

Terrestrial Invertebrates



Harrisoniella densa. Photo: Liliana Tobar.

Lice

Order Phthiraptera

ORDER INCLUDES:

2 Native Families

25 Native Genera

57 Native Species

5 Endemic Species

GENERAL INFORMATION: Lice are wingless external parasites of birds or mammals. Unlike other parasites, lice cannot live long if removed from their host. Eggs or nits are glued directly to the feathers or hair of hosts. Most lice rely on a single species to serve as a host. Lice are poorly known in Hawai‘i.

DISTRIBUTION: Lice are known from the islands of Hawai‘i, Maui, and O‘ahu, as well as 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: Poorly understood. However, since Hawaiian lice are typically bird parasites, those habitats that support healthy populations of various bird species should support lice populations.

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 lice should include:

- Conduct surveys to determine the distribution and abundance of known lice 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.
- Conduct and support systematic and taxonomic assessments of poorly known and understudied taxa. Review and revise genera in need of taxonomic scrutiny. Work to identify and describe new species to science.

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. Bishop Museum Technical Report No. 22: iv + 310 pp.

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