

# Crane Flies

**Order:** Diptera (True Flies)

**Family:** Tipulidae (Crane Flies)

### Identification and Descriptive

**Features:** Crane flies are slender insects with long, brittle legs. They have a superficial appearance to giant mosquitoes, although the wings lack scales. (Size is highly variable among the many crane fly species, with wing span ranging from 5-85 mm.) General body color is brownish and the wings of some species have dark markings. A prominent V-shaped suture occurs on the thorax between the wings. Larvae, which typically occur in moist soil or water, are thick-bodied maggots that lack a distinct head area. Some of the larger species in the genus *Tipula* are referred to as “leatherjackets” because of their thick skin.

**Distribution in Colorado:** Crane flies are common insects that occur almost everywhere but the driest locations. They are most abundant in moist areas that are high in organic matter, such as along waterways and ponds.

Crane flies are the largest family among the Diptera, with some 15,270 described species worldwide and over 1500 known from North America. The number of species present in Colorado is unknown but likely includes many score if not hundreds of species.



**Figure 2.** Adult crane fly emerging from pupal skin. Photograph by Nancy Ditman.



**Figure 1.** Adult crane fly.

**Life History and Habits:** The great majority of crane flies have larvae that develop as scavengers on decaying leaves and other plant matter. They tend to be most common in moist soil and many occur along the edges of and sometimes within ponds and streams. Within waterways the feeding activities of crane fly larvae can be important in the breakdown of organic matter in water. A few species eat mosses and liverworts, fungi, and a some consume leaves or roots of living plants. The latter are more adapted to drier sites and some of these may occur in pastures and lawns.



**Figure 3.** Larva of a *Tipula* sp. crane fly – a “latherjacket”. Photograph courtesy of Ken Gray Collection/Oregon State University.



**Figure 4.** A large *Tipula* sp. crane fly with wing markings.

The usual overwintering stage is a full-grown larva and pupation occurs the following spring. Adults emerge throughout the spring and early summer. Adult emergence occurs during the late hours of the morning and the adult crane flies only live for a couple of weeks and feed little, if at all. There is one generation per year produced by most species.

Adult crane flies, although resembling large mosquitoes, do not have biting mouthparts and are harmless to humans. They are sometimes referred to as "mosquito hawks", a term more appropriately applied to dragonflies, which actually eat mosquitoes.