

MAUI INVASIVE SPECIES COMMITTEE

Thursday, April 1, 2021

9:00am – 12:00pm

MEETING AGENDA

ATTENDANCE: Randy Barlett, Brooke Mahnken, Monte Tudor-Long, Erin Johnson, Lissa Strohecker, Adam Radford, Kari Bogner, Elizabeth Anderson, Forest and Kim Starr, Adam Knox, Elizabeth Speith, Carl Schwarz, Mike Ade, Serena Fukushima, Teya Penniman, Susan Frett, Aut Fleming JA, Marshall Loope, Betsy Black, Woody Mallinson, Fern Duvall

- The meeting was called to order at 9:10 am by Adam Radford
- Introductions were made around the Zoom screen.
- Minutes from the January 28, 2021 meeting were approved. They will be posted on the MISC website.

Announcements

- Radford: Randy, do you have any announcements for how it's going with the state in terms of the legislature, funding, or any other updates?
- Randy: As far as the legislature is concerned with invasive species bills, Josh has been semi-tracking them, Chelsea as well. The legislature is pretty much focused on the budget and COVID response, I think. We'll see if we can continue HISC funding that we normally get from the legislature. Our HISC funding notice will come out as usual at the end of the month.
- Radford: Knox, do you want to give a quick update for HBT?
- Knox: After 2.5 years of seemingly endless effort, we found out that the herbicide ballistic technology label has been approved by the Department of Agriculture. It's a big step to be able to use that tool again and we're hoping to do so in time. Those who are interested in seeing that label, and all the accompanying documentation, reach out to me and I'll send that over to you.
- Radford: Thanks to Knox for his hard work. It doesn't just benefit MISC but it's obviously a benefit to projects statewide.
- Forest: When can you get started using them again?
- Knox: As far as I understand, we can start right away, and the limitations, at this point, are helicopter time and paintballs. We need to figure out how to get more paintballs from Nelson. For those who don't know, that label for is specifically for miconia and strawberry guava.

Outreach and Education

Program Overview and Future Direction

- Serena (Screen-share): It's a privilege to be able to share some of the work that we get to do. My name is Serena Fukushima, I am now the public relations and education specialist of Maui Invasive Species Committee. I began November 2020 in this position but have been partnering with MISC in my other positions with Haleakala National Park for almost a decade now. It's an honor to be a part of the MISC ohana. I'm originally from Oahu, but currently reside on Maui. I began my conservation career about 15 years ago, my why is because this island, this land has sustained and nourished me my whole life and I've always been passionate about being outside and wanting to give back and care for this place that raised me and has done so much for me

and my life. My focus has been education for the last decade or so, I'm excited to go forward in this new role. My presentation today is on the broader MISC PR program. I want to acknowledge the community coqui control program is also a key component in the MISC PR messaging and output. I look forward to working with Susan more as I complete my onboarding and training. Today's focus is my kuleana specifically. What does the public relations and education program do? 2020 was the beginning of a new world with a global pandemic, we all needed to learn how to navigate this new frontier and MISC was no exception. Here are some of the activities that were conducted as we navigated and regrew in this new incarnation of working life. When I say we, in this context it was Lissa, I wasn't quite here just yet, and she can chime in on things as well for this year. From my understanding, 2020 started off really well, there were five in-person classroom visits in February and March, going over ROD, biocontrol, and little fire ants. MISC reached about 272 students and then March 10 was the last in-person visit, and pretty much that was it for the year, as everybody adjusted to the new normal. Maui Mauka Conservation Awareness Training started just about one year ago and for the first time went virtual. They did the four regularly scheduled presentations last year, plus some extra ones for the conservation community and educators. In total, the MMCAT team reached 360 people, including one event where there were 130 people in attendance, which was far more than what MMCAT has ever had before. This was our first time streaming live on Facebook and reaching out to that platform. Maui Mauka Conservation Awareness Training consists of me with MISC, Laura Berthold from Maui Forest Bird Recovery Project, and Allison Borell from East Maui Watershed Partnership. Our PR work is all virtual at this point, there was a Virtual Earth Day presentation with about 75 people. Instead of having an in-person award ceremony for the Malama i ka Aina Award at Arbor Day, there was a short film shown on YouTube and social media. That definitely expanded the reach of people in the audience from the few that would come for the in-person event to now reaching hundreds through these different platforms. We'd like to continue to do this in order to expand this award ceremony and honor. We stay consistent with our news media releases at about 23 occurrences throughout the year. Highlights included additional coverage of the Nahiku aerial efforts, the Vice News piece, and community social media posts that led to the containment of a coqui frog at Home Depot. Our website and social media reach increased to a little over 97,000 pageviews clicks and viewers, in comparison to 83,000 in 2019. One of those big jumps was from increased engagement from the statewide stop the ant month, which was virtual as well. Our Kia'i Moku Column for the Maui News also continued, we had 12 articles last year. They were focused on backyard detection and community involvement since everybody was on lockdown at home and we wanted to try to engage people in still continuing to be the eyes and ears from their backyards. Also, for the news media and social media websites, we were able to track various platforms. MISC PR tracks and maintains seven different platforms and they all showed increased traffic throughout last year. As 2020 came to a close, we took those lessons that we learned from the previous year into the first quarter of 2021. We're still navigating a global health crisis. We took those adaptations and pushed forward to meet our deliverables and engage with the public and each other in this new way. We recently had Hawaii Invasive Species Awareness Month. MISC contributed 10 presentations, a virtual scavenger hunt with about 23 submissions, and a raffle where 3 participants and local students received ohia plants as prizes. Maui Nui also had three awardees: Maui Nui MVP was from Lahainaluna High School; our Business Leader was Maui Disposal; and our Community Hero was John Phelps with the community coqui control

program. This was the highest level of participation for MISC to date. We were able to reach a very broad audience across the state and beyond in these virtual platforms. We also had our first two Maui Mauka Conservation Awareness Trainings this February. Adam Wong from the Department of Natural Resources Division of Aquatic Resources presented his findings from a study on Molokini. They were looking at the ecosystem's health during the COVID lockdown and had some really interesting findings to share. We also had Teya Penniman with the American Bird Conservancy who presented on mosquito populations and saving our native birds. We had over 60 participants combined in both training sessions on that virtual level. Also, this year we've had three articles so far in the Kia'i Moku Column for the Maui News. The topics were spittlebugs, 643 pests, and skunks. Mahalo to Fern and Marshall for helping me research for this article. Our Hō'ike o Haleakalā curriculum went virtual as well. There was lots of interest and demand for teachers to bring in guest speakers in the virtual setting. We had an overwhelming response in our call for virtual presentations. So far, I've done 14 presentations to 266 students or five different schools throughout Maui County, and we have more scheduled going into next quarter. Our social media continues to grow. Just this quarter - 176 new followers on Instagram, alone, and 36 original posts in this quarter as well. We are continuing to grow and trying to keep our output consistent, and we'll talk a little more about ads for social media growth going forward. We also had our community coqui control program featured on Akaku's daily news program, and then also the PSA spot on Mana'o Radio for this program. Both of these opportunities were initiated by community members that were involved in the community coqui program. I think that's one of the examples and testaments to Susan's hard work in enacting the community social marketing into her program. Our community is feeling empowered and they want to share and to spread the word about invasive species. All of this is in addition to weekly communication with the coordinators on species specific projects as well as communication with the public on general invasive species increase. Like everyone else, MISC had to quickly adapt and pivot in this pandemic to continue our work. Here's some examples of these pivots that we've made, our pandemic connection strategies in navigating this new time for the world. 1) Maui Mauka Conservation Awareness Trainings went virtual, and we've seen more conservation professionals and the general public in attendance than in past training sessions. Before there were ~10-15 people at a training, sometimes more if the tour buses drivers came. Now we average ~20-40 participants per training. Going forward, we have a unique opportunity to re-engage our target audience, tour guides. Tourism is back and growing, we want to make sure to recalibrate, re-engage with this audience. A type of hybrid in person and virtual setting might be a really great way to go forward. 2) There were overwhelming requests for our original classroom visits. We've made some modifications to our four year curriculum for certain presentations so that we can accommodate virtual learning, but also supplement these presentations with hands-on activities that students could do either in the classroom or at home. This takes a little more coordination and logistics, like getting supplies to the teachers and mailing things out. It takes a little more time and coordination, but it's extremely worthwhile going forward, especially if we want to reach our Maui Nui neighbors where maybe we aren't able to go in person to Lanai or Molokai, or expand into our neighbor islands, and beyond. 3) Stop the Ant Month went virtual this year, and there was more collaboration statewide. We sent out mailers, and the mailers resulted in a record number return of Little Fire Ant testing kits, which then led to the discovery of a new LFA population. It got people engaged, people were really responsive to those mailers. We're incorporating many diverse ways of reaching out to people and connecting, and then just from

the pandemic our social media presence has become a lot stronger. We're getting greater reach and we have potential to grow in that area as well. Now, my vision for the MISC PR program and how I see this program going forward. I ka wa ma mua, i ka wa hope - In looking to the past, we can inform our present and our future. I want to start looking forward by following and continuing to learn with the existing PR programs. This is a foundation, as this PR program was laid over 20 years ago. Those that came before me in this position, I believe, starting with Chrisy Martin and Lissa Strohecker. I'm honored to be a part of this legacy to take the time to learn about what already exists, get into the flow of these interesting processes, existing stakeholders, partners, teachers, community members and PR specifically. I've learned from reaching out for classroom presentations, for example, there's teachers who are already kind of in the flow and rhythm and know what they want and had a lot of interaction with MISC before, and I want to continue carrying on that legacy building those relationships and beyond. I look forward to collaborating with our staff and our committee, our partners and community to maintain and refine these current program activities. As we all know, relationships are crucial to conservation and interacting with our public and our community and I want to continue building the trust and relationships within. I'll work to continue keeping MISC a household name and a trusted source, that the community can come to with any kind of invasive species questions even if they're not our target species. I want to help maintain that reputation that people know they can reach out to us, we welcome these inquiries. We'll continue to maintain and develop that positive perception of MISC, and the trust of our public, our partners and our funders. That's my foundational vision going forward as MISC. Momoe aku i mua - To push ahead with determination. We'll continue to reach out beyond the conservation bubble. MISC has a great history of doing this, and a reputation in reaching out into other sectors. I want to keep up this existing work and move forward into those other sectors, such as having more collaboration and outreach with landscape professionals, the floral industry, construction industry, veterinarians, etc, continuing to move into networking and distributing people who are ears for invasive species. And in that vein, we have an endorsement program on the horizon. So helping in that initiative to improve existing relationships with our landscape industry developing the best practices and building relationships as a part of that program. Another new project, in the works, is quite a collaboration. I've been inspired by social media campaigns and use of tech from our partners, particularly, all of our MISC artists statewide. I've been developing a relationship with all the people behind the platforms and put out an invitation for us to meet and share techniques to promote conservation messaging on these types of platforms. Beyond networking and building relationships, a way to go forward is maybe to do something like HISC brown bag or offering trainings to our larger networks on how to navigate social media, what are some different techniques or tips that we could do, or have joint social media campaigns. I know social media isn't the only way to get out to people but it is a really powerful tool. There's so much technology and so many things changing and being updated all the time on these platforms. I think it's a great way to reach out to people, especially the younger generation to get them excited and engaged about invasive species. So that's one project in the works. Looking into the future, we'd like to have an opportunity to do biannual conservation training for MISC staff. This would be an opportunity to orient, develop and build relationships in MISC internally. All employees have a huge part to play in community outreach and spreading MISC messages, and a training like this can help lay their foundation as a part of our team. I see investing in our staff for MISC as an investment as well as in the broader conservation

community. We're all connected, we have a small community, we have a small network and somebody coming in fresh out of high school, or in an internship program, or as temporary workers, could be the next, you know, Uncle Darrell and be a lifelong MISCer or a crucial future partner if they do move into other places. My background is leadership development education, so, this is a passion project and something that I've been talking to Adam about implementing. It is something that has to be in person and so that would depend on where we're at with COVID-19. I see this as a long term vision for our staff. We also want to look into other trainings, collaborative and partner led trainings, like what Fern was talking about with doing the vertebrate training. Looking forward to the PR program, we hope to fill our Ho'ike o Haleakala/MMCAT position that was advertised last year, that would be helpful or extremely helpful in expanding on the whole Ho'ike o Haleakala curriculum and contributing to the MMCAT. There's also a position looking primarily at website and social media and graphic design development and management, this would be someone with these skills and devoted solely to this type of task within PR. That would help to open up more time and ability for me to go forward and expand the things that I talked about in the previous slides. Alright, so with that I just want to say mahalo, we're all working together, I really appreciate, and I'm honored to be a part of this hui and this ohana, and just want to aloha all of the people here and many beyond. I also want to take a moment to mahalo Lissa. I've known Lissa for about 10 years now, and have been spending pretty much every day with her since I started in this position. I feel really grateful to have that opportunity to learn from her and to have that overlap and time to really understand the PR program from her perspective. I just want to thank her for all of the many years, I think it's over 20 years, that she's invested in MISC and conservation and outreach in the islands. I think a lot of the initiatives and reasons of why MISC is a household name is in part due to her efforts in really getting out there in the community and just want to thank her again for a lot of really hard work. Thank you so much Lissa, we really appreciate you and look forward to hearing about what you do next. Florida is really lucky to have you.

- Radford: Mahalo, Lissa, for all of your contributions over the years, it's very much appreciated. It's been a pleasure working with you. You really led the charge in terms of building the brand recognition for MISC and networking and all those things are just invaluable. And so thank you very much for your contributions.

Advocacy

- Brooke: BBC has been wanting to come out and film HBT for a while, or Green Planet. Which by the way most of us are familiar with David Attenborough, and it would just be a segment within the episode. They're focusing on what people are doing to protect, restore and save the environment. In typical BBC style, they would be cutting from one part of the world to Maui, where we're going to step beyond and shoot miconia with paintballs to protect the watershed and endangered plants. It would just be a short little segment within a longer episode, it wouldn't be like the focus of the episode, but they are hoping to come out and do that very soon. The first half of May, I believe May 12, I think is what they're looking at for a couple of days of filming. They're also going to work with Hank and Keahi and show how to hand pollinate some Cyanea. They're going to juxtapose that against the things that we're saving by miconia control. They've been trying to cancel because our HBT permit hasn't gone through, but I've been stringing them along and I finally set the hook again so they are going to come out and do this soon so I've got to catch up with Serena and get her up to speed on where that

is. It's in process.

General MISC Updates

Plants

- Mike Ade: We're getting a call from Oahu from a person trying to get Verbascum, like a source on Maui to ship to her. You know the first time I thought it was actually kind of funny, but it's just getting a little bit scary because she said she located the source, and someone gave her permission or access to it, you know, we're like oh okay. I was wondering if Marshall and Aut, if you guys could contact Oahu and this lady. It can't happen and we would like to know her source on Maui where she was going to procure it. Another thing that came up which I neglected to put on the quarterly, was for Randy. In McKenna, one of the hotels in their main lobby had two floral arrangements containing pampas. HDOA responded right away and destroyed the Pampas and educated the florist that wasn't possible to do. That was a rapid response, because I don't know where this person had such fresh looking pampas. So, it's kind of weird to say, this time of year. Aside from that, miconia crew is continuing working on miconia control along Hana highway. Right now, they're in high steep terrain areas and the helicopter HBT approval from HDOA will come in handy. That area is hilly, use of spray ball or HBT, due to terrain and there's a lot of targets. So that was good news to hear. We have a very small crew on the Old Maui High side of the island, they continue to do Pampas grass survey and control. Our other species, for fountain grass we're still at one location, that still has potential to have plants. The last visit, less than a month ago, had one immature plant discovered. That's a good sign to see that the seed bank is quite depleted. If that's what's happening because as you know we've had quite a bit of rain on the south side. That's where the grass is, in a remote area south of Kula and above Kihei. So, that's looking good. We have a serious infestation of Ivy guard on residential areas in Waiehu that we continue to work on. It's horrible, it's such a great location for it. Generally, the Ivy gourd populations we were containing on Maui were in irrigated areas, hotels, in Kihei, in Lahaina, but they were always being watered. This Waiehu area is naturally watered, so we have Ivy gourd coming out of ponds, and our herbicide controls are quite difficult in areas with running water. So it's like, oh my goodness, what are we going to do, but it's been a battle. And unfortunately, both sexes are there so we have quite a bit of fruiting. They're great pictures of Ivy gourd fruit there because they're at a good size, up to over two inches and fat, and plenty of birds down there moving it around, so it's a challenge. We've reduced the infestation, but it's still gonna take quite a bit of time.
- Forest: There's a massive seedbank. We first found that population in the mid 1990s and at that point it was covering many acres. You guys did an amazing job of suppressing it. But it's not getting out of there.
- Mike Ade: Yeah, it's really one property, but there's a stream and a pond. It's been a challenge. All the other areas, we're at normal control, you know, you go back in six weeks and you do a little bit of control work, but we just can't seem to get a licking on that particular area.
- Forest: One last thing is, we did a survey for that a couple weeks ago since we've seen it. And they're going to get an NRCS grant to clear that whole thing. In our report we identified Ivy gourd as a priority target for control, so hopefully you'll be getting some serious help soon. This is on the county of Maui parcel, the 64 acre parcel.
- Mike Ade: Okay, well that's good news. Our other species, they're pretty much contained, we're not finding or have reports of any other regrowth of any of our other species. We still

have a couple of recalcitrances where we have one plant left in our targeted list. When we have another meeting about maybe dropping a species we might want to go towards *Pittosporum undulatum*, because it's just a difficult plant to get permission to kill. *Pittosporum viridiflorum*, we actually just got permission to control at our Kula site, the one that's been seeding all around the Walker estate. There's quite a bit of control work to do there. I just contacted and have the okay from MECO. They're going to come in and take it out of the power lines, one plant that I tried to get permission to kill for *viridiflorum* control back in 2003. So that's how big it is now, this one, they would not let me kill it, we killed every other one in that whole area, but that was our seed producer. That's a difficult one. But everything else we're going okay with. That's all I have, unless there's other questions.

- Forest: Thanks, Mike. You have actually eradicated quite a few things. Maybe there's something that Serena and I could highlight, all of the eradications that have occurred.
- Radford: Actually, that's funny you bring that up, Forest, because Springer just sent out a request to update the eradications lists for the different ISCs. Mike weighed in on that and I need to go back and kind of wrap that up, and I'll run it by you guys also. She was a really valuable resource for everybody, statewide.
- Forest: It helps to celebrate our wins.

Little Fire Ants

- Brooke: Things mostly remain the same, with several sites that are in the monitoring phase. New Lahainaluna site is now in a monitoring phase. Waihee Valley is in a spot treatments plan. I haven't looked at the most recent survey yet, but last time they were along the stream and in a banyan tree. The Kaupakalua site just recently shifted over to toxic treatments, and it's a little complex because there's different land types. We are now using granular based pesticides that use spinosad as the active ingredient and it is a naturally occurring insect toxin produced by bacteria, and it actually can be used on organic crops, and it's a little bit more expensive than the probate and siesta that we have been using. We feel that the public's viewpoint on pesticides being as it is, that it would be best to use spinosad, in lieu of the other granule baits. We use the insect growth regulator which is non toxic, and then we switch to a chemical treatment that you can use on your crops. The only thing that is left is the provant that we use in our gel bait. It would be great if we could get some sort of spinosad ingredient for the gel bait. Then, all the things that we use would be more appealing to the general public. So anyways, we switched recently to the toxic treatment at Kaupakalua. We did a full site survey, it appears that the ants are further out than we had detected before in low numbers, so we're gonna have to make some adjustments going forward. But things are on track at that site. Recently, just this week, I had help from Darrell, Shane and Carl, the new Carl not old Carl, and the plant crew guys, and my LFA crew, and we went down to the Huelo site, and the resident in Huelo has moved back to that site, the Loomis property you're familiar with it, and is revamping and living there now, and they dropped a whole bunch of trees because the canopy there is very large and dense, and they're opening up like, and we went down with chipper and chipped up a whole bunch of this material. So, at that site, Huelo has been around since 2014 and we've continued to do spot treatments there as the fire ants kind of shifted around. Just on that one property. It's probably because of the habitat, there's so much habitat and food in that area. So this effort of three days of chipping really made a huge difference in the amount of vegetation and habitat, and I'm hoping that this is going to move the ball forward with getting their site onto a monitoring phase. In Kaeleku, we have gone through an entire

year of treatments there. We've been doing spot treatments and on a recent survey, Joe detected ants in a little runoff area that goes through that site, down lower than we'd had before. Further surveys revealed that there's been a breach in that site where ants have moved a little ways down that stream. He's done some extensive surveying further down and not found any LFA, but just below that site, there's this new breach. We're working on getting that cleaned up and back up to speed, so that site is going to be around for a bit longer. As far as Nahiku goes, we have another helicopter operation scheduled in two weeks. That may or may not have to be moved, depending on whether or not we receive our bait in time for that. That will be the 12th or 13th treatment of the Nahiku infestation. As a reminder to everybody, we're planning in June the Nahiku blitz, which will be the biggest most comprehensive survey of the Nahiku site to date with an all hands on deck effort from MISC to do that survey, the logistics are still being worked out. If anybody has any questions about other sites, go ahead and ask but otherwise, that is an update of what is new with LFA.

- Forest: Monte has stepped up to do ant identifications and we have stepped away from that. We've actually gone from 80% down to 60% FTE. Good job, Monte.
- Mike Ade: Were you aware that the Sabbath property was sold to a new owners?
- Brooke: Yes. This new owner has been extremely supportive. As we did our last heli ops out of, he said to think of his property as the new MISC eastside baseyard and we're going to do all of our LFA heli ops out of there. I've talked to him about doing some miconia BBC filming, and we will probably camp there for the Nahiku Blitz.
- Mike Ade: We can use that for miconia ops also.
- Brooke: Quite possibly, yeah.
- Raford: Thanks, Brooke.

Coqui

- Susan: We have continued a little bit of an expansion with our micro neighborhood program, we added in the cul de sacs of Haiku Nani and Laupapa in Haiku. We also just connected with a lady on the Koi Koi cul de sac a few days ago. We're going to work with her on getting her neighbors organized as well as to do the spraying. It's awesome finding people that are super interested in helping however they can and they're willing to do the work themselves. They can also opt in with just some individual property owners that are totally on board to do the spraying if we're able to bring the equipment out to them and that's Carl helping out doing those as well. Taking the sprayer out and running through a little bit of training and safety stuff with the sprayer, going over things like plants that are sensitive to citric acid and other risks that folks need to be aware of. It had been maybe a little bit quieter for the community folks. We haven't been getting quite as many reports, but it has ticked up in the last week or two. The weather is getting a little warmer and with all the moisture that we've had, we're starting to get more coqui reports in. Carl has gone out on some outlier spots as well. I've been trying to get one here in Wailuku, but it's been kind of stubborn. We're trying to step in and get those outliers as much as we can, help the community as much as we can and make sure these coqui frogs aren't spreading to new areas. We also have all of the sound meter minis for the Acoustic Monitoring Project. They're all deployed and have been checked, some of them have been checked twice. The data is off to Conservation Metrics and being analyzed. We'll probably check those again within the next couple of weeks. But so far it's gone well and we're getting some cool recordings and kind of working through the process to get them out, and of getting those set up and fully operational. I think that's all for my update, but happy to answer any

questions.

- Radford: Okay. Thanks, Susan.

Funding

- Radford: In terms of funding and advocacy, which was the next thing on the agenda, but just to run through what we're looking at for this year and what we know so far. The county budget process has only really just begun. The mayor's proposed budget was released on March 25. What you see in the FYI 22 county funding column is all proposed, so that's still open for debate. The county council will deliberate on that budget, their proposed budget year, over the next month or so. That's why I put advocacy on the agenda. As you can see coqui would be the same as last year as proposed. Fire Ant is looking at a \$200,000 cut, miconia and other invasive species are looking at a \$100,000 cut, and then, Department of Water Supply funding would remain the same. The table below is other, more or less random sources of funding that are coming in at certain times and/or currently in, but being spent. We're looking at a pretty significant reduction and I don't think Randy's on the call anymore, but we don't know what the state side of things is going to look like, but we are also anticipating a cut there. I will say though, that on the county side of things, the council, there's been a lot of communication and activity around MISC funding. And I think the general feeling of support for at least having what we had last year, if not more. We had a good meeting with council members this week, and the council members get to actually pick five of their top priorities to advocate for and present those to the full council of members. MISC may be one of the top five with an additional \$200,000 into the budget for miconia and other invasive species. That would get us closer to flat from last year. As you can see what we're looking at currently is a \$300,000 cut. But it's not over yet. And so that's where advocacy ties in and I did want to recognize Teya's efforts for the \$25,000 from the Dorsey Foundation that's for a Little Fire Ant Dog Detector Program it's still alive. That's what that funding is for, but we'll have to match that funding from elsewhere, because the original proposal was about three times as much as what we received. So exciting nonetheless. Well, we'll have to figure out how to cover the costs of the rest of that program. And then the Pono endorsement program, I think Lissa's off now, but we were looking at Lissa helping us get this off the ground. This is an iteration of the plant pono program. Christy Martin was leading the charge on this and it's USDA funding. Basically, it's to expand the program throughout the state. This is, if you're not familiar with the program, it's essentially like a best management practices approach for nurseries and plant providers. We were asked to help lead this initiative with the development of questionnaires, administering those, and summarizing results and then developing products that would go towards the program statewide. That's one of the main things that we've been talking with Lissa about, helping to do is work with Christy to get the program going for all the islands. Mainly Big Island, Maui, Molokai, Oahu and Kauai. In terms of advocacy, now is the time where we want people to come out and speak to the budget, and where they want their taxpayer dollars to go. We've already been doing that by trying to connect with a lot of people we've worked with in the past and or on the coqui frog front, for example, following up with all the people that have submitted reports in recent history. Just checking in with them, but also saying this is also going on. If you want to weigh in, here's how you can do so and we can help provide direction for that. We can't provide testimony people or things like that, but we can encourage others to advocate on our behalf and it's already gone a long way. We've been in several meetings, even just this week, with council members where others from the community speak on our behalf. If

we were even with last year, that would be a huge success. So, now is the time in terms of advocacy and so we're trying to implement more of a structure around supporting people that want to speak up. Honestly, before I was more involved with this side of MISC, I didn't really know that it made that big of a difference to talk to council members or talk to state reps or those that make those decisions, but it does, it goes really a long way. When it's the community saying this is important to me, it resonates. I don't want to go too much further down the rabbit hole than that but just wanted to give you an overview of where we stand right now and what may be coming. Hopefully by the next meeting we would be able to say what we're looking at for this coming year. We continue to play catch up in terms of timing of when grants come online and then timing of spending down those grants. Hopefully this year we can accomplish that, but often some of those things are out of MISC's control. It goes through several different layers before a contract is fully executed. For example, the FY 21 county funds from OED, we still don't have those contracts. We submitted those proposals in July, July 1st of last year. So, that's a wrap. I'm happy to take questions about that or suggestions.

- Teya: I just want to clarify, and I know this is your intent. But just to clarify that we don't and we can't advocate for our funding, and we can't ask other people to do that. It's just a little tricky in terms of like, we can't say hey, council hearings are coming up, please go testify on MISC's behalf. We can inform people that the budget process is happening right now and this is the status for MISC, but we have to be really careful because we get government funding, we can do what's called lobby. We can provide information to our funders and we can provide information to the public. I would hesitate to use the word advocacy, even though that may be what we're doing. We can't really call it that. We need to be careful how that gets phrased. And that's why that kind of stuff is important to have Adam go through and ok. Just to be sure that messaging is on target. Our community is super supportive and that is really awesome that we've outlined it, this is just for a slight clarification.
- Radford: Thank you for clarifying that, it makes it much more clear. The way I see it working or how it has worked in the past from my perspective, is people come to me and say how can I help, and I say oh well, you know, this is going on if you want to weigh in. I don't suggest what they say or do, but just inform them of the process as you said. Thanks for clarifying that Teya, it is a fine line. Any other comments or questions on this? So I guess one real logical question would be, if MISC is cut again this year, what do we do? I don't actually have the answer to that question today because I don't know what the cut would be, if any. We of course are going to have to make hard decisions in terms of helicopter work, staffing, and then of course one of my goals remains to have people paid appropriately. Which we have not done pay raises in years, and that's really unfortunate. It would be great to be in a place where we were able to do that, to pay people a wage that's appropriate for a career path, not just to get my day to day.
- Forest: We've lost about \$5,000 in purchasing power, given the lack of raises over the past. We're still all in, but you're right we need to be getting back on track to keep pace with inflation that's happening all around us.
- Radford: I will just make one last point on that front, I have been talking with other MISC managers about at least increasing the base pay rates. It's really not where I want to be, and it has not kept pace with just inflation in general.
- Forest: We really appreciate you, Teya, and everyone else that's in this part of the process. We participated in that HISC meeting where they went through all the budgets statewide for all the programs and it's a tough process. We appreciate all of your efforts.
- Radford: I agree, it is a tough process and it takes a lot of people to participate, to get through

it. In total, yeah we'll see what this year looks like, I guess I think by the next meeting, I'll have a better sense of what we're really looking at, but we'll see. Thank you, Forest.

Staffing

- Radford: So moving on, I already think we covered funding and staffing. The main one was Lissa, which we already covered.

Facilities / Moving

- Knox: Hopefully we'll have electricity very soon. We still do not have electricity in our ops area, we do in the office. We're working with an electrical vendor, and we've got all the applications together and everything and so now it's basically with the electrical vendor and the MECO engineer working on a tower pole for us. It's been a pretty complicated process due to the fact that MISC isn't an actual entity, and we need RCUH tax ID clearance. Now that we got all that, we're just waiting on the engineer and the electrician to meet, sign off and put up the pole. Hopefully that'll happen soon. Wi Fi for the site is imminent. We just found out this morning, right before the meeting, that we have the Wi Fi bridge equipment, it finally came here via FedEx, since the original equipment was lost in the mail, maybe it was in the Suez Canal, who knows. Anyway, we should hopefully have it up and running by next Wednesday. We've got the equipment, we've scheduled the work with Harmer Communications on this, and this is the same technology that used to get WiFi onto Kaho'olawe instead of Hawaiian Telecom or Spectrum plumbing a fiber optic or line, you know, a faster connection basically to Old Maui High. We're going to do this WiFi bridge which is going to be beamed down from Pu'u Nianiau by the park entrance. What else is going on here at the facility. The grass is seeded, Mike put it down, it started growing and we're realizing that that's going to be a pretty big project to maintain that property because it's huge. We've got some really nice auxiliary fields that do have grass in them now but we're continuing to figure out how to keep that stuff mowed, keep it down and functional. Other than that, there's been a lot of dusting off of equipment lately, HBT equipment in general. In particular, I'm happy to report that most of it seems to work just fine. We're hoping to get that going as soon as possible once we get the thumbs up to fly. We have been assisting the Mauna Kahālāwai Watershed Partnership and getting their spray rig and aerial operations, online spray operations, up and running. The first Australian tree fern, and mulesfoot ferns were controlled this week with our plant team. Indirect assistance, lots of learning experiences and small kinks to work out. It was good for those guys to see the realities of doing that work. We've got our staff helping them to build and test the rigs, and everything went smoothly. We've got some pretty cool projects still, Susan mentioned the Conservation Metrics, working with Jeff Schlueter, formerly of KISC, to try to train their artificial intelligence algorithms to detect and quantify coqui frogs. Susan and Carl have been spearheading that whole thing. It's been awesome. Our next big project in case those who are not aware, it's a big one, is coqui barrier installation in Haiku and select strategic locations in partnership with DOFAW on TIP funds. Our current action item is to try to finish the scoping of the work for potential bidders on that. Any fencing contracts that are going to come out of that. I know we had discussed last time about trying to do a comprehensive or some sort of vertebrate training. We need to rekindle that conversation, but where I left off with it was just suggesting various presenters based on expertise in appropriate areas, then also suggesting some different format options, for format with appropriate group sizes and activities. So we need a time and place to start that. Miconia control is still going on. Next

week will be the first week in 2021, where we actually have permission to access the site. Unfortunately the site is for sale now and so the future access there's kind of unknown but we'll take what we can get for now. And TNC and DOFAW have both been helping us with that, since we still don't have firearms use permission. I think that's about it on my end that I can think of, there's a lot going on. We're just trying to keep everything moving on.

- Radford: We continue to move forward with trying to procure a long term lease agreement. Teya has been working on the application for that, we had a good meeting with the Parks Department, Friends of Old Maui High and others. They all seem to remain quite supportive of our presence there. The next step is to get the application in and moving and feedback from individuals, like parks and others. Then we can start on the community engagement process, which we knew we would need to do, but we were encouraged to do soon because, as I mentioned, the County Council's in budget deliberations now. And ultimately, they would need to sign off on a long term lease when it comes before them, and they're going to want to know what the public input process looked like and what concerns people may have had and how those concerns were addressed. We were told that they would probably not look at our application until like June, but we would want to be ready to go, have everything already done by June. So please weigh in, if you have other comments on that.
- Teya: I think, also because of it in the long term with the public, the governor would need to sign off as well. So we've got a couple hoops to go through and Old Maui High was looking at having the site designated more protection, more officially in the Federal Register of Historic Places, but they said that we're gonna hold off on that until you get your lease. They didn't want to do anything that might get in the way of that process. They seem very happy about the relationship.
- Radford: Definitely. Thanks, Teya.

Response to COVID-19

- Radford: Not much has actually changed yet. We all know now we have the vaccine available. It's everyone's choice whether they choose to become vaccinated or not. But what we do anticipate is our protocols for field work and other work in general changing soon. It's not just the fieldwork, when the infrastructure at Old Maui High is in place, being able to actually go back to the office and so we're working on what that looks like and still being safe and everything. That's on the horizon, I don't have anything definitive, as of today, in terms of changes in protocol but I think it's very soon to come. And we've been having that conversation with the university as well because at the end of the day, they're the ones that recommend and or approve any protocol we put in place. So that's where it's at. But yeah, we're moving along and we knock on wood, remain healthy.

General Partner Updates

- Marshall: Thank you guys for the citric acid, Darrell and Shane dropped off 20 bags for us. We're going to use that with Aut's surveys and target certain areas for him. For us, we've been busy with passengers, we have 45 direct flights a day. With that comes all the cargo so we're back to pre COVID levels. We've been busy trying to adjust back to some normalcy with all the people. So the guys are working all day pretty much. I know Aut's been working on a few things, if you want to chime in.
- Aut: Thanks Mike for reporting the Pampas grass in the hotel. That's a good one to get rid of. Some news from the Big island, the devil weed (*Chromolaena odorata*). Which is previously

only known on Oahu, and they found it out at a motocross park on Hilo side. He says it hitchhiked over on bikes. So there is a HDOA camera over there, and BISC are doing the control project, as we started surveying known places that people take their motorbikes. So that's one to look out for if you guys are out in the field. I don't know if you're familiar with it. I could send you some pictures of what they found on Big Island, kind of the habitat they have. Anywhere where people ride motorbikes would be a good place to look.

- Forest: Aut, are they going to try to eradicate that or is it too late spread? I know on Oahu they tried really hard but it's a tough one.
- Aut: They did an initial treatment, and they're going around to surrounding properties. There's a farm on one side and like bush/forest on the other side. I think they're still finding it. They haven't completely surveyed the area, they're going to try to eradicate it. That call hasn't been made yet, if it's control or eradication. We got to survey more.
- Mike Ade: What was the area that it was found, how big of an area was it spread?
- Aut: I'll have to get back to you on that, it's still changing.
- Mike Ade: There's other asteraceae in that area?
- Aut: I don't believe so.
- Mike Ade: That's what I would look for, other asters, where family members are growing.
- Aut: There's some really tall grass, and it's loaded with LFA. So it's taking them a while to survey all the areas.
- Forest: Do you have equivalent control specialists on the BISC side of doing the work?
- Aut: That's Cameron, so Cameron and BISC are working on the control and survey project together. So we think if we did find it on Maui, it would be a good opportunity to join forces and if we do find it, try to stomp it out as quickly as we can.
- Forest: On Oahu, I believe it's lowland mesic. Here's another for Serena, maybe. Get some eyes out there looking for this thing and highlight the Big Island find and the vectors and ask for help and new locations.
- Aut: We started driving the old cane roads, Mahi Pono, because people like to ride their motorbikes back there. There's also the motocross track right in that vicinity, the Maui raceway track. Yeah, I don't know, Mike, if you want to get together on some surveys or think of some ideas on where to survey.
- Mike Ade: Yeah, we can. I will look for it where Ivy gourd is at the moment in that area, out by the old maui central fence lines.
- Radford: Thanks for the update, Kari, any updates?
- Kari: Not too much, we just continue to battle the same target species for eradication. We just have five right now that I can handle to some degree. That's the fountain grass, ivy gourd, and parthenium. It's down to a lot of monitoring these days. We are working on updating our biosecurity protocol. Hopefully I can roll out a new version this month. It hasn't been updated for a few years and we've changed some protocols for checking shipments, and things like that. I know the last MISC meeting, actually, we did have one kind of exciting day. We had LFA come in on a plant shipment. It's the first time that LFA have been detected in a plant shipment since I started working at Pulama, so it was really good to go through the protocols that we have, and how to deal with that shipment. So that was definitely an exciting day. We looked at the ants under the scope. We took care of the problem without having to send the shipment back.
- Forest: Where was it from?
- Kari: It was from Big Island. We had some palms that came in and it was just on one palm.

Our biosecurity technician caught it. He treated the crap out of those palms and extended the quarantine time before we released them, so we could continue to monitor. He did a really good job, he definitely caught it, it was really small infestation and just a few ants. We've been working with the vendor to make sure that their protocols are in line with what we expect as far as future shipments and we haven't had any issues since. It involved multiple departments coordinating as far as treatment and making sure we're on the same page and then getting in touch with the vendor. I feel more confident going forward, if we have other shipments that we find LFA in. Other than that, I'm just continuing to take care of the weeds as best as possible.

- Monte: Kari, may ask what you treated the LFA with?
- Kari: We did talstar. It was outside of the nursery, it was at our quarantine site. We did multiple treatments at the highest dose possible. There's one round of treatments at a lower concentration and then we ended up increasing to the maximum amount allowed by the label.
- Radford: While we're talking about ants, I think Monte had a fun ant story he wanted to share.
- Monte: Yeah. We got a stinging ant report earlier this week that was a little alarming. Most of the stinging ant reports we get sound a lot like tropical fire ants, but this one sounded just like little fire ants. So much so that I dropped everything and drove to Lahaina immediately to check it out. It was somebody who lives near the Lahainaluna sites in a new housing development, and she was getting stung inside her house. I talked to her on the phone, it sounded exactly like little fire ants, so I went out there and put some vials in her house and around her house, and not a single ant came to my vials. She had reported that she was getting stung while sitting on a couch. She showed me the welts, she was covered with welts all over her torso, and her boyfriend had seen the ants and described them. It sounded just like LFA to me. I used an aspirator along the ends of the couch just hoping to randomly find something. I did and it took a few days to figure it out, and I'm going to try to share a picture. What I found was this guy, which I hope you can see, it turns out, it's sometimes referred to as an ant-mimic. I thought it was an ant and it turns out it's actually a parasitic wasp called *Cephalonomia gallicola*. Forest and Kim helped identify it for me. It parasitizes beetle larvae. They had just purchased a secondhand couch that came from a resort and the couch I believe is infested with furniture beetles. This wasp is parasitizing the beetles. Forest and Kim pointed out some papers that come from Korea, where they have examples of this wasp coming out of couches and stinging people. Anyway, it was something I found super interesting. What if it's not LFA, how can I reassure them that it's not an LFA. In this case, since nothing came to my vials, I was kind of stumped, especially with their description. Anyhow, it was a very good learning experience for me. Thought I'd share in case other people encounter mysterious reports that sound just like LFA. But, which clearly are not LFA.
- Susan: Thanks for that update, Monte. I was alarmed when I heard that voicemail too.
- Teya: So these critters are widely established in the islands already?
- Monte: That, I don't have a lot of information for and it turns out we had found them once before, and I didn't realize what we had found. This was, I think, about a year ago, Forest pointed that out to me, but I actually don't know much about this critter at all. I'm hoping to do some more research on it and see if it's just all over the place. I don't know.
- Elizabeth Speith: It'd be interesting too, Monte, if you have good specimens that could be submitted to local HDOA or Bishop so that there is a formal record of it.
- Monte: I have exactly one specimen. I'm happy to share it with anyone who wants it.
- Forest: Yes, so this wasp, I'm not sure how widespread it is here. But it's global and it gets spread all around the world in stored dried products. In this particular instance, it's in a couch

but many times it comes out of drying products in your counters or cupboards. People will see them and it gets dispersed. It's a trend of pests found all over the world. I'll look in the official list here from 2002 to see how widespread it is and why. Ok, it's in the arthropod checklist and it's only known from Oahu and Maui, but I'm sure it's more widespread than that.

- Radford: Any other partner updates?
- Forest: Naio thrips. Oahu, OISC, is no longer going to be involved with this species, like they couldn't get it, it's in the wild. The suggestion is if you come across the plant infested in landscape areas, send it in to be incinerated. In wildland areas there's no toxicants that are labeled. I'm not sure what people are going to do, they're figuring that out now. On Big Island, they didn't do anything and they just went crazy. Here, on Maui, it is not known yet. We did surveys this last quarter and didn't see any. That's the update, the biothreat, and OISC is pau. We've got thoughts on what to do when it gets here but yeah that's just on naio thrips.
- Elizabeth Speith: Just a point of clarification, while OISC stopped doing active control like a year or so ago, there is some control still occurring and at state-owned areas with naio. There's not a straightforward method besides removal and burning, but they are actively, as of like a month ago, still controlling in some of these areas, just no OISC.
- Forest: That's correct, if it's found on someone's land, they will have to deal with it. OISC will no longer be assisting with that, other than just providing some of the information they've gathered.
- Kari: Thanks, Forest. We've been keeping an eye out on Lanai for naio thrips. We haven't seen anything suspect yet. But I'm just curious, is anybody, or the USDA, working on a bio control, potentially for the thrip or is that on the table? Just curious.
- Forest: I haven't heard anything. The problem, especially with bio controls of insects in Hawaii, is that we do not have the bio control space at the moment to add any more projects. We need new facilities in order to increase capacity.
- Radford: We actually did submit a letter of support for that. Christy and others were looking for federal funding potentially for that, so all the ISC managers signed on a letter of support for that funding. So we'll see.
- Forest: I got contacted by Rob Hoff because they're going to pick up the ball, now that OISC is no longer involved with this, and they wanted to do a statewide reassessment of where things are. So, Serena, here's another PR scenario - maybe when the time is right, we could do another kind of PR Blitz to get naio locations and have people looking for naio that's damaged in their yards.
- Radford: Or even, knowing what naio is.
- Forest: Right, it's pretty rare.
- Serena: Okay, my question for you, Forest. Is there any updates on the mamaki borers?
- Forest: These little beetles are hard to work with. There are borers on mamaki plants at our place and they're dying, but it's very challenging to capture these little beetles. We've made some attempts but have been unsuccessful. It's on the Big Island too, it's probably much more widespread than we realize already. We have not definitively caught it and got it confirmed by someone else.
- Serena: Ok, I'll be in touch with you. I know there is a big push, again, for the remy moth outreach. I was thinking about a potential Maui News article, but wasn't sure. I don't want to jump the gun on the borers before it's confirmed, but I have that on my radar too as a potential article. Or maybe a social media piece for people to just keep an eye on their mamaki and record it.

- Forest: Yeah, it's not confirmed yet. The moth is for sure, and I think I saw it in a rare plant group that it's on the Big Island as well. The listings are changing dynamically and there's not that many people looking for them, and it's hard to find these things.
- Kim: Definitely haven't seen that moth on our property at all. Even the borers, most of our Mamaki are pretty healthy. There was one that was damaged by a falling eucalyptus, we saw the frass, but so far we haven't seen much damage, and it's one of our main restoration species in our gulch.
- Serena: Okay, I'll check in with you guys, maybe in a little bit when I start making that article. Thank you.
- Woody: The park, we've been doing a lot of the same but increased efforts, a lot of restoration work this winter went really well. We started a restoration project at about 1500 feet, an experimental thing. We've been getting back into Kipahulu doing alien plant control, more high elevation stuff. Protecting areas above 4000 feet from Ginger, so Ginger control and animal control as well. We are pretty fully staffed and our vegetation program is going really well. We're really lucky to have a lot of support. We have an acting Chief right now, Paul Hosten, from Kalaupapa. He came over for 4 months and he'll be done sometime middle of this month, and then we'll be back to rotating chiefs between me and our cultural resource specialist archaeologist, Rachel. I guess they'll be announcing that position again, but I really don't have any information. The park is still closed for visitor camping, I don't know when it's going to open up, the cabins are closed. We can still do work in the crater and we're pretty active as a crew, just catching up on all the projects that we kind of let lapse during the beginning of COVID last year. If there's any work that needs to be done. If there's surveys or anything you guys want to do, let's talk. We can work in the crater and we can do all that stuff, so if there's a need, let's make it happen.
- Radford: Thanks, Woody. Any other partner updates?
- Elizabeth Speith: I'm going to add a link, if anybody is interested, to the 643pest.org summary: <https://www.dropbox.com/s/n308xmnf26tc0xq/2020643pestORGsummary.pdf?dl=0>