



## Class Insecta, Insects

### Order Diptera, Flies, gnats, and midges

Diptera means “two wings,” and true flies bear only one pair of functional wings. Flies are one of the largest insect groups, with approximately 35 families that contain predatory or parasitic species. All flies have piercing/sucking/sponging mouthparts.

## Tachinid flies

Family Tachinidae

**Description and life history:** This is a large and important family, with up to 1300 native parasitoid species in North America and additional introduced species to help control foreign pests. These flies vary in color, size, and shape but most resemble houseflies. Adults are usually gray, black, or striped, and hairy. Adults lay eggs on plants to be consumed by hosts, or they glue eggs to the outside of hosts, so the maggots can burrow into the host. Rarely will tachinids insert eggs into host bodies. Tachinid flies develop rapidly within their host and pupate in 4–14 days. By the time they emerge, they have killed their host. Many species have several generations a year, although some are limited by hosts with a single annual generation.

**Prey species:** Most tachinid flies attack caterpillars and adult and larval beetles, although others specialize on sawfly larvae, true bugs, grasshoppers, or other insects. *Lydella thompsoni* is a parasitoid of European corn borer, *Voria ruralis* attacks cabbage looper caterpillars, *Myiopharus doryphorae* attacks Colorado potato beetle larvae, and *Istochea aldrichi* parasitizes adult Japanese beetles. Although these are very important natural enemies, none is available commercially.



Tachinid fly adult. (327)  
Photo: John Davidson