

**MAUI INVASIVE SPECIES COMMITTEE
MEETING
FRIDAY, OCTOBER 11, 2002
9:00 AM - 12:00 NOON**

ATTENDANCE: Kim Starr, Forest Starr, Fern Duvall, Bob Hobdy, Randy Bartlett, Philip Thomas, Mike Ade, Jamie Bruch, Mitch Craig, Steve Anderson, Alex Michailidis, Erik Barnard, Tina Lau, Mach Fukada, Rebecca Murphy, Elizabeth Anderson, Mele Fong, Lloyd Loope, Pat Bily, Jeremy Gooding

- The meeting was called to order by Randy Bartlett (ML&P/Chair pro tempore) at 9:10am.
- Aloha `oe, Jack Peterson, Mahalo nui loa nou kokua a hana `o`ole`a `oe! Jack has left the MISC operation. His last official day was today. His position had to be terminated before we could open the position for the new MISC Manager. Jack was encouraged to apply for the new position, but he decided not to.
- The minutes from the August 29, 2002 meeting were approved. They will be posted on the web-site.

NEW BUSINESS

PERSONNEL/FACILITIES

MISC "Manager" Recruitment Status (R. Bartlett)

- We are in the process of recruiting for the new MISC Manager position. The recruitment closed on September 30. Randy finally received all the applications yesterday. He will be putting together a selection committee soon. Randy will take the first cut on the applications to narrow the field down to an interview list. The interviews will be either next week or the following week. The MISC staff would like to see a member of the staff on the selection committee. It was decided that Erik will be on the committee.
- There is a card going around for Jack. Please sign it when it passes your way. Jack plans to stay in the conservation business in the long-term. He brought MISC up from scratch for the past three years and we owe him a debt of gratitude. We greatly appreciate all the work he did while in the MISC Coordinator position.

Transition Period Discussion

- We are in a transition period here at MISC and the staff is temporarily leaderless. Randy indicated that he has a lot of faith in Erik's ability to keep things going with help from Mike, Jamie, Elizabeth, and Mele. It will be a stressful period, but he is confident that the staff can do well. It will likely be at least two months before someone new is on board.

Temporary "Manager" Position?

- Randy suggested that we consider assigning a temporary manager position and doing a temporary promotion. Fern asked if there was really a need for this. Mele replied that there had been instances where it was unclear who had signature authority (i.e. when the EMI permit extension needed to be signed). Bob added that he thought it was a good idea. Elizabeth suggested that the manager duties be split between Erik and Mele. Steve agreed that this was a good idea as one person may not be available all the time.
- Randy agreed that if the committee is in favor, we will ask for Erik and Mele to both have temporary promotions. Mele will be responsible for the more public and funding related functions and Erik will be responsible for the day to day operation and supervision. Randy will work with Elizabeth to get the appropriate paperwork submitted.

PR/Education Position Description Revision

- Randy is still working on revision of the PR/Education Specialist PD. He is behind schedule on it but hopes to have a draft done by the end of next week. He will ask a few people to look it over --- probably the same people that are on the selection committee.
- Elizabeth suggested that rather than revising individual positions separately it might be a good time to take a look at all the MISC PDs, how the full operation fits together, where there might be gaps or overlap in duties, etc. We have already been working on revising the field worker and field supervisor positions and discussing establishing an intermediate level technician position. Randy agreed that it would be a good time to look at the entire operation. He asked that the MISC staff pull together copies of all existing PDs for him. In the future, Randy would like all revisions to go through the committee.

Whither Goest MISC? Holomua vs. Piiholo?/County vs. CTAHR?

- There is a question as to whether it is best for MISC to go ahead and plan on moving from here to the CTAHR facility up on Piiholo Road. It is still not written in stone that we will have to move out of NifTAL, but there appear to be a lot of benefits to moving. There are pros and cons to each side. We are good here at NifTAL until the end of the year. Randy needs to contact the County and ask them what their future plans are and see if they will give us more of a commitment on this place. The down sides here are the water and the maintenance issues. Leaks could become a big expense in the future. Alex has moved into the metal building at Piiholo, but there is a wooden building left which is fairly small. If we moved in we would need to put up temporary buildings, like yurts, in order to have enough space. There is room to do that and it is not a problem with CTAHR. There is also plenty of room to run heliops up there. It may be a better situation for us to continue to have the University as a landlord than to have the uncertainty of the County as a landlord. CTAHR would like us to be there. Here we are at the mercy of the County, we don't have any security, and they could change their minds.
- Randy talked to David Oka who is in charge of the Piiholo facility. There would be a lot of work involved. The wooden building would have to be cleared out and we would need to figure out how to get some temporary buildings. The rent would be free up there. We would just need to pay for utilities.
- Jeremy noted that if a move is made, he would like to see a better detox facility developed including a lift to put vehicles up on and a better way to clean vehicles. We could have contaminated stuff drain right into a sump. Randy agreed that this was a good idea. There is a covered area where they currently store a tractor and other equipment. The floor in that area is just dirt. He asked the CTAHR folks if we could put down a concrete pad and they said yes. We can have the entire wooden building. They just want to keep the tractor there. Randy asked about getting the front house and right now. That is not possible. Current CTAHR policy is that there must be a CTAHR employee living on all their sites for security purposes.
- Mach asked about sterilizers at the new facility. Erik indicated there really isn't anything. Alex added that there is an old antique one there that they are getting rid of. We will likely not be able to grow bio-control fungus anymore after we move because of equipment needs. We need an autoclave and a culture room.
- The sooner we make a decision the better. We need to be out of here by the end of the year and it will take some time and effort to get things squared away for a move.
- A question was raised regarding getting a yurt or portable building donated to give us more room on the site. The park might be able to help us out as part of the miconia program but probably not until the end of the fiscal year. Jeremy is just starting to look into modular space for a Hana base-yard. He hasn't been able to find any appropriate houses in Hana. Yurts cost \$15-20,000 and we would want a hard-sided one.
- Forest mentioned that we need to check the zoning on the area. Alex asked if there is any provision in MISC's budget for dealing with buying a portable building. We need to check with David Duffy.

- Steve mentioned he has plans for the greenhouse at the Piiholo site. He would like to use it as a mid-elevation propagation facility for the park.
- Randy suggested that we should go up to the site again with the MISC staff and get a better idea as to where stuff can go, what sort of storage we would need, etc. Erik noted that we could use the shed from Hana for storage and use the storage area attached to the building for more office space.
- Decision = let's plan on making the move.

MISC Mission Review and Rapid Response

- Mele requested that we do a quick mission review for MISC, especially in light of the latest snake sighting and response. We need to clarify coordination between DLNR/DOA and clearly specify who gets contacted, etc.
- Forest brought up the issue of defining how we deal with reports on species we aren't actively controlling (i.e. senecio, black wattle, etc.). We find ourselves with the public coming to us with questions regarding what to do. There is no reason we can't respond. We don't need to go out and control these species but we can at least gather information.
- Mele noted that she needs to know what MISC's role is in the bigger picture. Do we want the public to call us? Are we really supposed to be a rapid response team? We seem to have our hands tied as far as lethal force is concerned because of the RCUH IACAUC rules. Randy added that the IACAUC issue isn't resolved as far as vertebrates are concerned. We can provide support but we can't take the lead on vertebrate issues.
- Mele stated that in the case of the recent snake report, the landowner called DLNR. Meanwhile Fern was the subject matter expert and we were asking Fern what to do. There was a lot of confusion as to how to respond, who should respond, how long to respond, dropping other operations, etc.
- Jeremy suggested that we will never have a clear cut course of action on such a thing. If MISC has a list of subject matter experts to call (i.e. Fern), they should be able to help define what to do based on the level of urgency. It is impossible to define the level of support needed in black and white. There will always be variables and every occurrence will have a different set of variables.
- Fern indicated that this is a multiple level issue. CGAPS should be the one who sits at the table and somehow gets a flow chart going. DLNR/DOA has an MOA on how to deal with things like snakes, but the reason MISC came to be was because of the inability of the agencies to respond appropriately. In general this should be a CGAPS level issue. MISC is willing to play ball and we are willing to be the glue. DLNR has initiated a new position (the position Creighton is in) and we don't know how it is going to work out. Ideally DLNR would be the ones working with DOA on a report and then they would contact MISC for extra man-power. There hasn't been a snake report in a long time. During the old cane field snake incident a few years ago there was a decision to handle the incident like a fire with an Incident Commander.
- Fern suggested that this issue is one of the main things that should be addressed when we convene the subcommittee on vertebrates. We may need to drop things and simply respond until we get a clearer decision tree. We weren't wasting our time on this recent report. It was valid because the snake actually crawled over the person who reported it. It wasn't reported for two weeks because the homeowners thought they could take care of it.
- Bob indicated that Fern has summed up the problem well. A lot of it is about mandates. We are treading on new ground. We need to work out the coordination at the state level.

- Philip noted that it is hard to accept that we can't have obvious authority. We have to know whose responsibility this is. In the meantime, the flow chart idea is good. Do we want to advertise that people should call MISC if they have a snake? Is MISC capable of responding if they get the call?
- Fern noted that there is a very clear MOA between DOA and DLNR. DOA often replies that they have too much going on to respond. This is why Fern went out with Creighton this time. Fern will talk to Lyle Wong, but there may not be consequences. This is why MISC started dealing with vertebrate issues in the first place.
- Bob stated that we also need a clear decision making process for response. A two-week old sighting doesn't necessarily merit going out in the middle of the night. Fern countered that this was different because based on the report it did appear more urgent. There is usually a judgment call involved.
- Forest asked about the use of traps or dogs. Fern replied that he tried to get a dog, but DOA never called back.
- Randy continued that it is a complicated issue. We really need to address this at the CGAPS level. On Oahu DOA responds, but on Maui they don't.
- Lloyd explained that there is actually a bill to create an agency that deals with invasive species. The bill may go somewhere. The State has to get their act together. In New Zealand they are able to get coordination and deal effectively. Why we can't do this here?
- Rebecca commented that until there is a mandate from the Legislature there will be no one to take responsibility. It needs to go through the Legislature to make these people do their jobs. Then there would be a clear directive. From my point of view knowing how these agencies don't talk and communicate indicates that it will take a mandate.
- Bob suggested that we have quite a few grey areas between our mandates. If an animal is in someone's yard, the response is from DOA. If it is in the wild, it is DLNR's responsibility. If it is a wild animal and it enters someone's yard, we are in a grey area. We also have grey areas with the Humane Society. We need to clarify how the agencies will respond to invasives. Invasive species weren't an issue when these mandates were made.
- Pat noted that there seems to be confusion on a couple levels here. There is this pass the buck thing regarding authority. We are lucky we have something like MISC to deal. Another confusion is that MISC is viewed as an entity, but as far as authority goes we aren't an entity. We are also a consortium, which allows us to coordinate the response. It would be ideal if this was mandated, but in the meantime we have to talk about a flow chart – who they gonna call? Who is the ghost-buster? It is probably better for people to call MISC to channel the response. This makes MISC the index for these responses. We are poised to immediately respond. We really have a good thing going in that we are able to deal and coordinate effectively. MISC should be the one the public knows to call and then we figure out where to go on the flow chart.
- Lloyd stated that MISC exists because the agencies were perceived as unable to do the job. Both DOA and DLNR have been very supportive of the ISCs. The agencies realize they aren't getting more funding and their budgets are being cut. If there is an invasive species agency formed, the ISCs may suffer. Randy added that MISC is filling the gaps. We are here because of the gaps. This is an important enough issue that we need to work together. This goes beyond boundaries of geography, budget, and organizations. The Legislature is aware of us and the public is becoming more aware of us.

- Bob pointed out that Maui's secret weapon is what we have around this table. The people who will go out of their boxes a bit. MISC doesn't have the mandate, but we make things happen. Philip added that the secret weapon is individuals, not the agencies. You have to know who in the agency cares.
- Randy reminded the group that in past we agreed that for vertebrates Fern is the incident commander. If he calls to arms, we go.
- Erik asked if we are going to put our name and number out there for calls. Randy responded that yes we should be the clearing house. We used 911 in the news article and they do know who to call. There is a snake pager. The 911 operators are updated with contacts for birds, snakes, etc. Erik continued that we need to clarify what MISC responds to. Do we always respond? Randy noted that is up to the IC. Fern replied that if you really have a new vertebrate, we will respond. Go ahead and mobilize while you try to get a hold of me. The IC will determine the level of response. We have a good vertebrate person with Jamie on-board.
- The first meeting of the MISC Subcommittee on Vertebrate Management will be Friday, October 18 2002 at 9am. Folks that should attend = Fern Erik, Mele, Jamie, Mitch, Steve, Earl, Creighton, Bob Yonahara, and Elizabeth. Fern will contact folks that aren't here today.
- Alex noted that regarding RCUH policies, we provide as much support as we can within policy. There is a difference between control for research and control for management. We need clarification on RCUH policy regarding MISC's involvement with vertebrate control.

BUDGET/FUNDING/REPORTS STATUS

MISC Budget Status (Elizabeth Anderson; MISC)

- Due to time constraints, the budget status report was skipped at this meeting. The following notes are inserted for information, but were not discussed at the meeting.
- We are just about ready to close-out the personnel portion of our current County funding. We will be moving all of payroll over to the NFWF Grant account in late October/early November. We requested a reallocation of \$8,200 of the OED funds from supplies/support to helicopter operations. This reallocation has been approved. We will be spending out the remaining supplies/support money from the County grant over the next couple of months. The third quarter report has been submitted. Erik and Elizabeth met with staff at Tri-Isle on October 1 to discuss billing details and look at the breakdown of funds for next year's proposal.
- We will be finished spending down our current (FY02) Fish and Wildlife Service account by the end of October.
- The current Hawaii Community Foundation accounts/grants have been extended until the end of January 2003 to allow adequate time for all the projects to complete spending. MISC will be picking up the MoMISC technician's salary beginning in November and continuing until the second year HCF funds become available in January or February.
- The semi-annual accomplishments narrative for NFWF is due at the end of October. The financial report for the second quarter has already been submitted. We have met the match and should be able to begin applying for reimbursements.

Federal Funding/Reports Update Haleakala N.P. (Steve Anderson/Jeremy Gooding; HALE-NP-RM)

- We locked in a \$700/hour, \$337,000 helicopter contract. Windward Aviation was awarded the contract. We will be flying ~40 hours a month beginning in February. That is a lot of miconia work. We may have an issue with landslides.

- We have locked in the funding figures from the NPS for miconia this fiscal year: \$289,000 from the NRPP proposal, \$100,000 from the Haleakala base (this is actually \$200,000 but \$100,000 is held for now), and \$150,000 from the EPMT budget. The total comes to \$539,000 plus the heli contract for federal FY03. The \$150,000 from EPMT does not include Jeremy's salary.
- Jeremy is looking at hiring 3 PCSU field crew leader positions. There will be big infrastructure costs in Hana for a base-yard and housing. This doesn't leave much money for other targets. To a large extent EPMT will be doing miconia. The partnership with MISC will help us to meet goals for other targets.
- There will be a crew from North Cascades National Park detailed to Maui to work on miconia from January through late April. We will be counting on MISC to provide expertise and support.
- The Draft Environmental Assessment should be ready in a couple of weeks. It will be edited and then there will be community scoping meetings.

Eradicable Species Matrix Discussion

- This discussion was postponed until the vertebrate subcommittee meeting.

NFWF

- The semi-annual report for our current NFWF \$100,000 grant is due to Tri-Isle on October 22 and to NFWF on October 31.
- We will be putting together another proposal for \$100,000 for the upcoming grant cycle. The proposal is due November 6 to NFWF. We will need letters of support.

PR/EDUCATION STATUS REPORT (Mele Fong; MISC)

Community Outreach/Meetings

- MISC had a booth at the County Fair from October 3-6. We (8 staff) talked to more than 528 people during the four days. Thanks to Fern for helping on Friday and Saturday nights. We spent about \$200 for new exhibit components (banners and laminating text), printing new handouts, and supplies. Refer to section on "new products" for specifics on handouts. During the fair we received reports of seven coqui frogs, two pampas grass plants, one banana poka, one ivy gourd, and several parrots. An entomologist from California excitedly reported seeing dodder on the beach in Kihei, but it turned out to be the native kaunaoa vine. Another person requested a guest speaker for his Kalama Intermediate school class.
- Fern dealt with some difficult people that objected to us spraying the "poor little coqui." The live coqui display and tape of its call helped to pull people in. Thanks to Pat Bily for building three displays showing the effects of forested watersheds and aggressive plants, and an example that "snakes could end the tweet of Hawaii's birds." Mele talked to County Councilman Robert Carroll who thanked us for being at the fair and for doing a good job. He said we have the hardest job – to educate people about invasive species and the threats they pose. The County Farm Bureau made it possible for us to have exhibit space and entry tickets. Our exhibit space was next to the axis deer and fireweed folks. Mele recommends we do this again next year and plans on having a debriefing meeting with the crew to talk about ideas of what we can do better next year.
- Mele and Mike Walker will be attending the Global Invasive Species Programme (GISP) Workshop, October 15-16 at the Bishop Museum in Honolulu. Mike Walker is presenting a poster on how we're using GPS to record miconia sites and Mele will be attending as an observer.
- Invasive Plants in Hawaii – October 10 in Pukalani, 5:30-7:30PM. Sponsored by the state to look at New Zealand's risk assessment process. Christy Martin will be facilitating and Russell will be filming.

Products

- We will be developing a MISC brochure for legislators.
- Several new products were recently completed: 1) a “What You Can Do” page was added to the “Got Aliens?” handout; 2) Test Your Native Intelligence Game, and 3) a Display Only copy of laminated invasive species flyers. The two handouts were made for teachers and the general public.
- CBS Evening News aired a video about coqui frogs on Maui on September 17. The final product is 2 ½ -3 minutes long and was filmed over 1 ½ days in August. Filming was done at Howard’s Nursery and the video includes interviews with Christy Martin. Jack and Mele took the video to Howard’s to show the finished product to them. Everyone was pleased.
- The winter issue of Maui No Ka Oi Magazine will include an article on invasive species. Jeremy Gooding coordinated a 3-day session in September with journalist Michael Stein, photographer Ron Dahlquist, and MISC to describe what we’re doing together to fight invasive species. Christy Martin gave the interview about MISC efforts. Mele accompanied the journalist and photographer during a hike in Waikamoi Preserve led by Pat Bily.
- A “Snake Sighted in Haiku” news release went out on October 9. It was sent to three major newspapers, four Honolulu TV stations, and two Maui radio stations. Articles appeared in the Maui News, Honolulu-Advertiser, and Honolulu Star-Bulletin. KNUI aired the story on the radio. Channel 8 filmed Jack and Mele near Jack’s house in Haiku showing the gulch where the snake may go and will show a segment over the weekend. Creighton Low called us for help on October 8 after the homeowner called HDOA. We immediately responded. The homeowner had seen the snake on September 25 but waited two weeks before notifying us.
- On another note, we’re waiting for identification on the new frog that was captured on Lanai on September 10 before releasing a news article. This frog came from the mainland, and the day before, a coqui came to Lanai with plants from the Big Island.

MOMISC UPDATE (Tina Lau; TNCH-Molokai)

- Lori is doing a great job with outreach and community interaction on Molokai. Lori attended a recent water fest and had a little station on frogs. She went to a community event at Halawa and gave out information on Barbados gooseberry and introduced our mission. She also wrote an article for the TNC quarterly newsletter on MoMISC. The article was very well done. She knows how to get message out to the community.
- We had a visit from the Extension Specialists recently to talk about strategies. We discussed the idea of drizzle sprayer powered by CO2. We are looking at making and using the sprayer experimentally for cat’s claw and gooseberry. We are requesting funding to make the sprayer through a DHHL grant. Creighton and Glenn also came over and talked about how we can work together.
- We have been doing cat’s claw ground control with volunteers. We use the cut stump method on the outliers. Over a three day period we controlled 282 mature plants and 685 seedlings. We haven’t dealt with the core yet. We will try a trial combined effort with aerial spraying and the drizzle as a follow-up. Jeremy asked what chemical will be used for the aerial spray. Tina replied that it will be Garlon but we still haven’t determined the mix.
- We checked out the gorse population. It is about the size of two of these tables --- we are happy about that. We will survey the area surrounding the core. We are starting herbicide trials on New Zealand flax and we plan to start arundo treatments this month.

- Australian tree ferns are being sold at the nursery on Molokai. Lori has been following up. There is clidemia in the ferns. We have clidemia on Molokai but we do want to keep tabs on it. Lori is pulling it out of the ferns at the nursery. Clidemia is listed as a noxious weed so we may be able to deal with it from that standpoint. We are thinking of taking the nursery folks out for a field trip to see some of the noxious weeds in the wild.
- We have received several frog reports that turned out to be toads. We sent them off to Bishop Museum. They were very small toads so we were concerned they might be greenhouse frogs. Fern noted that black freckles with a raised orange area can always be seen on a toad. This is the best way to tell them apart. The greenhouse frog never has the raised orange gland.
- With the additional HCF funds we will be receiving this year we hope to bump Lori up to almost full-time (she is working half-time right now). We submitted a \$1,700 grant proposal to DHHL to make the drizzle sprayers and we may be able to request some helicopter money from them in the future.
- The next MoMISC meeting is October 17 if anybody is passing through.
- Fern mentioned that Earl is going to have money for eradicating things that can be dealt with in one or two years. If Molokai has populations that can be eliminated, you should get me that information or send it directly to Earl. They are already talking about the off-shore islets of Molokai. Lloyd continued that Molokai can make a strong case for eradication. If you could get to the person running for council on Molokai, it could be really constructive. Molokai has problems but they are something that could be dealt with. You don't have miconia, frogs, tibouchina, etc. so you have a very strong case.
- Mele added that now is a good time to be talking to the candidates. Rebecca disagreed --- they are too busy right now. It is best to wait until they get into office.
- Fern asked if there is any way to assess the status of the shama thrush on Molokai. If they get to West Maui, they could go all the way to the top. Tina replied no there really isn't. She also noted that they are starting to see francolins in the bogs. They have never seen them up that high before.

HEAR PROJECT UPDATE (Philip Thomas; HEAR)

- Philip gave a brief PowerPoint presentation on the invasive species workshops and the New Zealand quarantine program. The slides can be accessed at: <http://www.hear.org/kisw/oct2002workshop/presentations/hear/>
- Philip and Carol are trying to update ISC web pages in a timely manner. Their goal will be to post anything we send within one work day. That will be Carol's top priority. Please send anything for posting to both Philip and Carol. Also, please send any media updates to Philip. He wants copies of anything PR related.
- Philip has been working with the IUCN invasive species group and working on a global invasive species database.
- Currently anyone who wants to join the MISC-list must be approved. We would like to go to a system where approval is not required. Fern noted that this could cause a lot of problems with vertebrate issues. Philip replied that sensitive items should not go to the list. If it starts to be a problem, we will deal with it. It was agreed that the MISC list should be open.
- Philip also gave a PowerPoint presentation on the Kualunani Invasive Species Workshops. The goal of the workshops was to introduce invasive species concepts to the horticultural industry. They just completed a series of presentations on all the islands. Last night the program was on Maui. The weed risk assessment is an objective tool. It must be transparent, science based, repeatable, and reliable. Uses of an assessment

screening and informed planting decisions were discussed. Lists of alternatives to commonly used invasives are an important part of finding solutions we can all live with. Philip was amazed that most people in the horticultural industry were very accepting (with the exception of some folks in Kona). Most of the industry folks thought it was a lot less scary than they thought it would be

- Lloyd noted that he and Philip, Christy, Domingo, and Neil Reimer just returned from a trip to New Zealand to check out their quarantine system. In New Zealand, 100% of passenger luggage is checked. They toured the container facility. They have a sophisticated software system that helps them determine which things to target. They only have 3% slippage on spot checks at the airport. The bottom-line is you have to be really trying hard to get something through the system. Every piece of mail is run through an x-ray machine and sniffed by an agriculture dog.

ONGOING BUSINESS:

See the attached Activity Summary for an overview of the MISC crew's schedule since the last meeting.

VERTEBRATE CONTROL UPDATES

Caribbean Frogs (Erik Barnard and Mitch Craig; MISC)

- There have been four caffeine sprays completed. They have all been successful to some degree.
 - o 8/30, Hula Girl, 7,000 sq. feet at 2 %
 - o 9/6, Fritz Bathelt, 9,600 sq. feet at 2%
 - o 9/18, Howard's Nursery, 14,850 sq. feet at 1.5%
 - o 9/26, Howard's Nursery, 10,180 sq. feet at 1.5%
- The process was easier than we thought it would be. At Howard's and Hula Girl it has been very clear that there is a significantly diminished amount of sound. This has not been true at Fritz's probably due to frogs outside the spray zone. It was very difficult to find dead frogs at Howard's.
- There were some non-target species impacted. Primarily earthworms, slugs, and skinks, but most were found alive. There were some temporary plant effects noted at Hula Girl. Spider plants were impacted. The bromeliads at Howard's were not sprayed. HDOA is looking at post treatment soil samples to evaluate how the caffeine degrades. USDA also has data from one spray site on the Big Island.
- We are in a period now where caffeine can't be sprayed. HDOA did not renew the exemption and EPA is stepping back for now. USDA-WS applied for a 3-year renewal and will be finishing an EA when the non-target data analysis is complete.
- The 15% citric acid appears to be very effective. Phytotoxicity trials may be conducted at Howard's and also on the Big Island right now. Citric acid would be easier to deal with than the caffeine.
- Mitch will be finishing up data summary in the next few weeks and then he is moving to New Zealand. We need to discuss whether we replace Mitch or absorb his duties into crew. This will be an item for discussion at the vertebrate meeting next week.

Parrot-type birds (F. Duvall)

- Not much new has happened. We need to address the cockatoo problem soon since the population has increased by two. We want to schedule a trial to capture them. That is what Avery is interested in.
- The parrots appear to have moved. We need to get a survey together soon and Fern is hoping to have assistance from MISC. The MARS permit is up for renewal. MARS has not sent the signed permit back yet. We assumed they would want to renew, but we don't know that they actually will. They have nine birds that visit the site. Four of them have a band, which means they are part of the original flock.

Saffron Finches (F. Duvall)

- There is no new information and no recent sightings. They may have moved off and we just aren't seeing them.

PLANT CONTROL UPDATES (E. Barnard; MISC)**Miconia MISC Crew**

- There has been no new miconia ground work since the last meeting. The crew will be working in upper Nahiku next week.
- We conducted one bio-control spray operation using fungus grown here on the site.

Pampas Grass

- We spent 75 person hours on pampas since the last meeting. Thirty-four plants were controlled via ground work, 21 of these were flowering. Fourteen flowering plants were controlled via aerial spray operations. Aerial reconnaissance covered 10,344 acres and resulted in discovery of 91 plants (62 flowering). We found a couple of plants below the Observatories.
- We need to remove all the pampas stored in the Quonset hut. We need dump trucks and a back hoe to get it to the dump before we move out of NifTAL. We probably have at least ten truck loads to remove. Randy will check with Haliimaile to see if they can help us out. Bob may have a truck and front end loader available. It all needs to be transported to the dump and buried. The operation will need to be done with great care so we don't risk spreading the seeds. We will need to cover the loads with tarps and possibly wet them down with soapy water.

Fountain Grass

- We spent 30 person hours on fountain grass since the last meeting and controlled 337 plants.

Ivy Gourd

- Thirty-eight person hours were spent on ivy gourd with 470 plants controlled. The bulk of the work was in Kihei and Kapalua. We removed 75 pounds of fruit from Kapalua.

Ivy Gourd Bio-control (M. Fukada; DOA)

- There should be another petiole-gall forming weevil available in the next couple of months. It is a slightly bigger little weevil.

Giant Reed

- During 165 person hours of work, 220 plants were controlled.

Downy Rose Myrtle

- We controlled the hedge on Haiku hill. There were 40 plants all of which were flowering/fruitletting.

Rubber vine

- Fourteen plants were controlled during 11 hours of control work.

Next Meeting Date/Time: Friday, 12/06/02, 9am-12noon

MISC ACTIVITY SCHEDULE
August 29 to October 11, 2002

- 8/30 Arundo: Kahului (Sam, Jeremiah, & Matt)
- 9/2 Labor Day Holiday
- 9/3 Rubber Vine: Lahaina/Kihei (Mike Ade, Russ, & Matt)
- 9/4 Mele Fong starts work
Rubber Vine, Ivy Gourd &, Pampas Grass: Upcountry (Mike Ade, Russ, Sam, & Matt)
Data Base Meeting (Jack, Erik, Mike W., Steve, & Jeremy)
- 9/5 Arundo: Waikapu (Mike Ade, Russ, Sam, & Matt)
- 9/6 Frog Caffeine Spray: Huelo (Jack, Mitch, Erik, Mike A., & Mele)
Matt Snow's last day
- 9/8 Miconia: Hana core video (Russ & Sam)
- 9/9 Pampas Grass: Kula (Russ & Sam)
Helicopter Recon: Pampas Grass, Poli Poli (Erik, Mike W., & Mike A.)
- 9/10 Jamie Bruch, Jin-Wah Lau, and Shannon Wiannecki start work
Pampas Grass: Kula (Russ)
Arundo: Kahului (Mike A., Jamie, Shannon, & Jin Wah)
- 9/11 Arundo: Waikapu (Mike A., Jamie, Russ, Sam, Shannon, & Jin Wah)
Helicopter Spray Operation: Miconia bio-control, Hana (Mike W.)
- 9/12 Pampas Grass: Kula (Sam, Jamie, Shannon, & Jin-Wah)
Helicopter Recon: Pampas Grass (Erik, Mike W., & Russ)
- 9/13 Rhodomyrtus: Haiku Hedge (Mike, Jamie, Russ, Shannon, & Jin-Wah)
Helicopter Recon/Spray: Pampas (Erik, Mike W., & Sam)
- 9/16 Tiffany Kayama starts work
Arundo: Waikapu (Mike A., Jamie, Sam, Russ, Jeremiah, Shannon, Jin-Wah, & Tiffany)
- 9/17 Arundo: Waikapu (Mike A., Jamie, Sam, Russ, Jeremiah, Shannon, Jin-Wah, & Tiffany)
- 9/18 Data Training w/ Mike W. (Jamie, Sam, Russ, Jeremiah, Shannon, Jin-Wah, & Tiffany)
Fountain Grass: Kahakaloa (Erik, Mike A, Mele, Jeremy, & EPMT crew)
Frog Caffeine Spray: Howard's Nursery (Jack, Mitch, Erik, Mike A., Bob Sugihara, Trevor Lu, & Creighton)
- 9/19 Pampas Grass: Front country HNP (Mike A., Jamie, Sam, Russ, Jeremiah, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
- 9/20 Pampas Grass: Front country HNP (Sam, Russ, Jeremiah, & EPMT Crew)
Pampas Grass: Makawao (Mike A, Jamie, Shannon, Jin-Wah, & Tiffany)
Jeremiah's last day
- 9/23 Pampas Grass: Crater sweeps, Holua (Jamie, Russ, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
Gear maintenance & inventory (Erik, Mike A., Sam, & Elizabeth)
- 9/24 Pampas Grass: Crater sweeps, Holua (Jamie, Russ, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
Pampas Grass: Keokea (Mike A, & Sam)
Heli-spray rig inspection on the Big Island (Erik & Glenn Shisido)
- 9/25 Pampas Grass: Crater sweeps, Holua (Jamie, Russ, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
Fountain Grass: The Dunes (Mike A., & Sam)
- 9/26 Pampas Grass: Crater sweeps, Holua (Jamie, Russ, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
Pampas Grass: Kula & Makawao (Erik, Mike A., Sam, & Dave Pyle from EMWP)
Frog Caffeine Spray: Howard's Nursery (Jack, Mitch, Erik, & Mike A.)
- 9/27 Pampas Grass: Olinda & Makawao (Mike A., Sam, & Jin-Wah)

- 9/30 Pampas: Crater sweeps (Mike A., Jamie, Sam, Russ, Jin-Wah, Tiffany, Dave Pyle, & EPMT Crew)
- 10/1 Pampas: Crater sweeps (Mike A., Jamie, Sam, Russ, Jin-Wah, Tiffany, & EPMT Crew)
Meeting with Tri-Isle (Erik & Elizabeth)
- 10/2 County Fair Prep Meeting (Mele, Fern, & crew)
Ivy Gourd: Kihei (Mike A., Jamie, Russ, & Sam)
Basic Helicopter Safety Class (Shannon, Jin-Wah, & Tiffany)
- 10/3 Ivy Gourd: Kapalua (Mike A., Russ, Shannon, & Jin-Wah)
County Fair: (Mele, Jamie, & Jin-Wah)
- 10/4 County Fair: (Mike A., Shannon, & Fern)
- 10/5 First Aid/CPR Training (Jamie, Shannon, Jin-Wah, & Tiffany)
County Fair: (Shannon, Tiffany, & Fern)
- 10/6 County Fair: (Mele & Mike W.)

- 10/7 Pampas Grass: Crater sweeps, Paliku/Kapalaoa (Russ, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
Ivy Gourd: Kihei (Jamie & Sam)
Cage clean-up, autoclave, decontamination, gear, etc. (Mike A.)
- 10/8 Pampas Grass: Crater Sweeps, Paliku/Kapalaoa (Russ, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
Helicopter Recon: Pampas Grass (Mike W., Mike A., & Jamie)
Snake Hunt AM: Haiku (Jack, Mele, & Sam)
Snake Hunt PM: Haiku (Mitch, Mike A., & Jamie)
- 10/9 Pampas Grass: Crater Sweeps, Paliku/Kapalaoa (Russ, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
Heliops canceled due to snake hunt
Snake Hunt PM: Haiku (Mike W., Mike A., & Jamie)
- 10/10 Pampas Grass: Crater Sweeps, Paliku/Kapalaoa (Russ, Shannon, Jin-Wah, Tiffany, & EPMT Crew)
Snake Hunt AM: Haiku (Mike W., Mike A., Jamie, & Sam)
Jack Peterson's last day
- 10/11 MISC Meeting