

Title: Public Outreach on
Invasive Species in Hawaii County
Organization: Big Island Invasive
Species Committee
Award: \$30,000
Working Group: Public Outreach

The FY2011 BIISC POWG award supported the outreach specialist salary. Priority projects and methods are described below.

Citizen Eyes and Ears Early Detection and Reporting

The project encouraged and trained citizens for early detection reporting in Waimea and Volcano. These two communities were chosen as gateway areas to vital natural areas, including lands within the Kohala Watershed Partnership and the Three Mountain Watershed Alliance and Hawaii Volcanoes National Park. This project aims to extend the Eyes and Ears Network first started on Maui by Elizabeth Speith, USGS PBIN, to the Big Island. Citizens are encouraged to use their www.reportapest.org website as a resource and reporting location, in conjunction with the BIISC hotline (808-961-3299).

- In addition to general outreach at Farmers Markets and Community Association meetings, targeted training workshops were held in each community, highlighting species of concern.
- Brochures were produced emphasizing the species of concern for each community. These species include species common in other districts of the island, but not known to be present around these communities.
- Mailing of Early Detection brochure by Waimea Outdoor Circle, 200 recipients
- Hardboard POWG invasive species display placed at Hilo's Pana'ewa Zoo

Education about biocontrol

- Poster (Biocontrol Outreach Challenges in Hawaii) accepted for Sept 2011 International Conference Biocontrol of Weeds.
- Biocontrol brochures are displayed at all outreach events

Education of landscape and nursery industry

Plant sellers can be a serious transport pathway for invasives. The Big Island has over 300 identified nursery operators, in addition to numerous unlicensed backyard operators.

- presentation provided to the Big Island Landscape Architects (HILA) Association and info booth provided at Nov 2010 conference
- Significant progress was made during this period with an invitation to provide monthly updates on invasive species to the Board of the Big Island Nurserymen's Association. Several of the BIAN board members are also involved with the newly formed Hawaii Floriculture and Nurserymen's Association (HFNA), which provides an opportunity for BIISC to extend outreach and newsletter articles to this new group.
- Information booths were staffed at numerous farmers markets and plant sales



Piihonua Albizia Control Project Team

This project was initiated by a neighborhood in Hilo which became concerned that their homes access route could be blocked by Albizia (*Falcataria molucca*) growth and decay. The Piihonua Community Association contacted their elected officials for assistance. Under the leadership of the then Senator Takamine, multi-agency meetings were held to find a resolution to the communities concerns and brainstorm the wider problems of Albizia growth and threats to public safety, such as hospital access.



These meetings also sparked efforts to

change policy, such as the county tree-trimming ordinance and the Hawaii noxious weed rule.

- BIISC contributed both outreach assistance and educational material development, and remote sensing analyses.
- This mapping work was submitted as a poster for the Hawaii Conservation Conference 2011 and won honorable mention in the Society for Conservation GIS map contest.
- Continuing volunteer efforts from the community, in partnership with Dr. James Leary, Weed Management Specialist, CTAHR, are collecting valuable treatment data on labor, chemical methods and amounts, and timing.

Axis Deer

Preliminary outreach materials and meetings have been produced by existing BIISC staff. The scale of this issue will require dedicated outreach staff in the future.

Partnering with the Big Island Beekeepers Assc

The arrival of the varroa mite and small hive beetle on the Big Island provided a partnership opportunity to draw attention and educate people on invasive pathways and concepts around an issue that concerns many people (the loss of honey bees and pollination services).

- Co-staffed event booths
- Participated in BIBA meetings with policy makers

Astronomy Related Outreach

Due to the presence of world class astronomy facilities on the Big Island, and the cultural importance of stars in canoe navigation, BIISC outreach has the opportunity to participate in well-funded astronomy outreach events.

- Astroday (thousands of people attend) occurs at the beginning of May and BIISC has an information booth relating space themes to invasives.
- Onizuka Science Day, held in January 2011, offers students a number of interactive workshops. BIISC linked the discussion of the potential for life in space and planetary protection methods to invasive species concepts. Workshop tasks included designing a space lifeform and characterizing it as invasive or non-invasive, identification of science fiction movies with invasive themes, and a remote sensing tutorial on the albizia project.

improving publications and Internet presence

- BIISC webpage (hosted by HEAR) Outreach goals include constant updating of the website with brochures on new target species, pest alerts, and other information
- good progress on improving exhibit materials, with the addition of a prize wheel, custom printed vinyl photographic banners, banner display stands, and new foam board displays
- BIISC maintained a Facebook presence.

Measures of Effectiveness

Agency adoption of rules and policies against invasive species.

BIISC has been working to educate policy makers on the policy gaps for inter-island transport and quarantine. BIISC worked with beekeepers to support legislation that resulted in passage of SB866 and HB1568. BIISC met with Big Island elected officials to educate them on *Rauvolfia vomitonia* and the policy gaps that enable such species to arrive. This resulted in legislation introduced by Representative Cindy Evans. BIISC has been working at the County level to assist with drafting of a proposed revision to a county ordinance to enable invasive trees to be eliminated during roadside clearing (currently cannot be cut to less than 15' high).

Adoption of Codes of Conduct by businesses.

Due to the economic downturn and the consequent burden on nursery operations, BIISC outreach focused on education, new pest alerts, and issue education. This approach was felt to be more likely to succeed than asking businesses to commit to BMP that would have required more time and labor than nurseries could afford.

Track number of print and broadcast media mentions.

BIISC published 2 columns in the gardens news of the West Hawaii today, a blog article about staff snake response training, 4 articles in the Kohala Mtn news, 2 articles in the Hawaii Floral and Nursery Assc. newsletter. As part of the publicity about axis deer, BIISC has been mentioned several times.

Number of "hits" on invasive species web page.

BIISC is not able to track the number of hits on our webpage hosted by HEAR. BIISC has approximately 150 monthly active users on Facebook.

Number of callers on pest hotline.

The BIISC hotline averages one call per week.

Number of education materials produced.

Eight new large format exhibit displays were produced and 6 new brochures.

Number of people reached through talks and displays.

BIISC reached 8000 people during events which had a total attendance of 38,000.

Results from a public awareness survey.

No surveys were conducted by BIISC.

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

BIISC participated in 75 events during this fiscal year.

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

In cooperation with *Malama o Puna*, a non-profit and BIISC partner, 50 volunteers participated in mangrove control. Fifty other individuals were referred to groups in their area which have regular volunteer days.

Two individuals provided significant volunteer service to BIISC, and were later hired as staff. The first, Logan Berner, provided remote sensing expertise to the Piionua Albizia project. The second, Jake Muise, led the design of the axis deer response effort and spent many hours in the field.