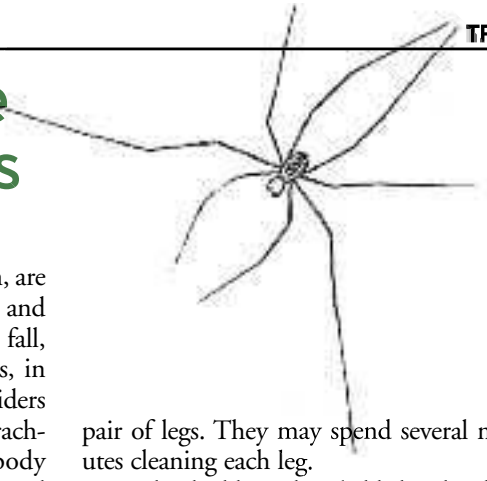
Trailside Nature
Daddy Longlegs

By Edna Greig



PEARSON SCOTT FORESMAN

Daddy longlegs, also called harvestmen, are common creatures of woods, fields, and structures. Active from summer to fall, these members of the order Opiliones, in the class Arachnida, are related to spiders (order Araneae), mites, and ticks. Arachnids have 8 legs and a 2-part body consisting of a cephalothorax and abdomen. In daddy longlegs, the 2 body parts are closely joined and appear as 1 oval-shaped structure suspended from the 8 long, jointed legs. Unlike spiders, daddy longlegs aren't venomous and don't bite. There are approximately 160 species of daddy longlegs in North America.

Those long legs serve several purposes. First, they enable the daddy longlegs to sense its surroundings. The second pair of legs, longer than the others, contains sense organs that can detect food, a mate, or danger. While at rest or eating, the daddy longlegs often extends these legs outward, sometimes tracing an arc slowly back and forth, ever vigilant.

Second, the daddy longlegs can sacrifice a leg to escape the grasp of a predator. The detached leg twitches for several seconds, preoccupying the predator while the daddy longlegs moves to safety. Spider webs often contain the shed legs from daddy longlegs that succeeded in freeing themselves from the silky entanglement.

Third, males mount fierce leg-pulling battles when competing for females. One male will use his mouth parts to grab the leg of another male and will jerk or rotate the leg until it breaks off or until the tormented male can pull free. The male with the most legs intact often is most successful in accessing a female.

Finally, the long legs deliver remarkable speed and agility for traveling through tangled vegetation.

Daddy longlegs take good care of those legs. They clean them regularly and thoroughly in a process called leg threading. One by one, they thread each leg through their mouth parts, starting closest to the body and slowly pulling the leg through until they reach the tip. They are especially fastidious in cleaning the important second pair of legs. They may spend several minutes cleaning each leg.

Besides shedding a leg, daddy longlegs have another defense to thwart predators. When startled, they can release a foul-smelling liquid from glands near the bases of their second legs. The liquid is repulsive to many predators and close-approaching humans.

Sometimes, when it senses danger, a daddy longlegs will bob its body up and down with increasing speed. The bobbing activity may warm the muscles and allow a more speedy retreat from the perceived danger. Bobbing also may be a part of mating activity.

Daddy longlegs generally require a moist habitat and usually are found in shady areas. They eat a variety of live and dead animal and plant matter but prefer soft-bodied prey such as flies and aphids. They're more active and feed mostly at night, when the air is cooler and moister.

The life cycles of daddy longlegs vary by species, but all hatch from eggs and go through a series of molts before reaching maturity. Molts can be challenging—the body usually sheds its old skin easily, but extrication of the legs can take considerable effort.

Mating occurs shortly after daddy longlegs reach maturity. Small groups of males and females congregate in moist, shady areas. A male who has successfully fended off rivals will mate with a female and then hover over her until she deposits their eggs.

To learn more about daddy longlegs, follow the Opiliones Project by Chris Buddle of McGill University at arthropodecology.com or on Twitter at #OpilionesProject.

Edna Greig is a Trail Conference member and regular contributor to Trail Walker. *She writes the blog Eye on Nature: eyeonnature.wordpress.com.*