbecues or swimming in the cool crystal water of the backyard pool. But one little pest, which is about ½ inch long and weighs only 2 -2.5 mgs., can be a huge contributor to spoiling our fun.

According to the Wikipedia Encyclopedia, mosquitoes are believed to have evolved around 170 million years ago with the earliest known fossils from 65-144 million years ago. Some ancestral mosquitoes were about three times the size of the present pests.

For the mosquito to complete its lifecycle, water is a necessary element. And we all know that there is an abundance of water in our state. Many species of mosquitoes lay their eggs on the water's surface. The eggs may hatch within 24 to 48 hours. Once hatched, the larvae move up and down from the surface of the water. The larvae feed on microorganisms and organic material found in the water. About a week after hatching, the larvae change into the pupal stage. Once the female mosquito vacates her watery home, she begins to seek out a blood source.

All mosquitoes feed on nectar and other sugary sources; however, most female species require the blood of animals or humans in order to reproduce. The female will seek out a blood source, even if she has to fly for miles. She will find her victims, which consist of mostly mammals including humans, by sight, smell, warmth and movement. The visual picture she sees is an infrared view produced by her prey's body temperature. They do prefer warm blooded creatures and generally will not bother the cold blooded species. When the female mosquito bites, she also injects an anticoagulant into the prey to keep the blood flowing. Depending on species, the female may lay up to 100 to 300 eggs at a time and may average 1,000 to 3,000 during her lifetime. The average life span of the female mosquito is from 3 – 100 days; the male's is 10 – 20 days. Males do not bite, but they do feed on plant juices.

The mosquito often carries diseases such as West Nile virus, malaria, encephalitis and yellow fever. Once the female, who drinks blood, injects her proboscis (long nose) into an animal or human, if that organism is infected, she will spread it to all she attacks.

There are about 200 species of mosquitoes in the United States and more than 2,500 worldwide. Their bodies are divided into three parts (head, thorax and abdomen) a hard exoskeleton, and six long, jointed legs. The mosquito's head is mostly eye. Each eye is made up of many tiny lenses forming two compound eyes. This type of eye allows for a very broad field of vision that easily detects movement. In addition, they have a straw-like proboscis and can only consume liquids.

For the most part, mosquitoes do not venture far from home. They are not particularly strong flyers and generally travel at speeds of approximately one to one and a half miles per hour. Most mosquitoes remain within one mile of their breeding site. However, if carried by strong wind or if the female is seeking out a blood meal, the mosquito can travel further distances. They fly mostly in the cooler hours of the morning and evenings, preferring to stay in a cool place in the heat of the day.

Because we do have the facts about these pesky creatures, there is much we can do to avoid their bite:

- Wear long pants and sleeves, socks and shoes when outdoors.
- Wear loose clothes made of tightly woven materials that keep mosquitoes away from the skin.
- Follow the label's instructions if using repellent.

- Repair or replace old and torn screens around the house
- Since mosquitoes breed in stagnant water, and can do so even in very small quantities, remove any possible breeding areas where mosquitoes could lay eggs.
- Drill holes in the bottom of containers that must be left outdoors.
- Keep your swimming pool aerated, cleaned and chlorinated, even if it is not being used.
- Keep your gutters clean to prevent standing water.
- Check under shrubbery and lawn coverings for hidden containers.
- Use landscaping to eliminate water that collects in low areas on your property. Mosquitoes can develop in any puddle that lasts more than 7-10 days during the summer.
- Repair any leaks from outdoor water pipes, joints or hoses. Replace washers on outdoor taps that drip.

By taking a few moments to prepare your home and yard from being a mosquito breeding ground, you will have a much better chance of enjoying your outdoor summertime activities. And remember, aquatic birds, frogs, beetles, water bugs and dragonflies eat mosquito larvae, so you might want to keep those critters around!