

Culicidae: mosquitoes

(in Kansas, about 2 dozen species in several genera)

Description: Long-legged, slender flies 1/8 to 3/8 inch long; wings have scales along the veins and margins; colors vary by species with patterns of gray, brown, black, white, and yellowish or greenish; elongated proboscis for sucking blood is obvious on females; both sexes have long antennae which on females are sparsely "feathered", on males more densely so.

Domestic animals affected: all

Damage caused: pain and irritation from bites and resulting itching; nuisance around eyes; extreme numbers cause significant blood loss; in Kansas, mosquitoes may transmit the viruses of equine encephalitis, vesicular stomatitis, and fowl pox; dog heartworm microfilariae; and several diseases of humans.

Development: complete metamorphosis: egg, larval stages ("wrigglers"), pupa ("tumbler"), adult.

Generational time: from 8 or 10 days to as much as 3 years, depending on species and environmental conditions (eggs of floodwater mosquitoes may remain viable for up to 3 years if not stimulated by moisture to hatch).

Oviposition site: singly or in aggregated rafts on surface of still water, or on mud or other moist substrates, depending on species.

Larval and pupal habitat, feeding: aquatic, most species feeding on plankton; a few species prey on larvae of other mosquitoes; pupae swim actively but do not feed.

Adult habitat, feeding: Females feed mostly on animal blood; both sexes (at least of some species) gain energy from feeding on nectar, aphid honeydew, and sugar from extrafloral nectaries of plants. Different species have different host preferences. Adults tend to stay in moist environments, flying most actively at dawn and dusk, resting in dense foliage during bright hours.

Method of dispersal or infestation: Adults are strong fliers. Females find suitable hosts via their attraction to CO_2 , host odors, reflectancy, and warmth. Oviposition sites are found via chemosensory and visual cues. In some species ("container breeders") eggs, larvae, and pupae may be transported by manmade transportation units.

Seasonality: A few adults of some species are active in Kansas as early as February and as late as November in some years; the primary mosquito season is May through mid-September.

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