OISC General Meeting
December 8, 2009, 9:00 a.m. – 12:00 p.m.
at
Windward Community College
45-720 Keaahala Road
Kaneohe Hawaii

MEETING NOTES

I. Welcome and introductions

Rachel opened the meeting and everyone introduced themselves.

II. Partner updates

A. USFWS, Josh Fisher: On dead birds, now we're able to do migratory birds, so we'll be testing those. The other thing I want to mention is that Dan Clark wants to meet with the ISC coordinators to see if we can figure out what projects to fund ahead of time, and not at the last minute.

B. Department of Transportation, Chris Dacus: We have completed a construction specifications guide for all projects over 1 acre, with specs for moving equipment, etc. The O'ahu Early Detection (OED) road surveys, 50 miles have been done. The whole island has about 146 miles, they're about a third done. Then we'll figure out which parts we will actively manage. The strategic plan draft is done. The idea is $3M for initial projects, then $2–3M/year. This is still under discussion as invasive species work can take money from construction projects.

Rachel: Is there anything we could do to show how important it is?

Chris: The main thing is why we should do it. It's a quality of life issue, which is not really in the mission statement. But we are part of the problem and should be part of the solution. DOT did remove a lot of albizia trees from a highway on Kauai. The public liked the tree-tunnel effect, but two large branches have gone right through car windshields. Albizia is maturing beside roads statewide, so it is a good time to make the case for invasive species work.

On the SWCA agreement, OISC is supposed to get paid for work by roads. We are also developing a roadside maintenance manual, which will help prevent

denuding of the roadside. Something anyone can pick up and use, whatever their knowledge.

C. Honolulu Botanical Gardens, Naomi Hoffman. At Ho‘omaluhia we are controlling albizia, macaranga, fiddlewood, *Schefflera*, we are trying to control a lot of things. A new species we are dealing with is *Bridelia*, Alex and Danielle identified it. It is a big horrible tree. A farmer next to Ho‘omaluhia called Becky Azama at DOA about it. The whole tree has thorns, all the way up. We only have four gardeners and they can barely keep up with the mowing. We have not heard back from Becky. The farmer has mature trees; on our property it is only keikis. If anyone has any ideas how we can control it, let us know. The keikis are maturing. We don’t have it as an accession, it could have been an unaccessioned plant. A lot of things were planted at Ho‘omaluhia that were not identified. I cannot find it in our database. It seemed like there was a gap in communication, the farmer did not want to talk directly to us.

Rachel: If this is the only record on the island maybe we can take care of it. We will research it.

Naomi: The keiki have thorns and buttress roots too, they’re maturing, it’s solid. It’s a monster.

D. HISC, Patrick Chee: We are working on the encumbrances for your funding, it is down in fiscal. Hopefully the first installment will be coming soon. There is some restructuring going on within HISC. We have had a series of meetings in the Public Outreach Working Group, and given the drop in funding for outreach, the decision was made that we will be losing one of the HISC public outreach positions. There will also be changes to the HISC Coordinator position which Mindy can elaborate on if she so chooses.

Mindy Wilkinson: On the HISC reorganization, I am going to be stepping down, and because of the current budget situation my position will not be refilled. It is likely to be cut. I am hiring a replacement that will be sort of like my position, plus a grants manager position. There will be one outreach person, we will post that position, and try to farm out some of the tasks the working group was doing. Weed Risk Assessment, ants, coqui, and avian disease will all stay the same. Cas for ants and Ray McGuire for coqui will be hopefully still be available to consult. On funding, there is additional ARRA money that Paul will hopefully approve. Hopefully some other money will be available for frogs. We want to support both WRA positions, with Patti over at Bishop. We only have funding for one position, we need agency backing so there are more useful products. We have about $100,000 for urban forestry. We want one of the HDOA entomologists to work with the ISCs, start getting people who work in the urban forest to start reporting to the ISCs. We will start in next 3 months or so. Money also will be spent at Ka‘ena on research. There is some tangential rodenticide work, OISC may be helping. After the fence goes up this spring what will happen with mice? The label we’re using is for rats. Rats suppress mice, and mice may not respond to bait the same way. Can we get a label for mouse

suppression? Some of you guys may be interested in this. We are working with Earl and Josh on a 5-year funding plan, what has worked and where are we looking to go. We would like to use that to bump federal money to $1M/year. I am interested in early detection. Maui has done early detection training for all our partners. We are also creating a user-friendly framework for reporting. Many vertebrates and invertebrates seem to be becoming established because we throw up our hands with them.

E. DOFAW, Rob Hauff: We are still waiting for official word that the early detection proposal you wrote got awarded. The preliminary word is that it was one of the winners. I assume that will become available in July. We have a little time to work out how it will be distributed among the islands.

Rachel: That was a statewide grant to be split among the ISCs, for doing the analysis, or depending on where each ISC is, to prioritize which species should become new targets and fund the field work to go kill stuff. There is $300,000 over two years, for all the ISCS.

F. O‘ahu Army Natural Resources Program, Jane Beachy: We are continuing to control various species on Army lands. *Smilax bona-nox*, OED was able to identify that for us, for a long time we didn’t have any reproductive parts. We’re trying Oust, we’ve been having a hard time killing it. We tried that in July, it will be time to go back and check it soon.

We did lots of aerial surveys. We had to use some helicopter time on our AMD contract, we have to use so many hours in a year. Kahuku, *Acacia mangium*, we only found a few small plants, within the zone we were expecting them. This is promising, it is not a big expansion. We also looked for melochia and found no new big mature trees. We did some aerials looking at ginger near the Schofield Waikane trailhead where we used to control white ginger. It was very depressing. There were just a couple of spots on the summit but on the windward side, there was white and kahili ginger from the valley to the summit. These are not incipient but major threats to the watershed. We also surveyed ginger at Ka‘ala. Interestingly we did not find it moving into Makaha or Waianae Kai, though we did find a lot of pakalolo at Waianae Kai. On the Haleauau side, kahili ginger has moved into the back of there. There is unexploded ordnance, it is very challenging to get it there. It would also be a very long hike to get there. We are considering trying some aerial control, talking to James Leary about HBT, etc. We thought the stuff at Ka‘ala seemed so doable in comparison. Also there is blue marble all over Haleaoao, it’s moving up. There is also Australian tree fern, and a variety of trees I wasn’t expecting, moving up toward Ka‘ala. We also looked at *Tibouchina herbacea* at Poamoho. It looks like native *Phyllostegia*, so it is hard to look for from the air. We flew about 15 feet above the ground, very slowly. I think we found the core [the site of the first plant found] and not anything new. Emma Yuen found two matures at site of the original plant. We do want to try to find new ground surveys around there. The last thing we looked for was manuka in Poamoho. We saw some plants not near the trail. It is also Kahuku, there is quite a lot of it up there. The ginger at Ka‘ala, I know OISC has worked on the State

side of the boardwalk. We checked out the manuka population on Kumaipo Trail (Waianae Kai/Makaha, ridge running up to Ka‘ala). It’s the only site in Waianae. I’m interested in an interagency camping trip to go kill it. We could get the majority without rappelling.

Rob: I have seen it on the road going up to Ka‘ala.

Jane: Two last things: The *Sphagnum* at Ka‘ala is the only site we know about on the island. We finally have a control, St. Gabriel’s moss killer, clove oil. It is really effective. We are going to start that beginning in 2010. We’ll start on the Army side of the boardwalk. We are talking with Talbert about what he would like to do. Amy and I looked for *Cordia aliadora*, a giant tree that was recorded at the end of the road. We found it had spread pretty far but not frighteningly so. It is challenging to eradicate but the overall acreage is less than 15 acres, probably. We have a pretty good perimeter. Maybe we can talk with OISC about its place in the priority list.

Rachel: The *Smilax*, is that the only place, where Alex and Danielle found it?

Jane: I don’t know if they found it elsewhere in their surveys. It is the only one on Army land.

Also, Jackson’s chameleons popped up next to Kolikoli Pass. Steve Montgomery dissected some and found *Achatinella* fragments. So they are predating native snails. This is a threat. They are hard to see, control would be a challenge. We are interested in high-elevation sightings, especially where there might be native snails. Fred Kraus is interested in anything outside Honolulu, he wants to know the distribution.

G. Honolulu Board of Water Supply, Amy Tsuneyoshi: We are continuing to work with Waianae high school students, removing guava and coffee at that site in the Waianaes, with Bruce with Ka‘ala Farm. This is inside a 100-acre fence in Makaha Valley. It gets them interested in natural resource work, they are Hawaiian Studies students. On the windward side, we have a partnership with KEY Project, Aquatic Resources is sitting in on those meetings. Though it is not incipient, they want to control hau along the stream banks. If anyone knows how, let us know. There is too much shade along the stream bank, nothing holding the stream bank in place, not enough sun for stream life. Maybe something similar to a banana poka day, have a hau day.

III. OISC general update, Rachel

Rachel: Good news on the budget: we have enough money for the next twelve months. One agency that hasn’t really helped us out is the City & County. Other ISCs have gotten money from their counties.

Safety: We have had no major accidents or vehicle dents this year.

OISC chair: Josh has been chair since spring. The chair turns over every year. Meetings are scheduled around your schedule. Duties are light—do the coordinator’s

performance evaluation, you call staff for feedback to help with that, that's about it. You can be as involved as you want. Everyone here has done it at least once, so if you haven't done it in a while, or if you want to bring someone new into the group…

Naomi: I'll do it. I'm not president of the Botanical Society now.

Rachel: Great. Josh started in March, so we'll look at that.

Outreach: Our volunteer program made the paper last Sunday. Chelsea got us a Facebook page. We are going to try to do regular updates. Outreach events since August, we did the 'Awa Festival, Makahiki Festival, class presentations, LICH conference, and a presentation to the North Shore Outdoor Circle on miconia and invasive species. I think they want more info on native species.

We have always had a miconia volunteer program. The Trail & Mountain Club likes to come. Back in 2007 we decided to stop using general volunteers, since a lot of people found it too rigorous even with the advance warnings. We tried to start doing outreach volunteer trips to get people into native forests. We don't have the money to do that anymore. Some volunteers who have been coming have been interested in trying miconia, we are trying to recruit more hard-core volunteers for miconia trips. We will interview them really well, make sure they can do it.

Rob: Do you track volunteer hours and use for match? Rachel: Yes.

Mindy: For non-miconia volunteers do you feel like there has been some value? Like fountain grass. Are people getting engaged?

Rachel: I feel like there is some value, but it is really hard to quantify. What I want to do this year is more lend our expertise to groups that are already doing that. Maybe help Sierra Club take schools on trips, stuff like that. It has value but not enough to justify using field time.

Mindy: That is one of the potential aspects for the early detection program. We could maybe go after the funding to support it, depending on the value. Even if it is an established thing that you could make a difference on in a particular area.

Jane: If there is room for volunteer trips, maybe target species that are OISC potential targets, then try to hike into native forest for an hour afterward.

Rachel: Finding a place for those trips once a month was getting hard. That sort of program works better for organizations that are managing a certain spot of land that they need to return to, not for OISC, a species-led organization. For example, the Army volunteer program trips fill up really fast because they are managing places like Ka'ala.

Mindy: Would the outreach be important if resources could be found? Logistically that might mean hiring a couple of more crew so the whole crew could also engage in outreach as well as keep enough hours for surveys.

Rachel: We have a really good partnership with Sierra Club, Trail & Mountain Club, so if we have a certain species we want to go after, we can do that. If the Boy Scouts call, we can find them a project. The group that is sponsoring can do most of the logistics. That is what we are looking at for next year. So our name will still be out there. Susie found some places we can take hard-core volunteers to do miconia. We have cut the trips down to every other month.

IV. Species updates, Rachel

A. Miconia. At the August meeting, we talked about not having enough available field hours to get everything due for survey in 2009. Susie and Jean mapped the priority acres we thought we could do with our available field hours. Kaalaea is where matures were found. We are only about 100 acres short of our goal. For town, aerials have been tough to schedule, it will get worse now that it is winter.

We completed all the ground acres, thanks to the ARRA Americorps position. Tehere is really great. And Susie is making sure we are staying focused on miconia, doing 3 days a week.

For 2010—I have never felt like we've been great at forecasting out 12 months, and everything has been so strange and up in the air—we are projecting out for 6 months. We are suspending Wahiawa and Waimea. Those were single trees, nothing else was ever found there. If for some reason we want to drop them permanently we should make that decision as a committee. Two trees off the large Maunawili tree were originally buffered as mature, because we didn't know what the source tree was. Other than that we are shrinking the buffer for 2010 to 450 meters. That drops 1600 acres, or rather "suspends." It is very unlikely those acres will get done this year.

[Slide: Table of the percentage of field time OISC spends on each species.] Miconia is at 55% for 2009, which is the goal. Several species under 1% were OED species. [Slide: Diagrams of town and windward side buffer priorities.] For 2010, 1,200 acres for the first 6 months of 2010 has been prioritized, resurvey inside the 450-meter buffer. It is broken up inside the buffer because doing sweeps of valleys doesn't always work, what with landowner permission issues, etc.

So to recap, we are suspending our regular strategy, putting some of the acreage on hold. For 2009, we are suspending 1,600 acres that were due this year. We have prioritized 1,200 acres for the first 6 months of 2010.

Rob: What percentage of seedlings have been found outside 450 meters?

Jean: 1%.

Mindy: Do the staff at Wahiawa and Waimea know about the miconia?

Rachel: We should talk to whoever is working there now, let them know they are in our buffer. Erin Purple at Wahiawa, they just hired a new supervisor.

Josh: I still worry about people moving seeds, dogs and hunters. They will report it. I think that is a good resource. Rachel: It was a hunter who told us about the Kalihi tree.

Jane: Does the hunter ed class have an invasive species component?

Dave: We should include miconia.

Mindy: Also any time people have to sign up for special hunts. KMWP has their ungulate person who is plugged into the hunter community, he could get us some time maybe.

Dave: We could put signs at trailheads.

Jane: The 800 meter ground buffer was narrowed to 450 meters—what about aerial, is there a resurvey schedule?

Jean: Basically we try to get it all done once.

Rachel: If we had enough money we would try to do it every 3 years.

Jane: I support the targeted 450 meters, it's important to prioritize for next year. I would encourage thinking about what things are falling behind and having a list of those so if other pockets of money become available you are ready to go after things.

Rachel: I usually try to put some aerial money in each grant.

BREAK

B. Fountain grass. The strategy is not islandwide eradication. It carpets Diamond Head, parts of Lanikai, Palolo and Punchbowl (there is lots of it there and lots on private land). Our strategy is to get rid of it at the airport and along major roads, and outside the already infested areas. Waianae, Kapolei, Ewa are priority areas. Fire is a problem in those places. Usually when we show dots on a map out there, they are historical points. Most of these are historical [slide: map] except the infested areas I talked about. The Waianae coast dots are gone now. So I graphed the North Shore, Waianae coast and airport. The plants found on the north shore haves gone down to zero. That site has been paved.

   Airport area, the spike on the graph is Navy housing where Alex found a lot of it. They gave us access and the site requires continuous maintenance. It is across Nimitz from the airport. We have done runway surveys with airport staff. If you are flying and see it, call us.

Josh: DoA looks there routinely too, but we don't get their data.

Rachel: It is a priority because of the traffic, people could carry it to other parts of the island. Waianae coast, none was found there in 2009. The graph drops to zero from 2003.

I have a question for the committee: how can we claim this as a success if it is not islandwide eradication? Are there any questions about the data?

Mindy: Have any infested areas been adopted by local groups?

Rachel: No. I did try to get some Boy Scouts interested in fountain grass. They said, are you kidding, that will take forever. Diane Drigot organizes a multi-agency fountain grass kill at Bellows. We send one or two people. At Diamond Head, I talked with the park manager, it sounds like they get threatened with lawsuits a lot by trail users, it's complicated there. People have claimed to get sick after seeing the blue dye.

Josh: I think biocontrol might be the best option for later for those badly infested areas. We have other focus areas.

Jane: If the Waianaes are free of fountain grass, it is useful to keep doing resurveys.

Rachel: We are still going to monitor it. DOFAW is putting together a Waianae Mountains Watershed Partnership. I thought I would take a brochure for use out there.

Jane: What do you do now?

Rachel: We drive roads and resurvey previous sites of plants.

Jean: This year OED covered it on their surveys.

Josh: In the past, it has been done by driving, using a spotting scope at the end of the roads to see the ridgeline. If it ends up out there it will come from a trail or road, like that one Army found in the East Range.

Jane: We need ways to save time, we don't want to have to do the spotting scope surveys often.

Rachel: We should make sure Army staff have a good ID for it.

Jane: I could do that when we have trainings, I can talk about the most important species for you. We drive that road a lot.

C. Other species

Other to-do work for the first 6 months of 2010: Himalayan blackberry in Palolo is done every 6 months. There will be some trips this December, then in February the Waimaomao population We will report on results at the spring meeting. Kawainui Marsh, DOFAW is helping us out with that. We are winding down the work at Royal Kunia Golf Course. Ko Olina, the golf course we got the grant for, we will probably do that in March.

V. Miconia modeling

Jean gave a presentation showing a map of where miconia would be if OISC and its partners were not controlling it. She originally gave a version of this presentation at the Hawaii Congress of Planning Officials/Hawaii Geographic Information Coordinating Committee Conference in September 2009. Scenarios run with the model include: 1) what would the miconia landscape be if HDOA, DLNR and dedicated volunteers hadn't controlled miconia in the 1990s, and 2) what would the miconia landscape be if miconia control were to stop. In both scenarios, miconia spreads beyond OISC's current survey buffers and into BWS, Forest Reserve, and USFWS lands and rare plant locations, etc.

The ArcGIS model incorporates variables such as rainfall, age to maturity, dispersal through stream corridors and the dispersal range of seeds by birds to depict the invasive spread of miconia on O'ahu. The model is very conservative, based on only 20 seeds per year per parent plant sprouting, and does not include extra dispersal like on hikers' boots or travel on cars, etc.

Rob: This could be really helpful for the state forest assessment that Ron Canarella is working on, for how the State will receive funding for future years. One of the things they require is graphic representation of your priority areas. This might be a helpful graphic depiction of where you work and why. What would it take to do the whole state?

Jean: We can talk later to see. Ron did mention this, he was at the GIS planners conference. If I have the base layers that I used for O'ahu for the other islands, I can run it.

Mindy: I will include it in the assessment if I can get a relatively low-reso slide of the two or three major pictures.

Jean: To describe the model, from the year a tree matures, it will put out 20 seeds that survive, spread randomly over a 400-meter buffer. This is a very conservative number. Using a small number means having less variables to deal with, like if a tree puts out a million seeds, how many survive, sprout, land on the same spot, etc.

Rob: This would be a great presentation for HISC.

Mindy: Also for a brown bag, if you are not getting tired of doing it.

Rachel: For me the important thing is that the points eventually move past the aerial buffer.

VI. Definitions discussion: eradication

Rachel: Some of you are involved in CGAPS. Over the summer Christy rewrote the CGAPS action plan and the ISCs were asked to come up with a list of things they had eradicated. I always felt like eradication is what we are judged on and that is the goal for our target species.

[Handout on definitions of eradication.] I want to ask you what you think eradication should mean for OISC, just start the discussion. I feel like eradicating our target species is the goal. There is a student doing a UH research practicum working on this for us, she will finish her paper in the next couple of weeks.

In theory the goal for all the early detection species will be eradication, since they are all small populations. We need to make sure we are all thinking about the same thing.

Jane: I think we can use terms like "local eradication." I also like Josh's idea of defining different stages where different areas might be, like Waimea vs. Kalihi. If reintroduction can occur where there are local eradications you need that caveat, especially on an island. Resurveys are still needed. We haven't achieved any islandwide eradications, but for fountain grass we have local eradication at four sites.

Mindy: This sheet has two classes of definitions: one for public or external use, one for internal use. For legislators etc., the Simberloff definition. We can claim eradication of coqui on O'ahu—just because it could come back in from Hawai'i doesn't take that away.

Internally we might use terms like "suppression level 1" but externally the eradication goal is more useful.

We are not going for big numbers of eradicated species, just a few. We are about 7 or 8 years behind MISC, which has about six species. Showing what hasn't happened because of your work matters.

Rubus ellipticus was all removed but someone told me the seed bank survives a long time.

Rob: If you keep rechecking and there are no sprouts, can't you say it is eradicated?

Jane: Seed banks change over time.

Josh: Preventative measures matter too. You might not be able to document a lot of eradications, but you have prevented problems.

Jane: It is also useful to have the benchmarks.

Rachel: This all came out of the CGAPS action plan. I am more concerned that we here all agree what OISC is supposed to be doing and that you approve of our progress.

Jane: Then I think it would be really helpful to have those benchmarks defined. The seed lab at Lyon does a lot, you can put seeds in there and just wait. It doesn't seem like it's a huge amount of work if you are doing a small number of species.

Amy: I think it would be good to distinguish your mission statement and your goals. Goals will change annually, and species will change too. The mission may be eradication, but it can adjust to containment, control, etc.

Rachel: Our mission statement says "eradicate or contain." For benchmarks I would like to hook up with UH interns to do some of the research. You guys can see if you agree with the results. Big research will probably get pushed aside as fires get put out. If you have a brainstorm in the car on the ride home, send me an email.

Final comment: Jane is presenting the Wahiawa coqui eradication at the NZ Invasives Conference.

VI. Adjournment

The meeting was adjourned.

ATTENDEES

Chelsea Arnott, OISC
Jane Beachy, Army Natural Resources Program
Patrick Chee, HISC
Chris Dacus, HDOT
Joshua Fisher, US Fish and Wildlife Service (USFWS)
Jean Fujikawa, OISC
Rob Hauff, State of Hawai‘i Department of Land and Natural Resources, Division of Forestry and Wildlife (DLNR DOFAW)
Naomi Hoffman, Honolulu Botanical Gardens
Mary Ikagawa, OISC
Keoki Kanakaokai, OISC
Arthur Khamsing, City & County of Honolulu Pookela Fellows Program
Rachel Neville, OISC
David Smith, DLNR DOFAW
Amy Tsuneyoshi, HBWS
Mindy Wilkinson, HISC