



**INVASIVE SPECIES OUTREACH & EDUCATION IN MAUI COUNTY  
HAWAII INVASIVE SPECIES COUNCIL  
FINAL REPORT – FY18**



*Outreach event and informational booth*



## **INTRODUCTION & OVERVIEW**

Public awareness and concern inspire people to report new or suspect plants and animals, help secure access to private property, and generate support for invasive species work and funding. MISC and MoMISC have developed robust programs to educate and engage the public about invasive species issues. HISC funding for this project sought to reach a broader range of stakeholders, including those likely to move or detect species moving interisland (biosecurity focus), and to retain highly trained outreach and education staff. These objectives were fully met.

Staff on Maui and Molokai used a broad array of strategies and approaches to educate and engage the public, including: production and dissemination of printed materials; utilizing broadcast media; participating in public events and presentations; offering classroom visits and teacher trainings; and providing workshops for targeted stakeholders. Outreach efforts worked to maintain and build positive relationships with local, state and federal elected officials. Staff share in statewide outreach processes, including efforts to enhance statewide coordination, expand stakeholder engagement, and ensure that efforts are culturally inclusive. Specific activities helped to build awareness about the threat posed by little fire ants (LFA) and rat lungworm disease.



*Little Fire Ant Prevention Partners program logo*

Overall, outreach and education activities had significant reach into local communities:

- Print media: more than 22,000 readers
- Websites: 5 websites and two social media outlets had 95,580 hits
- Outreach events: 12 events, including interactions with 1,475 people
- Presentations & workshops: 5 presentations with a combined audience of 157 people; 6 workshops with 183 people
- Educational materials & classroom visits: 16 schools and 2,858 students utilizing the Hō'ike o Haleakalā curriculum
- Internships & volunteers: hosted 6 different interns
- People reached: conservatively, more than 122,452

## PRINT MEDIA

**Deliverables:** Publish monthly articles in the *Maui News*; 5 other mentions; articles in The Nature Conservancy's *Newsflash*.

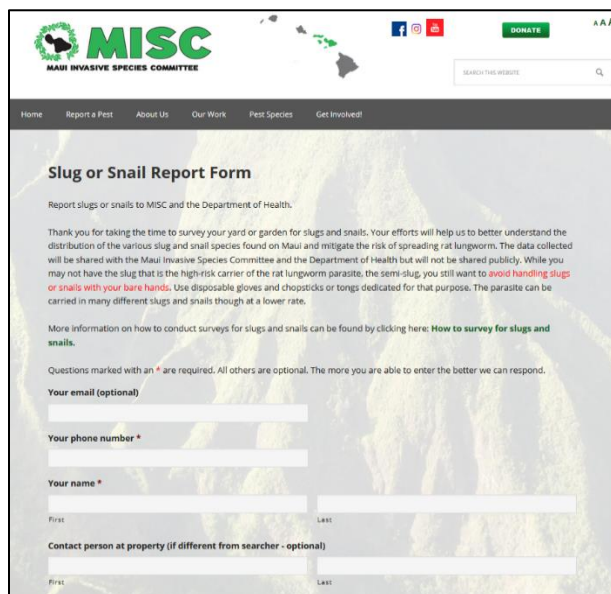
**Accomplishments:** A total of 18 articles, letters to the editor, and announcements related to invasive species activities or events were printed in local papers and newsletters, including contributions to The Nature Conservancy's *Newsflash* on Molokai, and monthly articles in the *Maui News*. News included articles about little fire ants; coqui frogs, with a focus on Māliko area residents as well as a coqui caught on Molokai (picked up by Hawai'i News Now); and events recognizing community efforts on invasive species. MISC also produced online newsletters and email blasts to stay connected with local residents.

The monthly Kia'i Moku columns, written by MISC's PR Specialist, covered: natural enemies, native species, rapid 'ōhi'a death (ROD), non-native species and potential impacts of their presence, illegal dumping and the spread of invasive species, and examples of how the community can help with the fight against invasive species.

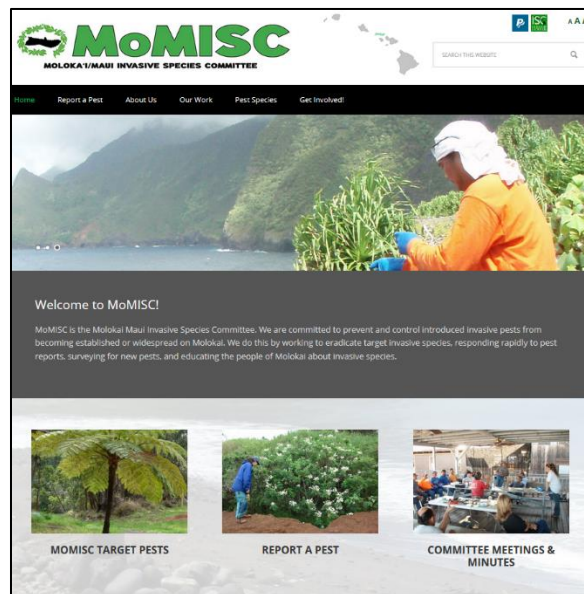
## WEBSITES

**Deliverables:** Maintain and update websites and social media platforms; estimated number of "hits" - 15,000.

**Accomplishments:** MISC and MoMISC maintained seven different Internet sites: primary websites for MISC and MoMISC ([www.mauinvasive.org](http://www.mauinvasive.org) and [www.molokaiisc.org](http://www.molokaiisc.org)); sites dedicated to little fire ants ([www.lfa-hawaii.org](http://www.lfa-hawaii.org)) and to the coqui-free nursery program ([www.coquifreemaui.org](http://www.coquifreemaui.org)); Facebook and YouTube pages; and the Hō'ike o Haleakalā curriculum ([www.hoikecurriculum.org](http://www.hoikecurriculum.org)), a new LFA page was also launched to promote proactive prevention practices (<https://mauiinvasive.org/lfa-prevention-partner/>) and slug or snail report form (data is shared with HDOH, HDOA and MISC). Total hits for these websites was 95,580.



The screenshot shows the 'Slug or Snail Report Form' on the Maui Invasive Species Committee (MISC) website. The header includes the MISC logo, a map of Maui, social media icons, and a 'DONATE' button. The navigation menu has links for Home, Report a Pest, About Us, Our Work, Pest Species, and Get Involved. The main content area is titled 'Slug or Snail Report Form' and includes a sub-header 'Report slugs or snails to MISC and the Department of Health.' The text explains the importance of reporting and provides instructions on how to handle slugs and snails. It also mentions that more information can be found by clicking on 'How to survey for slugs and snails.' Below the text is a form with fields for 'Your email (optional)', 'Your phone number \*', 'Your name \*' (split into First and Last), and 'Contact person at property (if different from searcher - optional)' (split into First and Last). A search bar is located in the top right corner.



### ***OUTREACH EVENTS***

**Deliverables:** Displays at 2-5 community events; reach estimated 2,000 people.

**Accomplishments:** MISC and MoMISC participated in 12 events, including: Molokai Earth Day; the Maui County Agricultural Festival; East Maui Taro Festival; Ha'ikū Ho'olaule'a; Maui County Fair; Arbor Day; Upcountry Farmers Market and Fair; Maui County Fair, and Lā 'Ulu Festival at Maui Nui Botanical Gardens. MISC and MoMISC recognized William "Butch" Haase of the Molokai Land Trust as the "Most Valuable Player" at the annual Hawai'i Invasive Species Awareness Week ceremony for his excellent work on Molokai removing invasive species and restoring habitat.. MoMISC maintained display boards with invasive species information at the Molokai Airport, Kaunakakai Harbor, and posted flyers at four post offices on the island. In total, these events reached at least 1,475 people.

### ***PRESENTATIONS & WORKSHOPS***

**Deliverables:** Give 3-5 presentations on invasive species topics; reach estimated 200 people.

**Accomplishments:** MISC staff participated in the annual Landscape Industry Council of Hawai'i meeting. Staff also presented at the Hawai'i Conservation Conference and served on the statewide and local ROD Working Groups. Workshop on coqui frogs and LFA reached 97 people.

Seven presentations or workshops were provided to diverse stakeholder groups, including: educators; landscapers; arborists; farmers; gardeners; community service organizations; tourism officials; Hawaiian environmental rights practitioners; and community associations. Topics included: general invasive species awareness; little fire ants; coqui frogs; early detection techniques; plant health; cultural issues; and the importance of public cooperation. Molokai staff also participated in the 'Aha Moku Advisory Council, which enhances the opportunity to ensure that traditional knowledge and cultural perspectives are incorporated into outreach messaging and events.

MISC staff continued to collaborate in the Maui Mauka Conservation Awareness Training for nature-based tour operators. This is a joint project with East Maui Watershed Partnership and Maui Forest Bird Recovery Project, which provides early detection and communication tools for tour guides about East Maui species, environments and threats. The project held four trainings for a total of 145 participants.





*Maui Mauka Conservation Awareness Training*

MISC was hosted by Kamehameha Schools for a screening of saving 'ōhi'a with a panel discussion to follow; 42 people attended.

### **EDUCATIONAL MATERIALS**

**Deliverables:** Promote curriculum to local teachers and schools.

**Accomplishments:** MISC assisted with development of informational materials for the Hawai'i Department of Transportation. A one-day workshop on utilizing the Hō'ike o Haleakalā curriculum was held for local teachers. Invasive species units are online at [www.hoikecurriculum.org](http://www.hoikecurriculum.org): From Evolution in Isolation to Globalization; Invasive Species Impacts: Why Care; and Biology and Ecology. A total of 16 different classroom activities are available online as part of the invasive species module. Some examples include: weed risk assessment bingo, and a strategy exercise using data on the wiliwili gall wasp invasion and Google Earth. There are four other modules online as well.

### **EDUCATIONAL PROGRAMS**

**Deliverables:** Conduct estimated 15 school-based activities; visit 6 different schools; reach estimated 1,000 students; conduct 1-2 teacher trainings based on the Hō'ike o Haleakalā curriculum.

**Accomplishments:** Staff conducted activities during 29 classroom visits or outdoor field trips with students from 16 different schools across the islands. Lessons used materials from the Hō'ike o Haleakalā curriculum, including testing new ones from the invasive species module. Other materials used included MISC videos and games (e.g., “Ecosystem Jenga”); working with students to develop an invasive species reporting App; and participating in leadership and career opportunity days. In total, MISC shared invasive species messages with at least 2,858 students from across the Maui and Molokai.



*Teacher outing in Waikamoi Preserve*

## **LANDSCAPE INDUSTRY**

**Deliverables:** Present annual Mālama i ka 'Āina award; support Weed Risk Assessment (WRA) technician.

**Accomplishments:** In partnership with Maui Association of Landscape Professionals (MALP) and the County of Maui, MISC recognizes a local community member with the annual Mālama i ka 'Āina award. The Mālama i ka 'Āina Award is presented annually to a landscaper, plant provider (retail and wholesale nurseries and garden shops), or commercial/agricultural property owner/manager to recognize their efforts to keep invasive species out of Maui County. Anna Palomino, research horticulturalist, was selected as the recipient of the 2018 award. She operates the Olinda Rare Propagation Facility and is owner of Ho'olawa Farms. Palomino is entrusted with propagating the rarest of the rare plants from Hawai'i.





*2018 Mālama i ka 'Āina Award presentation*

Outreach staff continued to participate on the MALP board; engage with the Landscape Industry Council of Hawai'i; and Maui County Farm Bureau. MISC provided office space for and supervised the Weed Risk Assessment Technician and Biodiversity Information Network (HBIN) staff; this arrangement enhanced communication among the different projects about public inquiries and reports on invasive species. The Weed Risk Assessment technician also served as a local botanical expert, assisting with identification of unknown plants, and head of the Maui Nui rapid 'ōhi'a death working group.

#### ***VOLUNTEERS RECRUITED***

**Deliverables:** Lead at least two volunteer field trips; host at least two interns.

**Accomplishments:** MISC led three service outings, focusing on miconia removal, coqui control techniques, and surveys for LFA.

MISC supervised six interns, four AmeriCorps interns, and two intern with the Nā Hua Ho'ohuli I Ka Pono internship program. The Nā Hua Ho'ohuli I Ka Pono internship program is a program designed to cultivate the next generation of conservation leaders. The program is through Kupu with support from the Hau'oli Mau Loa Foundation.



*Interns working with the MISC coqui crew*

#### **PEOPLE REACHED**

**Deliverables:** Reach estimated 24,000 people via print and broadcast media, school activities and community events.

**Accomplishments:** Reached an estimated 122,452 people. This estimate certainly includes some duplication; the same individual might have seen a video, heard a radio piece, read a newspaper article, or visited a webpage multiple times. However, other components of the MISC and MoMISC outreach and education program are seriously undercounted. Additionally, field staff interact with thousands of residents and visitors each year, sharing invasive species messages and materials when they are in the community conducting survey and control operations.

An island-based, comprehensive, multi-media strategy, tailored for different ages, cultures, and interests, remains critical to ensuring that the most effective messages reach all segments of communities on Maui and Molokai.