

In My Backyard Gnats!!! The Devil's Henchman



Fungus Gnat

Photo: orkin.com

Living in Sanderson has introduced me to a few problems I never thought I would encounter. Humidity, for one, was a surprise to me, as in my hometown of Marathon, just 54 miles away, our usual humidity was 5 to 10% for most of the summer and fall. It might get blasted hot there, but about 4 or 5 o'clock in the afternoon a breeze would come in off the desert and prairie and the heat would dissipate. Sometimes even that would fail but the low humidity seemed to make things better.

In Sanderson, however, we found the humidity to soar to 20 or 30% or even higher and we would swelter. In our part of town, the trees and buildings block the breeze and we still, after 27 years, have not gotten used to it. An old-timer told me years ago that some of that was due to moisture coming back up the canyons from Lake Amistad, that before the lake was built is

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Photo: orkin.com

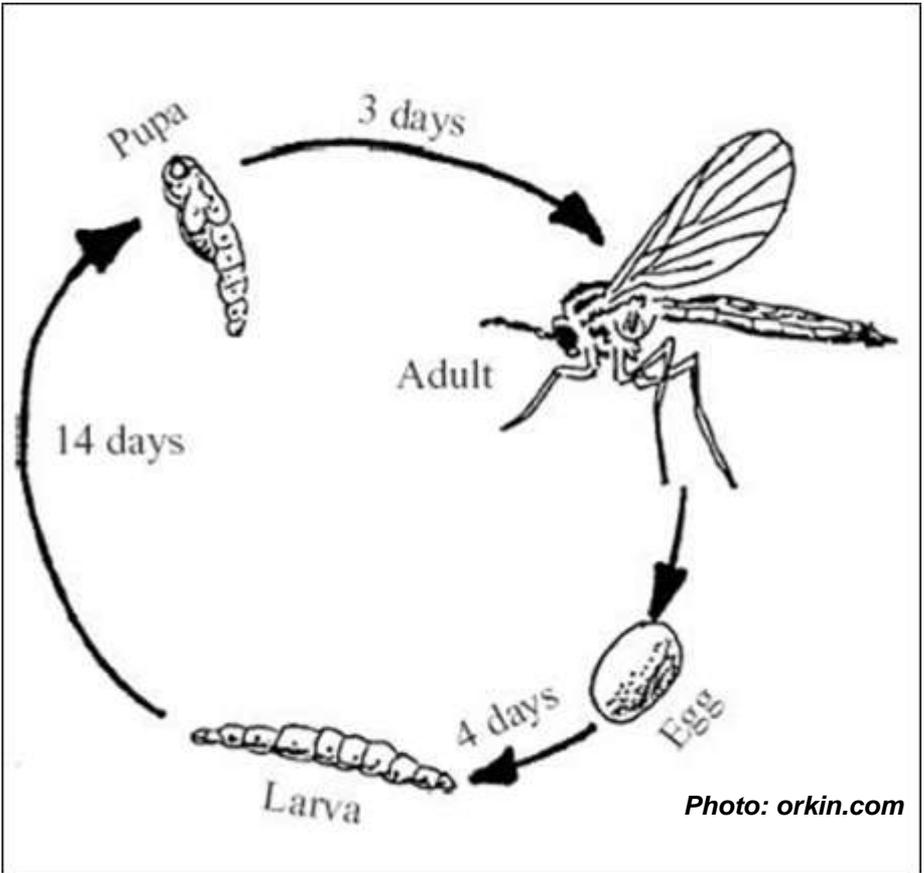
Common Fruit Fly

was just as dry in Sanderson as it was in Marathon.

But, something else that the higher humidity, the plethora of homes with lawns and flowerbeds in Sanderson and the extensive watering that goes on for months at a time has brought to this town is the infernal gnat! When I go outside I am attacked not just by swarms but squadrons of gnats, crawling on my face and arms and flying up my nose and into my ears. The little devils dive-bomb me and drive me nuts. Earlier this summer our air conditioner went out and every time I went out to check on it and figure out what was wrong, I was swamped with pesky gnats. They were so bad that I only lasted about 10 minutes outside, then I would run back in to escape them. My wife tried to get me to put on insect repellent, but I find that stuff nastier than the gnats. How could such a tiny insect cause me such aggravation?

So, what is a gnat, anyway? Some people believe them to be tiny flies, and they do fall into the Diptera order which also includes flies, but they are not flies. Some folks think they are baby houseflies, sewer flies or fruit flies, but though they are similar, the gnats we see are adults and not babies. They behave like fruit flies in their attraction to overripe fruit and vegetables, but fruit flies under an observation microscope are a far cry from gnats. The end of their abdomen is rounded, more like a regular fly, and gnats generally have a pointy abdomen. Refer to the photos in this article. Fruit fly coloration is light brown, usually with reddish eyes, a dead giveaway. They are slightly larger than the darker colored gnats and they can be obnoxious as well, but when they move across a surface they walk in a straight line. The light brown or black sewer flies move in an erratic, zig-zag motion. We seldom see gnats walking; they usually stay in flight or land and irritate. Fruit flies and sewer flies are strong fliers, but gnats are weak and erratic fliers. So, they are not fruit flies, sewer flies or baby houseflies.

And, as if that were not enough, there are non-biting gnats and biting, bloodsucking gnats. Like mosquitos, it is only the female that bites. The males just spend their time crawling in your ears or up your nose. Only the



Fungus Fly Lifecycle

black gnats bite, and it is a problem because in biting, they transmit parasites and cause diseases in animals and humans. River blindness is so serious that health organizations have devoted a lot of time and money to the control of gnat populations around the world. Fortunately, I don't think we have black gnats here, or at least I have never been bitten by one. Stock flies, yes, but not gnats. And, black gnats are very dark colored, although not actually black.

Our main culprit seems to be the lighter colored fungus gnats, which thrive in the wet soil of overwatered gardens and flowerbeds. They breed in fungi that are likely to be found in or on plants and vegetables and the surrounding soil, even in our dry environment. Unless there is a population explosion of fungus gnats they are not a problem for your garden, but in large numbers they can cause root damage and kill your plants.

There are two families of fungus gnats in our area, Sciaridae and Fungivoridae. They usually are found in areas with high humidity, but overwatered gardens and lawns will also attract them. Their females lay eggs in the damp soil or in decaying organic matter from the plants and in three days the eggs hatch into squirming little larvae. Some larval species feed

on the fungus found in most soils, but the problematic gnat larvae feed on roots and root hairs, which stunts the plant's growth. They can also infect your plants with viruses and diseases that harm their hosts.

We don't usually see the larvae because they are tiny and they remain in the soil, unnoticed. The adults fly low to the ground around the plants and land on the plant or on leaf litter. They also, as we have found out, will swarm up and crawl around on our faces, arms and legs, no doubt finding humans hot and humid during warm weather.

Fungus gnats thrive in the soil and on plants in the yard, but will attack potted plants inside, especially if they have been started outside. The list of plants that fungus gnats love is quite extensive: the roots of alfalfa, corn, cucumbers, lettuce, peppers, potatoes, soybeans, wheat, Easter lilies, carnation, clover, geraniums, nasturtium, poinsettias, and many other plants and vegetables.

The larvae grow to the proper size 14 days after hatching, then turn into pupae and the miracle of metamorphosis begins. In just four short days the adults emerge, fully mature, and begin the search for food and mates. The cycle begins again. Because of their tiny size, gnat populations can get out of control very easily and largely go unnoticed, until plants begin to wilt, yellow and fail. From hatching to laying eggs, the whole process takes about 21 days.

If gnats are a problem in your yard, try cutting back on your schedule and let the soil dry out before watering. This will kill the larvae and dry out the eggs. Pesticides are not very effective, especially if you are also killing beneficial insects, butterflies and bees. If they are in your house in large numbers, you may have to call your pest control man. Using a vacuum cleaner to suck up the offenders or electrocuting them with a bug-zapper are viable alternatives. Putting ripe fruit and vegetables in the refrigerator will reduce the problem in your kitchen or dining room.

Because of their tiny size and the necessity of using a magnifying glass to identify them, pest control men are better suited to taking care of your problem. They will know exactly what chemicals to use, based on their identification of the culprit.

And, if all fails, get out your flyswatter. Sometimes the old way is the best way. But, please, don't get me started on mosquitos!

And, what is in your backyard?