



MISC

MAUI INVASIVE SPECIES COMMITTEE

Quarterly Report to the MISC Committee

FY 2006, Fourth Quarter

April 1 to June 30, 2006

Manager's Report

Aloha,

One of MISC's significant challenges is that Maui Nui is made up of four islands. A particular highlight this quarter was getting most of the staff, field-based and office-bound alike, to Kaho'olawe for a week of field work. We had the satisfaction of seeing areas we planted two years ago with many thriving naio, 'aweoweo, and pili grass. We also appreciated learning more about the cultural aspects of the island. Standing at the piko of Maui Nui and seeing Lāna'i, Maui, Moloka'i and Kaho'olawe all at once was both a chicken-skin experience and sobering in terms of the county-wide kuleana we have accepted for invasive species. Our work this quarter in Maui Nui also included the ongoing efforts of MoMISC on Moloka'i and a trip to Lāna'i to continue work on fountain grass.



onging efforts of MoMISC on Moloka'i and a trip to Lāna'i to continue work on fountain grass.

Closer to home, we focused on miconia in the Huelo area in addition to our work in Hāna. The discovery of a forty-foot tall mature miconia tree a mere 500 meters from the Huelo population of feral mitred conures probably explains previous finds of miconia in the Twin Falls area, several miles mauka. Controlling the conures will help to stop long-distance vectoring of miconia seeds. We seem to finally be moving forward on this front.

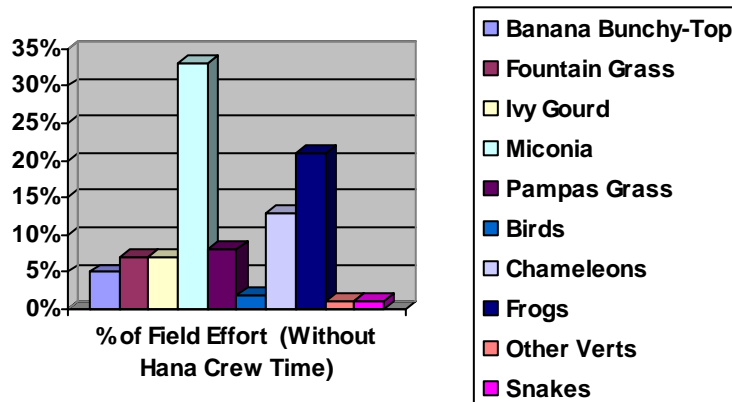
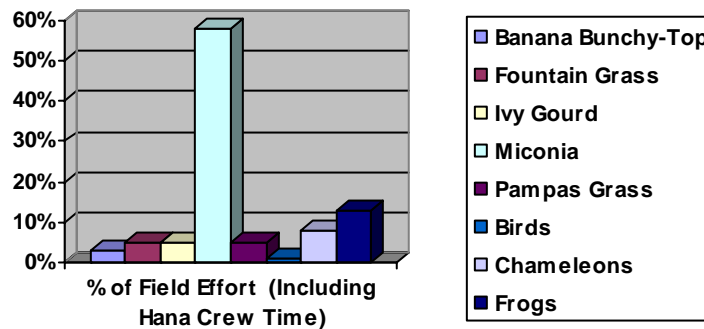
On the state level, we are proud to have our MISC Chair "Pro Tem", Randy Bartlett, assume the leadership role of CGAPS Chair. On the regional front, MISC enhanced its rapid response ability by sending Field Supervisor, Mike Ade, to the intensive, three-week brown tree snake training program in Guam.

Whether we're tackling major targets on the cliffs of Huelo, combing the red expanse of Kānepu'u on Lāna'i, or charming snakes in Guam, MISC is adapting to meet the challenge of working across a broad geographical area. We hope you enjoy reading more details about our efforts this quarter. Mahalo nui loa for your continued support.



Quarterly Highlights

MISC FIELD TIME SUMMARY



ACTIVITY HIGHLIGHTS

- April 1: East Maui Taro Festival exhibit/booth
- April 3-4: Adam conducts rappelling training for the Watershed Partnerships
- April 6: Teya gives presentation to the Pacific Fellows
- April 7: MISC Meeting
- April 13: Teya, Mike, Adam, Sam, & Elizabeth attend RCUH Performance Evaluation Training
- April 13: Last day of work for crew members Erica Anderson & Adam Cotton
- April 18-20: Teya attends Incident Command System Training on O'ahu
- April 18: Adam & Joy give a presentation for the Kihei Community Association
- April 19: Kōkua Festival exhibit/booth
- April 21: Teya, Mike, Adam, & Sam attend RCUH Workplace Violence Training
- April 20-21: Shannon assists with Moloka'i Earth Day festivities & ant survey
- April 22: Earth Day exhibit/booth at Maui Nui Botanical Garden
- April 24-25: Teya, Aaron, Lori, & Kama attend Data Hui IV on O'ahu
- April 26: Mike Kahula & Stephanie Miller join the Pi'iholo crew
- April 27: Agriculture & Natural Resources Awareness Day booth

May 1-5: All-staff trip to Kaho'olawe
 May 8: Miconia Operations Meeting
 May 8: Lissa Fox returns to MISC as a member of the Pi'iholo crew
 May 9: Mike K. & Stephanie attend Basic Helicopter Training
 May 9: Conure meeting/teleconference at MISC
 May 10-12: Adam, Elisse, & Floyd attend S271 Helicopter Training
 May 15-19: Mike's crew to Lāna'i for fountain grass control
 May 22: Pampas grass planning meeting with WMMWP, EMWP & HALE NPS staff
 May 23: Val Monson (Maui News) tours Hāna miconia operation w/ Teya & Jeremy



June 1-2: Lloyd Loope participates in statewide biosecurity forum
 June 5: Carl Martin joins the Pi'iholo crew
 June 7: Teya & Joy attend CTAHR "Jumping the Fence Line" Workshop
 June 7: Maui Farm Bureau Fair exhibit/booth
 June 9: MISC Meeting – focus on public relations and the Superferry
 June 12-30: Mike A. attends Rapid Response training for snakes in Guam
 June 14-15: Adam conducts rappelling training for new MISC staff
 June 16: Teya attends miconia economics meeting on O'ahu
 June 16: Mike Kahula leaves MISC to work for DOFAW
 June 21-22: Joy attends Natural Resource Communication Workshop on O'ahu
 June 23: Conure recon via boat: Teya, Adam, Fern, Kirsty Swinnerton, Doug Runde
 June 28: Teya meets with Nelson Sakamoto for review of MISC organizational structure & position descriptions

PR & Education News

MISC IN THE NEWS

Leaping lizards...jumping frogs....sinking Superferry....this quarter has been filled with news about invasive species affecting our islands. In mid-April, the Maui News featured a story on an iguana sighted near the dorms at Maui Community College.

Coqui frogs jumped into the news again, this time as part of a zoning issue before the Maui County Planning Commission. Commissioners considered whether a property owner was making adequate efforts to control coqui frogs at an infested nursery. Both the owner and the Planning Department asked MISC to submit testimony – a first in MISC history.

Numerous articles about the proposed Superferry highlighted concerns, conflicts, benefits and invasive species issues. MISC manager, Teya Penniman, is one of five people serving on the Superferry Advisory Board.

REACHING OUT TO THE COMMUNITY

From Hāna to Molokaʻi, MISC was represented well this quarter at public events. We attended six events including the Hāna Taro Festival, Jack Johnson’s Kōkua Festival, Earth Day events on Maui and Molokaʻi and two agricultural fairs. Our booths, covering topics ranging from MISC at work to fireweed’s impact on agriculture, attracted 955 visitors.

PUBLIC OUTREACH

Getting our message out to the community is a top priority for public outreach. Presentations were made to six community groups in the past three months – reaching 466 people. A presentation for the Kīhei Community Association highlighted the status of coqui frogs in the Kīhei area, a short presentation for natural resources staff on Oʻahu focused on BBTV, and we conducted our first public training on early detection for the Friends of Haleakalā.

A group of 100 Molokaʻi elementary students learned about invasive species by decorating a tree with ivy gourd flowers, miconia leaves, chameleons, and coqui frogs they had colored. Four classes at King Kekaulike High School attended a presentation on invasive species issues and conservation career pathways.



Six new classes at Kalama Intermediate School and one class at Molokaʻi High School took on the fire ant survey challenge. No fire ants have been found to date. Seabury Hall students finished up their year-long ant survey project by designing fire ant brochures for the public, which they distributed at their highly attended craft fair. An article in the Maui News, “Students Declare War,” spotlighted the project.

VOLUNTEERS

Thanks to funding from the Hawaiʻi Invasive Species Council, MISC continues to promote the Hōʻike o Haleakalā environmental education curriculum. Three “Weed Warriors” student volunteer trips took place this quarter. On June 3, volunteers assisted National Park Service staff in the control of alien pine trees on Puʻu Nianiau. On June 19, eleven students and one chaperone worked with the frog crew at the Howard’s nursery site in Haʻikū hand-capturing coqui frogs. The following week, on June 26, twenty-four students and four chaperones from Atlanta, Georgia visited Calasa’s auto junkyard. Many coqui were heard but only two were captured. The students had completed Hōʻike lessons prior to traveling to Hawaiʻi.

The Maui News published a letter to the editor by Mark Ing, a young volunteer who wrote about his perspective of invasive species and MISC’s work. Mark did an awesome job of articulating his experience. Here’s an excerpt - “From my volunteering experiences I was enlightened, or rather awakened, to the threat that invasive plants and animals impose on our environment, and as a Native Hawaiian, on my culture.”



Plant Updates

FOUNTAIN GRASS



Crew members traveled to Lānaʻi in May and engaged in a full-on assault against the established fountain grass population at Koele Golf Course. By using AquaMaster Herbicide at a 1.5% solution, we greatly reduced the amount of herbicide applied. There was a significant reduction in the number of flowering plants found compared to prior visits. A large number of seedlings were controlled.

PAMPAS GRASS

Our 2006 pampas grass season went into full swing in April/May. We began helicopter operations early this year to extend our visual recon efforts before the flowering season begins in July. After meeting with staff from the National Park and the East and West Maui Mountains Watershed Partnerships, we began procurement of dedicated pristine area gear specifically for pampas work in both the East and West Maui Watershed areas. We are planning camping trips in the West Maui Mountains this pampas season and we plan to drop crews by helicopter in the Honomanū area to do ground work. Crews on the ground in the Honomanū area will be equipped with basic emergency camping gear in case weather conditions prevent helicopter pull-out at the end of the day. We are increasing helicopter recon time on the West Maui Mountains this year and have already discovered a mature pampas plant on a slope near Kahakuloa. Ground control was initiated on keiki pampas plants discovered above Polipoli during heli recon.



OTHER PLANTS

While Mike's crew was on Lānaʻi in May they followed up on a long thorn kiawe report from Hank Oppenheimer. The plants were successfully controlled. Fruiting plants were discovered and consequently the crew will do an extensive search in the area on our next Lānaʻi visit in October.

PERIPHERAL MICONIA

Surveys of peripheral areas for miconia continued this quarter, weather permitting. Miconia was found and controlled in the Waipiʻo and Honokalā areas. The Huelo area infestation is significantly more extensive than early estimates suggested. The Waipiʻo site required MISC crews to rappel in order to remove more than 50 plants on the cliff. One plant controlled below Honokalā Road in Huelo has been described by experienced crew members as "the largest miconia plant ever." Helicopter recon in the makai areas of Haʻikū and Huelo was completed in May with no additional plants discovered. Survey and control work in the area should be complete this summer.

HĀNA MICONIA

Four aerial missions in March, April, May and June expended 50% of the existing helicopter contract that runs through February 2007. We anticipate four more missions will close out the existing contract. Haleakalā National Park estimates that there will be funding available for one more miconia helicopter contract at a reduced level beginning in March 2007.

The ground crew completed sweeps in six Pu'u Kī management units mauka of Hāna Ranch. The crew is currently working in the next unit toward the east, Mo'omo'onui. Initial data from the Pu'u Kī units is being processed to evaluate changes in the level of infestation following multiple control events from the ground and helicopter and to guide future re-entry intervals. The Hāna ground crew performed one rappelling mission to target plants that were not accessible by helicopters or normal sweeps in the Kawaipapa area.

PLANT DATA APRIL 1 TO JUNE 30, 2006

Maui

	<i>Plants Controlled</i>			<i>Acres</i>		Total Person Hours
	Mature	Immature	Total	Inventoried	Treated	
Priority Target Species						
<i>Miconia calvescens</i>	9	4,348	4,357	9,764.6797	0.8151	2,009.40
<i>Cortaderia</i>	2	135	137	14,797.4124	0.0031	196.20
<i>Pennisetum setaceum</i>	2	3	5	6.4984	0.0001	10.00
<i>Coccinia grandis</i>	29	2,653	2,682	547.6100	0.4408	172.58
Eradicable Species Project						
<i>Caesalpinia decapetala</i>	0	0	0	2.5556	0.0371	1.00
<i>Pittosporum viridiflorum</i>	0	34	34	5.9039	0.0008	11.50
<i>Verbascum thapsus</i>	1	2	3	15.3028	0.0001	2.25
Grand Totals:	43	7,175	7,218	25,139.9628	1.2971	2,402.93

Lanai

	Plants Controlled			Acres		Total Person Hours
	Mature	Immature	Total	Inventoried	Treated	
Priority Target Species						
<i>Pennisetum setaceum</i>	99	1,752	1,851	141.7608	0.0425	275.00
Other Plant Targets						
<i>Prosopis juliflora</i>	50	0	50	0.8583	0.0222	8.00
Grand	149	1,752	1,901	142.6191	0.0647	283.00

BANANA BUNCHY TOP WORK

MISC crews surveyed 226 TMK parcels on Maui this quarter for a total coverage of 89.7 acres – 230 crew hours were logged on BBTV and 441 site visits were made. Persistence has been required with crews frequently revisiting properties where no one was home or they did not initially receive permission to enter the property. BBTV was confirmed on twenty-seven sites in Pukalani and Makawao. All but two of these sites have been treated. Six sites treated were retreatments. The two remaining properties are being approached by HDOA for removal of infested plants. During this quarter, BBTV was also found and controlled in Kahului and Kihei by HDOA.



Vertebrate Status

COQUI FROGS

MISC crews have been steadily working on the 12 known populations of coqui frogs on Maui. We are seeing a reduction in acreage infested and a reduction in vocalizations heard at most sites. As we move into summer, the real results of our efforts have become apparent. Most populations had an increase in population density in April, but declined later through increased control efforts. Efforts were more effective as we moved into summer because of cooperative weather in all infested areas. MISC crews have continued habitat work at Haupoa Place, an East Maui junkyard and Honopou Valley infestation areas by working cooperatively both in time and resources with area residents. A new 100-gallon sprayer for coqui control was added to our arsenal in May. A plan for control of a third of Maliko Gulch and the surrounding infested area was developed. Coqui frog management plans for both the South Kihei nursery and Honopou were completed this quarter.

- This quarter MISC received 28 frog-related reports.
- MISC crews made 60 separate visits to 39 frog-infested areas and/or suspect locations.
- MISC crews spent 347 hours at a variety of locations working on frog control.
- 5,814 lbs. of citric acid were used this quarter.
- Twenty 1.3 lb. bags of citric acid were given to Rob Parsons to distribute to the public.

VEILED CHAMELEONS



Searches of the core areas were conducted this quarter and additional searches/recoveries resulted from reports received. Additional habitat modification was completed in the Makawao core area. The reduction of Christmas berry in the area greatly enhances the effectiveness of our searches. MISC's veiled chameleon research project continued to move along and a presentation will be given at the Hawai'i Conservation Conference in July to summarize our findings to date.

- Searches of our traditional core areas were conducted April 11-12, 2006 and May 22-24, 2006.
- Twenty-six properties were searched and 62 staff hours were spent searching for veiled chameleons this quarter.
- MISC crews responded to veiled chameleon reports in Makawao near Ahuwale Place and at the Kā'anapali Ali'i. The surrounding areas were searched, but no chameleons were found.
- Two large male veiled chameleons were recovered as the result of public reports.

MITRED CONURES

USDA Wildlife Services and MISC continued systematic observations of conure activity in the Huelo area. Both evening and morning surveys have been performed regularly at three separate locations. Bait stations and audio playbacks have been tried without much success. Flight patterns, timing, and numbers of birds have been identified and a summary report prepared. MISC staff and representatives from DLNR, USDA Wildlife Services, and the Maui Forest Bird Recovery Project surveyed the Huelo cliffs from a DOCARE boat to identify roosting and loafing areas, the feasibility of several control options, and rappelling opportunities.

OTHER VERTEBRATE ACTIVITIES

A large slider turtle was recovered in Hāna by MISC staff in May. The turtle may be a Florida Slider, which would be the first to be recovered in the state. MISC crews assisted HDOA with a search for a possible iguana April 11-13, 2006 in Kahului. The animal was not apprehended, but evidence of its presence was found. MISC crews also assisted HDOA with another lizard search in Kihei on June 2 and again nothing was found. Mike Ade attended Rapid Response Snake Training in Guam for three weeks in June.

MoMISC Activities

The MoMISC staff doubled in late June with the hiring of two temporary summer hires – Amado Cezar and Mapuana Hanapi. Amado is a senior at UH Mānoa majoring in ethnic studies and will be assisting with field activities over the summer. Mapuana is a recent graduate of Maui Community College/University of Hawai'i in education and is assisting with outreach, generating new fliers and brochures, and filing.

Field work continued this quarter on a variety of species including gooseberry, wood rose, ginger, cat's claw, rubber vine, and the gold dust day gecko. MoMISC assisted with TNC's aerial surveys for *Rubus* (blackberry). MoMISC had a display at the annual Earth Day event on Moloka'i April 21, 2006. Training and information on invasive species was provided for a Youth Conservation Corp crew, an AmeriCorps intern, TNC's summer intern, and MoMISC's two summer hires. MoMISC staff joined MISC in early May for a week long trip to Kaho'olawe.
