Hylaeus gliddenae Magnacca and Daly, 2003 (Hymenoptera: Colletidae: Hylaeinae)

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

SUMMARY

Hylaeus gliddenae is a large bee endemic to the island of Hawaii in Hawaii. It is distinguished by the unusual red abdomen. It is closely related to *H. paradoxicus*, differing by the presence of facial marks. It is known only from a single specimen collected in 1934.

CONSERVATION STATUS

Xerces Red List Status: Critically Imperiled (Possibly Extinct)

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: Abdomen dull red, remainder of body black; face with a U-shaped yellow mark and broad marks on the scape and mandible. Punctation of abdomen distinct.

Females: Unknown; may be indistinguishable from *H. paradoxicus*.

Hylaeus gliddenae is larger and more robust than most Hawaiian species. It is a member of a group of species with distinct punctation of the abdomen, including H. anomalus and H. satelles. It is most similar to H. paradoxicus of the island of Hawaii, with which it shares the distinctive red abdomen. It is distinguished by the presence of facial marks, which are absent in *H. paradoxicus*, and slightly smaller size.

RED LIST OF POLLINATOR INSECTS. Species profile: Hylaeus anomalus

TAXONOMIC STATUS

Hylaeus gliddenae was collected in 1934 and described in Daly and Magnacca (2003). Small females collected by Perkins and described (1899) as *H. erythrodemas* (later synonymized with *H. paradoxicus*) may actually be this species.

LIFE HISTORY

Like *H. paradoxicus*, *H. gliddenae* probably inhabits dry to mesic forests. The specific habitat of the single specimen cannot be determined from the locality label. It nests in wood.

DISTRIBUTION

Hylaeus gliddenae is only recorded from Kilauea. However, if it still exists it will probably be found in the area of Puu Waawaa and/or Pohakuloa like *H. paradoxicus* and other dry forest species.

THREATS

The rarity of *H. gliddenae* and lack of knowledge about its requirements make it difficult to assess threats. Dry forest has been severely impacted by feral ungulates and fire, but this species has not been found in remnant habitat with other similar species.

CONSERVATION STATUS

This species is extremely rare and possibly extinct.

CONSERVATION NEEDS

The top priority is to identify extant populations and document the continued existence of the species. All areas where *H. gliddenae* is likely to be found are protected under the auspices of the State of Hawaii, the National Park Service, or the U.S. Army, although they may not be actively managed for habitat conservation.

RESEARCH NEEDS

Locate extant populations, identify reasons for rarity.

RESOURCES

CONTACTS

Karl Magnacca, USGS-BRD, Kilauea Field Station, Hawaii National Park, HI 96718

REFERENCES

Daly, H. V., and K. N. Magnacca. 2003. *Insects of Hawaii, Vol. 17: Hawaiian Hylaeus (Nesoprosopis) Bees (Hymenoptera: Apoidea)*. University of Hawaii Press, Honolulu. 234 pp.

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

This bee has no web presence.