

Yellow-Faced Bees

COMMON NAME: Yellow-faced bee

HAWAIIAN NAME: nalo meli maoli

SCIENTIFIC NAME: *Hylaeus anthracinus* / *Hylaeus longiceps*

LEGAL STATUS: Endangered (Federal and State).

APPEARANCE: *Hylaeus* species have a wasp like appearance but can be distinguished from wasps because they have hair on their bodies. *Hylaeus anthracinus* is a medium-sized black bee with clear to smoky wings and black legs. Males have a single large yellow spot on the face below the antennal sockets. Females are entirely black and can be distinguished from males by the black hairs on the end of the abdomen and a mandible containing three teeth. *Hylaeus longiceps* is a medium-sized black bee with clear to slightly smoky wings. Distinguishing characteristics are its long head and facial marks on males. The male's lower face is entirely yellow and the yellow area extends to the sides in a broad stripe above the antennal sockets. Females are black and unmarked.

NATIVE RANGE: *Hylaeus* species are the only genus of bees native to Hawai'i. *Hylaeus anthracinus* are endemic to the Hawaiian Islands. They are known to occur on the islands of O'ahu, Moloka'i, and Maui, Hawai'i, Kaho'olawe, and formerly Lāna'i. *Hylaeus longiceps* are endemic to the Hawaiian Islands. They are known to occur on the islands of O'ahu, Moloka'i, and Maui.

HABITAT: *Hylaeus anthracinus* are generally found in coastal strand habitat, rarely at higher elevations in dry forest. *Hylaeus longiceps* are generally found in coastal strand habitat, but also inhabit dry shrubland.

DIET: *Hylaeus anthracinus* and *Hylaeus longiceps* have an affinity for native plants including naupaka (*Scaevola sericea*), ilima (*Sida Fallax*), akoko (*Chamaesyce* spp.), and naio (*Myoporum sandwicense*).

ECOLOGICAL THREATS: Habitat alteration of native coastal strand vegetation due to development and increased non-native species limits available habitat for yellow-faced bees.

Yellow crazy ants (*Anoplolepis gracilipes*) exclude yellow-faced bees from coastal strand habitat both by direct predation and by feeding on the nectar bees rely on. *Hylaeus strenuus*, a non-native bee species present on O'ahu, is spreading through coastal and lowland areas throughout the island and will likely become a competitor of *Hylaeus anthracinus* due to its similar size and habits.



MCBH CONSERVATION MEASURES: Surveys conducted in November 2016 and May 2017 confirmed that significant populations of *Hylaeus anthracinus* occur in coastal strand habitat of MCBH Kaneohe Bay. Abundant populations were found along the Pyramid Rock and North Beach shorelines, while very limited distribution of bees was found along the Fort Hase shoreline. No bees were found at MCTAB. No *Hylaeus longiceps* was documented on MCBH properties.

Conservation measures that benefit yellow-faced bees include:

- **Habitat protection and enhancement.** Protecting nectar plants, such as naupaka, in occupied habitat. Allow planting of tree heliotrope or beach heliotrope, which *Hylaeus* species have an

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affinity for (the species is on the approved plant material list of non-native plants for MCBH and currently occurs on Base).

- **Limiting disturbance.** *Hylaeus* species do not appear to be bothered by human presence. Minimize the removal of litter below trees in preferred habitat. Minimize driving near *Hylaeus* nesting areas to avoid crushing nests. BMPs and conservation measures are employed when a project may have an effect on bees.
- **Predator control.** Yellow crazy ant control may be performed if needed. Currently bees and yellow crazy ants do not occupy the same habitat at MCBH Kaneohe Bay.
- **Monitoring for presence to help direct management activities.** Natural Resources staff survey appropriate habitats, record occurrences and consult with USFWS as needed.
- **Education and outreach.** Development and distribution of informational material including videos, fact sheets, and briefings for military personnel and civilians on Base including new arrivals, and outreach with volunteers.

For more information: MCBH Integrated Natural Resources Management Plan. 2016. Section 6, 7.1, Appendix C & D.

PHOTOS

1. Female *Hylaeus anthracinus*. Magnacca, K. N. (2013). <https://www.flickr.com/photos/53189052@N08/20457882510>
2. Male *Hylaeus longiceps*. Magnacca K. N. (2015). <https://www.flickr.com/photos/53189052@N08/8642418296>