

Port of Entry/Exit Pest Monitoring Program FY22 HISC FUNDS PROJECT REPORT

This annual report includes the following components:

1. Project Overview
2. Report on activities in FY22

Should you have any additional questions regarding the implementation of the Port of Entry/Exit Pest Monitoring program, (formerly known as Māmalu Poepoe) in FY22, please do not hesitate to contact Dr. Kaufman at Leyla.V.Kaufman@hawaii.gov.

1. Project Overview

The Port of Entry Pest Monitoring Program (formerly known as Māmalu Poepoe) was originally conceived by representatives from multiple state agencies acting in their capacities as members of the HISC, including the directors or designees from HIDOT, the Department of Health (DOH), the Hawaii Department of Agriculture (HDOA), and the University of Hawaii (UH). These agencies recognized the following areas of shared interests with regard to airport facilities:

- HIDOT seeks to understand the presence and impact of invasive species at airport facilities that may be detrimental to facility operation or user experience,
- DOH seeks to improve its monitoring and research efforts regarding vectors of human diseases at airports, primarily mosquitoes,
- HDOA seeks to improve monitoring and research efforts regarding agricultural pests at airports, namely invasive ants, coconut rhinoceros beetle, and Africanized bees,
- UH seeks to improve research on invasive species distribution and economic impacts, and,
- DLNR is the administrative host of the HISC, which is mandated to provide cabinet-level coordination on invasive species issues.

HISC staff agreed to serve in a coordinating capacity for this project, including management of an interagency project budget and the hiring of a temporary Project Coordinator via a staffing partnership the UH Pacific Cooperative Studies Unit (PCSU) to finalize and implement the Māmalu Poepoe plan.

Utilizing UH PCSU as a project staffing entity has allowed HISC to fund temporary positions and partial full-time equivalences for the pilot project rather than establishing permanent civil service positions. HDOT agreed to fund the program as a 5-year pilot project. The pilot funding ended in March 2022.

2. Report on activities in FY22 (to March 2023)

- **Program expansion**

Given the overwhelming support from partner agencies, HISC staff worked on securing funds to continue with the program. During FY 22 the project coordinator worked with HISC/DLNR and CGAPS staff to send federal appropriation and Congressional Direct Spending (CDS) requests to the different Congressional offices in Washington DC. HISC staff also briefed local legislators on the program, which resulted in the introduction of a bill. Federal and State requests had budgets for the continuation of efforts at airports and also to expand efforts to seaports and expand the list of invasive targets. The CDS request was approved, and the appropriation went to USDA APHIS. USDA APHIS channeled the funds to DLNR via CAPS financial agreement. The program will expand efforts to the following harbors: Honolulu, Nawiliwili, Kawaihae, and Hilo. The State appropriation went to HDOA.

- **Invasive Ants**

The program continues the collaboration with the Hawaii Ant Lab (HAL) and MISC for the ant monitoring. During FY22 the program had two ant surveys at HNL and 3 surveys at ITO, 3 at KOA and 2 at OGG. No new ants to the state were reported at the different facilities. Positives for little fire ant (LFA) were recorded at ITO and KOA airports. During the same fiscal year, the operation expanded to seaports. The seaports included in the expansion are: Nawiliwili Harbor, Honolulu Harbor, Hilo Harbor and Kawaihae harbor. During this fiscal year we also visited the Pohakuloa Training Area (PTA) to check on potential sites for ant surveys. HAL staff provided a map with suggested ant monitoring sites and we started the process of getting all required permissions.

- **Africanized Honeybees (AHB)**

The University of Hawaii (UH) Bee Lab continues to provide guidance to the program. The UH Bee Lab conducts the DNA analysis and swarm trap processing for swarms intercepted at HNL. Table 1 shows the number of swarm interceptions at airport facilities. All swarms intercepted to date have tested negative to Africanized genes.

The program coordinator held 8 action plan meetings for AHB between August 2021 and March 2023). In these meetings, the group discussed issues like mandatory bee registration, issues regarding the importation of bee semen, buffer zones around airports, trainings for response, outreach materials, among other issues, we also planned a training for the invasive species committees' staff, that training was held in April 2023.

- **Coconut Rhinoceros Beetle**

No beetles were intercepted during FY 2022. Traps are currently being checked every four weeks. The CRB response team has seen an increase in CRB detections around HNL. Annual palm surveys were conducted at all airport facilities. During the palm surveys monitoring

crews inspect palms for possible CRB damage and count number of palms. Figure 1 shows the clusters of palms at Daniel K Inouye International airport. During fiscal year 2022 the program coordinator had meetings with HDOT staff regarding some suspected CRB damaged palms outside the secured areas.

The program expanded operation to seaports in the fall of 2022. The seaports included in the expansion include: Nawiliwili Harbor, Honolulu harbor, Hilo harbor and Kawaihae harbor. In early 2023 we coordinated a visit to Pohapuloa Training Area. BIISC staff assess the areas and provided suggestions on sites where we can install CRB traps. We are currently working on the required permissions.

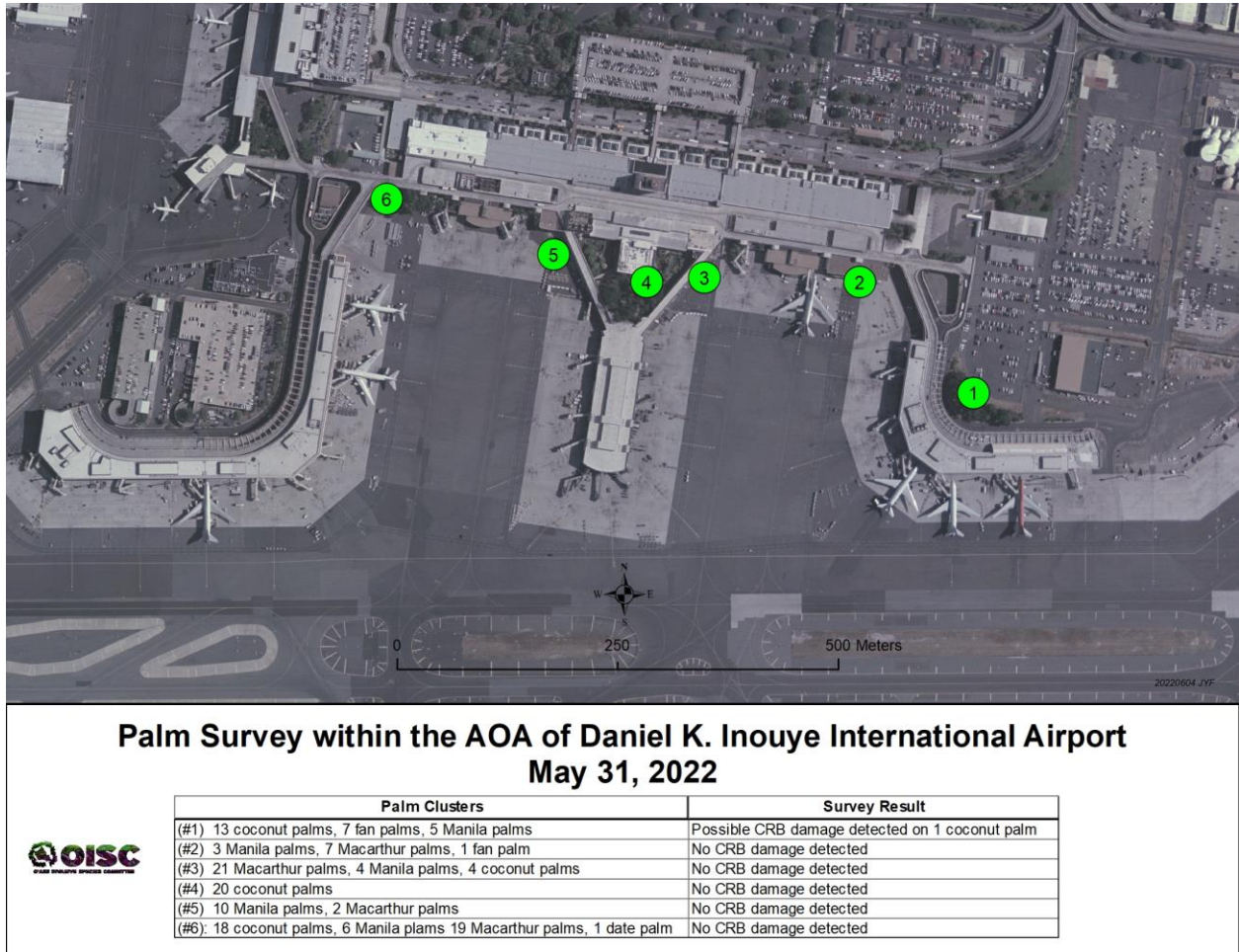


Figure 1. Palm survey inside the AOA at Daniel K Inouye International airport



Figure 2. Palm survey Kona International Airport

- **Mosquitoes**

No new mosquito species were intercepted during monitoring surveys at airport facilities during this fiscal year. The program continued providing monitoring equipment to offices. The program helped with the response to an interception of a female *Aedes aegypti* (this species is only known to occur in Hawaii island) at Honolulu Harbor in August 2021. The program helped with communications with HDOT partners to gain access to additional harbor sites. The program also provided monitoring traps to help with the response. No other interceptions were recorded. During FY2022 the program coordinator has also been working with mainland collaborators to conduct training for HDOH vector control staff. This training will be held in September 2023 in Hilo, Hawaii.