

Mosquito Control Update

March 19, 2013

Winter preventative maintenance and repairs on equipment, vehicles, and sprayers have been completed. All ULV spray trucks and sprayers, larvacide vehicles and sprayers, and aircraft are operational and ready for service. As temperatures gradually warm, adult mosquito activity will begin to increase and the District will assume full spray operations. Lately, control measures have mostly been limited to larvacide operations.

Rainfall totals for January and February have averaged 8.21 inches above normal. As a result, practically all of the floodwater mosquito breeding sites are flooded and have remained flooded for some time. This situation may work to our advantage by reducing the potential production of the usual spring and early summer emergence of woodland floodwater mosquitoes. If these areas remain flooded for a few more weeks, we will experience some permanent water breeding mosquitoes, but the problem will not be to the level of floodwater mosquitoes. Inspectors and biologist have been conducting routine larval inspections of the domestic breeding sites. They have been finding a mixture of permanent water and floodwater mosquito larvae at these sites. It is interesting that a relatively high number of species are breeding at these sites which include *Aedes vexans*, *Aedes canadensis*, *Culex salinarius*, *Culex nigripalpus*, *Cules restuans*, *Culex territans*, and *Anopheles spp.* The positive breeding sites are treated as they are identified.

The part-time larvaciders returned to work in early February to begin to once again treat the roadside ditches for the control of *Culex quinquefasciatus*, the southern house mosquito. When they reported to work, the larval breeding index was 10.5 larvae per dip. Because of the large amounts of rainfall, most of the ditches contained fresh water, so they were not exclusively breeding the southern house mosquito. After the first week of larvaciding the ditches, the larval breeding index fell to 2.8 by the next two weeks it fell to 1.5. The breeding index is now 1.4 larval per dip, which is considered very low.

A couple of weeks ago, two of the CDC light traps located in south west Slidell and south Lacombe near the marsh, collected a considerably large number of *Culex salinarius*. The collection was made on a night when the overnight low temperature was about 62 degrees. A cold front arrived the next day followed by another, so temperatures were not good for aerial adulticide. Adult mosquitoes become relatively inactive when temperatures are below 55 degrees at night. Finally, last night temperatures and winds were favorable for aerial adulticide and 15,360 acres were sprayed along the coastal areas from South Slidell to Mandeville.

A total of 169 mosquito pools were tested for West Nile virus with all returning negative.