

**MEETING MINUTES**  
**MAUI INVASIVE SPECIES COMMITTEE**  
**Friday, April 7, 2006**

ATTENDANCE: Randy Bartlett, Lloyd Loope, Bob Hobdy, Alex Michailidis, Forest Starr, Kim Starr, Steve Anderson, Nathan Varns, Lori Buchanan, Jeremy Gooding, Daniel Tanaka, Greg Hansen, Adam Radford, Mike Ade, Joylynn Oliveira, Teya Penniman, Aaron Kogan, Abe Vandenberg, Darrell Aquino, Chris Candito, Elizabeth Anderson

- The meeting was called to order by Randy Bartlett (ML&P) at 9:15am.
- Introductions were made around the table.

ANNOUNCEMENTS

- Joylynn is getting married on April 29<sup>th</sup> in Hana – Congratulations from all!

UPDATES

**Manager's Report**

- Teya: In the past, prior to our regular meetings, we have put out summaries of progress on our action items. We are changing strategies and we will begin doing a quarterly internal newsletter for the Committee. Our first newsletter, for the January to March 2006 quarter, will come out in April. We may try to have our meeting schedule coincide with the quarterly reports in the future. We also plan to begin an external newsletter, which will be published three times per year.

**Budget/Funding Updates**

- Elizabeth: the NPS funds that are currently supporting the Hana crew will be pau in October and we will need to switch the crew over to MISC base funds. We have a fairly good cushion that will see us through for awhile, but without additional funding things will begin to get tight after ~8 months to a year. Our FY06 OED general funds and FY06 FWS funds just became available and the OED BBTV and OED/State coqui funding should be in accounts soon. We are in good shape right now and things are moving very smoothly between Tri-Isle and PCSU/UH.
- Teya: there was an urgent call to spend down expiring funds that BIISC was unable to expend in time. At first, payroll expenses were not going to be allowed, but with a little negotiation we were allowed to move staff over to the account for one pay period which gained us ~\$45,000. We also were able to buy a new copy machine with the funds. Tri-Isle has reduced our overhead on the funds they manage from 10% to 8%. This change freed up an additional \$12,000 from the current incoming grants. A big thanks goes out to Tri-Isle for their support!
- Teya: the County budget hearings are currently underway. It looks like our County funding will be flat from FY06 for a total of \$600,000 (\$250K from DWS/\$250K OED general/\$50K OED coqui/\$50K OED BBTV). Tri-Isle has been very helpful in securing our County funding again this year. Joy and I testified at the Upcountry hearings and Joy and Sam testified in Hana. During the DWS budget hearings there were questions regarding our progress on miconia. We will need to get a short miconia progress report out soon.
- Teya: we anticipate our FY07 HISC funding should be about the same as FY06. Mindy is planning to make the HISC funding process more competitive and will be requesting proposals. She wants more of an early detection and rapid response focus and is trying to get us away from legacy species. Forest Service funding should also be relatively flat (without the \$20,000 we received this year for Lanai fountain grass surveys). Molokai is expecting \$20,000 from the Forest Service for miconia recon. Forest Service funding this year will be coming from an invasive species pot rather than from the Forest Health program as it has in the past. We received \$25,000 from FWS for FY06 and we are not expecting anything from them in FY07.

- Jeremy: the bulk of the EMPT funds for FY07 will be going to the Big Island. All of the soft money sources that we have been using to support the miconia operation are pau and the new Superintendent expects additional cuts next year. The helicopter contract for this year will be 50-60% of what we had last year. Things do not look promising from the NPS perspective for at least another year. Randy: how much does the Hana operation cost per year? Jeremy: \$300,000/year for salaries, field gear/utilities, \$300-350,000 ideally for heliops, and \$33,000 for truck and herbicide. ~\$700,000/year to run the full program.

### **Legislative Session**

- Randy: Mindy has been tracking a lot of things. Teya: there are a number of bills related to coqui frogs this year. We sent in testimony on one bill that is a repeat of last year's help from the State to the counties. We received \$100,000 in FY06 for our coqui work in this manner. There is also a house budget bill for \$2 million for Big Island coqui work. It is a little unclear as to how the coqui funds would be managed. Big Island residents were very vocal about the frogs and they don't want to hear the idea that they aren't eradicable there. There is a move to take HISC funds and designate \$2 million of the \$4 million to coqui. We don't want this to happen as it would be very restrictive to our operations. There also are draft rules on coqui frogs out for review. The comment deadline is basically past, but you can still comment to Domingo. I will send out the link.
- Teya: there was another bill of interest that would have required counties to create invasive species management plans and required landowners to remove invasive species before sale of existing properties. The bill would have allowed counties to create incentive plans. The bill passed out of the House, but never got a hearing in the Senate. It is encouraging that the idea is out there - a little step forward even though it didn't go through.
- Lloyd: I was at an airport action plan meeting a couple of weeks ago and they were optimistic that there will be funding to double the number of inspectors. HDOA asked to have a bill introduced to give them authority to collect fees from shippers. The bill was shot down, but it brought the prevention idea to the attention of the Legislature. There is broad support for using general funds to increase staffing. Forest: this is the best financial situation the State has been in for a while. Teya: the new head of plant quarantine has pulled together a bio-security plan. It has an agricultural component including the idea that we need to grow more of our own products. There is enthusiasm for moving forward.
- Teya: the invasive species committees sent a list to HDOA outlining the species we want added to the Noxious Weed List. HDOA has asked for an assessment regarding the criteria. We need to justify why the species should be listed. We need to prioritize. Forest: we can prioritize for the Maui list. High priority should be given to species where the analysis has already been done. This is a step in the right direction. Lloyd: the feedback I've received is that adding a few species to the "black list" doesn't do any good. What we really want is a "white list." There are too many species here that we don't even know about. We need to document all the species that are here in Hawaii if we want a white list. The last additions to the Noxious Weed List were in 1992. Kim: the immediate need is for the targets that we can't get access to. Forest: the priority species would be the ones where recalcitrant landowners are the only reason we are not able to achieve eradication.

### **Staffing**

- Teya: two of our crewmembers, Adam Cotton and Erica Anderson, are moving back to the mainland. Both have been with us for a little over a year and have made excellent contributions to our operation. We are in the process of replacing them as well as replacing two other crew members that left a couple of months ago.

### **Training**

- Adam: I've conducted rappelling training for the Piiholo and Hana staffs and for the East and West Maui Watershed Partnerships. We have one more round of training scheduled for MoMISC and new MISC staff. Rappelling will be a great tool for us and will help us to do our work more safely. Alex: my crew said it was an excellent course. Elizabeth: we had positive feedback from West Maui also. Adam: we also had an all day safety meeting recently and sent several crew members to pesticide training.

### **PR/Education**

- Joylynn: Shannon is continuing work with the Hoihe curriculum. Her current focus is on getting teachers and students involved in the ant baiting activity. She is also scheduling weekend and evening field trips for students to do invasive species field work as part of the “Weed Warriors” project. Forest: there was a nice letter to the editor in the Maui News from one of the students. Teya: there was a group of students scheduled to do coqui work one evening and at 5pm it was pouring rain. Shannon, Adam, and crew adapted and did a talk story with the students instead – they showed them slides, etc. and got them to write letters to the editor.
- Joylynn: Elizabeth Speith, Shannon, and I did a trial run on the Early Detection Workshop with the MISC and EMWP crews. They gave us great feedback. Darrell A. may already have found a bingabing tree as a result of the information he learned at the workshop. We have a draft booklet which we will send out electronically for review. Elizabeth S. will continue to conduct workshops through May and then Shannon and I will continue into the summer.
- Joylynn: there have been a number of events this past month. We had a successful booth at the Taro Festival with more than 200 people visiting. We also had a booth at the Haiku Hoolaulea. Earth Day and the Kokua Festival are both coming up. Shannon will be going to Molokai to have an Earth Day booth at their celebration and to meet with teachers. We have a public relations database and it is providing excellent data on our PR activities thanks to Aaron.
- Joylynn: we are working on getting out the message that we need more funding. We hope to get Valerie Monson out to Hana soon. I attended the Native Hawaiian Education Association conference in March and gave a presentation.
- Teya: I spoke to the Pacific Century Fellows group yesterday. The group is made up of leaders, mostly from Oahu, who meet monthly to learn more about Hawaii. The theme this month was the environment and they came to Maui. Alex and I both gave presentations. It was a good opportunity to talk to a different group of people.
- Adam: one of our staff, William Midgley, was on the MCC program “Connecting the Dots” with Chuck Chimera from the park. I did a presentation for Haiku Community Association that aired on Akaku.

### **Data Management**

- Aaron: more and more of our crew are being involved in making maps and doing data entry. We have an off-site back-up for our computer system now. It goes home with someone every day - its name is Myron. We are doing a complete rebuild of the aerial miconia data set all the way back to Pat Bily times. Lissa is helping. We are trying to clean up the inconsistencies.
- Aaron: Data Hui IV is coming up. All the ISCs are getting together on Oahu. We are trying to move the ISCs together so we have consistent reporting for the State. Teya: one focus of the upcoming meeting will be to try to come up with consistent measures of success. Hopefully we are almost done with definitions. We need to be able to evaluate how we are doing. How do we compare what we find from year to year? It is a difficult question because of boundaries on areas. We may not need to put the entire population of a species into repeatable management units. We may need to back off on that and sample some areas instead. Some areas we need to cover 100%, but we can't have 100% coverage of the entire island for a particular species. Coming up with criteria for the sampling areas is challenging.
- Jeremy: has anyone in the Hui talked to the national level? We need to mesh the data. There are several different agency versions out there already. Teya: we do have a USGS representative involved in the process. Our database was originally based on the NPS. We are trying to boil down our field work to something simple. Ideally, what we have will fit with national standards. Please share any information you have with us.

### **Superferry**

- Teya: I am on the Advisory Board for the Superferry. It is not appropriate for us to say we oppose the

Superferry, but it is appropriate for us to ask questions and expect answers. These answers have not been forthcoming. I've been asked to summarize the invasive species threats posed by the Superferry. Given that an EIS isn't happening, we need to do our best to provide relevant information. The Maui advisory group is meeting every two weeks. There is no advisory board on Oahu and the Big Island group is functioning mainly via email. I'm thinking we might want to get some of the Superferry staff out to see miconia. Steve: I think getting the point across regarding what our crews go through in the way of decontamination would be great. Teya: the point has been made repeatedly and their response is that they will turn away muddy vehicles. Their response to the need for pressure washing is that entrepreneurs can deal with that. I know they are involved in discussions with HDOA and I don't know what resources HDOA will have for inspection or what HDOA is telling them they need to do. There is also a question as to why the Superferry is being singled out when Matson and Young Brothers can ship with no cleaning requirement.

- Forest: we need to look at what measures we can suggest they take so their project can go forward. We can't say yes or no, but we can say what we think should be done. This is an opportunity to address some of the major inter-island transport issues. Teya: plants must be inspected by HDOA, but realistically will that happen with a vehicle full of camping gear? The ferry will hold 107 to 282 vehicles with a one hour turn around time. The concept of how far in advance people would need to arrive in order to be inspected has not been discussed. Randy: DOT and HDOA need to work together. The ferry will be at the same dock as Young Brothers – it is already maxed out. Lloyd: my suggestion is that we request a DOT and HDOA presentation. It is important for the local HDOA staff on Maui to work with the Superferry to make sure things are in place. Anna Mae would be an excellent person to work with them, but that depends on what level they will consult with. We need to encourage a presentation from Carol at HDOA. Randy: and from DOT. Teya: the Ways and Means Committee decided that there will be three DOT forums on each island to address concerns. It is a requirement in order for them to get their additional funds. Teya: I will pull together a threats outline and send that out for input and review. Randy: I imagine in the coming year CGAPS will be more focused on this issue.
- Teya: should we take them to miconia-land? Lloyd: I think it is a waste. If anything, take them to fire ant sites on the Big Island – that would be more relevant. Randy: the field trips that would be good would be for the stuff that isn't here. Miconia is already here.

#### **ACTION ITEM**

- *Pull together a draft Superferry threats outline for Committee input and review.*
- *Contact HDOA about a presentation to the Maui Superferry Advisory Board.*

#### **Strategic Plan**

- Teya will get a summary out soon.

#### **MOMISC REPORT (Lori Buchanan)**

##### **Vertebrate Updates**

- There have been no coqui reports and no red-vented bulbul have been seen.

##### **Plant Updates**

- Efforts continue to control cat's claw seedlings. There is new growth only in upper Kalamaula. Maintenance and monitoring of wood rose for seedlings and new growth also continues. There have been no new mature New Zealand flax plants reported. No new reports for fountain or pampas grass. Initial suppression of five acres of rubber vine was completed in February with the assistance of the MISC crew. Of 13 known populations, 12 have been initially suppressed and we are entering the maintenance and monitoring stage.
- Of the three Molokai populations of gooseberry, encompassing an estimated three acres total, less than one acre remains reproductive. Of the two known gorse populations, only the Kamiloloa population has put out seeds since initial suppression. Two seedlings were found on March 27, 2006 at the Kamiloloa population.

Seedlings and surrounding soil were removed by James Leary and taken back to UH Manoa for research. MoMISC is cooperating with Mr. Leary's gorse research.

- Miconia aerial surveys on Molokai continued in perfect aerial survey weather! These surveys have been a very productive use of funds for MoMISC. Mahalo to everyone that has helped support these operations. These surveys have allowed for overall general assessment of the integrity (invasives, ungulates, etc.) of the areas surveyed. This has allowed us to report to the community (taro farmers, ranchers, the East Molokai Community Board, etc.) that they need to initiate watershed protection now! This one effort has generated so many positive partnerships and feedback.
- Ten mature long-thorned kiawe shrubs were removed. These plants were detected by Forest and Kim during the "Molokai roadside survey." Kiawe was intentionally planted and irrigated as a landscape planting by the landowner. Australian tree fern efforts are going well. Of the 35 known trees, 21 have been controlled. MoMISC's goal is for the remaining trees to be killed by the end of 2006! No naturalized populations have been reported.

### **Legislative Update**

- Mele Carroll has taken the lead in MoMISC efforts to legislatively work an angle for obtaining an agricultural inspector for Molokai.

### **Outreach and Education**

- MoMISC was asked to do an interview for OC16 "Outside Hawaii." The Earth Day celebration on Molokai is April 21, 2006. Shannon will be over to help MoMISC with a display and to share a table. Good attendance is expected and we are thankful for Shannon's assistance. Shannon also will share the Hoike curriculum with Molokai students and teachers.
- MoMISC will be hosting the Youth Conservation Corps the week of July 3, 2006. It will be a week of fun-filled field activities like rubber vine control. Our next workshop is planned for the Maui Electric Company linesmen.

### **Data**

- Data is going much better. We got the 9.1 ArcView version. Sam has been training Kama and we have developed our definitions, which we will have for the Data Hui. Kama is able to do maps now. The Molokai TNC staff helps us out a lot.

### **LANAI**

- Teya: both Piiholo crews were on Lanai for a week in January and Mike's crew will be going over again May 15-19. Mike: things are very green and the fountain grass seed bank is active. We've changed our herbicide technique a little. We found an additional site on our last trip, but it was not too bad. All known individuals have been treated. Some fountain grass is growing in lantana and is very difficult to get to as a result. We covered the Kanepuu side via aerial surveys in January. Aerial spotting works if the plants are in flower. The ivy gourd at the Harbor is pau.
- Adam: we did another door-to-door survey for BBTV in Lanai City. We submitted samples of anything suspicious and they all came back negative. We surveyed Lanai City last summer as well so we now have two full surveys. Lloyd: are there people on Lanai you interact with? Adam: there is one farmer interested in developing clean stock for the state. There is general interest from the community and we always distribute flyers. Teya: now that we are going to Lanai every quarter we have developed a presence. Bryan Plunkett from Lanai Company has been a great help with logistics and transportation.
- Forest: we would like to get resources to do a roadside survey on Lanai. Lloyd: it would probably cost ~ \$10,000. Teya: we should talk about writing that into our FY07 HISC proposal.

### ***ACTION ITEM***

- *Prepare a proposal for Lanai roadside surveys.*

## PLANTS

### **Miconia**

- Jeremy: we have started year four of the helicopter contract. This contract is smaller than previous years. Because we have reduced air-time, we will need to increase our efficiency. The Hana ground crew is finishing Puu ki units 1-5. When they are pau, we will have our first set of comparable ground unit data. We should be able to graph effort and plants found and hopefully see a difference. Now that Aaron has finished with the database rebuild, we should be able to do the same thing with the aerial information. We hope to get some meaningful information for a presentation at the Hawaii Conservation Conference.
- Jeremy: Adam's crew has been working in Huelo since last summer – moving from west to east makai of the Highway. They were in the Honokala area yesterday and detected miconia plants including seeding individuals. They were not in contaminated gear/vehicles. We will bring in a crew with dedicated miconia gear as soon as we get permission. Darrell did a great job of following our protocols for peripheral areas. He called in and reported the find and the crew did a textbook job of not getting themselves contaminated. Teya: it is interesting how many people you are talking to don't know about miconia. That was something we didn't expect. We need to do more outreach in the Huelo area. Just having our crews working in the area is good outreach. Darrell: a lot of the residents mistake clidemia for miconia.
- Jeremy: we do have a new set of satellite imagery which shows plants well. We want to try to ground truth the images. We should find out in the next few weeks if we can pick stuff out of the IKONOS data. There is a Forest Service proposal to do some aerial mapping in conjunction with a nationwide *Melaleuca* survey. I've advocated that they do Maui because there is an obvious spread here outside of the original plantings. Kim: there were one million *Melaleuca* planted on Maui historically. Lloyd: there is a Florida/Hawaii connection because of the so-called ohia rust. It is attacking rose apple and *Melaleuca*. Jeremy: they could also survey for pampas, miconia, parrots, etc. so it would be to our advantage to have them come.
- Teya: we did a conure flight a couple of weeks ago to look at the cliffs where they roost, try to get photographs, and to look at rappelling options. Our pilot, Pete, knew where they were at Kailua Reservoir. Our GPS wasn't working, but Pete wrote down the coordinates. When we put the coordinates on a map, they came out almost exactly at one of the 2002 miconia locations. Lloyd: my sons were pig hunting in that area and they saw 200-300 parrots. I'll get more information on the location for you. Jeremy: this is consistent with what we have found elsewhere and may point to conure vectoring of miconia. Abe: the main group goes south typically and there is a small group of 8-10 that goes west. Adam: people higher up near the highway indicate they see the birds occasionally. Abe: most people I talk to are aware of the conures.

### **ACTION ITEMS**

- *Get parrot sighting location from Lloyd.*
- *Do more miconia outreach in the Huelo area.*

### **Pampas Grass**

- Mike: there is plenty of it out there. We sent a sample from the population on Olinda Rd. to UC Davis. We thought the population was *selloana*. It was flowering in July. It turned out to be a hermaphrodite – this seems like a bad thing to me. There aren't supposed to be male *selloana* plants here. Teya: UC Davis had contacted us for *jubata* samples for a study they are doing so we asked them to look at these others as well. This is the kind of information we need for *selloana*. It is bad news, but good news. Mike: the genotype from California is the same as we collected on West Maui. Forest: we should look at publishing *selloana* as naturalized on Maui.

### **Fountain Grass**

- Mike: we just found another population across from a site that we have been checking for the past four years. In Waiehu we found flowering plants with keiki. There are plants in the area of the County water tanks so now we are monitoring that area. We also we did a rappelling trip to the Kahakuloa site. This was our first rappelling implementation. We found a flowering plant, but not keiki. The Waipoli site was dozed

again. We monitor it regularly – there are two eradicable species and pampas on that road.

### **Ivy Gourd**

- Mike: we are doing well with the known populations and spending more time searching on the perimeter. It is gone from the areas where we are controlling it, but we are continuing to look and continuing to find more. We found a large population of fruiting individuals in Kihei. After all the rain we are dealing with regrowth. Thanks to Randy we have permission to camp at the Kapalua ballpark. With less driving, we have more time to search. We found a fruiting population in Lahaina. We got permission and have completed control already. Bob Hobdy gave us a report from the Hyatt in Kaanapali. Gall wasps had knocked all the leaves off the trees otherwise we wouldn't have been able to see it. Randy: there is a new site on Dickenson Street. It is on the fence posts and is not fruiting.

### **Giant Reed**

- Mike: we continue to work on the same populations. The plants at Hookipa keep coming back.

### **Eradicable Species**

- Mike: the silver wattle is not dead. We haven't seen any regrowth on the water wattle after the third treatment. We have permission to kill the remaining *Pittosporum*. There is more on the site than we expected. We treated our Osage orange site at the request of owner. There was a root sucker over 30 feet away. The cat's claw at Ulupalakua came back with fruit and we retreated it.

### **Banana Bunchy Top Virus**

- Adam: Maui HDOA staff found BBTV in Kula recently. We don't know the exact location. We regularly continue to find BBTV in Pukalani. We have completed our first full sweep in the Pukalani/Makawao area. In Pukalani there are ~50 TMKs that are infected and in Makawao only four. BBTV has also been found in Lahaina and Kihei. We are focusing on the core in Pukalani and Bob Y. is taking care of the rest of Maui.

## VERTEBRATES

### **Coqui Frog**

- Adam: we have 13 known population centers and are working on 12 of these. The 13<sup>th</sup> center is Maliko Gulch. We put together a management plan for work on Maliko. With current resources we can cover everything except Maliko. It is our last area to begin work on and offers the greatest challenges. We are seeing good success at the other areas. Forest: do you think you can control the others? Adam: yes. Most of the movement we see is via plants and hitchhiker coqui on cars. Teya: Haiku Post Office is completely controlled and we have five areas that will be mostly pau by the end of 2006. We will continue monitoring these areas. Initial suppression at Castleton's was a big break-through. With populations of five or more frogs we do a drench application of citric acid.
- Teya: HDOA plans to have a hot water facility on the Big Island and on Oahu. We should continue to push for a facility on Maui. There will be a statewide plan for coqui. When we looked at Maliko Gulch, we evaluated how we would take it on. We have mapped the infestation and defined the makai extent. We would like to try different approaches in different sections of the area. We estimate we would need \$750,000 for the first year. Adam: Teya and I went to the Big Island to observe the Manuka operation. We got rained out, but it was still interesting and good to see how they do things. Randy: has anyone tried citric acid with a mister/fogger? Adam: yes, I've seen that. Randy: it would penetrate well. Adam: on a small scale in residential areas it works well, but it is pretty loud.

### **Veiled Chameleon**

- Adam: we have done two rounds of chameleon surveys and only found one animal. We are also surveying peripheral sites – we visited Montessori School and next week we will do two more peripheral sites. We just aren't finding much.
- Teya: Brooke has a telemetry receiver and is ready to begin implementing the research project as soon as he

has a chameleon to work with. Either we have been really been successful in our control efforts or people are moving them around for us. There still may be people pretending to be MISC and taking the animals out of the neighborhood. It is hard to narrow down. Adam: as part of the HISC-funded research project, Brooke has compiled a lot of resources and improved our data system. Teya: we may bring a chameleon expert over from the mainland to collaborate.

### **Conures**

- Adam: Abe has been putting in a lot of time surveying and observing the conure population. He has tried playbacks and feeding stations and has compiled some good information. Abe: there are 60-80 birds for sure. I'm not seeing more than that. The feeders don't work and the recording just irritates them. Doug Runde of USDA Wildlife Services is still working in cooperation with MISC on the project. Teya: we've been talking about conure control for years. During the flight we did it was easy to follow the birds from the helicopter. It was our conclusion that we could control them from the air. The area we were flying in was over EMI and State land - not over private properties for the most part. There really is not much of anybody out there. You are away from the colony which is good. If you do something at the roost and nest site, it might cause them to move and make more of a problem. We propose having a conure meeting with the interested agency people. We would need to deal with jurisdiction issues and determine if an EA would be required.

### ***ACTION ITEM***

- *Schedule a conure meeting.*

### **Other Vertebrates**

- Adam: MISC staff assisted with two snake reports recently— one in February and one in March. One was in Kapalua and was assumed to be a garter snake. The other was in Lahaina and was assumed to be venomous. Neither snake was found.

Next Regular Meetings: All meetings are from 9am to noon at the MISC Piiholo Base-yard.

June 9, 2006

August 11, 2006

October 13, 2006

December 8, 2006