The Gloworm

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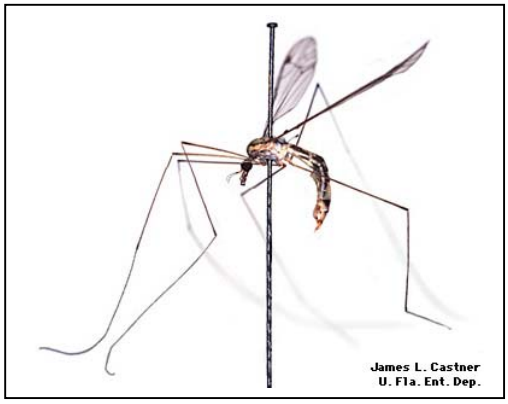
Spring is here, bugs are flying and it's time to get outside and enjoy it all. In just a few days if you will begin leaving the outside lights, you will have an entomological surprise. Those most delicate of large insects, the crane flies, are beginning to accumulate around lights at night in high numbers. The big problem that most 4-Hers have with crane flies is that they lose their legs, sometimes even before they are pinned. Try spraying them with hair spray to stiffen the legs and hold them on the body, then handle them as little as you possibly can to get them placed in the box.

Crane flies

The several families of crane flies are distinguished by wing venation and the presence or absence of ocelli and a mesonotal suture. Identifying characteristics for the family Tipulidae include:

Mosquito-like insects with very long legs.
Antennae with 6 or more segments.
Mesonotum with V-shaped suture.
Ocelli absent.



Tipulidae is the largest family of Diptera with about 1,500 species in North America and 12,000 species worldwide. Larvae are found in fresh water and moist soil, most feeding on decaying vegetation. A few species are pests of cultivated plants.
(Information prepared by John L. Foltz, University of Florida, Dept of Entomology & Nematology, 1 November 1998.)

Fireflies

Another interesting insect, which will be flying shortly is the `firefly' or `lightning bug.' These beetles, both larvae and adults, are predaceous. Larvae feed on other insects, snails, slugs and earthworms. Adults are well known for their flashing, an important part of their courtship and mating. There are 23 genera and about 200 species of Lampyridae in North America.

During summer months fireflies rest on plants or in trees during the day and are most active between dusk and midnight. The firefly light is called a "cold light" because it produces almost no heat. It is produced when oxygen, breathed in combines with a substance called luciferin in the presence of the enzyme luciferase, in special cells called photocytes.

Female fireflies lay their eggs in the soil which hatch in about four weeks. The carnivorous larvae sometimes glow and are known as "glowworms," though there are wingless adult females of certain Lampyridae also known by that name. Some firefly eggs also glow. After hatching the larvae spend the summer eating and then dig small tunnels in which to overwinter. In spring they emerge to forage again, pupate and eventually emerge as adult fireflies.

If you are interested in attracting fireflies to your garden Dr. Marc Branham, Ohio State University (http://IRIS.biosci.ohio-state.edu:80/projects/FFiles), says -

1. Cut down or eliminate using chemicals on you lawn.

2. Reduce any "extra lighting" (photic noise) on your property, as this light interferes with the fireflies luminous signals (i.e., it is harder for fireflies of many species to locate mates in such areas). Also many firefly species are active only during a certain period of the evening. These insects determine when they will flash (i.e., the time of night) by the intensity of ambient light. This is why you don't see many fireflies flashing on clear nights when the moon is full.

3. Additionally, low overhanging trees, tall grass or similar vegetation will provide adult fireflies a place to rest during the day and remain cool.

While these tips may not guarantee you success in attracting fireflies to your yard, they may certainly improve the odds....

Pyractomena borealis
last larval instar

Additional information may be obtained through Oklahoma State University, and Texas, but by far the most information was from the University of Florida and Ohio State. ***(pictures and information on fireflies were obtained via the Internet from Univ. of Fla, Ohio State and other locations)***

Happy Bugging,

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