



Kaua'i Invasive Species Committee (KISC): Highlights

In FY 2010, KISC continued working on goals outlined by the HISC Response and Control Working Group. Priority was given to early detection, response, and control of various plants and insect targets. KISC received \$90,000 from HISC and leveraged \$137,000 in additional funds. ARRA funding of \$166,000 was also distributed to KISC. An island-wide roadside survey for early detection of invasive plants was completed and delimiting surveys are determining the extent of some of the priority plants identified. Mature miconia plants were discovered during aerial and ground surveys and KISC was able to rapidly respond to dispatch them. KISC is also the primary responder to new coqui reports across the Island and also is working to eliminate the one known wildland coqui population in Lawa'i. KISC also conducted outreach events across the island educating the public about the threats of invasive species.

HISC Response and Control Measures of effectiveness

- 1) Number of species detected and evaluated for feasibility of eradication.**
- 2) Prioritization processes identified and in place.**

KISC was able to utilize the expertise of the O'ahu Invasive Species (OISC) Early Detection Team as they conducted a new island-wide early detection survey for new invasive plants. Approximately 793 miles of roadside were surveyed. The results of this survey are under review, however, a few priority species were identified and KISC has ground-surveyed 288 acres to identify and delimit their extent. KISC was able to respond and treat 9 early detection species with a total of 917 plants treated.



Molucca raspberry discovered on roadside survey

This roadside survey was also instrumental in identifying 4 of KISC's priority target species outside of their known range which the crew has continued responding to.

HISC Response and Control Measures of Effectiveness

- 1) Number and area of priority invasive species eradicated and/or controlled.**
- 2) Number and names of species, habitats, ecosystems, agricultural, and managed areas protected because of control efforts.**

Between September 1, 2009 and August 31, 2010, KISC surveyed for and controlled 14 different plant, vertebrate, and invertebrate species, and two pathogens, covering over 7,700 acres. Species activity highlights are described below:

- KISC crews completed 1,051 acres of miconia ground-surveys during this period and removed 568 trees, saplings, and sprouts from the Halelea Forest Reserve and the Wailua River State Park. Seven of these trees were mature, three of them found during aerial surveys. Aerial surveys covered 1,888 acres. All plants found were within the known infestation buffer.



KISC crewmember spraying citric acid

- Coqui control work continued to be a priority for KISC this year. KISC is not only the primary responder to all new coqui reports on Kaua'i, but also conducts all of the control work at the one infestation site in Lawa'i near Aepo Reservoir. During this reporting period KISC crews treated 2,171 acres and expended 1,929 person hours. During this period there were approximately 13 frogs confirmed and killed outside of this Lawa'i site as new arrivals to Kaua'i.
- KISC partnered with the Pacific Missile Range Facility working on Long Thorn Kiawe removal with contracted machinery. Throughout the year, approximately 5,375 plants were treated and 673 acres surveyed.
- In an effort to preserve wetlands as well as agricultural lands in Makaweli Valley, Waimea District, KISC worked in partnership with local taro growers to survey over 293 acres for cattails (*Typha latifolia*), removing 2,942 plants.

HISC Response and Control Measures of Effectiveness

1) Implementation of the priority response and control actions of the Aquatic Invasive Species, West Nile Virus, coqui frog, and red imported fire ant plans

In partnership with the HDOA, KISC did the following during 2010 to keep public lands and residential areas on Kaua'i free coqui frogs, West Nile Virus, and various agricultural pests.

- Monitored nurseries and residential areas for little fire ant, and coqui frogs. Although no new infestations of little fire ant were detected, 13 coqui frogs were detected and eliminated.
- Assisted HDOH and USFWS in distributing educational information to the community of Kaua'i for West Nile Virus and Avian Influenza.

Other activities

- Organized and implemented a Service Learning Project with 4th graders at Ele'ele Elementary School. This project taught keiki to differentiate between native and invasive species, the scientific process of collecting data, and species identification.
- KISC participated in the ARRA AmeriCorps Program by having a year-long intern participate in all KISC activities; learning about field protocols, general invasive species threats, and participating in educational events.
- Quickly responded to and assisted with removal of a new roadside weed introduced to Koke'e: wheat. This weed-seed was intermixed with hydro-mulch sprayed following road construction.