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Hylaeus melanothrix (Perkins, 1899) (Hymenoptera: Colletidae: Hylaeinae)

Profile Prepared by Karl Magnacca, USGS-BRD, Kilauea Field Station.

SUMMARY

Hylaeus melanothrix is a bee endemic to the island of Maui in Hawaii. It is a member of the dumetorum species group, distinguished by the lack of yellow marks except on the face, and the very long body hair. The species is has not been collected in over 100 years, and may be extinct.

CONSERVATION STATUS

Xerces Red List Status: Critically Imperiled Other Rankings:

> Canada – Species at Risk Act: N/A Canada – provincial status: N/A Mexico: N/A USA – Endangered Species Act: None USA – state status: None NatureServe: **GNR IUCN Red List:** N/A

SPECIES PROFILE

DESCRIPTION

Males: Black, face with three separate, irregular yellow marks; otherwise unmarked. Scape strongly arched, almost hooked. Hairs of head and thorax very long.

Females: Black, unmarked. Hairs as in male.

Hylaeus melanothrix is a member of the dumetorum species group. It is distinguished by the long hairs and hooked scape from all but H. filicum, which has much more extensive markings in both sexes.

RED LIST OF POLLINATOR INSECTS. Species profile: Hylaeus melanothrix

TAXONOMIC STATUS

Hylaeus melanothrix was described as Nesoprosopis melanothrix by Perkins (1899). Nesoprosopis was reduced to a subgenus of Hylaeus by Meade-Waldo (1923). The most recent taxonomic treatment was Daly and Magnacca (2003).

LIFE HISTORY

Hylaeus melanothrix inhabits montane wet forest and probably nests in wood like related species. Nothing more is known about it.

DISTRIBUTION

Hylaeus melanothrix has been collected relatively few times, from the moutains of East Maui.

THREATS

The rarity of *H. melanothrix* and lack of knowledge about its requirements make it difficult to assess threats. Habitat degradation due to feral pigs and invasive plants is probably the most serious threat.

CONSERVATION STATUS

This species is extremely rare, known from few specimens collected over 100 years ago. However, the rain forests of East Maui are difficult to access and collect in and have not been searched for bees recently. Therefore, it is likely that *H. melanothrix* persists, though it may still be rare.

U.S. Federal listings of rare and endangered species classed *H. melanothrix* as a "Category 3A" Candidate Species, considered "probably extinct". It currently has no status as a "Species of Concern" at the federal or state level.

CONSERVATION NEEDS

The top priority is to document the continued existence of the species. The areas where it is likely to be found are protected under the jurisdiction of the Nature Conservancy, the State of Hawaii, and the National Park Service. It is possible that this species is not even endangered, but simply overlooked.

RESEARCH NEEDS

Locate extant populations; determine reasons for rarity.

RESOURCES

CONTACTS

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Perkins, R. C. L. 1899. Hymenoptera, Aculeata. Pp. 1-115 in D. Sharp (ed.), *Fauna Hawaiiensis*, Vol. 1. Cambridge University Press, Cambridge, United Kingdom.

WEBSITES

Bishop Museum Extinct Species – Insects http://hbs.bishopmuseum.org/endangered/ext-insects.html
Lists *H. melanothrix* as extinct. Updated March 21, 2002.