MANTODEA

Mantids / Praying Mantids

The name Mantodea is derived from "*mantis*", the Greek word for these insects.

Classification	Life History & Ecology	Distribution
Physical Features	Economic Importance	
Major Families	Fact File	Hot Links

Life History & Ecology:

Mantids have elongate bodies that are specialized for a predatory lifestyle: long front legs with spines for catching and holding prey, a head that can turn from side to side, and cryptic coloration for hiding in foliage or flowers. Mantids are most abundant and most diverse in the tropics; there are only 5 species commonly collected in the United States and 3 of these have been imported from abroad.

Distribution:

Common in tropical and subtropical climates.

	North America	Worldwide
Number of Families	**1**	**8**
Number of Species	**20**	**~1800**

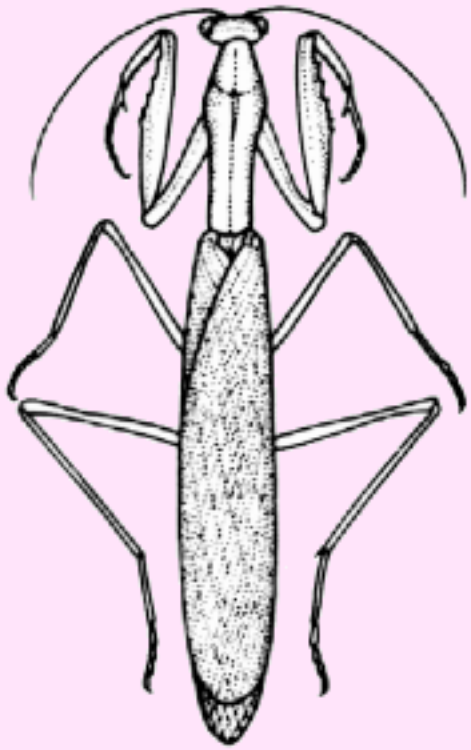
Classification:

Hemimetabola
incomplete development (egg, nymph, adult)

Orthopteroid
closely related to Orthoptera and Blattodea

Physical Features:

	Adults: 1. Filiform antennae 2. Head triangular with well-developed compound eyes 3. Mouthparts mandibulate, hypognathous 4. Prothorax elongate with large, spiny front legs



adapted for catching prey
5. Front wings thickened, more slender than hind wings
6. Tarsi 5-segmented
7. Cerci short, multi-segmented

Immatures:
1. Structurally similar to adults
2. Developing wingpads often visible on thorax

Economic Importance:

Generally considered to be highly beneficial insects because they feed on other insects. Since they are cannibalistic and also feed on other beneficial insects, their value as biocontrol agents is probably rather limited.

Major Families:

- **Mantidae** -- this family includes all of the common North American mantids.

Fact File:

- Mantids are the only insects that can turn their head from side to side without moving any other part of the body. Many humans mistakenly interpret this behavior as a sign of intelligence.
- A female mantid may eat her mate while he is still linked with her *in copulo*. This behavior is probably more common in captivity than in the wild.
- Most mantids are cryptically colored to blend with their environment. A pink Malaysian species spends most of its time hunting for prey on pink orchids.
- Although mantids usually feed on insect prey, they have been known to catch and eat small frogs, lizards, and even birds.

Hot Links and Illustrations:

- **Praying Mantid -- Clemson University**
- **Gordon Ramel's Dictyoptera Page**
- **Ecowatch Mantodea Page**
- **Tree of Life Web Project - Mantodea**
- **Discover Life - Mantodea**

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Last Updated: 5 March 2005