

March Flies

Order: Diptera (True Flies)

Family: Bibionidae (March Flies)

Identification and Descriptive Features:

Adults are moderate sized (ca 1 cm), dark flies. The sexes can be distinguished by the very large eyes of the male; females possess relatively small eyes and have a head that is more elongated. They are slow fliers. Some species are notably fuzzy.

Larvae are maggot-form with a dark brown head. Colors range from dirty white to brown and on close inspection the body can be seen to be spiny.

Distribution in Colorado: March flies are most abundant in wooded areas and in moist sites. Some have adapted to irrigated lawns and gardens.

Life History and Habits: Despite the name, March fly adults are not seen in early spring. The most common Colorado species (*Bibio albipennis*, *B. atripilosa*) are active

later in spring, from late April through May. However, other species have peak periods of adult activity in midsummer and several emerge as adults in September and October (Table 1). Where abundant, they may produce noticeable mating swarms. Adults also may visit flowers for nectar, but they are short-lived and survive only a few days.

After mating females deposit masses of eggs in moist soil. Upon egg hatch the larvae feed on decaying organic matter; a few species may also may feed on roots of grasses and other plants producing minor injury. Most often March fly larvae feed gregariously and may be present in a mass of a hundred or more massed larvae. Pupation occurs in the soil and one generation is produced annually.



Figure 1. Top. Female, *Bibio xanthopus*. Bottom. Male, *Bibio xanthopus*. Photographs courtesy of the Ken Gray Collection, Oregon State University.



Figure 2. Full-grown March fly larvae and a pupa (right)



Figure 3. Mass of March fly larvae that developed in an area of turf that was rich in decaying plant matter.

Table 1. March fly species known to occur in Colorado.

Species	Period of adult activity
<i>Bibio albipennis</i> Say	late April-early June
<i>Bibio alexanderi</i> James	late April-early May
<i>Bibio atripilosa</i> James	midApril-May
<i>Bibio brunnipes</i> (F.)	July-August
<i>Bibio flukei</i> Hardy	August-September
<i>Bibio fluginatus</i> Hardy	June
<i>Bibio holtii</i> McAtee	August-September
<i>Bibio longipes</i> Loew	October-November
<i>Bibio palliatus</i> McAtee	August-September
<i>Bibio rufipes</i> (Zetterstedt)	September
<i>Bibio siebkei</i> Mik	midJuly-August
<i>Bibio similis</i> James	May
<i>Bibio slossonae</i> Cockerell	September-October
<i>Bibio striatipes</i> Walker	August
<i>Bibio tristis</i> Williston	May
<i>Bibio vestitus</i> Walker	June
<i>Bibio xanthopus</i> Weidemann	April-May
<i>Bibiodes aestivus</i> Melander	June
<i>Bibiodes halteralis</i> Coquillet	April-May
<i>Dilophus occipitalis</i> Coquillet	July
<i>Dilophus stigmaterus</i> Say	July-September
<i>Dilophus tibialis</i> (Loew)	June-October
<i>Penthetria heteroptera</i> (Say)	late April-early June

Fungus gnats in lawns. Several other small flies may develop on decaying plant material in lawns. Perhaps most common are various kinds of fungus gnats, an insect that is best known as a frequently encountered resident in the soil of houseplants and as a pest of mushroom houses. Issues with fungus gnats on indoor plants are covered in the fact sheet *Fungus Gnats as Houseplant and Indoor Pests* <http://extension.colostate.edu/docs/pubs/insect/05584.pdf>



Figure 4. Mass of fungus gnat larvae

Outdoors fungus gnats normally are never noticed, the adults being of small size and the larvae widely spread through lawns and gardens. A rare exception occurs when very high number develop in a site that is particularly, with moist decaying organic matter. In these cases very large numbers of the larvae may be found in large masses (Figure 4), which may attract further attention if they wander in a massed group on the soil surface when they are looking for a site to pupate.