

MAUI INVASIVE SPECIES COMMITTEE

Friday, September 18, 2015

Meeting Minutes

ATTENDANCE: Lloyd Loope, Pomaikai Kaniaupio-Crozier, Hanna Mounce, Fern Duvall, Rob Hauff, Elizabeth Speith, Josh Fisher, Chuck Chimera, Forest Starr, Kim Starr, Teya Penniman, Lissa Strohecker, Abe Vandenberg, Adam Radford, Mike Ade, Aja Akuna, Paul Berce, Brandon Gurat, Iban Garvin, Elizabeth Anderson, Quigley

- The meeting was called to order at 9:10 am by Lloyd Loope, Chair
- Minutes from the June 19, 2015 meeting were approved. They will be posted on the website.
- Introductions were made around the room.

ANNOUNCEMENTS

- Teya: the EMAPi Conference is coming up next week on the Big Island. MISC will have a poster on the Hoike curriculum and James is doing a presentation on HBT.
- Fern: The Native Ecosystem Protection and Management program has a Nakula Management Plan out for review.

EARLY DETECTION

- Teya: early detection and rapid response is a cost effective approach - find them early and get them early. We want to look at where resources would be focused in the future. It is obvious that the arrival of new things hasn't stopped. Do we have adequate resources to do what we need to do?

Recent Efforts / Issues

Rapid Ohia Death (ROD)

- Teya: Rob is the Forest Health coordinator for the state. There are handouts on rapid ohia death on the table. Forest: there are over 6,000 acres that are more than 50% infested on the Big Island. So far, it is mostly confined to Puna, Volcano and Hakalau. There is no known cure and we are not exactly sure how it is spreading. To date, it has only been confirmed on the Big Island. There is an interim rule to prevent transport of ohia parts, but not one for soil movement. Rob: there are 15,000 acres where there is mortality in the Puna District and 6,000 acres where more than half the trees have died. There is a monthly call hosted by the U.S. Forest Service in Hilo with a diverse group of participants. This week there was a special outreach call hosted by The Nature Conservancy. Outreach is a key component to managing this disease. I am not aware of any recent detections that change the current known distribution. There have been infected trees found above Hilo at 5,000 feet elevation, which is high. The protocol is to go in on the ground and take samples from the trees. It could be moving with insects. The areas where it has been found aren't necessarily near roads and trails. We need to look into the insect vector possibility right away. There has been no major activity other than the rule passing. Developing rapid detection will be critical to enforcing the rule. The intent is not to keep things from leaving the Big Island, but to have things inspected. Molecular rapid detection tools will be key.

- Fern: Hanna's crew was up in Nakula in the NARS and found trees that looked suspicious. Based on an overflight it looks like there may be 200 trees dead from something that looks like rapid ohia death in the area. We are waiting for confirmation from samples that were taken. There was staining on the samples that looks very similar to rapid ohia death. We need confirmation before it is stated publicly. Is there a plan for information dissemination? Hanna: we need to be careful what we are saying in any publicity. Rob: there is no plan for public dissemination so far. There was an outreach working group meeting recently and I am hoping they will be able to coordinate any public messages. It will take a couple of weeks to identify the pathogen. Just because we see dead trees doesn't mean that it is ROD. Until it is verified, you should just say you found dead trees. There have been a lot of samples sent in that have been negative.
- Teya: according to the flyer a dark staining of the bark is common in affected trees. Hanna: there is a video on the website on how to sample. If you see staining, the video says you need to cut the entire tree down and bag it. We need to know what we should be prepared to do. If this turns out to be the only tree, containment would be important. The situation has not been dealt with right on the Big Island. We need to go above and beyond with containment. Forest: prevention is critical because there is no way to control it. If ROD is detected, we need to know what the best management practice is. Hanna: we need to have sampling kits with our crews in the field and a protocol for them to follow. Fern: if it is in the NARS, the sooner we can find out the better. We have crews that work there and in other very pristine areas. It would be helpful to know as soon as possible since we are uncertain how it spreads. This may change how we do our work. Teya: you should just go ahead and implement a bleach boot wash. Rob: there are protocols for diseases out there that we can follow. It doesn't seem to be spreading by root graft. Until we know how it is spreading, we won't have recommendations. There are cautious things we can do, but we don't know if they will be effective. Getting multiple samples from one tree may be important. The priority right now is to get samples taken and submitted. If we get a positive, we will need to respond.
- Teya: the interim rule passage by the HDOA is a watershed event. Their willingness to impose a quarantine is unprecedented. Kudos to them and to Scott's leadership for making that happen. Lloyd: Young Brothers decided on their own not to take ohia from the Big Island. Forest: work needs to be done on ways to allow commodities to move despite the quarantine. We need an effective treatment. Soil quarantine will go into effect in January. Hula halau are an issue. They need to be steered to uninfested areas for collecting. Teya: there is HISC funding allocated for a post-doc to work on this topic. HDOA on Maui has two vacant inspector positions that will be transferred to the Big Island to deal with this. Rob: birds won't be a high risk vector in this situation. The virus is not usually in the flower, but rather in the wood. Teya: the question for the committee is what do we want to do going forward? Forest: we have been looking at aerial imagery of Maui. There are a lot of dead trees out there and there are forest areas that are definitely in decline. Most of the forests we are looking at don't look like what we see in the images from the Big Island. We did see something in Olowalu Valley that is a little suspicious. We need to be sure to get GPS points for suspect trees for follow-up. Mike has a spot in Honomanu that needs follow-up.
- Rob: I will follow up on the Nakula sample. We need to keep in mind that we should not sample trees that have been dead for a long time. The samples need to come from live trees. Fern: the Nakula trees had both brown and green leaves. Rob: we need to use basic sanitation protocols until we get a positive. Once we get a positive, we will need to think a little harder about sanitation and where people are going. Fern: we do have gear separation, but I'm not sure about boots. Hanna: the tree was alive in June. Rob: if it has been dead more than a few months, other pathogens will come in. Pomaikai: it would be good to initiate

sanitation protocols prior to when we get confirmation. We all use the same helicopters. Rob: practical sanitation is always a good idea, but until we get a positive we don't want to get too radical. We will need then to look at who is even allowed into these areas if there is a positive. Teya: we need to sample Olowalu and Honomanu. We can schedule an overflight in conjunction with pampas grass heliops. Forest: I see most of the suspect trees at the interface with African tulip trees. Rob: right now we don't have a protocol for aerial surveys, but we are hoping we will have a better protocol in the future. Teya: should we be training the folks who fly the most often, as well as the pilots, to have a visual image? We could send a few people to the Big Island. Rob: that sounds like a good idea. There are patterns that differentiate it from other types of dieback. Pomaikai: Maui Land and Pine would support getting the key Windward pilots trained. It would be nice to have a list available of where samples are being taken. Teya: we can create our own Google online system for information sharing.

Report-a-pest

- Elizabeth S.: there is an online reporting form at reportapest.org that allows reports to be assessed and responded to. I pulled together statistics from the last six months to show trends in the type of information we are processing and what happens to that information. Teya: we want it to be easy for people to give us information when they see something odd. This is a complementary system to the HDOA 643-PEST program. Elizabeth is the only person facilitating these reports. In the future, there may be someone at HISC or HDOA to help. Elizabeth S.: one of the primary things we've been working on is rewriting the system so it is more compliant with modern technology. The site is still hosted by UH Manoa. In the 10 years since it was coded, the site has become somewhat obsolete.

Report-a-Pest Reports - April to September 2015 (6 months)

98 reports for widespread species (unactionable)

- 2 hrs per report = 196 hrs saved (ISC/HDOA)
Time includes interaction with reporter, confirmation of ID, data collection, outreach with reporter
- 5 weeks FTE

Notable / Other Reports

- 5 Controlled/Response
- 1 to HPWRA
- Kauai: Rabbit @ Polihale, Coqui
- Maui: Coqui
- Oahu: Coqui
- Hawaii: LFA outside of known zone

Reports by Island

- Kauai = 7
- Oahu = 82
- Maui = 13
- Big Island = 20

- Elizabeth S.: I post insect reports to Hawaii Flicker ID. For animals we tell people to call 643-PEST and to call 911 for snakes. We get mongoose reports for Kauai. They are difficult to verify. We hand them off to KISC or HDOA. Adam: we had a snake report recently and the woman told a cop and he didn't respond. We need to update that protocol and follow-up with the police and dispatchers (*ACTION ITEM*). Elizabeth S.: even if a report is not actionable, we still have a positive outreach interaction. Fern: I got notification of a capuchin monkey loose on Lanai after Labor Day. The report went to 643-PEST and by the time I got the report it was four days old. For something that important the system isn't fast enough. Adam: the issue I

see is that we have so many entities involved. Teya: funding for this project is from HISC and it was funded at a very low level this year. The interagency rapid response program was cut in the funding this year. Chuck: after hours and on weekends there is nobody to respond. Elizabeth: the website that people see has not been updated in a while. It looks kind of 1990s. We don't have funding for that right now. Fern: for Maui you should be mapping green iguanas. Teya: sounds like we need to go out and survey for them. Elizabeth S.: I can put up a page that says we want these types of reports so it will come up in a Google search. It is important to have a stable position to facilitate the program. I am half time right now and my fte is decreasing. There are also two part-time programmers who do the behind the scenes stuff. Elizabeth's full presentation can be viewed at:

https://docs.google.com/a/hawaii.edu/presentation/d/1xRFyGNoSlyrMD8Up25maiHHHecjXUmeAQ2U6OJs6tSQ/edit?usp=doclist_api

Weed Risk Assessment (WRA)

- Chuck: I average 100 – 120 assessments per year. They take a day or two per plant. I am the only WRA person now. In the past there were two of us. There have been 1,670 species screened to date, 109 in the past 12 months. Of these, 695 (40.1%) were high risk, 713 (41.9%) were low risk and 262 (15.4%) needed further evaluation. All of the assessments completed before 2006 should be redone. There is so much more information available now. The information is used by government, public, industry, and conservation groups statewide and internationally. The landscaping and horticultural industry is a primary target of the program. We want to encourage them to use low risk plants. As an example, Sustainable Bioresources LLC on the Big Island submitted their entire inventory to be screened. The Plant Pono nursery endorsement program, which is specific to the Big Island right now, has had 19 species assessed. I did an article on aquatic invasives for the Hawaii Landscape magazine last April. The magazine reaches a different audience than we are usually in touch with.
- Assessments have been done at the request of the general public as well. For example, there was a person trying to plant species that would attract butterflies. There was one plant he wanted to use that isn't here and it came out as high risk. We discouraged him from planting that species. Some individuals will ask if something is invasive before they decide to plant it. I also get requests from botanical gardens. The Honolulu Botanical Garden and NTBG often request assessments when they want to plant something new. CTahr contacts me occasionally and the ISCs use WRA information for early detection, target species prioritization, and outreach. The Office of Maunakea Management requested 31 assessments to aid in prioritization of weed control and management efforts. I have also processed requests from the federal government (NRCS) and from several international organizations. The Plant Pono website is a user friendly site geared toward the general public to promote the use of native plants and provide information on invasives.
- There will be a poster presentation at the upcoming EMAPi conference titled "Developing a List of Known Invasive Plants to be Restricted from Introduction, Propagation, Distribution, and Sale in Hawaii." The Hawaii Noxious Weed List hasn't been updated since 1992. The project and poster outline how plants may be added to a restricted list. The WRA is a part of this process, but there are other steps as well. We hope to have this become a framework for adding new plants to the restricted list. A list of 1,500 plants needs to be winnowed down to a couple hundred that will ultimately be proposed for addition. It remains to be seen whether the list will actually be updated. The offshore and incipient plant project focuses on plants that are not known to be here or are here in very low numbers and considered to be eradicable. What we are establishing is a black list of plants that can't be grown or brought in. The ideal would be a white list of

what you can grow and bring in. Everything else is prohibited until deemed to be low risk - guilty until proven innocent.

Naio thrips

- Teya passed around a handout. Forest: naio thrips are not known from Maui yet. We have visited naio locations and surveyed. There is treatment available for landscape plants, but it would be impractical in the wild. The thrips have been on the Big Island for six years now and have killed vast tracks. Cynthia King from DLNR has been the lead although there is technically no lead agency. Brooke was collecting points. How they got to Hawaii has not been confirmed. Teya: we started by identifying where naio is found on Maui based on what we know. The information is not comprehensive. The sites should be checked every quarter, but we haven't managed to do that. Kim: some areas get checked more often than others. Teya: we haven't been recording data. Is this something the committee thinks should be done? Lloyd: it seems like the most important thing is to keep naio from coming over from the Big Island through education and pressure on HDOA. It would probably only come over on naio plants. Forest: naio is a rare plant on Maui. It is not an ecotype here like it is on the Big Island. Teya: I would like to suggest that we commit to participating. We need to figure out a schedule for surveys of some selected areas and get in touch with partner agencies. The first step would be to email people who participated in the beginning. Forest will send out the email. We will shoot for surveys every six months.

Future Priorities

DOT-SNIPP grant

- Teya: there will be additional funding this year for work on invasives along state roads. There is a statewide plan being implemented by a consulting organization (SWCA). In year one of the funding we conducted roadside surveys over half of Maui for 100 different native and nonnative species. We need to complete the survey of Maui and survey Molokai and Lanai. The funding covers some control work and includes LFA. We want Forest and Kim to survey all the bridges from Keanae to Hana for LFA. The funding this year will most likely cover West Maui and Molokai.

CRB

- Teya: Forest and Kim are surveying for CRB as part of the roadside surveys.

GENERAL UPDATES

Statewide biosecurity initiatives

- Teya: HDOA is committed to doing a statewide biosecurity plan and is allocating funding so that it can be done outside of HDOA.