HISC support

Funds to hire a HISC Plan Manager and support program administration. The HISC Manager:

- Provides primary staff support for HISC projects
- Gathers information to identify emerging issues and opportunities relevant to HISC's mission
- Tracks funding, issues, regulations and legislation relevant to HISC's mission
- Reviews and tracks grant proposals for HISC funding and collect and review reports on funding.

Total \$75,000

HISC

Public Outreach Projects

Project Goals for FY 2005-2006

- In cooperation with public and private entities, increase voluntary compliance with quarantine laws;
- Avoid accidental introductions of invasive species;
- Establish an effective pest hotline that delivers timely information to managers on the ground.

Key accomplishments by HISC plan task:

1. Identify high priority messages to focus education efforts and develop outreach plans with the Department of Education (2 years).

To accomplish the goals of education and outreach, the HISC Public Outreach Working Group and CGAPS provide grants that support statewide educational efforts and extend outreach activities to target groups which would benefit from detailed information on invasive species.

HISC and CGAPS identified the Hawai'i plant industry as one of the most important target audiences for an invasive species message. The plant industry is responsible for importing, growing, promoting and selling plants, many times without regard to a plant's potential or realized invasive impacts.

In October 2005, CGAPS and HISC outreach specialists initiated the "Code of Conduct Project," a self-regulatory process for the industry to participate in invasive species prevention and education.

The Project's three main objectives:

1. To have plant industry participants agree to submit names of each plant species new to Hawai'i so the plant can be evaluated for its potential to be invasive if planted here;

- 2. To have plant industry participants agree to not grow or sell a short list of invasive plants that are the subject of control or eradication work in Hawai'i;
- 3. To have plant industry members agree to promote the use of non-invasive or native plants.
- To date, the O'ahu Nursery Growers Association, the Kaua'i Landscape Industry Council, Wal-Mart Garden Marts, and the Landscape Industry Council of Hawai'i have agreed to support the voluntary "Code of Conduct Project." More groups are considering joining the Project.
- An early outreach initiative that encourages participation of the plant industry is the Malama i ka 'Āina Award begun four years ago by MISC. The award recognizes efforts to keep invasive species out of Maui County and is presented annually to a landscaper, plant provider (retail and wholesale nurseries and garden shops), or commercial/agricultural property.

Additional educational/outreach efforts to target audiences:

- In an effort to expand this spirit of cooperation within the local business community, outreach specialists are mounting an education campaign with the Hawai'i pet industry. "Habitattitude" is a project that encourages responsible consumer behavior by warning against dumping aquarium plants and animals into oceans, streams, lakes, rivers and wetlands.
- KISC produced and published *Kia'i Moku*, invasive species newsletter highlighting ISCs, partner projects and current topics of concern.
- OISC produced and published *OISC Weed Wise*, a quarterly update on O'ahu's terrestrial invasive species.
- MISC produced a quarterly activities report and published and distributed Kia'i Na Maku O Mau Nui, a newsletter designed to inform the public about invasive species issues.
- KISC initiated the 1st Kaua'i Conservation Conference, designed to strengthen partnerships, exchange information, and develop a vision for better public outreach.

2. Develop a business round table of private sector transportation entities (e.g., airlines, shipping) to identify invasive species outreach opportunities (2 years).

- The HISC Public Outreach Working Group and the HISC Resources Working Group have partnered to identify DBEDT's Business Roundtable as a good opportunity to conduct outreach and ask for assistance in multiplying our network.
- A short powerpoint presentation and script have been developed and provided to DBEDT Director Ted Liu, who has agreed to present this information to the Roundtable.
- HISC, CGAPS and TNC have made concerted efforts to engage DOT-Airports Division in discussion about a proposed airport signage project at Honolulu and Kahului terminals. HISC continues to press its suggestions and comments regarding display contents and locations within Kahului Airport and also plan

continued involvement in future signage projects at Honolulu International Airport.

3. Develop or utilize an existing website for in-reach to HISC members and partners as well as outreach for the general public for pertinent invasive species issues (1 year).

- DLNR continues to host and update the HISC website.
- A new, user-friendly website is in the final stages of development. This new site is being incorporated into the design for the ISC, CGAPS, and the Aquatic Invasive Species Team.
- MISC and KISC outreach specialists have created a database to measure the effectiveness of outreach methods with an ability to query based on species target, medium and demographics, which will be standardized for all islands.
- 4. Develop a series of invasive species Public Service Announcements (PSAs) in cooperation with a variety of media outlets to encourage travelers and residents to not introduce or transport invasive species into and between islands (1 year and ongoing).
 - CGAPS worked in cooperation with the HISC Public Outreach Working Group to develop a series of five PSAs. These messages were listed in last year's report to the Legislature.
 - HISC funds were used (in addition to funds received from USFS, the National Oceanic and Atmospheric Administration OAA, U.S. Department of the Interior, and the Hawai'i Tourism Authority-Natural Resources Program) to produce the five 30-second PSAs and to buy broadcast time on all the major local TV network affiliates.
 - The PSAs aired between January 23 and June 30, 2006, and may be aired again pending funds.
- 5. Develop a Pest Hotline available to the public that is integrated into a statewide geographical information system and interagency database that is accessible to field crews actively controlling terrestrial and aquatic invasive species.
 - HISC funded the creation of a new statewide seven-digit Pest Hotline number, 643-PEST. This phone number may be dialed toll-free from any island, and calls are routed to the nearest HDOA office during normal work hours, and forwarded to the DOA office at the Honolulu International Airport, which is staffed after hours and on weekends.
 - DOA has developed a database for logging and tracking these reports.
 - An average of 12 calls reporting invasive species are logged statewide per week.

Public Events/Informational Presentations and Displays: Throughout the State, HISC, CGAPS, and ISC specialists conduct *at least* one outreach/educational activity per week informing a specific audience about invasive species. In FY 2005-2006, these activities totaled more than 75 separate events statewide. Target audiences and events include the following:

- Agricultural and Environmental Awareness Day
- Agriculture and Natural Resources Awareness Day
- Aka'ula
 Alternative
 School
 Introduction to
 Ho'ike o
 Haleakala
- Alien Algae Clean-up Events
- Ant ID Workshop
- Arbor Day on Kauaʻi
- Arbor Day on Maui
- 'Ava Festival at UH Mānoa
- Banana Poka Festival
- Big Island Legislator-Community Meetings (All Districts)
- Bishop Museum "Mad About Science" Fair
- Earth Day 2006 Molokai
- Earth Day at Maui Nui Botanical Gardens
- East Maui Taro Festival
- East Maui Watershed Partnership Art Show
- Friends of Haleakala Early

- Detection Workshop
- Ha'ikū
 Community
 Health Fair
- Ha'ikū
 Ho'olaule'a &
 Flower Festival
- Hana High School Introduction to Ho'ike o Halekala
- Hana Library Display
- Hawai'i County Fair
- Hawai'i Invasive Species Council
- Hilo Invasive Species Workshops
- Ho'ike o Haleakala Teacher Training Workshop
- Honolulu City Council
- Hoʻokahua
- Introduction to Hoʻike o Haleakala
- Kahului Airport Displays (2)
- Kamehameha Preschool
- Kaua'i Children's Heath Fair
- Kaua'i County
- Kaua'i Farm Bureau Expo
- Kaua'i Garden Fair
- Kihei Community Association

- King Kekaulike High School
- Kokua Festival 2006
- Kona Farm Fair
- Kula Elementary
- Lahainaluna High School Career Day
- Landowner Assistance Workshop
- Lawn & Garden Fair
- Lyon Arboretum Plant Sale
- Ma'ema'e Elementary School
- Mālama O Mānoa 1,000 Tree Giveaway
- MALP Meeting
- Maui Community College Students Hike
- Maui County Fair
- Maui Farm Bureau Fair
- Maui Realtors Association
- Moloka'i High School Natural Resource Academy Intro to Ho'ike o Haleakala
- Natural Resources Communication Workshop
- Navy Exchange Earth Day
- Oahu Nursery Growers Association
- Ocean Festival

- Palolo Pride Festival
- Punahou Lutheran Church Earth Day
- Rotary Clubs (Oʻahu & Kauaʻi)
- Seabury Hall
- Seabury Winterim
- Student Fire Ant Surveys
- UH Earth Day
- UH Hamilton Library Invasive Species Display
- Wahiawā
 Pineapple
 Festival
- Waimanalo Agricultural Association Meeting
- Waimea Invasive Species Workshops
- Weed Warriors Controlling Pines in Haleakala NP
- Weed Warriors Coqui Frogs
- Weed Warriors Frog Hunt
- Weed Warriors Ivy Gourd Trip
- Windward Community College Geography Class
- Word of Life Career Day

Media (Print): Coverage totaled approximately 30 articles in FY 2005-2006.

| "The costly coqui" | Honolulu Star-Bulletin |
|--|------------------------|
| "Pesky little coqui posing economic threat to islands" | Honolulu Advertiser |
| "Invasive Grass Spreads on Oahu" | Honolulu Advertiser |
| "Residents must help fight invasive species" | Honolulu Advertiser |
| "4.9M approved for coqui fight" | Honolulu Star-Bulletin |
| "Sound of summer: 'Coqui!"" | Honolulu Advertiser |
| "Report Coqui Frogs" ad | Honolulu Weekly |
| "Malama i ka 'Aina Award Applications Being Accepted" | The Maui News |
| "Invasive Species Crews Eliminating Pockets of Coqui Frogs" | The Maui News |
| "Nominations for Invasive Species Fighters Due" | Haleakala Times |
| "The Kumu La'au - Foundation for the Hawai'i's Rainforest" | Maui Nui Botanical |
| The Kumu La au - Foundation for the Hawai 1's Rainforest | |
| | Gardens Newsletter |
| "Two Honored for Efforts to Preserve Isle's Native Species" | The Maui News |
| "Nursery Manager Honored for Keeping Frogs Out" | Haleakala Times |
| "Going Native" | Maui No Ka 'Oi |
| "Enlightened Management" | Maui No Ka 'Oi |
| "Students Declare War – 'There's lots of species' invading the isl | ands" |
| | The Maui News |
| "Weed Warriors" | Maui Weekly |
| "Forum will take up issue of Superferry" | The Maui News |
| "Invasive species group does invaluable work for all" | The Maui News |
| "Superferry names five members of advisory panel" | The Maui News |
| "Volunteers Sought to Fight Invasive Species" | The Maui News |
| "Fighting Aliens" | Kaunana |
| "Detection of invasive plants to be taught" | The Maui News |
| "Kauai Mobilizes for Snake Hunt" | Honolulu Star-Bulletin |
| "Snake Hunt Underway at Lihue Airport" | The Garden Island |
| "Mongoose Sighting Could Pay Off" | The Garden Island |
| "Grower of the Month" | Kauai Weekly |
| "Stopping Invasive Species Before They Start" | The Garden Island |
| 11 0 1 | |
| "Kauai Joins Fight against Invasive Species" (Front Page) "Taking the Islan Back from Invasive Species" (Front Page) | Hawaii Landscape |
| "Taking the Isles Back from Invasive Species" (Front Page) | Honolulu Advertiser |
| "The War on Weeds" | Honolulu Weekly |
| "Solution to coqui: a hot shower" | Honolulu Advertiser |

Media (Broadcast): HISC contracted Dateline Media, Inc., a media monitoring network, to list broadcast coverage of invasive species for FY 2005-2006 on local TV network affiliates. TV mentions of invasive species totaled 271 statewide; radio broadcast mentions totaled 65 statewide. In addition, broadcast media activities on non-network stations are listed below.

- Hawai'i Public Radio interviews (2): terrestrial and aquatic invasive species.
- "Outside Hawai'i" weekly TV magazine show aired vignettes on miconia.

- "Outside Hawai'i" weekly TV magazine show aired vignettes on long-thorned kiawe.
- "Connecting the Dots" Presentation on MCC Today.
- Leeward Community College Educational Media Center Invasive Species Information Series to air on 'Ōlelo Community Television (in development).
- German TV DocuVista documentary filmed on Kaua'i highlighting Miconia and the topic of "seed tracking" by hiking tourists; aired "Kaua'i the Garden Island" on Arte TV throughout Europe.
- "Miconia on Maui" aired on Ho'ike, Kaua'i public access television.
- "The Coqui Frog Invasion in Hawai'i" aired on Ho'ike, Kaua'i public access television.
- "Crucial Media Contacts" database distributed to outreach specialists.

Print and Broadcast Press Releases: Press releases are often distributed in

collaboration with partner agencies. Some examples are listed below.

Coqui Calling Season/Pest Hotline Coqui Frog PSAs (2005, 2006)

Alien Algae Clean-up Events Extinguishing the Little Fire Ant through

Ohia Rust

Malama i ka 'Āina Award Application

(2005, 2006)

Education

Weed Warriors

West Nile Virus

Malama i ka 'Āina Award Recipient Reporting Mongoose Sightings

(2005, 2006)

Print Material & Miscellaneous Outreach Products:

"1-2-3 It's a Miconia Tree!" rack "Report a Pest" rack card

cards "Report Coqui Frogs" magnet
Alien Seaweeds rack card "Stop the Silent Invasion" T-shirts

Aquatics one-pager "Stop Alien Algae" T-shirts
BBTV Posters Updated Displays w/ Games (all

Door Hangers (Packets w/SASE, alerting homeowner of invasive species on property and asking tattoos ISCs)

"Weed Warrior" Miconia temporary tattoos

permission to control.) *Carijoa riseii* invasive coral rack

Fire Ant flyer cards (DAR partnership)

HISC one-pagers Coqui frog informational flyers Honolulu City Council informational "Wanted" poster for mongoose

packets reporting award

<u>Invasive Plants flyers</u>

Sierra Club Hiking Field Guide

Landscaping Professional's Guide to

Apple Snail Pest Alert poster

Landscaping Professional's Guide to Apple Snail Pest Alert poster Stopping the Spread of Coqui

Pampas Grass brochure

Local Publications list Miconia rack card OISC brochure OISC Newsletter

Pest Alert Flyers

Measures of Effectiveness

1. Number of callers on Pest Hotline

- An anecdotal assessment from DOA estimates an average of 12 calls per week
- Although Hawaiian Telcom's 643-PEST number is supposed to be accompanied by monthly reports on number of calls, this has not yet been provided to DOA or DLNR. Hawaiian Telcom representatives are aware of the problem, but have thus far been unable to address the issue.

2. Number of educational materials produced and distributed to target audiences

- Direct public outreach has risen statewide, thanks to HISC funding for additional outreach personnel and materials.
- Outreach specialists take advantage of opportunities to educate in public events/informational presentations and displays.
- Production of print material and miscellaneous outreach products target the public with species-specific topics.

3. Media relations, mentions in print and broadcast, contribute to public perception of invasive species issues.

• Outreach specialists actively engage the media by seeking out opportunities for publicity or by providing information in the form of detailed data, images, interviews and additional sources.

4. Number of volunteers who assist with invasive species management stewardship; this effort is done in cooperation with agency partners.

- OISC volunteers contributed approximately 800 hours to field work in FY 2005-2006.
- MISC volunteers contributed approximately 625 hours

5. Number of hits on invasive species web page

• This was not available at the time of reporting.

6. Public Survey

• As part of the Silent Invasion Media Campaign, CGAPS hired Ward Research to conduct two statewide telephone public awareness surveys, the first in 2004, before the PSAs aired, and the second in 2006, near the end of the television portion of the campaign. The following tables are from this report.

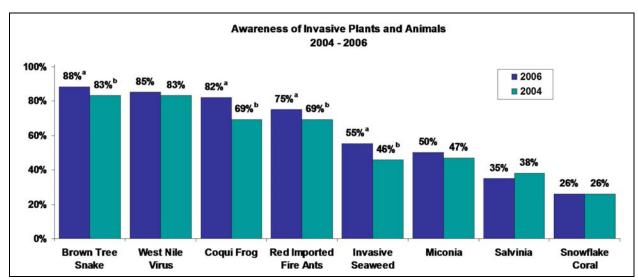


Figure 1: Awareness of Invasive Plants and Animals 2004-2006. The graph shows some key invasive species that are highlighted either in the PSAs or have received significant media attention over this period. The letters "a" and "b" denote statistically significant changes between 2004 and 2006. Note: salvinia is not mentioned in the PSAs, nor is it regularly mentioned by CGAPS or HISC outreach specialists. In almost all cases (except salvinia and snowflake coral) public awareness is rising.

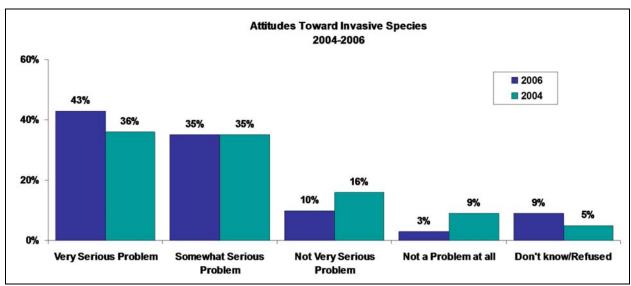


Figure 2: Attitudes Toward Invasive Species 2004-2006. This graph shows that the number of people that view invasive species as a "very serious problem" is rising, and that the number of people that think invasive species are not a problem are dropping.

Two additional questions asked in the 2006 survey revealed support for future initiatives:

- A large majority of residents (91%) said they would support a law to ensure that plants are reviewed for their invasive potential before introduction to the state.
- Table 3: Support for Cargo Fee. There is public support (88%) for a law that allows HDOA to charge a fee for cargo with invasive pests, based on responses to the following:

"Currently, the Hawai'i Department of Agriculture lacks adequate funding to inspect all cargo and goods entering Hawai'i for invasive species. Would you support a law that allows the Department to charge those sending cargo here an appropriate service fee if their items are found infested with pests? This fee would ensure that funds for inspection keep pace with the amount of infested cargo entering the State. Would you support such a law or not?"

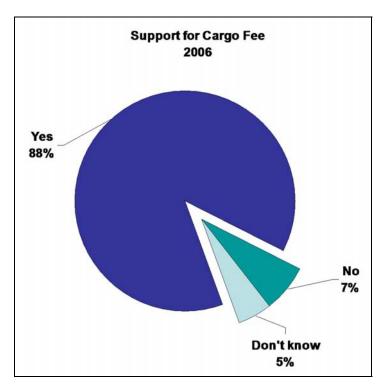


Figure 3: There is strong support for user fees to fund invasive species interdiction and quarantine. On January 19, 2006 the HISC approved a resolution in support of the invasive species recommendations of the Governor's Economic Momentum Commission. The Commission recommends a review of user fees from importers/shippers to ensure these fees are adequate to properly fund the needed prevention and quarantine programs.

Public Outreach Grants for FY 2005-2006

| Title | Organization | Award | Comments |
|---|---|----------|--|
| Habitatitude Campaign | HI DLNR/DAR, Aquatic Invasive Species Team | \$9,000 | Working with aquarium trade to post invasive information and offer unwanted fish turn-in. |
| Invasive Species Control and Education for a Native Hawaiian Fishpond | Ao`ao o na Loko I'a o Maui | \$8,500 | In Kihei, Maui. |
| Malama i ka 'Aina, Malama i ke Kai | University of Hawaii | \$8,000 | Continued funding to expand high school teacher invasive training to neighbor islands. |
| Pu'u Wa'awa'a Ahupua'a Invasive Species Outreach Project | DLNR, Division of Forestry & Wildlife | \$8,000 | Community outreach to stakeholders. |
| Weed Warriors | Tri-Isle Resource Conservation & Development Council, Inc/MISC | \$7,245 | High school program (Maui) of class visits and volunteer invasive removal field trips. |
| Jumping the Fence Line: Escaped Agricultural Plants in Hawai'I | University of Hawaii | \$7,000 | Free awareness training for ag, landscape, and land management professionals. |
| Invasive Species Public Service Announcements | Imi Pono no ka Aina | \$6,827 | Forty-eight radio PSAs with contests and prizes (for the Big Island). |
| Kohala Coqui Coalition | North Kohala Community Resource Center | \$6,000 | Continued community outreach to eradicate and prevent coqui reinfestation. |
| Island Invaders | Honolulu Zoo Society | \$4,707 | Curriculum for "Zoo-to-You" school visits, including scholarships for underserved schools. |
| | | \$65,279 | |