

MAUI INVASIVE SPECIES COMMITTEE
Friday, September 8, 2017
Draft Meeting Minutes

ATTENDANCE: Forest Starr, Kim Starr, Hanna Mounce, Bill O'Neill, Fern Duvall, Brooke Mahnken, Adam Radford, Chuck Chimera, Lissa Strohecker, Bryan Berkowitz, Stephanie Miller, Allison Borell, Kerri Fay, Mia Ritte, Jeremy Gooding, Chuck Lassiter, Woody Mallinson, Carl Martin

Remote Attendance: James Leary, Josh Atwood, Randy Bartlett

- The meeting was called to order at 9:08am by Fern Duvall, Chair
- Introductions were made around the room.
- Minutes from the last meeting were approved. They will be posted on the website.

REVIEW PUBLIC OUTREACH AND EDUCATION PROGRAM

- Adam R.: thanks to Lissa, Allison and Mia. They are doing an incredible job. The program has grown into a whole operation of its own. Great job! Lissa: (PowerPoint presentation given) it has been four years since the last PR meeting. A lot has changed.

General Shifts in Messaging

- Lissa: there has been a shift to empower the community because we are at the point where we can't do it all. A lot of people are willing to help so we are providing them with resources. Adam R.: this is a much different model than five years ago but more appropriate. Lissa: the shift started with the little fire ants (LFA) project - we were asking people to survey and send in samples. We also had a lack of resources to work on banana bunchy-top virus (BBTV). Workshops were conducted to teach the community how to identify BBTV.

Community Events and Presentations

- Lissa: the crew is the front line. In 2016 we attended 14 community events ranging from big events like the County Fair to small events like Arbor Day and partner events. We also participate in events all over the island, such as the Taro Fest in Hana. Adam R.: we participate in a suite of events and also participate in events that are small but have a large impact. Lissa: last year we did eight presentations with 316 people in attendance. This year will be much bigger because of rat lung worm (RLW). Fern: are you mostly reactive or proactive? Lissa: both. Very reactive but also proactive. Adam R.: our presentations are reactive and social media is proactive.
- Lissa: one event is the Maui Association of Landscape Professionals' Maui Garden Expo where we present the Malama i ka Aina Award to recognize a landscape professional who has done a significant amount to spread the word about invasive species or reduce the spread of invasive species. This year the award was presented to Sara Tekula and Joseph Imhoff. In 2009 we started presenting glass sculptures of native species created by Jupiter Nielsen for the award.

Maui Mauka Conservation Awareness Trainings

- Lissa: we started working with East Maui Watershed Partnership (EMWP) and Maui Forest Bird Recovery Project (MFBRP) in 2013 to create a program to reach out to tour guides. Since 2013 we have done 20 trainings to over 200 guides from nearly 50 companies. The purpose is to get accurate

information out to tour guides for tourists. It gives MISC the opportunity to talk about coqui frogs and other target species to a different community. We are starting to move towards targeting the resort industry also. At first there were very few in attendance but now it is much bigger. The trainings have been revised from one hour and are now three hours. This change occurred due to feedback from the tour guides and to allow time to accommodate all of their questions. Each organization has its own infographics. We have now expanded to other conservation groups by having a guest speaker at the training. Emily Severson from Maui Forest Bird Recovery Project and Suzanne Conlon from Kealia Pond National Wildlife Refuge are scheduled to be the next guest speakers.

- Lissa: we advertise through Facebook primarily. Each organization spreads the word throughout their own networks using Mail Chimp and other tools. Companies continually send new tour guides because of a high rate of turnover. We also advertised this year at Hawaii Conservation Conference with an informational table courtesy of Maui Forest Bird Recovery Project. It is funded under the umbrella of each organization. Originally there was a group Hawaii Tourism Authority grant and now the funding is split among all of the organizations. Na Koa Manu is the fiscal sponsor. Chuck C: do the participants give any money? At the last training forty dollars was donated. We have talked about charging but we aren't currently. Mia: do they receive a certification? Allison: yes, they do get a certification. They've gotten decals saying they've been educated. Bryan: do they do group trainings? Lissa: yes, if they have more than seven participants
- Chuck L.: would you be willing to work with us? We have to do a training and would love to have you. Allison: the hardest part right now is scheduling. Lissa: we were doing them all at CTAHR, and now we are moving around the island. We have done them at the whale sanctuary, at Kealia Pond and we are also getting interest from other conservation organizations. Kim presented from West Maui Mountains Watershed Partnership (WMMWP) and we try to tie that to the location. Fern: what about on the State / Federal level, like with Christy Martin? Lissa: we added ROD based on a model for a training on the Big Island for tourists. Fern: what about other organizations? Lissa: we have a conference call quarterly about statewide pushes and we all share information. Fern: Chuck monitors ROD discussions. Is there anyone from PR that listens in on that? Lissa: there is a PR working group but I haven't listened in on that for a while.
- Chuck C.: have you had any contact with the cruise ship people? Do they have a naturalist on board? Lissa: I haven't done work with them. Hanna: the product for this training is really great but there isn't much time to allocate towards it. We need to find a way to reach all of these other tour guides. It could be a full-time job for someone. We need more funding or time for it. It's at a point where it can really grow, for example, reaching out to the hotels and resorts. It's ready and should happen. Lissa: this was Allison's brain child. It's a great idea.

Print Media Coverage

- Lissa: there were 34 articles last year that mentioned MISC, which included letters to the editor or advertising for the Maui Mauka trainings. This also includes the Kia'i Moku columns. I keep thinking we'll run out of ideas but we haven't yet. We welcome input for new ideas for topics. It's a good way to highlight partner organizations. For example, working to remove pines on Haleakala. All of the articles are available on our website. The biggest searches have been for information on barn owls vs pueo and on the gold dust day geckos. Lissa: we generally put out eight press releases per year. Some are due to inquiries from reporters and we also send one out every couple of months when there is something news worthy or we are trying to generate interest.

Broadcast Media

- Lissa: we were featured in three Hawaii News Now broadcasts from news articles this year. There was also a broadcast of the LFA documentary. We had HISC funding in 2016 to broadcast the LFA documentary and it is now also on YouTube. In 2014 we did premieres for the LFA documentary throughout the state. In 2016 it was only premiered on Maui. Fern: do you follow the interest after these come out? Lissa: I haven't tracked but we do get more reports after articles come out.

Website(s) and Social Media

- Lissa: we have five websites that we maintain. I recently merged the coqui free site into our MISC website. Fern: do any of these have links to the report a pest site? Lissa: yes, but I need to double check the link. Fern: the message should be out there. That could be a front-line of finding things where they are few in numbers. Lissa: we also have a Facebook account and just started Instagram. We have a YouTube channel for LFA, BBTV and coqui frogs. They all get good traffic. Allison maintains the Hoike site. The most popular site is the main MISC site. It gets 26,000 hits per year. I'm trying to reorganize it so that when people search they start looking deeper into more topics. Hanna: you get 26,000 hits per year on your website but you have a fairly small following on Facebook and Instagram. Is there an easy way to connect people from your website to social media? If you could get half that number, it would be great. If a new problem comes up, the people only visiting the website won't find out. You need some way to capture those people.
- Fern: at outreach events, especially the trainings, do you mention volunteer needs? Lissa: we have a page of "opportunities in your area." Fern: do any of the organizations from the trainings come volunteer? Lissa: volunteers sometimes come to tour guide training. Fern: the National Park on the Big Island had a huge *Vespula* outbreak and the ISCs weren't really notified. Adam R.: I'm not sure the information always flows out to the ISCs, but we are good about getting it out. Fern: it would be good if the state information got to the ISCs.

Education Program

- Lissa: Allison is working at MISC one day per week and she does the bulk of the educational visits. We've also partnered with EMWP leading school groups into Waikamoi. There is a camp called "Learning Endeavors" which gets students into the field. It's a really good program. Allison: Learning Endeavors gave us a little grant money and we got a few rain jackets. Lissa: we've also been hosting school groups here. Recently a teacher from Kamehameha Schools contacted us. In 2016 we hosted 42 activities with 15 different schools, reaching out to a total of 1771 students. The biggest event was "Ag in the classroom." We had 15 minutes per group in combination with other organizations. The other big one is with Seabury Hall where they help in Hana for three days during their Winterim.

Hō'ike o Haleakalā Curriculum

- Lissa: this was originally developed through the National Park Service. Now MISC is housing it and promoting it. It is the basis of our educational program. Recently we received funding for the invasive species module, which is being written by Shannon Wiannecki. It is almost finished. We are trying out the activities and making adjustments and waiting for each to be completed before posting. Allison is taking the lead on testing them in the classrooms. Fern: does it tell people about the websites? Lissa: yes. There are many links to other organizations and references. It was originally written in 2002 so

there are many videos missing. Some activities need reformatting because they have outdated technology and old links etc.

Teacher Workshops

- Lissa: we were partnering with the DOE; participating teachers can be eligible for a pay raise. We lost our contact person and it's harder for us to do workshops now because we aren't a part of the DOE. We charged thirty dollars per person for the last and the average cost of a workshop is one to two hundred dollars. We are looking at partnering, but the cost is a bit more. The workshops are two days long, and some of the content comes from new activities that we need to test. We also go out into Waikamoi to get the teachers into the forest.

Community-based social marketing

- Lissa: we are trying to get the community to take ownership of some issues. At BIISC they have the LFA Community Program. Franny spent three months with a graduate student doing studies. They did presentations and told the community they need to do control work and then followed up to see if they did. It is a change in strategy. The process lets the community commit and create their own plan. Adam R.: we put in a Hawaii Tourism Authority grant to pursue this with coqui frogs in particular. Lissa: we need a person on the crew to delegate to. It is a pretty intense process. KISC has the Plant Pono program which uses weed risk assessments for nurseries. It has a code of conduct. Kauai has the best management for LFA and coqui. It is customized for growers, landscapers and based on the Plant Pono concept. It's a logical expansion of our coqui free nursery program. We could have an LFA free program etc.
- Forest: they talked about a RLW certified free program, but that's too risky. Lissa: Kauai is very reluctant to certify, but this is an endorsement. It shows that they have been trained. They worked directly with landscapers and talked about what is reasonable for decontamination etc. The Big Island also does Plant Pono because they have so many nurseries. Randy: I have a question about certification. I want to consider getting ahold of CTAHR agents on Maui to see about recommendations for IPM. We could possibly partner with them and share resources. Lissa: Arnold put out a guide for best management on coqui and LFA. Randy: it gives it some weight with the general population. Adam R.: DOA certification is on a "one bench" basis. It's not the whole facility which is different than the coqui free certification. Chuck C.: this could be a full time job. Molly Murphy works half of the time on early detection and the other half on education. BIISC is primarily focused on getting nurseries not to grow BIISC target species. There were several hundred on the high risk list which was too much to ask, so they are trying to get them not to grow targets at least. It is a full time job on the Big Island. Molly has been really proactive. Fern: can we do that here? Chuck C.: yes, you have to go out to all of the nurseries, educate them and give them alternatives, etc. On Kauai the tree fern is high on the profile target and they were able to get a large nursery to stop selling it which was a huge symbolic victory. But it's hard to get all of the nurseries to do that.
- Lissa: all of the islands have different targets. Mia: the one nursery on Molokai just went out of business. I'm not sure if that gap will be filled. Right now individual landowners are bringing over plants for landscaping for new construction but they aren't a landscaping company. Lori and her crew inspect shipments once in a while. Many are buying things from the mainland, like bananas. We might have just gotten a positive BBTV from outside of the known area. The person brought banana plants from the mainland. Fern: the lack of a nursery forces people to purchase their own plants,

which is harder to control. Lissa: there was a recalcitrant owner that had pampas and that property just sold. We went to control the plants and she had just ordered 500 *selloana* seeds through the mail!

Stop the Ant Month

- Lissa: Spot the Ant, Stop the Ant month happens in the fall each year. We get funding annually for radio PSAs to encourage the public to test for LFA. Last year we got test kits out to all of the libraries. The public has been very receptive and supportive. After Spot the Ant month last year the Kapalua infestation was reported. The lady called HDOA. It seems more appropriate to do a big burst rather than constant messages that can get ignored. This year we got \$3000 for PSAs.

Hawai'i Invasive Species Awareness Week

- Lissa: Hawaii Invasive Species Awareness Week is in late February / early March. Each island gives an award to a business. An MVP is nominated to go to Oahu. On Maui, it was the Maui Huliau Foundation. They are an environmental youth filmmaking club. They sweep the video awards in a contest for 30 minute videos.

Other Outreach

- Adam R.: MISC received recognition from Maui County at the LFA screening event at the Hui Noeau, presented by Councilmember Don Guzman. It speaks to how incredibly supportive the Council is of our work. Many residents are eager/willing to express support for MISC to elected officials (county and legislature). As appropriate, we provide information about our strategy and program needs.
- Mia: sharing success stories is effective. The people that show up are the ones with problems. It's good to be in touch with communities with problems. Adam R: we do highlight success Fern: It's a win-win when the community and council get to interact. Adam R.: I usually show maps of where we work broken out by election districts to elected officials and they are usually surprised. Lissa: Mike Gabbard stopped at our booth at a festival and talked about his experience shooting miconia with HBT. It has a lasting effect.

Crisis PR:

- Lissa: last year was the first full-fledged crisis situation where people were actively going against us. Fortunately, it was for one of our species we have the most support for: LFA. It was an LFA site that someone in the public didn't want controlled. We got a ton of support, even from non-pesticide, non-GMO people. Lissa: we respond to direct inquiries from reporters, but not to each situation. Fern: on a case-by-case scenario. You might have people that don't want you to use pesticides but it's such a terrible problem that you just have to weather the storm. Forest: the protocol should be the same each time. Be consistent. Lissa: we got actively trolled on Facebook. Bryan: you can't avoid all negative comments.
- Hanna: we don't get much, we've only had a few instances, but our policy is to respond one time and not to delete. But we only do one fact-based response. Bryan: our supporters were posting positive things we do. Lissa: that is one place where it would be good to build our social media network for support. Forest: you might ask other outreach / PR people because everyone has that issue. Allison: hotels that get bad reviews usually give one response but don't engage in a huge argument. Hanna: it's not bad to ask other partners to help respond to those as well. Lissa: I drew up a draft of the semi slug find and the value of partnering with other organizations was huge. Forest: or with the lehua

rodenticide. Putting out a call when it needs to be addressed is a good procedure. Randy: you might want to consider working with Christy and the HISC chair. Or put in a request to RCUH / PCSU about protocol for language for social media. Have a science-based form that they can refer to. Randy: it's helpful to have a generic protocol of what to do. Bryan: increase your own positive posts to redirect. Adam R.: I like Fern's suggestion of connecting more with public information officers. One more thing, is to be really prepared with a lot of information before information is disseminated. Mia: determine what is appropriate to post. Adam R.: thanks Lissa! Our reach is really impressive when you look at radio PSAs, media and TV. All of the dimensions of our outreach program are really impressive. We plan to continue to expand upon that. Fern: the other thing MISC does is all of the things you do with interns like Kupu and AmeriCorps. That is also education and there's the multiplier effect. Adam R.: good point. We usually have 4-5 interns a year.

- Adam R.: one other item that Pat Bily wanted to bring up. (quoted from email) *"I am wondering if the perception of biocontrol can be addressed among the group. I bring this up because we still have many in our own conservation community that are suspicious or even opposed to it. So, apply that metric to public outreach and there appears to be little support for an item we are decades behind on. You see it as well as I do, we cannot win many of these battles with simply using physical control, and judging by HISC RFP's for BC work rejected this year, we continue to go 2 steps backwards. Bottom line: managers need to talk with field staff to clarify the realities of BC (as in 'will not eradicate pest') and that classical scientific biological control is NOT the rat and mongoose story. This is something Lissa has written about extensively over the years, but if we can't convince the ranks in conservation, how can we convince the public or funding sources?? When I presented at the EMAPI in 2015, I garnished figures from the majority of ginger control workers in Hawaii. We spend \$1.1 million annually on physical control, and most workers will tell you we are spinning our wheels. Compare that to Landcare NZ's chart attached where one may get one or two BC agents for that same money."*
- Adam R: basically, switching to biocontrol is more effective. How can we better advocate for biocontrol. James: it's pulling from the same pot. Are management programs willing to give up what they are currently managing? Adam R.: what can we do better to get our staff and the broader community on board? James: I wish more could happen faster. We are probably under investing. If it takes 10-15 years to be released and another 30 to get naturalized, that's painful. Fern: I think Pat means that there isn't a division, but that we need to talk more about the need for biocontrol. I would disagree with funding issues. If you have \$20 million per year there is a portion that can be taken out for biocontrol. Many people would be happy to step away and fight something else. It's not a man-hour vs biocontrol issue. Chuck C.: there is suspicion within the community of biocontrol agents not being tested adequately and concern regarding non-target and other unanticipated effects. That it isn't going to do what was intended and will have unintended consequences. Forest: the idea is nice of releasing but it is permanent and there are no champions of biocontrol. There is a lot of room for improvement. Fern: it's a good education subject within the conservation community. Lissa: it has come up, especially with opposition to the strawberry guava biocontrol. Tracy Johnson has something close for miconia biocontrol. Chuck C.: there is never a silver bullet. The best you can hope for is a reduction in growth or reproduction. I think one of the best examples was with wiliwili. Forest: in the past we've done a matrix about needs and priority setting. Fern: we did do that pretty currently. I think we talked about it within the last 1.5 years. Lissa: we just tested a biocontrol game for Hoike. They were all interested and supportive.

General Updates

Funding

- Adam R.: It's coming together. We're about \$400K down from where we want to be but have \$485K in new proposals coming up. It's all coming together still for FY18. James: what is your goal? AR: about \$3.2 million.

MISC Target Species

- Adam R.: we've been hiring temporary and intermittent employees on the coqui crew for evening work. The full-time workers get everything prepped for the night work. This way we can make pushes as needed and stretch our resources. Hanna: who are you aiming at for intermittent employees? Do they already have jobs? Adam R.: yes.
- Adam R.: plant updates, we are in full swing with pampas heliops. We have done a lot in East Maui and some in West. We had a poor performance in West Maui last year due to weather and a lot of other factors. It'll be interesting to see what that does this year. We have two interns for the summer in Hana. They have assisted some with LFA, but are primarily working on miconia. Fern: is a review being done of other species so they don't get away again? Adam R.: a lot are in the monitoring phase. Big time consumers are ivy gourd, pampas grass and miconia on a seasonal cycle. There was a big find of ivy gourd in Wailuku. Lissa: the owners are from Thailand and were actively growing it. Adam R.: the Hana miconia baseyard has been retrofitted so it's up and running. It looks great, the crew did a great job. There was a gap from December until last month where Piiholo wasn't going out to Hana. Normally we go out once per month. James: how many bunks? Adam R.: eight. It's where the old herbicide room was. Hanna: is it potential housing? Like intern housing? Adam R.: it's possible but it's meant for the Piiholo crew to stay there. Brooke: the damsel fly researchers are going to use it this month.

LFA Update

- Brooke: we did a comprehensive update at the last meeting. This is a gif that shows the change from before. This is the Haiku site on Lilikoi Rd. It's had six months of Tango treatment. I was hoping to see fewer ants. The red dots show density. The insect growth regulator isn't as extreme as the toxicant. The ants are getting old but are still around. The next phase is the toxicant application.
- Brooke: next is the Huelo site. The first image is the original treatment area. It has migrated mauka into the property next door, they were recalcitrant for a while. They are also a little concerned about treatment because they have a greenhouse. The treatment area is a lot smaller here and we are on target. But the problem is all of those big trees we need to deal with. There is an outlier that's probably been washed down the ditch. Two of the property owners are cleaning the whole place, one has a burn permit, and we've been working with them about moving items. We haven't sampled in the trees yet. Arborists have fancy slingshots on poles to get hand lines in trees and we might want to get one of those.
- Brooke: Kapalua is looking really good. Only one positive ID. There are 50 really tall palm trees and we know they have ants in them. An arborist was in one and got stung. They told the property owner after hauling all the green waste away. We have followed up but haven't found anything. Kim: could they treat while there are up there? Brooke: they could but I haven't talked to them about it. Ersel recommends Talstar for the trees which we don't use for other control work. Fern: could you treat the tops of trees using the slingshot? Brooke: yes. I don't know which part of the tree is utilized by the ants. I assume it's in the crown. It might not be as easy in a mango tree but I don't know. Control

work is with Hawaii Ant Lab (HAL), except the haiku site. They come over, calculate the bait, mix it, and they split it between East and West Maui. Michelle and one other person do the treatment in Huelo and Nahiku.

- Brooke: on to the Waihee site, this is the original LFA site. They came back and now things are looking good. There is still a tree issue. We agreed to do a cooperative approach with the neighbors and HAL to top and remove trees. One theory of why they came back is because of the trees. The area mauka and by the farm we aren't using toxicant. We're using Tango there. It's good but not as effective as the toxicant bait. The neighbors had no idea of the previous years of work. They are supportive and clearing property but not doing anything in the treatment area so they don't move ants. They have also gotten a burn permit. They will eventually do a large burn that we might assist with. The community board is very engaged.
- Brooke: Nahiku- we're still waiting on special local needs for Altosid for aerial applications. The control work and treatment is being done mauka of the highway and residential areas Makai of the highway and some at lower properties. The other areas we aren't doing treatment until we have better tools. We are treating where the ants might get moved or are near people. Adam R: the last hurdle for the special needs permit is the damsel fly survey. Brooke: he said historically there was one record of it. Imi said that stream is usually dry. It's also not within the LFA infestation anyway. There is a location makai where the ants may be but we haven't surveyed there yet. I'll assist with the survey.
- Brooke: we've done a lot of fire ant surveys, mostly responses to tropical ant reports. Having Monte on staff, now we have shifted and Monte goes to survey and Forest and Kim ID for us. We are now mapping tropical ants to give to parks and ask for help cleaning them up. It's not pleasant getting stung by them. I would like to get fewer reports of tropical fire ants. Adam R.: once they are mapped, we could go do annual visits instead of following up on each one. Brooke: but we've been burned in the past by not surveying. Fern: is there competition between tropical fire ants and LFA? Forest: there is a lot more diversity once control is in place. They do overlap at the Kapalua site. Chuck C.: tropical fire ants prefer drier, sandier soil. LFA needs moisture - it needs to be irrigated or a wet area. Hanna: do you have regular samples from green waste or Eco Compost? Brooke: the guy at Eco Compost is pretty sure nothing would survive their process. It is sterile when it leaves. Monte has been doing lots of surveys at green waste sites and the dumps. Forest: DOA recently contacted us, they want to increase their surveys of nurseries. We have a spreadsheet online. They are going to survey places we haven't. We wanted to but haven't gotten there.
- Forest: as part of Mamalu Poepoe we are surveying only airports, but not the harbors right now. We are going to survey Kahului airport to fill gaps for LFA as well as the rhinoceros beetle, Africanized bees and mosquitos. Once a month we'll go check traps. It's a collaborative effort with DOH, DOA, HISC and DOT. It's a five-year program and we are in the second year. The funding was for \$300K statewide. Leila Kaufman is the coordinator. We don't anticipate a lot of results. Fern: no one has surveyed the palms? Forest: Monte did, but not the tops. We are mostly focused within the security fence. Chuck C.: are you only looking for those four species? What about other things you find? Forest: if there are gaps it wouldn't be hard to add a few things in like a ROD spore trap.
- Forest: we did an African honey bee training. If wild bees colonize the trap, we have to take a bag and collect the whole hive and freeze it. Then they take the DNA to determine if they are African or not. African bees are in the southern US and spreading north. It's kind of inevitable that we'll get them.

Partner Updates:

- Chuck C.: you are all aware by now that Lloyd passed away. MISC hosted a nice celebration of Life for him. Adam R., Lissa, Bryan, Elizabeth and Teya were all very instrumental. Betsy helped with large portion of the food and it was outstanding. MISC did an amazing job.
- Allison: most of you know that next Friday is the opening night for the art show. It starts at 5pm. There will be hula, then the awards ceremony and then more hula. There will be speakers throughout the show. Fern, Pat and Dan will be giving talks on Thursdays at 5pm. This is the third year the art show has been at the Hui and the 13th year overall.
- Kerri: TNC has hunting dog puppies for sale. There is an ad on Craigslist or you can talk to Caleb. There were nine for sale. Kerri: we are holding another docent training. Contact Kerri. There isn't a date set yet. It'll be two days long - one day in the field and some office. We are working on a weather camera for Puu Koolau. You can see it from the office. Most of the time it's pointed toward Hana airport but if there is a special request we can pan it wherever.
- Woody: we have a camera too that points into the crater. NPS.gov/hale. It's not the original crater cam, this one shoots right into the crater. It's really nice, newer, and updates every 10-30 seconds. There is a meeting on pines on November 2 about all the work being done on East Maui. It's at TNC. We'll be going over the treatment work that's been done and future collaborative work.
- Josh: we're working on funding paperwork. Nothing else exciting.
- Fern: I've been in Australia the last four weeks. I got to see effects of their biosecurity and invasive species awareness. I visited a lot of National Parks and other high importance conservation areas. The saturation of invasive species information out there was amazing. One related species is *Pongamia*. It's wide spread and someone pointed it out to us because we looked like park people. Chuck C.: because it's native to North Australia it's not a high risk there, but it is being cultivated outside its native range. Florida is the only place it's out of control. It's being promoted as biofuel. Fern: Queensland treated it as an invasive. You can't find any sign that isn't devoted at least a third to invasive species in the parks. There are many things that DLNR and Forestry could duplicate including wider broadcasting.
- Mia: there's potential BBTV outside of the known area on Molokai. Lori found a large tumbleweed population near Molokai ranch property. We might need some help with control. It's probably also at the green waste, the dump and the quarry. So it's spreading wherever gravel is being moved. Lori wants to do a big BBTV push again. Forest: on Maui, once the vegetation came up the tumbleweed went away. If it's continually disturbed it will continue to grow and spread. The seedbank is pretty short. It's almost better fought through cultural practices. Mia: ours are in hot / dry areas that don't get much vegetation. Adam R.: fireweed is problematic. We have a map available if you want to see the updates. Mia: axis deer are becoming more of a problem. The land is overgrazed. Monsanto and Mycogen put up ten foot fences which funneled all the deer out. It's becoming more of a topic. More people are seeing the negative effects of the large populations. There are large herds but they aren't as healthy.
- Chuck C.: Lori mentioned a ROD survey? Mia: JB Friday came and they observed some defoliation that looked similar to rose apple rust on Oahu. They also did a survey on the East side. Chuck C.: they are determining if it's the same rust. The state is doing aerial surveys. It still has not been found outside of the Big Island. Molokai and Oahu had large swaths of ohia death, but it's not ROD. It

could be rust. It's covering large areas and is a big concern mainly due to the loss of mature trees. Prior rust was noted on seedlings but never noticed causing death. It's very troubling. Eventually the "lab in a suitcase" should be on every island just for ROD. But it's not going to detect other things that are killing ohia. It will help screen and take pressure off of other labs being overwhelmed with samples. Right now Maui's rapid response team is Mike Ade. He samples from properties where ohia has died. When crew finds dead ohia they have sent in some samples. So far we have been fortunate but hurricane season is coming and it is wind dispersed. Mia: was the ohia seed collection workshop last month or is it coming up soon? Chuck C.: ours is on November 8.

- Adam R.: the next meeting date was set for Nov 17th. Adam Knox will be gone so I would like to move it. We will have a review update on the current plan and then move into the priority setting process. By then we'll have FY18 in so if funding does get cut we'll figure out how to work with that.

NEXT MEETING: December 8, priority setting meeting, 9am-3pm.