

***Hylaeus niloticus* (Warncke, 1970)**  
**(Hymenoptera: Colletidae: Hylaeinae)**

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**SUMMARY**

*Hylaeus niloticus* is a coastal and dry forest bee endemic to the islands of Molokai, Lanai, and Hawaii in Hawaii. It is similar to *H. assimulans*, distinguished by the smaller size, shape of the male scape, and other details. It has not been collected since 1918, and may be extinct.

**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:	Species of Concern
USA – state status:	HI: Species of Concern
NatureServe:	GNR
IUCN Red List:	N/A

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**SPECIES PROFILE**

**DESCRIPTION**

**Males:** Face entirely yellow below the antennae, extending dorsally as narrow stripes along the eye; otherwise unmarked. Scape narrow, more than twice as long as wide, widest at apex.

**Females:** Entirely black, lacking coloration. Large, but without distinct punctation on the abdomen.

*Hylaeus niloticus* is close to *H. assimulans* and *H. ombrias* in the *flavipes* species group. Males can be separated by the shape of the scape, which is widest at the apex in *H. niloticus* and at the middle in the other two; both sexes of the former have the frons much more densely punctate. *Hylaeus niloticus* is also usually smaller, but small specimens of the others have been found.

## **TAXONOMIC STATUS**

*Hylaeus niloticus* was described as *Nesoprosopis obscurata* by Perkins (1899). *Nesoprosopis* was reduced to a subgenus of *Hylaeus* by Meade-Waldo (1923). The name *Prosopis nilotica* was proposed by Warncke (1970) to resolve homonymy with *Prosopis obscurata* Schenck (Warncke considered *Prosopis* rather than *Hylaeus* the correct name for the genus). The most recent taxonomic treatment was Daly and Magnacca (2003).

## **LIFE HISTORY**

*Hylaeus niloticus* has been collected from both coastal strand and higher-elevation dry forest. Little else is known about it. Nesting habits are unknown, but it probably nests in the ground like related species.

## **DISTRIBUTION**

Historic collections of *H. niloticus* are from the leeward areas of Molokai, Lanai, and Hawaii. No recent collections exist.

## **THREATS**

The greatest threat to *H. niloticus* is habitat loss. Dry forest and coastal vegetation have been severely impacted by feral ungulates and invasive plants.

## **CONSERVATION STATUS**

This species was found widely though not abundantly in the early period of Hawaiian insect collecting (1892-1930); it has not been collected in over 80 years and may be extinct. If it does exist, it is probably restricted to small, scattered populations.

Originally, U.S. Federal listings of rare and endangered species classed *H. niloticus* as a “Category 2” Candidate Species about which more information was needed before it could be considered for listing. This status was based on recognition that Hawaiian bees in general were becoming rarer and little was known about their conservation status. Data were never gathered to document whether or not this species should be proposed for listing. It is currently considered to be a “Species of Concern” or a “Special Status Species” by the U.S. Fish and Wildlife Service and the Hawaii Division of Forestry and Wildlife.

## **CONSERVATION NEEDS**

Several areas where *H. niloticus* may persist have not been investigated fully or at all. These include the southern slopes of East Molokai, much of Lanai, and montane dry areas of Kona on Hawaii. These areas, especially Molokai, should be checked for remnant populations of this species.

## **RESEARCH NEEDS**

Locate populations; determine habitat requirements.

## RESOURCES

### CONTACTS

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### 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.

Meade-Waldo, G. 1923. Hymenoptera, fam. Apidae, subfam. Prosopidae, fasc. 181. Pp. 1-45 in P. Wytsman (ed.), *Genera Insectorum*. L. Desmet-Verteneuil, Brussels.

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

Warncke, K. 1970. Beitrag zur systematik und verbreitung der Biengattung *Prosopis* F. in der westpalaarktis (Hymenoptera, Apoidea, Colletidae). *Bull. Rech. Agr. Gembloux*. 5:745-768.

### WEBSITES

Bishop Museum Arthropod Species of Concern checklist

<http://hbs.bishopmuseum.org/endangered/soc-artho.html>

Lists *H. niloticus* (as *H. obscuratus*) as a Species of Concern. Updated February 21, 2000.