



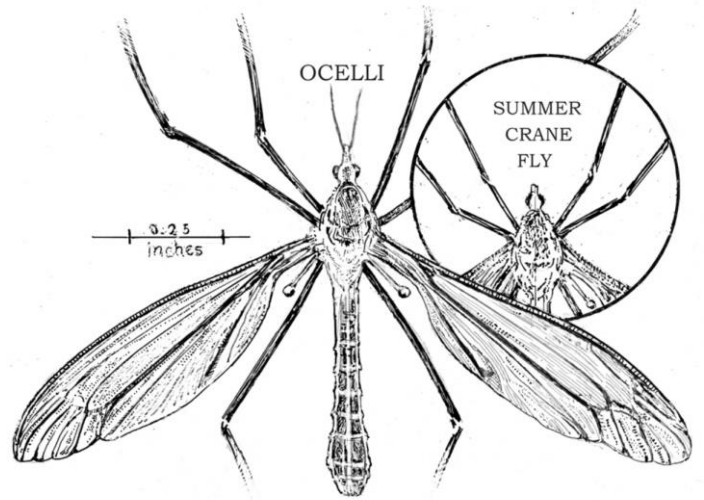
By Eric Dinerstein

A Crane Fly in Winter

The great entomologist E. O. Wilson spoke for all scientists and naturalists who are passionate about insects when he said, “Every kid has a bug period. I never grew out of mine.” What parents have not seen their kids become fascinated with ant farms? It’s easy to understand how children remain enchanted by fireflies (actually a beetle, not a fly) or Monarch butterflies or Luna Moths. But you probably won’t find many kids or adults who maintain a lifelong yen for the long-legged, ungainly-looking crane flies. That is a pity.

When one encounters a crane fly in the house, the first inclination is to swat this creature, which resembles a giant mosquito, before it has a chance to bite a family member. But that shameful act would be a case of mistaken identity. The crane fly has no mouthparts to speak of, and it doesn’t live to suck blood. The only purpose it has in its sweet short life—typically one to two weeks after emerging from the larval stage—is to breed. Although it looks like a male mosquito on stilts, or a weird cross between a midge and a daddy long-legs spider, the crane fly is harmless to humans and a great boon to the ecology of the living world. And in winter, when most insects have died off or gone into a kind of hibernation, a group of crane flies known as winter crane flies can be seen flitting about on sunny days.

The name winter crane fly bears no false advertising; it is one of the few species of insect that is on the wing in the year’s coldest season. Winter crane flies are slightly smaller than the crane fly most people see in their houses in the summer, the common crane fly. The crane flies obtain their name because they have the long-legged appearance of cranes and a beak like the sandhill or whooping cranes of the U.S. These crane flies also represent the order of the true flies, the Diptera. A tip for identification useful to bug lovers: the order of true flies, the Diptera—that includes horse flies, black flies, crane flies, midges, gnats, and mosquitoes—only have one pair of wings. All of the other “flies”—dragonflies and damselflies (order Odonata) or butterflies like our beloved Monarchs (order Lepidoptera)—have two pair of wings. So do bees, wasps, and yellow jackets—(order Hymenoptera). Moreover, if the species is a true fly the name fly will be a separate word, unlike dragonfly or butterfly which is incorporated in the same word.



WINTER CRANE FLY

Illustration: Trudy Nicholson

But what makes the group we call crane flies so special in nature? The answer is their predominance in wild nature and their contribution to the food web. Some ecologists estimate that the greatest contributor to the biomass of living organisms in the Arctic tundra is not the brown bear, polar bear, caribou, or musk ox, but, per hectare, the larvae of the common crane fly. Sometimes called leatherjackets because of their tough outer coating, the larvae can stay in the ground in a damp area for 1-4 years until it reaches the adult stage and emerges to breed. But either as a larval grub in the ground or as an adult on the wing, the common crane fly is an attention grabber, emerging in great swarms. There to vacuum them up are the shorebirds—especially phalaropes and sandpipers of various kinds. In fact, it is estimated that the entire diet of some of these shorebirds is composed of crane fly larvae and adults and that the breeding of these shorebirds is timed to the emergence of the crane fly larvae as adults.

But let’s return from the Arctic to a cold, but not freezing, February afternoon in Cabin John. There flying about some fallen logs are winter crane flies like giant winter mosquitoes, looking for mates. Which begs the question, why would an insect fly in winter? The best answer seems to be that for the winter crane fly, if you are only alive for a week or two as an adult, and your sole purpose is to breed, than seeing to your business in a predator-free period of the year and nothing to eat you might be a smart evolutionary adaptation. It has been working for them for 180 million years, so why change now?

When we see the summer crane fly or the winter crane fly, stop and admire this creature that has been around far longer than humans. It has figured out how to cope in this challenging world for millennia, even if its time on the stage as an individual is rather short. Don’t hasten the demise of your crane fly with a broom; raise your broom in a salute. ##