

O'ahu Invasive Species Committee
August 14, 2002, 9-12am - Minutes
Lyon Arboretum, Manoa

Attendees: David Cheever, Scott Cheever, Ken Ching, Jim Corcoran, Coleen Cory, Sheila Cox, Leilani Durand, Rob Hauff, Mike Leech, Lydi Morgan, Ryan Smith, Jason Sumiye, Amy Tsuneyoshi, Linda Ure, Ron Walker, Mindy Wilkinson

1. WELCOME (Mike Leech, OISC Coordinator)

2. Approval of past minutes

3. ANNOUNCEMENTS (Mindy Wilkinson)

- Meetings for the Global Invasive Species Program will be held on October 15, 16, and 17 at Bishop Museum. Austral-Pacific regional issues will be discussed. The first day and half are open to the public; the remaining day and half are closed for breakout workshops. Contact Mindy for more information (mindy_m_wilkinson@exec.state.hi.us or 956-3931).
- Weed Risk Assessment Workshops will be held on October 7 (rescheduled from a previously arranged date), to discuss the work of Kurt Daehler and Judie Denslow on this project. The workshops will be held at McCoy Pavilion from 5:30-7:30pm. OLELO (channel 52) will tape and broadcast the event, but an executive producer is needed from the OISC membership. Nurseries and landscape companies are encouraged to attend. Two fliers will be sent out to relevant parties on August 25 and September 25.
- An article was passed around which appeared in Landscape Hawai'i on the spread of melastomes by way of hapu'u logs.
- There is a Forestry position open in Hilo for work with invasive species (contact Julie Denslow at (808)933-8121x16 or jdenslow@fs.fed.us).
- On June 21, 2002 Gov. Cayetano signed an executive order establishing the Hawai'i Invasive Species Council (HISC). A similar bill, House bill 2212 was vetoed. HISC will help to coordinate government actions on invasive species issues. There will not be a council chair; the council will be composed of department chairs from HDOA, DCCA, DLNR, DBET, DOH, DOT, Dept of Hawaiian Homelands, and the UH president. The council will produce a Hawai'i Invasive Species Plan, to be modeled after the national plan, which will establish set protocols for prevention, rapid response upon arrival, and long term control of invasive species. At least one meeting of the council is scheduled to take place before the end of September. CGAPS and the ISCs will provide information and on-the-ground support for the council.
- A new farm bill was signed recently providing incentives for environmental quality control for farmers, including noxious weed control, sedimentation, and waste management. This provides new federal funding for noxious weed control. (NRCS-EQIP, <http://www.usda.gov/farmbill>)
- OISC is considering holding working group meetings on an as-needed basis, rather than having regularly scheduled meeting dates.

4. OISC LEADERSHIP CHANGES (Coleen Cory)

OISC has established defined leadership position duties, term length, and rotation--a system developed by Duane Nelson, chair of CGAPS. The OISC Chairperson becomes the Emeritus Chair after their one year term is up, and the Deputy Chair becomes the new Chairperson. Each term lasts for one year and turnover will occur in June. The Chair (Mindy Wilkinson) will be responsible for most of the organizational issues for the Committee; the Emeritus Chair (Coleen Cory) helps to advise the Chair, and the Deputy Chair (Christina Crooker) is mainly responsible for the OISC budget. These three leadership positions are volunteer positions. One OISC Coordinator and two

field crew have been working as paid staff since January 2002.

5. RECAP OF 'REPRIORITIZATION OF SPECIES' MEETING (Mike Leech)

This all-day meeting was held on August 7, 2002 at Lyon Arboretum. Nineteen people met in order to:

- 1) produce a list of species for rapid response (species that are not yet on O'ahu, but if they ever arrived the OISC crew would coordinate with other organizations on control work). This list was compiled:

- brown tree snake
- red imported fire ant
- *Tibouchina herbacea*
- *Cortaderia spp.* (pampas grass)
- banana poka
- gorse
- fireweed
- *Buddleia sp.*
- St. John's Wort

Please send suggestions for other rapid response species to leech@hawaii.edu

- 2) identify target species for OISC. A large list of candidate species was narrowed down to three categories: 1) OISC target, 2) not a target (either too widespread on O'ahu or not a threat), and 3) species that need more research. The list of species requiring more research has been sent to Dr. Duffy at UH who will assign one species to each of the undergraduate students in his conservation (??) class in order to gather the necessary information (species biology, distribution on O'ahu, invasive threat, etc). A new list of OISC target species was compiled as follows (in order of priority for staff time):

1. 1. Miconia
2. Frogs
3. Himalayan blackberry
4. fountain grass
5. *Myrica faya*
6. beardgrass and hiptage (tie)
7. *Leptospermum polygalifolium* (manuka)
8. parrots
9. *Melastoma septemnerium* and *Rhodomyrtus* (tie)
10. thorny kiawe, *Dillenia suffruticosa*, and *Cinchona pubescens* (tie)

- 1)
- 3) determine % staff time to be spent controlling each new target species. Distribution of staff time reflects more on the immediate threat of that particular species (i.e. level of invasiveness), rather than on the relative amounts of time that it would take to eradicate any one species. Staff time will be approximately distributed as follows:

- Miconia (50%)
- Frogs (20%)
- Blackberry (10%)
- Fountain grass (10%)
- Faya tree (5%)
- Other species (5%)

- 4) evaluate the process of target selection.

6. STRATEGIC ACTION PLAN (Mike Leech)

This document details OISC’s mission and the importance of our cause, our goals for the 2002-2003 fiscal year, and our accomplishments from the 2001-2002 fiscal year. The strategic plan will be distributed to legislators, other conservation organizations, and any other interested individuals, in order to spread awareness of our organization, and inform people as to how they can get involved. A draft copy (text only) of the strategic plan will be sent out via email to the OISC list-serve for review by the membership. Please send any comments/corrections/suggestions to leech@hawaii.edu by August 30. The final version will contain species images and distribution maps, and will be posted on our website (www.hear.org/oisc).

7. IMPROVING DETECTION (Mindy Wilkinson)

When OISC was first created, a detection group was established as one of the six working groups. This group has since dissolved, and a discussion was initiated at this meeting in order to evaluate the potential for its revival. A model plan from Maui was discussed: Forest and Kim Star of USGS-BRD spent six months driving 100,000 miles of road in order to determine distributions of known invasive species, and to survey for new populations of invasives. They were able to learn 100 species by sight, drive every public road on Maui, and, using GPS, map 14,000 plant locations. Laura Hillis and Keali’i Bio of BIISC performed a highway survey of the Kona side of the Big Island, recording every plant they encountered. These projects were successful in establishing distribution maps for a number of horticultural weeds; however, they involve the use of paid staff time (in which OISC is more limited) and did not survey the forests for pests. O’ahu differs from Maui and the Big Island in that there are fewer pristine areas (that we would be aiming to protect) which can be accessed by road, therefore making a road survey less valuable. Attendees suggested applying this model to trails, having knowledgeable volunteers use GPS units to map distributions for new and known invasive species. As a step in this direction, Mike Leech will be giving a presentation to the Hawai’i Trail and Mountain Club (HTMC) in late September on invasive weeds, and will hopefully be able to distribute sets of OISC weed ID cards to their members. Na Ala Hele has also recently established an agreement with HTMC, allowing them to use herbicide to kill weeds along trails or where new trails are being made. Other ideas included the use of volunteers from specific communities, as they are likely to be hiking mainly on trails in their area. It was also suggested that groups sponsoring sections of highway should be recruited to the search for invasive weeds. And it should be determined whether O’ahu has a USGS-BRD field staff that would potentially be available to perform the same type of weed survey conducted on Maui and the Big Island. Limitations to these ideas for detection include the need for highly knowledgeable volunteers, and the ability to collect accurate data (feasibility of distributing GPS units to volunteers).

8. WORKING GROUP REPORTS

- **Control** (Mike Leech)

Control highlights: Miconia - three mature trees were found on Pu’u Pia in July.

Schizachyrium condensatum - previously undescribed from O’ahu, two populations of this species have been found, one on the town side of H-3, and the other at Temple Valley in Kahalu’u. OISC staff have controlled half of the population at H-3, and hope to eradicate both populations by the end of September.

Miconia	Total plants	Mature trees	Total survey area (acres)	Total person hours
May	2873	10 (Manoa)	69.9	167
June	1	0	65.5	222
July	62	3 (Pu'u Pia)		186
August	2	0		126

Species	Individuals treated	People Hours
Fountain Grass	1880	56
Manuka	530	78
Blackberry	200	42
Morella Faya	100	100
Caribbean Frogs	3 males captured	7.5
Schizachyrium	250	16

- **Budget** (Mike Leech)

OISC will be hiring two more field staff (through RCUH), and will hopefully have them on board within the next two months. DOFAW is also working on hiring an Invasive Species Field Technician this month. This person will spend approximately 80% of their time working with OISC. And \$15,000 from the OISC budget is specifically available for frog control work.

- **Education**

1. **Newsletter** - The OISC staff is hoping to begin production of a monthly OISC newsletter to be sent via email to the OISC list-serve. In one to two pages it will describe updated control work accomplishments, information on target species, and upcoming volunteer events. Any input from the membership would be much appreciated; please send suggestions to leech@hawaii.edu.
2. **Poster** - OISC staff developed a poster that was presented at the Hawai'i Conservation Conference Poster Session in July. Money is available for professional printing of the poster, which will be posted in public areas, government (DOFAW, USFWS, etc.) and other conservation offices, and potentially in commercial nurseries. Attendees gave suggestions for revising the poster, and it was mentioned that the purpose of the poster should be more carefully considered: the poster in its current form focuses on providing detailed descriptions of our target species, but perhaps the main focus should be on a more general description of our organization, and especially on how people can get involved.
3. **Brochure** - OISC staff developed a brochure that was distributed at the Hawai'i Conservation Conference in July. Plans are underway to add background images, and to have the brochures printed professionally in color and on glossy paper, and distributed widely.
4. **Other Education Campaigns** - Bishop Museum is producing a series of ID cards on "good guy/bad guy" species. A partnership project led by the State's Environmental Council has produced a number of large ID "flashcards" on invasive alien species (OISC's Education Committee reviewed the list of species proposed). However, neither set includes specifically the incipient invasive species that OISC targets. OISC has budgeted funds to begin working on our own set of species ID cards. The USDA has a public relations committee that gives educational presentations at schools on request, and is interested in being able to distribute sets of OISC's ID cards to the students.

9. FROGS

- All control work for frogs is currently being carried out by the State Dept of Agriculture. Handcapturing is taking place at populations in Wahiawa, Waimanalo, and the Home Depot on Ala Kawa St. An agreement is in place allowing caffeine to be used experimentally by HDOA, but this agreement expires on September 27, when the results of the study are due. A one year extension of the deadline is being applied for. Use of caffeine requires a site of application which can be controlled for 24 hours, does not have surface water or wells, and where there are no people nearby with significant health problems. Its use also depends on determining whether there are any side impacts that the application may have (determined through communication with the public). If it is found that there are no side impacts, caffeine may be made legal for use within 6 months. However, if there are effects, an Environmental Impact Statement must be produced for each application site, which could delay the process for up to 18 months. USDA and DOA have been meeting to discuss the issue.
- The UH College of Tropical Agriculture has formed a “Coqui Frog Working Group” which holds meetings in Hilo. The Hawai'i county mayor is very concerned about the issue, and his staff attends the working group meetings.
- Current restrictions regarding inter-island transportation of horticultural plants (potentially infested with frogs) are very weak. DOA staff (already very limited in numbers) must actually see the frogs in order to reject a shipment of plants.
- An additional obstacle has recently arisen with the formation of a Big Island group called “CHIRP”, which is attempting to muster support for the acceptance and integration of the frogs into Hawai'i. This group has been invited to be part of the planning process for frog control.
- UCD (Davis) researchers have resurveyed their plots (set up on the Big Island in the 1980s), which were originally for the surveying of native insects and spiders. Coqui frogs have since invaded the plot areas, and so far researchers are finding native insect densities to be much lower than previously recorded.
- Jim Corcoran of the Kailua Neighborhood Board No. 31 and a director of the Maunawili Community Association stressed the urgency of the coqui frog issue: It was reported that hotel guests are checking out before there time is up because of the disturbance from coqui frogs. Eighteen months ago there were 30 coqui populations on the Big Island, and now there are over 300. They may be able to contain populations there but it is now thought that they will never be able to eradicate the frogs. The coqui will affect the environment, economy, and lifestyle on O'ahu. Property values will decrease with the invasion of coquis. One restaurant on Maui was handing out a bounty of \$75 per frog because of the urgency of their problem, but had to stop because hundreds of frogs were being brought in. Jim reports that coqui frogs are capable of reaching population densities of 8,000 frogs per acre, and consuming 46,000 insects per acre per night. He argues that the restrictions on caffeine use are a small problem to overcome, compared with the problems we will have if coqui frog populations are left untreated, even for a short period of time.

10. FIELD SCHEDULE

Algae Removal: August 24, Saturday, 7am-12pm, Waikiki Aquarium

Miconia: Sierra Club, Saturday, September 14, meet at 8am, Church of the Crossroads, Manoa

11. SPECIES BACKGROUND (Mindy Wilkinson)

Medinilla spp. (Melastomataceae) - This genus is native to South America and tropical Asia. There are no native Melastomes in Hawai'i. *Medinilla* species are most commonly used as ornamentals, though some are used medicinally in other locations. Flowers have hooked anthers and are likely “buzz” pollinated.

- *Medinilla venosa* - the only species of *Medinilla* that has been placed on the noxious weed list, and that has been collected from naturalized populations. Maui's infestation is centered in

Haiku. First collected on O'ahu in 1957. Not used as an ornamental; looks like clidemia with small white flowers.

- *Medinilla magnifica* - an ornamental, used as a house plant in non-tropical areas. Widely planted on O'ahu. Street planting in Hilo. Big pink persistent bracts. Recorded naturalized on Big Island and to a lesser extent on Maui (though different species of *Medinilla* may sometimes be confused). No naturalized populations have been noted from O'ahu. This species is widely available as a garden plant.
- *Medinilla cummingii* - native to the Philippines, no big bracts. Seedlings have been known to sprout epiphytically on trees near parent plantings at Lyon Arboretum. The small dark fruit is eaten by birds, containing many dozens of small seed per fruit. This species is potentially naturalized on Maui at Hana. The OISC crew has observed a few naturalized individuals of this species in Nu'uuanu and Manoa. Dispersal capabilities are probably comparable to *Miconia*, and 100,000's of seeds are produced per flowering event.
- Other cultivated species include *M. crassata*, *M. crassinerva*, *M. decora*, *M. heterophylla*, and *M. scortechinii*. It is unknown as to whether or not species other than *M. cummingii*, *M. venosa*, and *M. magnifica* are naturalizing.
- *Medinilla* species are capable of forming thickets and displacing native vegetation. Call 286-4616 to report sightings of *Medinilla*. Photos of *Medinilla* species will be posted on the OISC website in the future.

12. NEXT MEETING

November 6, 2002

9am - 12pm, Ho'omaluhia Botanical Garden