

# **Mosquito Control: Weather played havoc with annual mosquito migration, to our benefit**

By JEFFREY STIVERS, Special to the Daily News

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August in paradise (aka Naples) usually isn't. Paradise, that is. August normally means high heat, high humidity, high mosquito populations and the threat of West Nile virus and Saint Louis encephalitis.

This August has been a little bit different, however. We have had the miserably high heat and humidity but the mosquitoes have been noticeably absent. With reduced mosquito populations the risk of mosquito-borne disease is also reduced but not eliminated.

While the staff of the Collier Mosquito Control District (CMCD) would like to take credit for a relatively mosquito-free August, the credit really has to go to Mother Nature. Recent weather patterns explain some, but not all, of the reduction in mosquito populations.

Much of the salt marsh mosquito problem in Naples is caused by mosquitoes migrating into the area from the Everglades and the 10,000 Islands area. They do this by flying upward at night and hitching a ride on the prevailing southeast breeze. This year there have been several periods when the prevailing night time wind has been from the west. This condition has reduced the intensity of the normal invasion of Naples by salt marsh mosquitoes.

Instead of Naples, all those mosquitoes have migrated to the Miami area. The mosquito control grapevine has it that the Miami-Dade Mosquito Control received 1,500 complaint calls in one day. Doesn't sharing with our neighbors on the east coast give every one a warm, fuzzy and less itchy feeling?

The situation with freshwater mosquitoes is much more confusing. We have had a lot of rain, with standing water in many places. Yet, there are relatively few freshwater mosquitoes out plaguing residents. There are two possible situations that may explain this phenomenon.

One possibility is the type and timing of the early rains experienced by the Naples area. The very heavy rainfall experienced early in the summer was enough to fill up drainage ditches, swales and other low spots in the terrain. This provided sufficient water to hatch mosquito eggs laying dormant in the soil. It also provided standing water for female mosquitoes to lay eggs.

However, in many places, unfortunately for the larvae hatched from those eggs but fortunately for people, the water in the ditches, swales and low spots quickly dried up and/or soaked into the ground before the larvae could emerge as hungry adults.

This type of cycle was probably repeated numerous times during the summer, leading to reduced freshwater populations in many parts of the district.

Something else that has been observed in other parts of the district is the presence of small, mosquito-eating fish in many of the areas where water is still standing. It is possible that the heavy rains that flooded many areas earlier in the summer caused permanent bodies of water, such as canals and retention ponds, to temporarily connect with temporary pools. These connections permitted the introduction of fish into the temporarily flooded areas.

With the introduction of mosquito-eating fish, as well as other predators such as dragonflies, beetles and frogs, into potential mosquito breeding areas, Mother Nature has provided the area with natural mosquito control agents, free of charge. Whatever the reason, a friendly west wind, frequent flooding and dry-down of breeding sites, the introduction of mosquito-eating fish into temporary pools, or some other combination of unknown factors, this has been one of the lightest mosquito seasons anyone at CMCD can remember.

Maybe, as some have suggested, Mother Nature owns a house down on Gordon Drive and she has gotten tired of all the mosquitoes, just like the rest of the residents of Naples.

That might also explain why all of the hurricanes seem to avoid Naples: Mother Nature probably can't afford to have her hurricane insurance premiums go up either.



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