Ochlerotatus *dorsalis*

Introduction: The Ochlerotatus *dorsalis* mosquito is sometimes referred to as the 'Pale Marsh' mosquito due to its light coloration and its propensity to prefer areas where brackish water is present. Known for its salty personality, this mosquito is an aggressive biter that tends to bite most fiercely in early spring. In the North Fork Valley this mosquito will be found near the river bottom, occasionally near desert water holes, and in heavy agricultural areas.

Life Cycle: In the late Fall the adult, female, O. *dorsalis*, mosquito will lay her eggs in areas that have a history of holding flood water. These areas are referred to as flood plains. The eggs are laid singularly either on the ground or on dried up vegetation, and are protected with a strong exterior that keep them safe throughout the winter. In spring, as irrigation and rising river water are introduced to the dry flood plains, the eggs are soaked and within 3-5 days a larvae will hatch. While the O. *dorsalis* mosquito is most prominent in the spring, several generations may occur throughout the summer, a new brood hatching about every 18-24 days dependant on flood patterns.

Habitat: O. *dorsalis* larvae occur in a wide variety of habitats, including both fresh and alkaline waters. In the North Fork Valley it is common for this species to occur as a result of pasture irrigation. This habitat provides a large, known flood plain and exposure to direct sunlight which accelerates that mosquito lifecycle. Brackish waters in the river bottom often contain large numbers of O. *dorsalis* that are introduced to runoff waters via the river in the early spring.

Disease: Mosquitoes have the ability to transmit pathogens that cause some of the worst diseases in the world. This particular species of mosquito is no exception, as it has been shown that they transmit both California Encephalitis and dog heart worm.

Control Methods

Due to the nature of the breeding locations, the insect growth regulator Altosid would be applied, followed by the bacterial larvicide Bacillus *thuringiensis* (BTI).