

**Title:** O'ahu Island Invasive Species Detection & Control  
**Organization:** O'ahu Invasive Species Committee  
**Award:** \$203,078



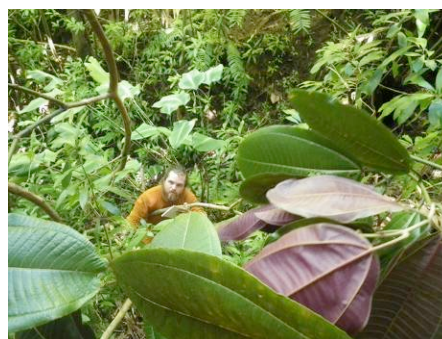
**Introduction:** The O'ahu Invasive Species Committee (OISC) is a voluntary partnership of private, governmental and non-profit organizations, and individuals united to prevent new invasive species infestations on the island of O'ahu, to eradicate incipient species, and to stop established species from spreading. OISC helps protect a wide range of environments by targeting selected invasive species for island-wide or localized eradication. In FY2013, OISC's total funding need was \$1.3 million. OISC secured 63% of this need. HISC funding comprised 28.35% of OISC's budget funding and the remainder was leveraged with private, federal and other state sources.

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### **Achievements in FY13**

#### **Deliverable 1: Survey 1200 acres for Miconia.**

OISC's primary priority target species is miconia because of the severe consequences that an established population would have on the watershed health of the island. Miconia forms dense, monotypic stands in Hawaiian forests. Its rapid growth and large leaf habit create a closed forest canopy that would reduce native and non-invasive plant regeneration. Once it eliminates the understory, miconia's extremely shallow root system promotes large-scale erosion events that decreases aquifers recharge ability, increases the sediment load in streams and on coral reefs and reduces the regenerative abilities of forest species. OISC's field crew surveyed 2,468 acres and removed 2 mature and 1376 immature miconia (*Miconia calvescens*) trees from the southern Ko'olau Range, preventing this species from expanding into O'ahu's watersheds.



*OISC crewmember controlling a large mature Miconia in Manoa Valley August 2013*

#### **Deliverable 2: Survey Ha'ikū Valley for Pampas grass.**

OISC has been working with property owners to systematically remove pampas grass from the urban and residential areas and has removed 620 plants from over 45 different residence and business on O'ahu. OISC's work in this area proved to be essential after pampas grass was seen naturalized in Kīpapa and Ha'ikū Valley. OISC controlled these naturalized populations and conducted delimiting surveys to ensure there were no other mature plants in the vicinity. The time taken to remove this grass from cultivation was essential, as the potential for this species to reinvade was drastically reduced since so many had been removed from cultivation. OISC conducted surveys over 168 acres for Pampas grass and controlled 1 plant. Surveys in Ha'ikū Valley covered 157 acres.

#### **Deliverable 3: Survey 52 acres in Palolo Valley for Himalayan blackberry.**

Removed 734 Himalayan blackberry (*Rubus discolor*) plants over 39 acres in Pālolo Valley. The infestation area is in the transition zone between disturbed and mostly native forest. OISC's work here protects the native forests at the summit of the Ko'olau Mountain Range.

#### **Deliverable 4: Control 8.6-acre infestation of Cape Ivy.**

Completed delimitating the population distribution of O'ahu's only known infestation of Cape Ivy (*Delairea odorata*) located in the mid-elevation forest of the Wai'anae Mountains. Delimitating surveys

were conducted over 48 acres and 15 acres of Cape Ivy were treated. This species is controlled twice a year.

**Deliverable 5: Survey 100 acres for Spiked Pepper.**

In partnership with Waimea Botanical Garden, OISC conducted surveys and control for Spiked pepper (*Piper aduncum*). The species has been removed from Waimea's plant collection. OISC conducted surveys over the grounds to control plants that have spread from the original display.



*OISC's field crew looking for Spiked pepper in Waimea Botanical garden*

**Deliverable 6: Collaborate with HDOA to conduct survey and control of Coqui frog. Work with nurseries to implement best management practices to reduce Coqui frog.**

OISC's pest response technician assisted the lead agency for Coqui frog control, the Hawaii Department of Agriculture (HDOA), to control 4 coqui frogs on O'ahu. OISC has been unable to work with nurseries to implement BMP's to reduce coqui frog because HDOA is the lead agency for this species and therefore better suited to complete this project.

**Deliverable 7: Conduct early detection surveys for Little Fire Ant in new landscaping.**

Little fire ant (*Wasmannia auropunctata*) has been detected on the islands of Kauai, Hawaii and Maui. OISC's pest response technician conducts early detection surveys for city parks, landscaped areas, and military installations for little fire ant. No Little fire ants were detected in the 106 acres surveyed.

**Deliverable 8: OED will identify and assess 20 plant species from natural resource agencies and the general public.**

The O'ahu Early Detection (OED) program connects scientific, herbarium-based research to invasive plant management by working with public agencies and private citizens to identify, document, and make recommendations about introduced and potentially invasive plant species. OED is a collaboration between the O'ahu Invasive Species Committee and Bishop Museum. Through surveys of residential, urban and natural areas on both public and private property, OED documents newly introduced plant species and assesses the threat of invasiveness of introduced plants to Hawai'i's environment and agriculture and the feasibility of eradication and control given the species' distribution. OED's work ensures that public dollars supporting invasive species control are used efficiently and effectively by helping agencies prioritize species and set realistic goals.

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**Additional Information**

To make the most of limited resources, OISC focuses its activities where there is the greatest return for the effort invested, working to stop invasive species before they become established. OISC's partners and steering committee choose those species that have the potential to disrupt vital ecosystem services, threaten Hawai'i's food sustainability or severely degrade the quality of life on O'ahu. In 2013, OISC continued to stop the spread of an erosion-promoting tree, performed early detection for little fire ant and coqui frog, and controlled a rangeland weed that is toxic to livestock, humans and other plants.

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**Contact Information**

**For more information, please contact:**

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