

Title: Kaua'i Island Invasive Species Detection & Control
Organization: Kaua'i Invasive Species Committee
Award: \$314,663



Introduction: The continued introduction and spread of unwanted pest and invasive organisms harms our economy, water supply, native bio-diversity, health, and the lifestyle and culture unique to this island. The Kaua'i Invasive Species Committee (KISC) is a voluntary partnership of government, private, non-profit organizations, and individuals working together to: prevent the introduction of potentially damaging pest species to the island, eliminate recently arrived (incipient) pests before they spread beyond control, manage established pests in order to reduce their negative impacts, and educate and involve the public as to the magnitude of the invasive species problem and the need for control programs such as KISC. KISC works in partnership with existing programs and aims to assist in the coordination of efforts island-wide. KISC's priorities are those species that are recognized as having the greatest potential to harm human welfare and native biodiversity, and where the use of limited resources is most likely to be successful.

KISC estimates that its FY14 total base funding need was \$750,000. The budget was 75% of estimated funding and HISC provided approximately 56% of KISC's acquired FY14 funding.

Achievements in FY14

Early detection. Number of species detected and evaluated for feasibility of eradication:

Early detection of incipient invasive species included roadside surveys, private property surveys, as well as surveys at nurseries, ports, green-waste areas and resorts.

- One species *Solanum torvum* surveyed for feasibility of eradication with over 23 acres surveyed.
- One species, *Cissus verticillata* (seasonvine), as a step in analyzing feasibility of eradication, is still undergoing herbicide trials with no success.
- Little fire ant surveys were conducted island-wide covering 146 acres with no new introductions detected.



KISC crew treating Long Thorn Kiawe

Priority target species. Number and area of priority invasive species eradicated and/or controlled:

Control and eradication efforts centered on 7 priority plant species, 17 other species, two vertebrate species, coqui frog and mongoose and one invertebrate species little fire ant.

- Survey and control of *Miconia* was focused on three primary areas of the Wailua District; Wailua River State Park (WRSP), Wailua Homesteads, and the Game Management Area (GMA) in the Halele'a Forest Reserve. Air and ground crews surveyed 1,372 acres, and controlled 151 immature plants and 1 mature. Eradication strategies dictate the importance of removing plants before reaching maturity; current data suggests that these strategies are mostly working, as only one mature plant was detected.
- Other priority plant targets included *Arundo*, ivy gourd, false kava, long thorn kiawe, and other miscellaneous species. Over 4,000 acres were surveyed and over 21,364 individual plants were treated.

- KISC assisted HDOA and the Hawaii Ant Lab with eradication efforts at Kauai's one little fire ant infestation site in Kalihiwai. Over 147 acres were treated utilizing over 1,423 person hours.
- In collaboration with DLNR Division of Forestry and Wildlife, KISC utilized over 1,345 person-hours conducting mongoose detection and response. No mongooses were captured during this fiscal year.
- KISC continues to assist HDOA with coqui response and survey on Kauai. Over 143 acres were surveyed at high-risk areas as well as responding to calling frogs. Four coqui were detected and captured during this period. Coqui continuously arrive via interisland shipping.

Rapid Response. Number of potential new island introductions responded to and dispatched: KISC's ability to quickly respond to reports of new invasive introductions helps to prevent establishment and unchecked invasion.

- In collaboration with HDOA, KISC was able to survey for a potential new infestation of LFA from the big island. A portion of a farm shipment was detained by plant quarantine and found to be positive for LFA. Crews quickly surveyed the staging area for equipment that had already been transported to Kauai and had no detections.
- KISC also assisted HDOA with Coconut Rhinoceros Beetle trap monitoring

Other Activities in FY14

Capacity development: Overall staff capacity was enhanced by adding one new field crewmember and an outreach position. The crew also participated in cliff technician certification for rope safety, and a proper application of pesticide class.

Partner collaboration: KISC continued to work closely during FY2014 with the Pacific Missile Range Facility, Hawaii Army National Guard, UH-CTAHR, DLNR-DOFAW, The Nature Conservancy, Hawai'i Department of Agriculture, US Department of Agriculture, Hawaii Department of Transportation and US Fish and Wildlife Service offices on Kauai and Oahu.

Contact Information

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