

Kaua`i Invasive Species Committee (KISC): Highlights

In FY 2009, 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 \$375,100 from HISC and leveraged \$244,826 in additional funds. KISC has been successful in stopping the spread of Miconia, with the last known mature plant removed in late 2004. 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. Early detection work continues with follow-up to a roadside survey conducted in late 2007. 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 conducted delimiting surveys following up an extensive island-wide roadside survey. These surveys prioritized eight (8) plant species that are considered high risk. Approximately 458 acres were surveyed and 30 plants were removed and thought to be eradicated.

Once a species has been identified as a possible new introduction to Kaua`i, expert, on-island, advice is solicited to determine if other populations exist beyond the roadside. KISC's website is also utilized to generate input from the general public as to feasibility of control. See: <http://www.hawaiiinvasivespecies.org/iscs/kisc/ed.html>.



KISC crewmember treating cattails in Makaweli Valley

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, 2008 and August 31, 2009, KISC surveyed for and controlled 20 different plant, vertebrate and invertebrate species, including miconia and coqui frog, over 7,992 acres. Species activity highlights are described below:

- KISC crew completed 381 acres of miconia surveys during this period and removed 296 trees and saplings from the Halelea Forest Reserve and the Wailua River State Park. No mature trees have been found since 2004 emphasizing that strategies for miconia work on Kaua`i have been successful. No helicopter surveys were conducted during this reporting period. All plant found were within the known infestation buffer.
- 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 3,458 acres and expended 2,441 person hours. During this period there

were approximately 10 frogs confirmed and killed outside of this Lawa`i site as new arrivals to Kaua`i.

- KISC was successful in partnering with the Marriot Kaua`i Lagoons to remove Kaua`i's last known population of pampas grass (*Cortaderia selloana*) as their feature ornamental plant on the golf course. Approximately 93 plants were removed over 206 acres using 122 person-hours. KISC was also able to solicit donations of native plants, from the National Tropical Botanical Garden, to re-plant the removal sites. KISC continues to work with the Marriot as they strive to make this course an Audubon Cooperative Sanctuary Program certified course which involves removing invasive species.
- 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 treat over 256 acres of cattails (*Typha latifolia*), removing 4,213 plants.



KISC crewmembers removing pampas grass from Kaua`i Lagoons Golf Course

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 Hawai`i Department of Agriculture, KISC did the following during 2009 to keep public lands and residential areas on Kaua`i free coqui frogs, West Nile Virus, and various agricultural pests.

- Monitored nurseries island-wide for little fire ant, nettle caterpillar, and a new naio thrips. These survey areas totaled 129 acres with none of these pests detected;
- Responded to and eliminated 10 coqui frogs that were new introductions at nurseries and private homes;
- Assisted Hawai`i Department of Health and US Fish and Wildlife with picking up dead birds reported to 211 and submitted them for testing for West Nile Virus and Avian Influenza.

Other activities:

- Organized a state-wide ISC service trip working to assist Kaua`i State Parks and Koke`e Resource Conservation Program with invasive weeds threatening Kaua`i's pristine forest.
- KISC participated in the University of Hawai`i Pacific Internship Program for Exploring Science (PIPES) that introduces students to conservation work. KISC partnered with both local and Federal partners to produce an outreach event showcasing the last of the Hawaiian ducks, the Koloa Maoli, whose numbers are threatened by crossbreeding with Mallards.
- KISC successfully participated in Hazard Analysis Critical Control Point (HACCP) planning to develop a protocol for working with the invasive weed, *Miconia calvenscens*. This plan was the first plan submitted nationally from the state of Hawai`i. It can be viewed at: http://www.haccp-nrm.org/Plans/HI/HACCP_Miconia_KISC.pdf.