HISC-funded Public Outreach in FY09

Report on Efficacy of Public Outreach on Invasive Species

The coordinated effort to educate the public about invasive species by the Hawaii Invasive Species Council Public Outreach Working Group (HISC POWG) staff and member agencies has been successful, as measured by public awareness surveys, target audience surveys and additional measures of efficacy listed in the Strategic Plan. The HISC POWG utilized \$312,000 to support outreach staff and activities in each county. HISC POWG funds partially supported four county-based positions (the remainder of their salaries supplied by Invasive Species Committees); part of the funds for one part time person to manage the HISC website and electronic information; and two full time statewide positions to focus on bigger picture outreach projects.

The HISC POWG funds and staff add needed capacity to statewide invasive species programs in three ways: it provides funds for dedicated outreach staff positions in each county, funding for outreach materials and media services, and a mechanism to coordinate outreach messages and actions across the state. Outreach staff persons in each county brought invasive species information to communities via booths at public events, public presentations, print and electronic news articles and stories, radio and television ads and programming. Additional outreach to specific groups leveraged our overall efforts, including conducting teacher training sessions on invasive species curriculum for schools, working with landscape and nursery groups to promote the use of the Weed Risk Assessment and voluntary codes of conduct, and working with existing groups such as the Sierra Club and Hawai'i Trail and Mountain Club to promote awareness and report forest pests.

The HISC POWG worked to promote the following messages/concepts:

- Protect Hawai'i.
- Report a Pest to 643-PEST (7378).
- Don't Dump Aquarium Pets or Plants.
- Don't Plant a Pest.
- Don't Pack a Pest.
- Report Dead Birds to 211, or www.gotdeadbird.org.
- Don't Sell or Buy a Pest.
- Keep Pets Contained.
- Buy Local.
- Plant Native Species.

Outreach resulted in a reduction in importation, planting and sale of invasive ornamental plants.

The HISC POWG continued statewide outreach to the plant industry on the benefits of using the Hawai'i Pacific Weed Risk Assessment (HPWRA), which asks 49 questions about a plant to determine if it might become invasive if planted in Hawai'i. Unlike the import rules for animals, most species of plants are allowed to be imported into Hawai'i without review to

determine if they might be invasive. Furthermore, the difficulty in listing known invasive plants on the State Noxious Weeds List ensures that known pest plants continue to be grown and sold. In the absence of protective laws and rules, the HISC POWG identified outreach to the plant industry as one of the most important outreach projects. The HPWRA technicians and project is sponsored by the HISC Prevention Working Group.

A plant industry personnel survey of Landscape Industry Council of Hawai'i participants was conducted in May-June of 2008 to gauge awareness and support for the various initiatives to slow the introduction and spread of invasive ornamental plants. Results from 104 completed surveys show that industry members are largely aware of one or more of the current voluntary initiatives to reduce invasive plant species in Hawai'i, and that receiving this information has changed their plant use.

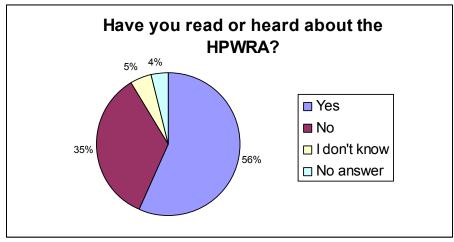


Figure 1. 56% of those that answered this question had heard of the HPWRA. Of these, 91% believe that the HPWRA can provide useful information about potential invasiveness of plants in Hawai'i and 30% said that receiving HPWRA information resulted in a change in their plant use.

Outreach builds public reporting networks:

1. Statewide public reporting network for snake sightings and other invasive species

One of the findings of public awareness surveys by the Coordinating Group on Alien Pest Species was that people largely did not know whom to call to report invasive species such as snakes. In addition, Hawai'i Department of Agriculture's pest hotline was an O'ahu number, which was a toll call for neighbor islanders, and neighbor island offices were not open on evenings or weekends to answer calls. HISC funds supported the set-up costs for 643-PEST, a direct-dial hotline number that uses a computer program to route calls to the nearest Hawai'i Department of Agriculture office during normal work hours, and forwards calls to the HDOA office at the Honolulu International Airport for response during evening and weekend hours. This hotline is toll-free for callers and is staffed at least 20 hours per day.

The HISC POWG continued engaging the public in monitoring for and reporting of invasive species to the hotline. An informed public can be the crucial link in the early detection and rapid response to unwanted species like snakes, and can prevent new infestations of currently localized pests such as coqui frogs and Little Fire Ants.

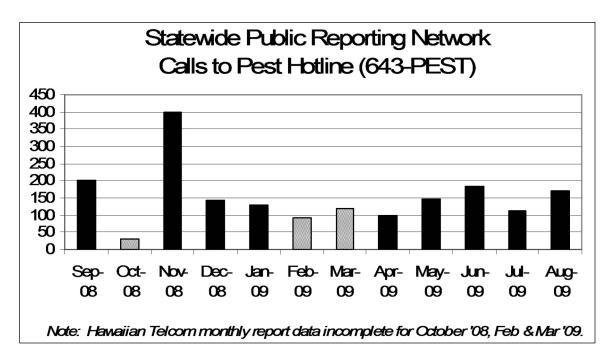


Figure 4. News of coqui detected in Kailua, O'ahu resulted in 273 calls to 643-PEST on November 4, 2008 alone. HISC funds supported the implementation of a new statewide pest hotline phone number in 2005. Since then, the HISC POWG has worked to increase awareness and use of the number to report sightings of invasive pests.

The pest hotline number is featured in every talk given by POWG outreach staff statewide, and at community booths and on materials such as magnets, pencils and pens for the public. As part of a HISC-funded outreach project to encourage plant industry personnel to



report sightings of new insect pests, a pest hotline logo was created in 2009. Outreach funds have also been used to continue to air a pest hotline radio jingle sung by Frank DeLima.

2. Public participates in early detection program for WNV and avian influenza.

Building the state's ability to quickly detect new diseases such as West Nile Virus (WNV) and avian influenza (AI) has been a HISC priority, with portions of the program funded by the Prevention Working Group (HDOH sampling and lab costs) and the Established Pests Working Group (delivering dead birds to labs for testing). Arrival of either of these diseases could happen anywhere in the state, and it would result in birds becoming sick and dying. The HISC POWG worked to inform the public and engage them in the early detection and reporting network by asking them to report dead birds to the 211 hotline, or online at www.gotdeadbird.com. HISC POWG staff and participants assisted with outreach for this message, and the USFWS supported the statewide radio broadcast of a 30-second radio ad which began on May 12, 2008 and aired on alternate weeks through November 30, 2008.

Figure 3. With articles and television news media stories waning, the HISC POWG turned to radio ads to increase awareness and reporting of dead birds. Website visits increase between May 12 and November 30, 2008 with statewide radio ads (funded by USFWS). Dead bird reports also rose during that time period.

89.33% % New Visits

3. Outreach in communities reached over 50,000 people

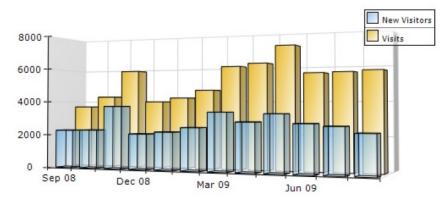
The value of direct community outreach via staffed displays at community events, school presentations and similar venues is not easy to calculate. At community events and presentations, staff field questions about the importance of biosecurity, of detecting and reporting pests such as coqui frogs, little fire ants and other pests, and people are provided with outreach materials for future reference. Presentations to groups like the nursery industry, school teachers, hiking and diving clubs continue to be a high priority. More than 50,000 people were reached in this manner between September 2008 and August 31, 2009.

4. Electronic media supports HISC messages

1.20 Pages/Visit

The HISC website, <u>www.hawaiiinvasivespecies.org</u> received more than 63,300 visits over the year ending August 31, 2009. Outreach funds also provided partial support for posting materials to the website and list serves, and for implementing other electronic media methods.

Date Range: 9/1/2008 to 8/31/2009



| Month | Visits | Unique Visitors | New Visitors | Return Visitors |
|-----------------|--------|-----------------|--------------|-----------------|
| September, 2008 | 3,686 | 2,262 | 2,262 | 0 |
| October, 2008 | 4,304 | 2,561 | 2,285 | 276 |
| November, 2008 | 5,891 | 4,157 | 3,718 | 439 |
| December, 2008 | 3,996 | 2,557 | 2,087 | 470 |
| January, 2009 | 4,224 | 2,710 | 2,218 | 492 |
| February, 2009 | 4,683 | 3,055 | 2,490 | 565 |
| March, 2009 | 6,068 | 4,069 | 3,383 | 686 |
| April, 2009 | 6,228 | 3,528 | 2,836 | 692 |
| May, 2009 | 7,224 | 4,095 | 3,299 | 796 |
| June, 2009 | 5,617 | 3,450 | 2,773 | 677 |
| July, 2009 | 5,653 | 3,368 | 2,635 | 733 |
| August, 2009 | 5,727 | 2,919 | 2,281 | 638 |

5. Number of education materials produced.

Materials range from refrigerator magnets, key rings, and pens to posters, brochures, displays and printed and portable document format (PDF) newsletters, as well as a statewide HTML email newsletter. See details in project sections below.

6. Public awareness surveys.

In 2004, 2006 and 2007 outreach efficacy has been measured by CGAPS and the HISC POWG using professional research companies to conduct periodic telephone surveys of a representative number of residents statewide, to gain a sense of public awareness, concern, and support. Funding for the 2007 survey was provided by the HISC POWG, and results may be found at http://www.hawaiiinvasivespecies.org/cgaps/whitepapersreports.html.

7. Number of invasive species educational programs and community events implemented by staff.

Logged number of educational programs and events totals 58.

8. Number of volunteers recruited and/or referred to invasive species projects.

A statewide total of over 2,572 volunteer hours have been logged. This does not account for all volunteer hours from staff and partners who have given time to invasive species efforts which could add up to several hundred more hours.

9. Number of people reached through media.

It is difficult to gauge how many people are actually reached through the print and broadcast media. Over the past year there have been over 50 mentions of the HISC or HISC projects in the media. Given the combined estimated audiences of radio, newspaper, magazine, and television coverage, the potential number of people reached more than 250,000.

Other Outreach Measures of effectiveness by project:

OISC

1) Agency adoption of rules and policies against invasive species

• OISC, along with HDOT, submitted comments to and met with Honolulu Rail Transit to discuss measures to decrease the likelihood that construction of the proposed rail system will introduce new invasive species to O'ahu. Transit officials agreed to use the Hawai'i Weed Risk Assessment when choosing plants and to require that construction companies bringing heavy equipment to O'ahu ensure that it is free of dirt, insects and plant parts.

2) Number of educational materials produced.

The OISC outreach specialist created the following educational materials:

- Information about remote monitoring for coqui frogs that will be used by nurseries.
- A video showing OISC removing miconia.
- Updated "It's easy to be Weed Wise" brochure that informs people about the Weed Risk Assessment and which plants to avoid in landscaping.

3) Number of people reached through talks and displays.

• OISC's outreach program incorporates the HISC outreach objectives and messages into all outreach activities. In 2009, OISC reached 4,547 people through public events and talks. OISC facilitated news coverage about miconia and is using social networking tools to reach a wider audience.

4) Number of volunteers recruited and/or referred to invasive species projects.

• OISC's volunteer program garnered 1,096 volunteer hours to work on invasive species removal projects

Other activities:

• Participated in state-wide service trip that included personnel from each Invasive Species Committee to remove invasive species from Koke'e State Park. The combined crew of 64

people removed 28,927 Kahili ginger, 1701 smoke bush, 891 privet and 4,682 strawberry guava.

KISC

1) Agency adoption of rules and policies against invasive species

• KISC collaborated with the Kaua'i Landscaping Industry Council (KLIC) to host a workshop in December at the National Tropical Botanical Garden to review the statewide HASLA/LICH-approved Weed Risk Assessment list of invasive ornamentals resulting in an adoption of the a new list, adding over 125 new plants to the "don't sell list" from the original Voluntary Codes of Conduct signed by KLIC in 2006 (also facilitated by KISC).

2) Number of educational materials produced.

The KISC/Kaua'i HISC outreach specialist created the following educational materials:

- Several "Weed of the Week" fliers highlighting various KISC target and invasive ornamentals in conjunction with radio program.
- Fliers in English and Hawaiian about rodent control operations on Lehua Island near Ni'ihau
- Fliers for Arbor Day with web resources on horticultural invasives and native species alternatives for landscape use
- Assisted with the production of a student-produced PSA on snowflake coral
- Designed agricultural specific invasive species photos and trivia for the "Wheel of Invasive Misfortune."
- Distributed X amount of Coqui Notification Fliers
- Published X amount of KISC newsletters
- Native and invasive species "memory game" cards for aina-based education initiatives, such as Malama Kaua'i, also given to local teachers as a resource

3) Number of people reached through talks and displays.

- KISC's outreach program incorporates the HISC outreach objectives and messages into all outreach activities. This year, KISC reached 5,133 people through public events such as Garden Fair, Kaua'i County Fair, Banana Poka Roundup, and Ag Awareness Day. KISC also had displays at the local library and assisted with an environmentally focused display mentioning invasive species as a threat to Kaua'i's native treasures in the airport.
- KISC reached 924 people through talks to groups like rotary clubs, school visits, direct audiences like boat dive operators and fishermen, hiking tours, Governor's advisory council, DLNR sponsored private landowners workshop, Agricultural Forum, and volunteers and staff for many Kaua'i based organizations.

4) Number of volunteers recruited and/or referred to invasive species projects.

• In all KISC presentations, information for volunteer opportunities with Koke'e Resource Conservation Program and the National Tropical Botanical Gardens is given out for invasive removal work in natural areas and restoration sites.

5) Events

KISC helped to implement and/or coordinate several community-based efforts that helped to raise awareness about invasive species.

- Assisted with the coordination of the Pacific Invasives Learning Network Biosecurity workshop on O'ahu in June, focusing on strengthening communications between Hawai'i's top trading partners
- Chaired the Arbor Day committee, an event attracting over 400 people, with an invasive species bounty, educational booths, over 1500 native species given away
- Assisted in the coordination of the annual Newell's Shearwater blessing, reaching out to Native Hawaiian student communities and raising awareness about invasive species threats to seabirds

6) Media Hits

- Assisted with all press releases for the Lehua Restoration Project
- Submitted releases (all with invasive species mentions) for arbor day, shearwater blessing, the ISC staff retreat, pampas grass removal, and the KLIC adoption of WRA list. Stories appeared in The Garden Island, Kaua'i People, Honolulu Advertiser, and the Hawai'i Landscaping magazine
- KISC appeared on Kaua'i public radio 27 times this year. There are about 950 listeners of the Garden Show, where KISC would talk about the weed of the week and other invasive species issues.

MoMISC

1) Agency adoption of rules and policies against invasive species.

MoMISC's Field and Outreach Coordinator recommended and was successful in getting several private and government projects to incorporate invasive species protocols in their projects. A current DOT bridge project for Moloka'i valued at \$7.4 million dollars was conditioned to incorporate HDOT's invasive species protocols in its project. A part of the agreement includes \$20,000 dollars for mitigation of accidental invasive species spread from the project.

2) Number of educational materials produced.

MoMISC has only two full time staff, but provides outreach and data management services as well. Despite limited time to create outreach products, a recent survey contracted by US Fish and Wildlife showed that the residents of Moloka'i ranked the highest in the state in their knowledge of invasive species and protecting the environment. MoMISC has produced the following products, many of which can be downloaded off the www.hear.org website:

- Over 40 MoMISC pest fliers, including new target species and other pests of concern
- Several power point presentations for educational outreach for public and private groups, MoMISC/MISC meetings and Maui Community College botany class.
- Invasive species outreach materials for the Moloka'i Airport kiosk as well as the MoMISC Invasive Species Board at the Kaunakakai harbor. Sample topics included "Stop Buying and Stop Planting" and "Here / Not Here," a showcase of pests on island and pests for prevention.
- A display and interactive invasive species game for the annual Earth Day event.

3) Number of people reached through talks and displays.

In FY2009, MoMISC reached over 3,000 people through public and private displays and presentations.

4) Number of volunteers recruited and/or referred to invasive species projects.

MoMISC prioritizes its time in working to foster long-standing assistance from other conservation partners and their professional trained staff. By facilitating positive professional partnerships, MoMISC's small staff is able to be successful in fulfilling its mission.

• MoMISC was successful in securing over 847 contributed partner hours.

AIST

The AIST has participated in four education and outreach events since April 2009. For Earth

day, the AIST set up a booth at the Waikiki Aquarium, with educational pamphlets and a poster about super sucker and the algae problem in Kaneohe Bay. Children were reminded to malama the ocean by creating fish crowns with limu attached to them. Other events included teaching in two separate classrooms at Kamiloiki elementary, giving a talk about invasive species distribution and abundance on Oahu. AIST also participated in a Navigating Change Outreach fair at Maunalua Bay Beach

Park, where team members helped the children sculpt the Hawaiian island chain and

plot out locations of alien algae. The other classroom event created informative posters

about the algae pull in Maunalua Bay and the impacts of *Avrainvillea amadelpha*. In early 2009 the New York Times ran an article on the Supersucker program and their work in Kaneohe Bay. See link for video

http://video.nytimes.com/video/2009/02/19/science/1194837960943/vaccuuming-the-reef.html?th&emc=th



