

Big Island Invasive Species Committee

Report on HISC Grant 2022 for Detection & Control of Invasive Species on the Island of Hawai'i

Community Engagement Program

Submitted by Franny Brewer, July 2023

Public outreach for any public service program has several objectives. We must provide specific motivation and training so that citizens can team up to take on some of the burden of invasive species control for which government services lack capacity. We must convince residents to open their properties for inspection and control work, to relinquish their exotic ornamental plants, and to contact authorities when they see something strange. We must field reports and explain tough decisions about which species we will help our communities tackle. All of this requires the development of long-term, personal relationships and a significant amount of trust.



BIISC staff pose with community trainees after a morning of hands-on albizia control in Puna.

In 2022, as our island communities emerged from the altered world of the Covid-19 pandemic, our community engagement team emerged similarly altered, now fully embracing tools that had previously been sparsely used or never explored. Programs which prior to the pandemic had focused heavily on interpersonal interactions were now more challenging to implement and promote. Public expectations for virtual events and online opportunities were now significantly higher. Then in summer 2022, the desire for in-person events swelled, and requests for BIISC participation were so numerous that we could not meet all of the requests! Throughout most of 2020 and 2021 we had worked on developing programs to meet new needs and demands, and 2022 was a year spent integrating those techniques, technologies, and considerations into our traditional community engagement efforts to find a new and workable balance.

For most of the year BIISC's outreach team was short-staffed, as longtime Communications Director Franny Brewer was asked to take on the role of acting BIISC Manager in April. By the end of the

year, we added a half-time graduate student from UH-Hilo to help carry the load. The three full-time team members - Invasive Plant Prevention Technician Molly Murphy, Invasive Arthropod Education Technician Jade Miyashiro, and Community Engagement Liaison Kawehi Lopez - worked incredibly hard to maintain BIISC's reputation for reliability and approachability.

Despite the challenges, the team met nearly all of the outcomes proposed in the 2022 HISC grant agreement, and in several places exceeded them. Project goals for 2022 specifically addressed Hawaii Interagency Biosecurity Plan implementation tasks and tasks identified in the BIISC 2018-2023 Strategic Plan, developed and approved by twelve county, state, and federal agencies and community partners. Below is a summary of the progress on the Goals and Outcomes listed in the grant Agreement (color coding: green=met/exceeded, yellow=approaching, red=not met).

Goal #1: Networks of citizen scientists and organized community volunteer teams will be organized, trained, and supported to report and control invasive species island-wide.

Expected Outcome	Actual Outcome
<i>Social media following will be increased by 10% to communicate weekly via social media with over 2,700 residents. Our expected engagement rate is 6% (responses per follower per post) which is higher than average.</i>	Growth in social media following on Facebook and Instagram exceeded goals, growing by 24% and 34%, ending the year with 3949 and 3668 followers respectively. Instagram engagement averages reached a high of 10% and Facebook a high of 7.4%.
<i>At least 2,000 residents will be engaged in trainings delivered via webinar or similar online platforms. Topics will include management of common invasive species including little fire ants, albizia, rat lungworm disease, common weeds, and new threats on private property.</i>	Nearly 1700 residents received some form of training/education in the listed issues via online offerings (17 events, 473 attendees) or at in-person venues (43 events, 1203 attendees). An additional 3200 people were reached through contact at booths or tables at various events held around the island.
<i>Herbicide recommendations for 10 common, high-impact weeds of residential areas on the Big Island and 12 assessments of potential eradication targets will be publicized.</i>	Control recommendations for 9 common weed trees, along with descriptions and impacts, were published on our website under the menu item " Backyard Pests. " Control method tests for the tenth (<i>Rubus ellipticus</i>) were determined to need further investigation before they could be shared. Assessments and descriptions of 15 targets were posted, including 10 targeted for eradication and 5 for containment, and are available on our website.
Community engagement efforts to advance hazardous albizia removal projects and little fire ant control will be conducted, to the extent possible under ongoing pandemic restrictions.	There were 8 albizia control trainings/workshops in 2022, and 9 trainings/workshops for control of little fire ants. These were a mix of online and in-person events, with most being hands-on.

Goal #2: Businesses in Hawaii's horticultural and landscape industry will be good stewards of Hawaii's environment, recognized for their commitment to stopping the spread of invasive pests.

Expected Outcome	Actual Outcome
Add 3 new landscape or nursery businesses, and engage at least 1 big box store in promoting a Pono Plant.	Four new local nurseries were given the Plant Pono endorsement for the first time in 2022, bringing the total of currently endorsed nurseries to 21 (some previously endorsed nurseries had closed over the pandemic).
	The Plant Pono coordinator approached multiple Big Box stores on the island, but efforts to engage them in Plant Pono were rebuffed. We had success in getting the Kona Home Depot to remove a display of pampas grass. However, repeated efforts to persuade Home Depot to remove night blooming jasmine and medinilla from their sales floors were unsuccessful, as managers have (correctly) pointed out that these plants are not on the noxious weed list. Walmart had voluntarily agreed to remove these species in 2015 and continues to not sell them.
Annual surveys of 33 nursery businesses will document an absence of invasive plant inventory at participating nurseries and a reduction of invasive inventory in non-participating nurseries.	Sixty (60) nurseries were surveyed in 2022. None of the participating PP nurseries were found to have any invasive plant inventory at the time of surveys (earlier in the year we were alerted to a PP-endorsed nursery selling NBJ, once contacted about the issue they quickly destroyed their stock and apologized for the mistake). Only 15% of nonparticipating nurseries had any invasive plants for sale, down from 50% when standardized surveys began in 2017.
At least 12 new species profiles will be added to the website (one per month).	Ten species profiles and two blog posts were added to the Plant Pono website ("Fourteen Privacy Fences for Hawaii" and "When Living Fences Escape") which discuss specific plant species that should and should not be used for hedges.

Goal #3: Hawaii's citizens will demonstrate strong public support for improved biosecurity practices.

Expected Outcome	Actual Outcome
Promote and amplify 9 stories highlighting the importance and successes of the state's	BIISC prompted, promoted, and/or participated in 10 media stories that circulated in 2022, with the highlight

<p>Biosecurity Program in combating invasive species.</p>	<p>being a “Living 808” segment on KHON spotlighting our work on invasive plants. In all of our interactions with reporters, biosecurity and its importance were stressed, whether or not that information was included in the final produced piece.</p>
<p>Community engagement will be doubled during Stop the Ant Month and HISAM, as evidenced by clicks, positive comments, delivery of ant samples or species reports, and other personal contacts during these months.</p>	<p>During STA month (October), 23,589 Instagram accounts were reached- 17,437 more accounts than we did the month prior. On Instagram, 24 posts earned 2,847 total engagements and on Facebook, 15 posts earned 2,015 total engagements, reaching 19,816 (15,000 more than the prior month).</p>



Plant Pono program coordinator Molly Murphy poses with a participant at BIISC’s ohi’a potting & care workshop held at the Nov 2022 Ohi’a Love Fest in Pahoa

HISC Funding Priorities

The *HISC & CGAPS 2025 Joint Strategy: In Support of the Hawai’i Interagency Biosecurity Plan* provides a guideline for how to plan and prioritize efforts in invasive species work across the state. As the team with the most diverse variety of tasks related to all levels of invasive species prevention and mitigation, our Community Engagement program seeks to support all five of the priority areas: 1)Prevention & Early Detection/Rapid Response for New Invasions, 2)Management of the Inter/Intra-Island Movement of Invasive Species, 3)Implementation Large-Scale Control of Widespread, 4)High-Impact Invasive Species, Increase Pacific Regional Biocontrol Research & Capacity, and 5)Maintain an Engaged & Supportive Community.

The last listed priority #5 is actually the first priority of this team, as we believe that the success of all of the other goals can only flow from the success in that area. Our Community Engagement team works incredibly hard to use all tools at our disposal to meet all audiences and sectors where they are. Our popular albizia and little fire ant control programs were designed in direct response to expressed community needs, and in 2022 we added an additional training class, "Backyard Pests," to help longtime residents and newcomers alike identify and control common weeds and insects pests found in their home landscapes. Programs like this help us not only with Priority #5, but with Priority #1 (Early Detection)& #2 (Prevent intra-island movement) as well: by increasing familiarity with common pests, we train the community to be on alert to unusual sightings. By teaching proper control methods, we decrease the movement of pests around the island. Reporting of new species is always stressed and BIISC provides multiple avenues for reporting, from using 643pest.org to direct messaging via Facebook or Instagram. With the discovery of devil weed (*Chromolaena odorata*) on our island in 2021, we leaned heavily into our well-developed social media and email network to spread awareness. In 2022, several new detections of this noxious weed resulted directly from notification by alert residents who saw our messages.

We promote positive messaging and education about large-scale control efforts, like IIT for mosquitoes (Priority #3), and utilize our trusted networks to help get the word out to correct misinformation. This same approach is used for Priority #4. Efforts to support classical biocontrol range from writing supportive comments for all EAs for new releases to painstakingly correcting Facebook posts in local gardening groups about supposed biocontrols run amok (no, that's not *Tectococcus*, ohī'a have their own gall insects!) As dedicated members of the Hawaii Invasive Species Awareness Month planning team we assist with the production of informational webinars and keenly focus on promoting direct contact between the public and the researchers working on these efforts.

Biosecurity is a running theme in all of our outreach efforts, which include periodic updates to our island State and County legislators. We contributed heavily to the creation of videos for the Honolulu Airport Biosecurity Display, focusing not only on our own efforts but on that of partners in agriculture and the important role of our community. We will continue to support the implementation of the 2017 Interagency Biosecurity Plan and any and all efforts to protect our community from invasive species.