

Big Island Invasive Species Committee (BIISC) Highlights

BIISC surveyed 6,244 acres for 5 key target species, and two incidental species and controlled a total of 16,608 acres, 17,610 individual plants were treated, and a total of 4,357 worker hours were used. An additional 165 miles of road were surveyed by the early detection crew looking for and mapping 138 potentially incipient invasive species.

Miconia calvescens

- BIISC continues to focus containment strategy along a 40-mile containment buffer between Malama Ki in lower Puna to Ninole in the Hamakua districts. Surveys focused in the Hilo, Hamakua and Puna districts.
- Completed aerial surveys in the upper Hamakua district at elevations between 1,400' and 1,600'. A total of 1,598 acres were surveyed by air, while ground crews removed a total of 687 plants in this area.
- Expanded survey and control effort from 1,600' to the 1,800' elevation above the core population in Onomea after finding a small number of plants at the 1,700' elevation.
- Began work in a 52-acre control block in the Nanawale Forest Reserve. This project was terminated after data analysis revealed the feasibility to complete the mission was questionable after finding a large number of plants within the control area, as well as adjacent private parcels.
- Completed survey and control blocks in the Makuu Forest Reserve. DOFAW donated 12 hours of air time to this effort which allowed BIISC to drop the ground crew at the far southern end of the survey sites to limit walk time to the survey and control blocks. DHHL assisted BIISC in permitting us to utilize their lands as a landing zone to load and off load the crew.
- Aerial spot treatments for miconia took place in Wao Kele O Puna Forest Reserve (WKOP) and Malama Ki.

Plume Poppy (*Macleaya cordata* formally *Bocconia frutescens*)

- Survey and control activities focused in the Wood Valley area of Kau, and Honomalino area in S. Kona.
- Crews controlled a total of 2,760 plume poppy plants covering a total of 695 acres within the Wood Valley control area.
- BIISC conducted one aerial spot treatment within the Kau Forest Reserve treating 5 large adult trees. The one hour air time for this spot treatment was donated by DOFAW.
- Crews conducted plume poppy control in the Honomalino area of S. Kona. Initial

efforts focused on total eradication of this population and estimated to take 3 months. However after crews found a substantial amount of plants within the control area, it was determined that eradication was not feasible. The priority has shifted to a containment strategy. Further work is needed to determine the size of this population with assistance from the community. To complicate efforts, conventional control methods using herbicides is hampered by the number of organic farms in the area. UH-College of Tropical Agriculture and Human Resources (CTAHR) is assisting in alternative control methods for the organic farmers.

Fountain Grass (*Pennisetum setaceum*)

- BIISC continues to expand its fountain grass control activities in the Kau/S. Kona districts. This project is a joint effort by staff from the DOFAW and the Research Corporation of UH (RCUH) personnel of the Resource Management Division of Hawaii Volcanoes National Park (RM/HA VO).
- BIISC crews have controlled a total of .01 acres treating a total of 115 plants. The total observed acres for roadside surveys are 695 acres total. The number of plants treated, is significantly less than last report since the majority of plants previously treated has been reduced substantially.
- BIISC controlled fountain grass along roadsides along the Hamakua coast. Crews treated a total of 1,278 plants along the Hamakua highway. The intent of this effort was to expand the highway buffer from the core in West Hawaii to East Hawaii.



Pampas Grass (*Cortaderia jubata*)

- BIISC completed removing all pampas grass at the Waimea Country Club and adjoining private parcels, the largest known population on the Big Island.
- BIISC completed roadside surveys in the Volcano area after receiving reports of pampas grass being grown in private yards. Two known locations were found to be free of pampas grass and BIISC believes the plants were removed by the property owners. The crew was not able to verify this as the owners were not home at the time of the surveys. BIISC will continue to monitor these locations in the future.

Wax Myrtle (*Morella cerifera*)

BIISC began an aggressive control effort of wax myrtle, a close relative to the faya tree which has invaded forests in Hawaii's Volcano National Park and surrounding areas. Crews have removed a total of 867 plants, all of which were considered mature, expensing a total of 184 work hours. This population is quite large and will require extensive effort to control the population, however, at the moment this is the only known population in Hilo. BIISC strategy for this site is full eradication.

Other plant species

Pyracantha (*Pyracantha angustifolia*)

BIISC followed up on a report of pyracantha in the Panaewa community in Hilo, BIISC crews went to survey the site. However, crews were unable to locate the plant. BIISC crews did not find any other plants during the roadside survey.

Mexican Sunflower (*Tithonia diversifolia*) Surveyed and controlled a total of 57 acres at two locations in E. Hawaii.

Early Detection

BIISC completed roadside surveys of the Kau and S. Kona districts.

Met with partners to assess and update the early detection species list. The species list has increased to a total of 138 species up from 52 species a year ago.

The early detection team continues to work with the WRA team to assess a small number of unranked species on the current species list.

Coqui

BIISC assist the State Coqui Coordinator by providing office space, equipment (including computers) and administrative assistance to its project and personnel. In addition BIISC assists with all hotline calls and provides citric acid to community members through its citric acid matching program (CAMP). BIISC efforts also include:

- Providing two (2) cell phones to communities in the Volcano and upper Puna areas to respond to hotline calls directly. The community hotline calls total 96 to which community teams responded and treated 75 areas.
- Received a total of 1,275 hotline calls between BIISC and USFWS, all of which were implemented into the coqui database (see map).
- Provided a total of 448 50-lb. bags of citric acid to community members as part of the citric acid matching program (CAMP).
- BIISC provided technical assistance to 9 community groups wanting training on application and spraying techniques. These were in addition to training programs given by Hawaii County.
- BIISC assisted the Volcano community with putting in coqui street signs the group purchased with a grant from the Hawaii Island Economic Development Board.
- BIISC crews assisted DOFAW/Natural Area Reserves System(NARS) with aerial control activities at the Manuka Natural Area Reserve in Kau.

The State Coqui Coordinator is responsible for:

- Maintaining the interagency databases and develops maps for the coqui hotline calls, road surveys and control efforts.
- Maps and reports are used to track progress and strategize State efforts.
- The control operations are contracted to the USFWS.
- Targets high-value natural areas and state land near residential areas.
- Eradicated 5 incipient populations.
- Controlled an area of 62 acres.

Coqui Community Outreach

- Coordinated the establishment of a coqui barrier fence around the Kulani Prison parking lot to prevent the spread of frogs into the prison area.
- Conducted nursery support in Waimea.
- Supplied community support for organizations in Honokaa and Volcanoes area.
- Sprayed buffer zones around state park parking lots to prevent spreading the frogs on vehicles