

Terrestrial Invertebrates

Lacewings and Antlions

Order Neuroptera

ORDER INCLUDES:

- 4 Native Families
- 5 Native Genera
- 50 Native Species
- 50 Endemic Species

GENERAL INFORMATION: Lacewings and antlions are predaceous, feeding on other insects. Most adult species have four large, net-veined, colorful wings. Despite this, most are poor fliers; a few species are flightless (e.g., *Pseudopsectra lobipennis* and *Nesothauma haleakalae*). The largest number of Hawaiian endemic species is found in the genera *Anomalochrysa* and *Micromus*.

DISTRIBUTION: Neuropterans are known from all the MHI except for Kaho'olawe and Ni'ihau. Members of this order also are known from the NWHI.

ABUNDANCE: Unknown. A lack of systematic surveys prevents any population estimate. However, the loss of native habitats likely means that species within the order are declining.

LOCATION AND CONDITION OF KEY HABITAT: Mostly unknown. However, lacewings and antlions appear to occur in a wide range of habitats.

THREATS:

- Loss or degradation of habitat.
- Insufficient information for species assessments.

CONSERVATION ACTIONS: The goals of conservation actions are not only to protect current populations and key breeding habitats, but also to establish additional populations, thereby reducing the risk of extinction. In addition to common statewide and island conservation actions, specific management directed toward lacewings and antlions should include:

- Conduct surveys to determine the distribution and abundance of known lacewings and antlions and to document and identify new species.
- Preserve, maintain, and restore habitats supporting existing populations.

MONITORING:

- Continue monitoring the status of known populations.

RESEARCH PRIORITIES:

- Conduct studies to document the biology, habitat requirements, and life history of native species.

References:

Howarth FG, Mull WP. 1992. Hawaiian insects and their Kin. Honolulu: University of Hawai'i Press.

Nishida GM editor. 2002. Hawaiian terrestrial arthropod checklist, 4th edition. Honolulu (HI): Biological Survey, Bishop Museum.

Zimmerman EC. 2001. Insects of Hawaii: Volume 1 Introduction. Honolulu: University of Hawai'i Press.