

Mosquito Control Update September 14, 2009

Attention over the past several days has been directed to the potential for floodwater mosquito breeding due to the excessive rainfalls the area has been experiencing. Biologists and mosquito control inspectors have been sampling many of the floodwater breeding sites throughout the parish. Early on, much of the rainfall was soaked up and not much breeding was observed. However, as water accumulated with more rainfall, many sites now have standing floodwater and are breeding *Aedes vexans*. This mosquito breeds in woodland and marsh areas, grassy fields, and fresh water ditches. It deposits its eggs on the soil surface and when rainfall occurs and floods the eggs, the development process begins. Egg to adult takes approximately seven days. Many of the known breeding sites have been pre-treated with methoprene, a synthetic juvenile hormone mimic. Applications of this product, which is in the form of a briquet, are made early in the season to established breeding sites with close proximity to residential areas. When the site is flooded, some of the methoprene is slowly released into the water. The methoprene acts by keeping the mosquito in a juvenile state as either a deformed larva or larva/pupa intermediate, thus preventing the mosquito to successfully emerge as an adult mosquito. The briquets remain effective for about 6 months. It is impractical to treat all of the thousands of floodwater breeding sites in the parish, so very soon floodwater mosquito adults will begin to emerge from many parts of the parish. Adulticide sprays will then be necessary.

Selected areas of the marsh were inspected last week for salt marsh mosquito breeding. Over the past several days, the marsh has been flooded from high tides produced from east and southeast winds. Inspections of these areas last week have indicated little salt marsh mosquito breeding, but it is a little early to conclude that we will not experience more salt marsh mosquito production. Mosquito control officials will continue to monitor the breeding of this mosquito. In addition, light traps and landing rates will be utilized to detect any adult emergence.

Heavy rainfall actually helps to reduce the breeding of the southern house mosquito. This mosquito prefers to breed in polluted and septic water. When these roadside ditches receive heavy rainfall, it freshens up the water in the ditches so as to reduce the potential for high breeding of the southern house mosquito. Mosquito control personnel continues to aggressively treat the ditches where this mosquito breeds.

Last week only one mosquito pool returned positive for West Nile virus. It was a pool that consisted of four southern house mosquitoes and five *Culex nigripalpus*. Over the past several weeks, all of the positive pools were from the southern house mosquito, so it is believed that the positive species in this recent pool was also the southern house mosquito. Mosquito Control personnel are still very focused on West Nile virus and the control of the southern house mosquito. The West Nile virus season usually runs into late October and sometimes November. A total of 61,440 acres were aerially sprayed over the past two weeks for the control of the southern house mosquito adults. The area included greater Covington and greater Slidell. In addition the entire parish was sprayed by truck twice.