

Title: Kauai Invasive Species Committee Detection & Control

Organization: Kaua'i Invasive Species Committee, Pacific Cooperative Studies Unit, UH

Award: \$499,223

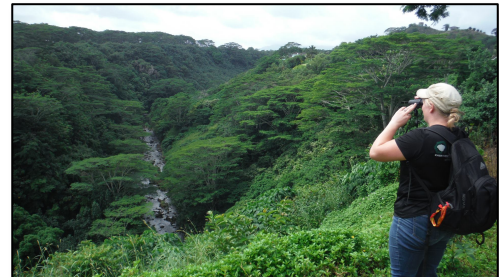


Introduction: The Kaua'i Invasive Species Committee (KISC) is a voluntary partnership of government, private, non-profit organizations, and individuals working together to: prevent the introduction of potentially damaging pest species to the island, eliminate recently arrived (incipient) pests before 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. KISC functions as an island-wide rapid response team that helps coordinate and fill gaps in the multi-agency effort to prevent the establishment of new pests. KISC has also evolved a highly effective early detection program that is continuously monitoring Kauai for threats that have evaded port detection and risk becoming new invasions. Priority is focused on species that are recognized as having the greatest potential to harm human welfare, agriculture, and native biodiversity, and where the use of limited resources is most likely to be successful.

Achievement Highlights in 2017

Early detection: Number of species detected and area monitored

KISC's plant early detection program completed the 2-year island wide survey including accessible roads, trails, nurseries, and planting sites. The data will be used to prioritize over 49 early detection species for possible control using KISC's plant species prioritization process. Additional early detection efforts include increased capacity in Kokee incipient weed control program.



KISC Botanist surveying.

- A total of 5,043 acres were surveyed as part of the island-wide botanist survey in 2017.
- Aerial surveys for fountain grass were not conducted due to limitations to definitively identify from the helicopter; expert opinion suggests that ground truthing and identification preparations need to be conducted day-of aerial survey.
- 31 species prioritization assessments complete, including early detection species and current KISC target species.
- 40 new island naturalization records, 5 of which are new state naturalization records.
- In partnership with Kokee Resource Conservation Program, 136 KISC person-hours were used to control incipient weeds in Kokee: *Buddleia madagascariensis* and *Juncus effusus*

KISC's invertebrate and vertebrate early detection highlights:

- A total of 32,528 acres were surveyed using 876 tracking tunnel observations for an island-wide mongoose population assessment. This metric is based on each trap sampling 500 m² per day. The mongoose assessment is scheduled to be complete in 2018.
- A total of 16 coconut rhinoceros beetle traps, 25 swarm traps, and 12 Asian giant hornet traps were maintained in partnership with Hawaii Department of Agriculture (HDOA) and Mamalu Poepoe.
- Surveys in partnership with HDOA detected a new island record of the trap jaw ant, *Odontomachus sp.*

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

Control and eradication efforts centered on 5 priority plant species, 10 additional plant species, and one invertebrate species - little fire ant.

- Survey and control of miconia is 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 1,011 acres, and controlled 169 immature plants and 3 mature.
- Other priority plant targets included arundo, ivy gourd, false kava, and long thorn kiawe (LTK). 409 acres were surveyed and 3,629 individual plants were treated.
- KISC assisted HDOA and the Hawaii Ant Lab with continued eradication efforts at Kauai's established little fire ant infestation site in Kalihiwai. 117 acres were surveyed and treated using 1,182 KISC person hours. The last detected little fire ant at the infestation site was in January 2017, no LFA have been detected since.

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.

- KISC assisted HDOA and DLNR respond to 2 Rapid Ohia Death reports, no ROD was detected.
- Assisted HDOA on 11 coqui frog responses with 5 coqui frogs and 4 greenhouse frogs captured.
- *Pueraria montana var. lobata* was detected in a new location on Kauai, Hanalei National Wildlife Refuge. In partnership with refuge staff, KISC controlled 54 mature and 25 immature kudzu plants.

Other Activities in 2017

The 2017-2022 KISC Strategic Action Plan was completed in early 2017. The plan provides framework for KISC's plant early detection program, detection and control of target species, early detection and rapid response for vertebrate and invertebrate species, and KISC's public awareness programs.

Partner collaboration: KISC is a project of the Pacific Cooperative Studies Unit (PCSU) with the University of Hawaii. KISC continued to work closely during 2017 with the Pacific Missile Range Facility, Hawaii Army National Guard, UH-CTAHR, DLNR-DOFAW, The Nature Conservancy, Hawaii Department of Agriculture, US Department of Agriculture, Hawaii Department of Transportation, Kauai Community College, the County of Kauai, Kokee Conservation Resource Conservation Program, National Tropical Botanical Garden, Kauai County Farm Bureau, and US Fish and Wildlife Service offices on Kauai and Oahu.

Contact Information

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