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Terrestrial Invertebrates

Fleas

Order Siphonaptera

ORDER INCLUDES:

1 Native Family

1 Native Genus

1 Native Species

1 Endemic Species

GENERAL INFORMATION: Fleas are typically parasites feeding on the blood of their vertebrate hosts. Larvae are free-living and feed on organic matter. One native species is known in the Hawaiian Islands. *Parapsyllus laysanensis*, a seabird parasite, was described from Laysan albatross nest material and has also been found in wedge-tailed shearwater nests. This order is poorly known in Hawai‘i.

DISTRIBUTION: Hawai‘i’s single native species of flea is known only from Laysan Island in NWHI.

ABUNDANCE: Unknown. A lack of systematic surveys prevents any population estimate.

LOCATION AND CONDITION OF KEY HABITAT: Unknown. However, habitats supporting breeding colonies of seabirds are likely key to this species’ survival.

THREATS:

- Loss of hosts and degradation of habitat for host species.
- 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 *Parapsyllus laysanensis* should include:

- Conduct surveys to determine distribution of known *P. laysanensis* populations and to document and identify new species of Siphonaptera.
- 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 this endemic species.

References:

Davies RG. 1988. Outlines of entomology. New York, (NY): Chapman and Hall. 408 pp.

Haas GE, Wilson N, Tomich PQ. 1972. Ectoparasites of the Hawaiian Islands, I. Siphonaptera. Contributions of the American Entomological Institute 8(5): 1-76.

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.