

Mosquito Control Update January 9, 2014

Mosquito activity during the cold winter temperatures has obviously decreased dramatically. The cold temperatures do not kill the adult mosquitoes, unless temperatures remain below freezing for about 48 hours. Instead, their metabolism slows down considerably and they become relatively inactive until temperatures rise to about 55 degrees. Although very little control procedures are undertaken during the winter, limited field duties such as mosquito adult and larval surveillance continues. Controls are initiated during the winter only when temperatures rise to a degree whereby adult mosquito activity resumes.

During the months of December through February, District personnel are busy performing repairs and preventative maintenance on all of the vehicles, equipment and sprayers. All of the truck mounted ULV sprayers used for adult mosquito control receive a detailed inspection with repairs as needed for such items as: replacing insecticide lines, inspecting spray heads, cleaning the blowers, changing oil and filters, de-carbonizing the engines, checking compression, checking and replacing belts, cleaning chemical tanks, inspecting spray nozzles and spreader heads, tuning up engines, cleaning cooling systems, replacing seals in pumps, inspecting electrical systems, cleaning and adjusting carburetor, replacing fuel filters, calibrating units, and more. Similarly, all mechanical and electrical systems of all the vehicles and the three airboats receive a detailed inspection with repairs as needed. In addition, the annual maintenance will be performed on two of the three aircrafts this winter. Some of the field personnel participate with all of the maintenance.

The District is still testing adult mosquitoes for West Nile virus activity, but on a limited basis. Two cool weather mosquito species, *Culex restuans* and *Culliseta inornata*, are species of particular interest to be tested during the winter. It is possible that the West Nile virus could over winter in these cool weather mosquito species. Two *Culex restuans* mosquito pool returned positive for West Nile virus, one from the Mandeville area and the other from the southwest Slidell. During the winter months, mosquito pools are taken from the New Jersey light trap collections and by aspiration.