



## *Culiseta melanura* Biology

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*Culiseta melanura* is without a doubt the most important mosquito in Brunswick County. This mosquito is responsible for maintaining Eastern Equine Encephalitis (EEE) in the wild bird population. EEE is the most mosquito transmitted disease in Brunswick County. It is important to note that *Cs. melanura* is strictly a bird feeding mosquito. It **does not bite humans** or other mammals.

*Cs. melanura* larvae develop in cool, acidic water that is shaded and often retained in depressions at the base of tree trunks, stumps or uprooted trees. *Cs. melanura* breeding and is usually concentrated at the edge of the swamps flood plains and woodland pool systems. Larvae are most often found in sphagnum bogs, cypress swamps, or black gum/tupelo swamps. Its abundance is attributable to its unusual breeding habits and because its larvae are able to survive in the saturated root mat when the water table declines, leaving other breeding sites dry.

Developmental rates of *Cs. melanura* in nature are unpredictable and are subject to such variations imposed by weather factors and fluctuations in water level. In Brunswick County, breeding seems to be continual, although retarded during the winter months. Population densities of this mosquito are highest deep in the interior of the swamp habitat. However, mosquitoes will leave the swamp breeding sites and move to drier upland, forested habitats, especially during the late summer and fall.

In Brunswick County, *Cs. melanura* populations have two major peaks of adult abundance, typically one each during April-June and August-October. Host-seeking activity, and presumably blood-feeding, is greatest during the first 2 hours after sunset and then continues at a low but constant level until sunrise.

We consider it to be of the highest importance to the citizens of Brunswick County. Monitoring this mosquito allows us to anticipate the potential for Eastern Equine Encephalitis to bridge from the bird population to the human and mammal population. This bridging requires a mosquito that is capable of feeding on both birds and mammals. Remember, *Cs. melanura* only feeds on birds.

For More information about *Cs. melanura* and Eastern Equine Encephalitis, follow this link to [An Operational Timeline for Initiating EEE Bridge Vector Control](#) written and researched by Brunswick County Mosquito Control in 2003.