JOSH GREEN, M.D. GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA





STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I **DEPARTMENT OF LAND AND NATURAL RESOURCES** KA 'OIHANA KUMUWAIWAI 'ĀINA

DIVISION OF FORESTRY AND WILDLIFE 1151 PUNCHBOWL STREET, ROOM 325 HONOLULU, HAWAII 96813

July 11, 2023

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Section 106 Consultation for Conserving Habitat for Two Maui Yellow-SUBJECT: faced Bee Species

To Whom It May Concern,

The Department of Land and Natural Resources Division of Forestry and Wildlife (DOFAW) is proposing to work on the project listed above with funds from the U.S. Fish and Wildlife Service. Under Section 106 of the National Historic Preservation Act, DOFAW is consulting with Native Hawaiian Organizations related to historic properties or knowledge of Hawaiian practices. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant association.

The Division of Forestry and Wildlife is partnering with the U.S. Fish and Wildlife Service to conduct a review of this project to comply with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR Part 800. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your organization or community, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

The project is located in 3 acres of the Lower Lihau unit in the Lihau section of West Maui NAR, TMK (2) 4-8-001-011. Dry forests are an important habitat for the Hawaiian yellow-faced bee, the only bees native to the Hawaiian Islands. The bees continue to forage almost exclusively on native Hawaiian plant species, even as a new suite of flowering species have invaded Hawaiian ecosystems. This preference for pollen and nectar primarily from native plants is likely contributing to declines of some species. The group is also highly susceptible to habitat loss and alteration, and declines and extirpations may be attributed in part to the invasion of non-native arthropods. This project focuses on stabilizing and enhancing existing habitat for endangered yellow-faced bee species on the island of Maui, the endangered *H. assimulans* and *H. flavipes*, using a combination of invasive species control, out-planting and deploying artificial nest blocks.

Buffel grass is the target invasive species in the project area since it outcompetes native plant species and increases fire risk. Herbicide will be applied at the restoration site and within fire breaks across the state.

Three endangered plant species, *Abutilon menziesii*, *Hibiscus brackenridgei*, and *Portulaca villosa* and additional common native species will be outplanted including, but not limited to, ilima (*Sida fallax*), nehe (*Wollastonia integrifolia*), pua kala (*Argemone glauca*), aalii (*Dodonaea viscosa*), and wiliwili (*Erythrina sandwicense*). Only seeds or cuttings from the restoration site and/or nearby West Maui habitat within the appropriate seed zone will be used for plant propagation. Planting will be scheduled for the wet season (winter months) and focused on areas where plants are likely to successfully establish and/or where the existing diversity of native plant species is low. A catchment irrigation system will be set-up on site to provide water to a subset of plants over the project period depending on rainfall, up to eight months following out-planting.

Twenty small nest blocks will be deployed at the Lihau restoration site to monitor potential use by *H. assimulans* and *H. flavipes*. Each block will be anchored on rebar posts. Posts will be pounded into the ground to a depth of 12"-18", coated with Tree Tanglefoot to exclude foraging ants, and the sticky surface will be protected with a PVC collar to minimize adhesion of debris and accidental capture of bees. Blocks will be located to avoid disturbance of any archeological features.

Once the consultation period is over, and if there are no major concerns presented, DOFAW will begin with nest box deployment. However, if any sites or artifacts are discovered, all work will stop, the proper authorities will be notified, and an assessment of significance will occur.

If you are interested in participating in this undertaking as a consulting party, want to provide comments on the proposed project APE and any historic properties in the APE, or want to suggest additional key contacts, please respond by August 11, 2023 via email to Cynthia.B.King@hawaii.gov.

Sincerely,

/s/

Cynthia King

Native Ecosystems Program Entomologist

Division of Forestry and Wildlife

Department of Land and Natural Resources



An orange star indicates the approximate location of the Lower Lihau Unit of the West Maui NAR. Yellow polygons indicate available habitat and yellow points are locations where endangered *H. assimulans* were identified in 2021.



Example nest box