



# March Flies

O & T Guide [T-#06]

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March flies are occasional pests of turf, particularly in home lawns with considerable thatch buildup. Adult flies are persistent, annoying but otherwise harmless pests flying slowly above turf in large numbers on calm, sunny afternoons in early spring. Larvae burrow through and feed in thatch, often in large numbers.

**Metamorphosis:** Complete

**Mouth Parts:** chewing in larvae

**Pest Stages:** larvae, adults (minor)

**Scientifically:** March flies are members of the insect order Diptera and the family Bibionidae.

**Typical Life Cycle:** Eggs are laid in small clutches in the soil-thatch interface; these are rarely seen. → Series of Larvae. These often occur in considerable numbers in late winter-early spring in patches of decaying organic matter and thick thatch. → Pupae are interspersed in the soil-thatch layer in late spring. → Adults are two-winged flies with generally black bodies and appendages and a short, broad proboscis. Some have smoky wings. Most known species have one generation annually although some may have two or possibly more.

## Description of Life Stages:

**Egg**---minute, round, white

**Larva**---larvae are thin, cylindrical, rough-skinned, legless and off-white. Their rounded head capsules are dark gray to black and bear chewing jaws. Mature larvae are about one inch long.

**Pupa**---lozenge-shaped, brown to black, smooth, about 3/8 inch long.

**Adults**---Adults are slightly smaller and thinner than house flies. Most are black or dark-colored. The colorless wings (only one pair) usually have a dark spot near the end of the leading edges.



March fly larvae in turf. Photo: Whitney Cranshaw, Colorado State Univ., [www.forestryimages.org](http://www.forestryimages.org)

**Habitat and Hosts:** Adults are commonly seen in spring and early summer flying slowly and in large numbers over turf with thick thatch layers. Some adults have just emerged while others are finding mates in these swarms

and females are ovipositing. Mature larvae are usually discovered by raking spongy areas of infested turf in early spring.

**Damage:** Adults can be numerous and annoying but are otherwise harmless. Larvae are actually removing or tunneling through thatch that can be so thick as to stifle movement of air, water and nutrients to turf roots. Many homeowners are alarmed by their numbers and appearance. Larvae also can be found in old corrals or other areas where thick layers of animal manure are decomposing.

**IPM Notes:** Swarms of March flies over turf signal larval presence as well as thatch buildup. Mechanical removal of thatch when turf is still dormant will eliminate the habitat for March fly larvae and adults as well as improve turf aeration and the percolation of water and fertilizer. The larvae are actually penetrating and reducing thatch in the lawn rather than damaging the turf. Although they may appear objectionable to many people, the larvae are harmless to people, pets, livestock and wildlife. Presently, no insecticides for turf list March flies on their labels.



Closeup of a March fly larva, *Bibio* sp. Photo: Whitney Cranshaw, Colorado State Univ., [www.forestryimages.org](http://www.forestryimages.org)



Hand holding mature March fly larvae. Photo: C.F. Valdez and A.Reyes, Los Alamos Coop. Ext. Service.

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