

## PHASMATODEA

The Phasmatodea (or sometimes called the Phasmida) are the walkingsticks and leaf insects. All of our species are stick-like in shape, but many in the tropics are shaped like leaves (Family Timemidae). There are more than 2500 species worldwide; they are especially common in the Orient; in the U.S. most of the species are southern in distribution with all of our species being wingless (one species in southern U.S. has wings). The mouthparts are mandibulate. The cerci are short and 1-segmented.

Walkingsticks have walking legs which are not enlarged or modified for jumping. They usually have 5 tarsal segments. The prothorax is short in relation to the mesothorax. These insects lack tympana and stridulatory organs. Many of the species are capable of emitting a foul smelling substance (for defense); these are usually aposematically colored. Some species exhibit **autotomy**, the ability to lose part or all of a leg; they are also able to regenerate lost legs (at least to some extent). The males are often distinctly smaller than the females, and the male genitalia are asymmetrical. Some will feign death when disturbed.

They feed on the foliage of plants. They usually do not cause economic damage, but sometimes they can be in numbers great enough to cause serious damage to trees. The eggs are laid by simply letting them drop to the ground. In fact, when the population is high it can sound like it is raining from just the dropping eggs. The eggs do not usually hatch the next year, but usually hatch the 2nd year after being laid. Because of this there may be heavier populations every other year.

There are 4 families recognized from the U.S., but 3 of these are relatively uncommon or our species are few and restricted to the southern or western U.S. The family of our Minnesota and North Dakota species is Heteronemiidae which are called the common walkingsticks. Our most common species is *Diaperomera femorata* (Say) which has been known to defoliate trees. This family also includes the largest U.S. species which can be up to 180mm. This family includes 20 North American species.