

Culex tarsalis



Introduction: This mosquito can be separated from other species of the *Culex* genera by the median banding on the proboscis, as well as the wide basal and apical bands on each tarsal segment. They are golden brown in color and possess a blunt rather than pointed abdomen. *Culex tarsalis* are locally abundant and are persistent biters that are most active at dusk and after dark.

Life Cycle: Females hibernate through the winter in secure locations. In spring egg rafts containing approximately 190 eggs are laid in newly created sunlit pools that are frequently surrounded by grasses and annual vegetation. Larvae will hatch off in 3-5 days depending on the temperature of the water, with several generations occurring throughout the summer.

Habitat: Larvae of the *Culex tarsalis* tolerate a wide range of water conditions including agricultural tail waters, alkaline lake beds and fresh and saline wetlands. Although they don't prefer to breed in water that contains organic pollutants they are known to dwell in permanent standing water, which includes ponds, ditches, and artificial containers.

Disease: This species of mosquito is probably the most prominent vector of arboviruses in North America. After emergence in early spring when mosquito populations are low the females will primarily feed on birds. However, as mosquito populations rise later in the summer, bird mosquito avoidance behavior diverts many to begin feeding on small mammals, livestock, and man. This shift in hosts may account for an increase in viral transmission of West Nile Virus, Western Equine encephalitis and Saint Louis encephalitis, among many others.

Control: Due to the nature of the breeding locations this species of mosquito should be carefully monitored, and a regiment of the bacterial larvicides *Bacillus thuringiensis*, and *Bacillus sphaericus* should be applied.