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Date: Tuesday, June 7, 2011 at 4:57 AM

To: Don Meidinger <bbqdady@yahoo.com>

Subject: new document

StartFragment

Don,

I know you think this is a waste of time, but unless someone can understand what we do and why, that is when I will be able to get them to understand where the retaliation is.

Have a nice day.

I'm looking for accuracy and input.

The Mosquito

There are many species of mosquitoes. Species have physical traits that entomologists can differentiate under a microscope and see with the eye. Each specie has a specific blood target. Blood is crucial for the mosquito to reproduce and for the female to lay her eggs. Male mosquitoes do not bite and only eat nectar from flowers.

Some species of mosquito lays their eggs singly one at a time on the damp soil where the female instinctively knows water has been and will be again. These eggs can lay dormant for years. Other species of mosquito lays their eggs in rafts of 100 to 300 at a time in standing water.

The one universal trait that all mosquitos share is the metamorphic stage that takes place once the combination of heat and water hatches the eggs. The process goes from the egg, to four stages of larval development 1st instar, 2nd instar, 3rd instar, 4th instar, then to the pupal stage to the adult. The larva eats

from the 1st stage to somewhere around the 3rd. During the 3rd stage, the metabolism slows down to prepare itself for the pupal stage. This information is important because this is where the science of chemical use becomes important. There is no known chemical that kills the eggs.

I will go into a few mosquito species that field technicians target in the county of San Joaquin and that pertain to what I want to communicate. The mosquitoes I am going to describe are the species of mosquitoes that I believe are relevant to proving my accusations that I was retaliated against after filing my 2007 complaint to management through the relocation to Escalon that followed. And understanding of these mosquito species proves management's negligence to provide the information necessary for me to be a success in my relocation and to provide the service tax payers pay for and believe they are receiving. I was denied the effective chemicals necessary to provide this service and why this denial exposed the residents of San Joaquin county to a serious health risk.

Culex Pipiens

Culex Pipiens is referred to as the house mosquito. Eggs are laid in rafts of 150 to 300 in polluted or foul water. These mosquitoes have a variety of breeding grounds. These mosquitoes are the dominant mosquito that breeds in dairy ponds. Other sources can be storm drains, septic seepage areas, catch basins, swimming pools—any stagnant water.

If a culex pipiens is found nearby, it is an indicator that polluted water is nearby. The female mosquito injects a fluid into its victim. This process numbs the victim so it is not aware it is being attacked. It also acts as a blood thinner as the mosquito victim's blood

is too thick and would kill the mosquito otherwise. She prefers to get her blood meal from birds but will feed on mammals. This is how West Nile Virus is spread. The bird is the host.

The *Culex Pipiens* also vectors St. Louis encephalitis. Like all species, weather temperatures can speed up the reproduction process. This mosquito goes from egg to adult in 7 to 14 days.

Aedes Nigromaculis

Aedes nigromaculis, the pasture mosquito, deposits its eggs singly (up to 150) on grass stems at or near the ground in moist places. In permanent pastures, eggs are concentrated in great numbers at the base of clumped grasses. The eggs remain unhatched until flooded by irrigation. If water does not flood the pasture, the eggs may remain dormant and viable for a number of years. This species is able to produce a brood following each flooding. It can take as little as four days for this mosquito to develop from egg to adult. The *aedes nigromaculis* is a vicious biter, attacking human beings and other mammals such as horses, cattle, dogs, and rabbits during the day. They are most persistent near twilight.

Newly emerged adults may remain near their larval habitat for the first 24-48 hours before flying elsewhere. Flights of many miles are common. Females are capable of flights up to 20 miles when seeking a blood meal.

Males of this species do not bite. Instead they feed on nectar and plant juices. Females may also feed on plant juices, but must obtain a blood meal in order to develop their eggs. This mosquito is known as the most vicious pest. According to the CDC it is also a carrier of West Nile Virus.

(<http://www.cdc.gov/ncidod/dvbid/westnile/mosquito-species.htm>)

Culex Tarsalis

The Culex Tarsalis is considered the clean water mosquito for her preference in habitats. She lays her rafts averaging about 190 eggs. Her preference for laying her eggs is sunlit surface water pools that are frequently surrounded by grasses and annual vegetation. Larvae tolerate a wide range of water conditions and may be abundant in agricultural tail water, alkaline lake beds, fresh and saline wetlands, secondary treated sewage effluent and oil field run-off. Excessive organic pollution is not tolerated.

This mosquito is the dominant mosquito found in rice fields. It is also a carrier of West Nile Virus.

These are the three major mosquitoes found in San Joaquin County. These are the species focused on in my daily work.

Chemical & Natural Mosquito Controls

Now a bit about the pesticides we have at the district. All of the chemicals used to kill the larva stage are ingested. If the larva is done eating, it is able to morph into an adult. This creates problems. There is only one pesticide available that kills the pupa. This chemical is an oil.

The one time kill that has to be ingested comes in a liquid that can be mixed in our tank and sprayed by our blower unit or by our two gallon hand can. This product also comes in a 40 pound granular form. This is applied by hand. Granules are ideal for places you cannot drive. The granule has a suggested 21 day

residual.

The oil that is used to suffocate the larva is controversial. Some say it is ingested and kills all stages of the larva. Others say it only kills from the third through the pupal stage. The oil creates surface tension over the water. The mosquito has a siphon tube that is used to come to the surface of the water to get air. The chemical actually suffocates the mosquito by cutting off its oxygen. This chemical's use has been limited by the EPA and is no longer allowed to be used in pastures or orchards as the label says it may not be sprayed on a crop or edible food.

The last chemical we have to use is Altosid. This product comes in pellets to apply in pastures, bricks that have 30 day residuals, and 120 day Altosid.

We also depend on fish.

These are all the larvacides we have to use at the district.

Challenges Presented by Zone 18 (Escalon)

Here are the challenges and problems I face to date in Zone 18 (Escalon). I have been told by the old time field technicians my zone is the hardest zone and the most labor intensive. When any other zone has as many sources and treatments, management takes the whole crew in to assist.

I have 1000 acres of rice. Management requires me to do a full inspection of the rice fields pre flight and post flight. This job used to take two technicians, Janine and Morgan, a day each to do when they filled in when Tom Beard was assigned to the zone and went out on medical. Two days a week assigned to rice they know

they are already going to fly does not make any sense. The last month, prior to my last injury, I was informed I was taking too long inspecting the rice.

I have South San Joaquin Irrigation District (SSID) who runs a 10 day irrigation schedule in my zone. So every day, a section of my zone is getting water.

Irrigations run 24 hours a day 7 days a week. SSID goes from Kelly Road all the way south to Mc Bride which runs into Stanislaus.

I have Oakdale Irrigation District (OID) who runs their irrigations from 14 days in the beginning of the season then changes to 10 days in the heat of summer and back to 14 days when the season is ending. OID covers Kelly Road north to Dodds Road.

I have four dairies. Carl Van Vliet on Sutliff and 120. This farmer chronically over irrigates. He has 100 acres that he irrigates with fresh irrigation water. Then he dumps his dairy pond water onto the crops. This is where the problem lies. First off, he uses way too much water because he is trying to push water over a hundred acres. Using dirty dairy water, the chances of egg rafts being transferred through the irrigation area and ending up in a drain or area I cannot access is high thus continuing the reproduction of the culex pipein mosquitoes who thrive in dirty water. The culex tarsalis travel through the fresh water irrigation lines. After a property owner irrigates, he then drains. The next property owner gets the surviving mosquitoes. So Carl now has two species he has nurtured on the areas he is farming. Then he has pasture land where the pasture mosquito hatches. In three days in the right conditions, we now have three species.

Citing