

**MAUI INVASIVE SPECIES COMMITTEE  
MEETING**

**MAUI INVASIVE SPECIES COMMITTEE  
MEETING**

**FRIDAY, JANUARY 11, 2002**

**9:00 AM - 12:00 NOON**

ATTENDANCE: Ron Nagata, Steve Anderson, Kim Martz, Forest Starr, Lloyd Loope, Erik Barnard, Christy Martin, Jack Peterson, Randy Bartlett, Mike Walker, Jeremy Gooding, Renate Gassman-Duvall, Mach Fukada, Pat Bily, Fern Duvall, Philip Thomas, Carol Annable

- The meeting was called to order by Randy Bartlett (MPC/Chair) at 9:10am

**NEW BUSINESS**

PERSONNEL STATUS (Jack Peterson; MISC Coordinator)

**New Field Crew Member**

- We've selected a new field crew member to replace Jayson Barangan. He hasn't been approved by RCUH yet. His name is Matt Snow. He is originally from Oahu and went to school at Punahou. He has a degree from MIT, is an award winning musician, and has excellent volunteer experience.
- The MISC crew is out in Hana working with the EEWf crew again this week.

**Emergency Environmental WorkForce (EEWF)**

- MISC has 15 full-time EEWf employees working full-time in Hana. Two members of the crew are dealing with decontamination and the rest of the crew is doing miconia field work. Mike Ade is leading the crew. The EEWf has been our primary focus since the last meeting. We have set up a new base-yard near Hana for the crew and we have them well geared up at this point. Much more on the EEW in a few minutes.

MEETING MINUTES

- Minutes from the Nov 11, 2001 meeting were approved. They will be posted on the web-site.

BUDGET/FUNDING STATUS REPORTS

**MISC Budget Report** (Elizabeth Anderson, MISC)

- Expenditure of the \$30,000 Hawaii Community Foundation (HCF) Grant for our Data Specialist was completed in mid-Dec. We are waiting for the University to finish setting the new account for this year's \$40,000 grant. As soon as the new account is set up, Mike Walker will be transferred over to that account.
- We still have ~\$20,000 remaining in the Fish and Wildlife Service (FWS) account for Christy's salary and there is another \$46,000 ready for invoicing to support the Education/PR position.
- Other than the HCF and FWS accounts MISC is having a serious cash flow problem. With the \$60,000 we were cut from DLNR to support the Hana crew, our DLNR account is just about spent completely down. At the moment we don't have funds available to even cover January payroll. We have \$100,000 committed from NFWF and ~\$400,000 from the County, but there are been significant delays in securing those funds and making them available. It is unfortunate that we had to spend the DLNR account so far down because it is our most flexible account for things like parrot contracts, utilities, etc. The NFWF funds are for salaries/plants only and the County funds are all earmarked for miconia.

- We have roughly \$4,000 left from last year's TNC money. This account is keeping us afloat right now for travel and small purchases. We have spent approximately \$15,000 to date on supplies and travel directly related to the EEWf crew. This \$15k has been split between MISC accounts, the EEWf account, and pay back we will owe to the NPS.

**2002 Action Plan Status** (Jack Peterson, MISC)

- The first printing of our 2002 Action Plan is complete. We have 11 copies and will be making more soon. We can still make changes before the final printing which we'll distribute more broadly (i.e. to Legislators). We need to get the plan out to the Legislature when they open on January 16. The Action Plan contains a significant update on miconia and improved graphics and maps, and the results section is better than ever.
- There is no request amount included in the Action Plan yet. We intend to include a budget page outlining what was spent this year. We used a July to June format for the results section since that corresponds to the State and County fiscal year. The plan outlines the minimum \$2.25 million per year for at least 10 years needed for miconia, but no other funding figures are included at this point.
- Randy reminded us to make sure we get a copy of the Action Plan to Lyle Wong.

**County Funding Update** (Nathan Varns; Tri-Isle RC&D)

- Nathan wasn't able to join us today because he is diligently working to complete the County contracts for MISC. He sent over a written update.
- The County contracts continue to be developed. Tri-Isle RC&D signed the \$200,000 contract with Maui County Office of Economic Development. The contract is going through final County channels and should be completed by the end of next week. RCUH has been in the loop and is setting up another account to administer these funds.
- A NFWF grant claim was sent in for \$80,000, but we were informed they require expenditure of both in-kind funds and the NFWF grant before check can be issued (an advance is not allowed). We're working to get this resolved and are scheduling a teleconference next week to work out the details.
- In December, Tri-Isle requested a reallocation of an older FY2000 Water Department grant (\$100,000), which was approved by David Craddick, to get some money into the pipeline for MISC crew and staff expenses. RCUH said contract for this is forthcoming very soon.
- The other \$200,000 contract with the Water Department is still in their hands and we were informed it will be completed by Water Department staff next week and sent through channels for signatures.

**Legislative Bills**

- There is a DOFAW line item (LNR 402) for \$500,000. There is also another \$500,000 in the Governor's budget request going to the Legislature. We need clarification as to what this funding is for. We don't know whether it is allocated for the new positions or for invasives work. We need to check and see what else is in the pipeline.

**Federal Funding Update/Haleakala N.P.** (Ron Nagata, Steve Anderson; HALE-NP)

- The Superintendent is still in process of getting permission to divert funding from existing fencing accounts to miconia. He is also looking at using some of the park's base increase from the Washington Office for miconia as well.
- The park currently has no Internet communication with the world due to a court injunction. It is possible the park may not have email back until April. The Superintendent is waiting for guidelines regarding what we can do to divert funds. The information has been delayed because of the Internet problem.

- We will need to come up with an equal amount of money to finish the fencing project from another source, probably a fee project. The system for fee projects is also Internet driven and therefore we don't have access to the necessary information at the moment. The fence project that is being considered for diversion is roughly \$300,000.
- The park also submitted a Natural Resource Preservation Program (NRPP) proposal for miconia. The proposal is for \$300,000 per year for 3 years.
- The current park Fee Demonstration Program is good until 2003 and then it must be reauthorized. We are hopeful that when it is reauthorized there will be wording added to the legislation to allow use of fee money outside of the park if there is a direct threat to the park. Fees have been collected for nine days at Kipahulu now. The amount of money collected has been fairly low because visitation is down.

#### **Federal Funding Update/USFWS**

- A huge THANK-YOU goes out to Mike Richardson for all his help in procuring equipment, clothing, and supplies from DRMO for our EEWf crew. Mike went above and beyond the call in making multiple trips to DRMO, picking up supplies, packaging them, and shipping them to us. He easily saved us several thousand dollars. We need to send a thank-you note to his supervisor.

#### **Federal Funding Update/USGS-BRD (Lloyd Loope, USGS-BRD)**

- Lloyd is working with the park to facilitate getting additional miconia funding. Luckily USGS does have email and Internet access.

#### PR/EDUCATION STATUS REPORT (Christy Martin; MISC)

##### **Community Outreach/Meetings**

- Christy has given several outreach talks recently. She spoke at the Whale Sanctuary and gave a talk to the Wailuku Rotary. She will be going on the rotary circuit soon.
- Christy helped Tracy and Art with the miconia seed study. The conures ate the seeds and all the seeds germinated within the first two weeks. They are planning some studies with other species of plants. MARS was very helpful and cooperative during the study.
- Christy has also been doing a lot at Akaku. She has taken several video classes and is on the Hot Topics crew. Christy, Fern, and Philip were on Hot Topics in December talking about coqui frogs.

##### **Emergency Environmental WorkForce (EEWF)**

- Getting the EEWf up and running has taken a lot of our time and energy over the past month. There was a great deal of planning involved in figuring out where to put 97 people. The dengue fever crews took a lot of people. Since our MISC crew is working out in Hana most of the time doing miconia with EEWf, we weren't able to take-on and supervise any EEWf workers in the central area. The central area workers were divided up between a variety of organizations: TNC, USFWS, Community Work Day, Haleakala National Park EPMT, HDOA, and HDOH.
- The crews have been given training in natural history, herbicides, first aid and CPR, etc. The program will continue through late February or early March.
- Forest and Kim have an EEWf crew through Community Work Day. The crew is working at Kanaha Beach in an area of sand dunes and wetlands where they are moving brush. They have a full-time crew of 10 good folks and are interested in additional funding to pursue continuing the program. Their crew has

been very productive and they are really seeing results and understanding concepts. They will take the knowledge they gain from the program with them when they leave.

- There are two of the Community Work Day EEWf workers that are part-time at Kanaha and then are doing work at Howard's Nursery with Bob Yonohara catching frogs at night. Fern mentioned that there are some areas in the wild that would be helpful for them to work on also. Howard's is a good place for them to learn
- Pat has 4 workers at TNC (he started with 5). He is viewing the program as an opportunity to make these people emissaries for conservation. They are getting a great message and they are pretty good at weed identification already. They've killed 1700 pines in Waikamoi. Some of the workers are not in great physical shape so they lose some time hiking into remote areas. The crew is contributing to weed control projects that have been on the back burner because Pat is usually a one man show. Pat mentioned that he was uncertain who is doing his EEWf payroll and has had a hard time getting answers on administrative support.
- Jeremy's NPS EEWf crew is down to 6 workers from 7. The crew has definitely dominated their time recently and there have been some substantial start-up costs, but the results are worthwhile. Right now they are working on pines at Puu Nianiau. This was a good place to start because of logistics. He would like to see the program extended. The first month there was not as much in return because of the learning curve.
- Lloyd summarized that it is a good program and we would like to extend it. There needs to be more logistical support provided in the future.
- Steve added that we need to remember what this committee is about and what we are trying to do. With the EEWf crew we are putting a lot of effort in the core. This is channeling us into lower priority action. We need to figure out how to get them out into the priority areas. We don't want to lose sight of our goals.
- Christy added that if the program is extended they will be able to work on their own more because they will be well trained. Randy continued that if the program is extended we must have more transportation.
- Jeremy also noted that as miconia work expands, with both the EEWf program and the possibility of increased Federal funding, we need to address long-term housing for our crews in the Hana area. Oheo is really not appropriate because of the potential for dispersal into the park. We need a more functional facility. Wainapanapa has been a great option for the short term, but we can't count on using the cabins indefinitely. We need to remember to count the use of the cabins as an in-kind contribution from the State. Randy asked if there are state or county lands in the Hana area that we could build something on.
- Pat observed that the concept of how the EEWf fits into MISC priorities is an important question. This could hurt chances of funding in the future because they've already given us this money. Christy countered that we need to remember that the initiative is not a MISC initiative, but rather is for invasives in general.
- Pat added that if the program is renewable maybe the infrastructure will come along with it like it did with the CCC program. Fern asked if anyone from the ISC's is having input into the reauthorization idea? Randy noted that he needs to start contacting people on that.
- Jack gave an over-view of the MISC EEW program. We've been saying all along that we need better resources to make the program functional and that our needs were large and immediate, so we felt we should graciously take whatever they gave us. This came from outside (the legislature) and landed on us. We're thrilled that requests from David Duffy etc. for this EEWf Bill landed on fertile soil in the Legislature and feel it's a testament to our strong PR and how well we've gotten our message out. It wasn't ideal but we had to take what they handed us and accept it. The initial training and getting up and running definitely took some time and money. We need to maximize the press and results. More on results later. David Duffy

thinks this could generate a much larger program --- an order of magnitude larger. Our objective is to have the program be a success. We need to do what Steve suggested and not get sucked into the Hana core too deep. We started in the core because of the simplicity of logistics, and because of transportation and kill number issues. The EEWf budget initially made no provision for vehicles or transportation. We also initially want to report large numbers of miconia killed. Days of sweeps in the periphery could yield very small kill #'s). There is no reason why we can't expand out and hire more people in central Maui later if the program is extended. Christy continued that although the core isn't the best place to be working, it has been a black hole for information and we are going to come out with some good data on what is there and what needs to be done. This is a tremendous public outreach opportunity.

- Jack added that Christy did an excellent job of finding places for the 40 central Maui people. Our entire crew has really risen to the occasion. Mike Ade is doing a great job of supervising all these folks. We owe a special thanks to Jeremy for his assistance with purchasing supplies
- We are doing weekly EEWf progress reports for RCUH. We received a thank you letter from the Mayor and a thank you to Christy from Duane for teaching CPR/First Aid over on the Big Island.
- Pat asked if the EEWf crew in Hana is working with the state crew at all. Jack responded that parts of the crew are working with us and they have been very cooperative. We are getting a good perspective on the core. Pat mentioned that after his EEWf crew gets in better shape he would like to take them out to do some work miconia work in Keanae.
- We are using a foliar spray on seedlings, hand pulling anything we can, and using thin-line basal bark on everything else. Jeremy asked about the numbers in the core. Jack pointed to the map. The area in yellow covers 13.8 acres with an average of 2,380 plants above a half meter high per acre. To date = 33,000 individuals controlled.
- Steve asked how long it has been since the Hana crew went through the area where we are working now. Jack responded that they are on a 3 year cycle. We are seeing seeding in areas they have been through. In related developments, we also found two seeding trees very close to Haleakala NP in Waihoi Valley. There is also a new cohort we found up by Keanae (in Wailua Nui). There are hundreds of plants where last year we found and sprayed 1-2 dozen, but none more than two meters high. They could all be progeny from the one initial tree.

#### MOMISC UPDATE

- Tina was not able to make it over for the meeting today. The MoMISC brochure has been printed and will be delivered to all Molokai boxes shortly. The total cost was ~\$1900. The next MoMISC meeting will be on January 23.

#### HEAR PROJECT UPDATE (Philip Thomas; HEAR)

- Philip requested that we send him copies of all press releases that are issued.
- The Arborist Committee has made amazing progress. There is a consensus to update the Planting Plan and accept the DOFAW list. Preliminary screening results are coming in based on the Australian system. Using the results we were able to eliminate one species from the "bad guys" list for the Planting Plan. This was good public relations. There will be a letter to be sent out in the name of the Arborist Committee with a definition of invasives, a set of alternatives for planting, and an outline of the plans to update the Planting Plan. The changes to the Planting Plan will be proposed to the County Council at the next meeting. Philip encouraged everyone to send in suggestions for non-invasive substitutes.
- Rod Randall was on Maui for two weeks and spoke at the Urban Forestry Invasive Species Workshop. He also spoke to the Arborist Committee and was taped for Akaku. He participated in Hot Topics program on

invasives with Randy, Ernest Rezens, and Robin McMillan. Unfortunately, the MISC meeting that he was also going to speak at was cancelled. Philip has Rod's PowerPoint presentation available and we will get copies of the Akaku tape.

- Rod did the original instigations for the Australian screening program. This is a system that really works. He will be publishing a book soon with references on "weediness" for 20,000 taxa. Philip is helping to get the database in shape. A global compendium of weeds is now posted on the HEAR web-site. This is an excellent reference and source of information.
- Forest added that the idea of screening plants before they are imported is the wave of the future. In Australia 90% of plants are accepted for import through this system.
- Philip will be hiring an assistant in the next week or two. Carol Annable has applied and there is one other applicant. The assistant will help Philip to implement a lot of new things.
- Philip is going to California at the end of month for several meetings: the National Biological Information Infrastructure (NBII) invasive species meeting, the NBII National All-Nodes meeting (as a partner of the newly formed Pacific Basin Information Node (PBIN)), the North American Biodiversity Information Network (NABIN) meeting, and XML training (a way to share information globally). He will also be working with the folks at UC Davis to learn some techniques for global information sharing that will help make Rod's stats available on the web. There are nearly 1 million records on over 20,000 invasive plants.

#### **ON-GOING BUSINESS:**

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

#### VERTEBRATE UPDATES (Fern Duvall; DOFAW)

##### **Caribbean Frogs**

- Fern has been out of the office and Earl is in the process of changing offices. The nursery/hotel frog issue may be addressable if we can get the caffeine certification taken care of and meet the regulations. This will be very difficult, but it may be doable. However, for natural/wildland areas the caffeine may not be functional. With the current label it simply isn't feasible. The label would need to be modified for wildland situations. The State Department of Agriculture added things to the EPA regulations and made it much more restrictive than EPA did. If the state can change its stance, this may be the easiest way to address the problems.
- Steve asked about the problems with the labeling language. Fern responded that it is incredibly restrictive. You have to be able to restrict all access into the area and you must be able to do counts in the areas treated. You must have barriers. This won't work on wildlands or hotel grounds. You can't just post the treated areas. You must be able to keep people out of the area completely and you need to do pre and post treatment counts. There is only one person that can certify the site and each site must be certified before treatment. It just is not doable. In the meantime, now that it is wetter the situation is becoming more dire. The entire frog issue is something we will need to take a harder look at. The label is just not workable.
- Fern asked if the EEFW workers that have been assigned to frogs could be doing more hand catching in the wild rather than just nursery work.
- Philip added more to the caffeine label story. It was very difficult to get a copy of the label in the first place. Philip made a number of follow-up calls after getting the label and copies of the EPA letter. He asked if the monitoring requirement was really meant to be followed to the letter. They responded that they hadn't heard anything from anyone saying there was a feasibility problem. Philip asked for clarification and they

refused. They did offer to comment if they were sent something to review and were asked if it met criteria. Philip is hopeful that if we do the monitoring a couple of times it might be adequate. The monitoring requirement was put in by HDOA not by EPA. It is more strict than what EPA required. EPA needs to hear from MISC and other agencies in order for the label to be changed. The permit expires in September and we may not be able to address the issues by then.

- Fern noted that Earl went thru 140 chemicals in addition to the caffeine. The first chemicals he looked at were already on the market, but none of the ones already on the market killed enough frogs. We need to get Hilo HDOA to come over and look at the situation and then we can write a letter from DLNR and copy EPA on it. It looks like a letter writing campaign may be in order.
- Nobody has successfully used caffeine yet in the state except experimentally.
- Mach Fukada was introduced. He is working for HDOA primarily as an entomologist for the bio-control section. He is concerned with survey for and detection of new plant pests and is also looking at things other than insects including weeds, fungus, slugs, snails, etc. He has been volunteered to assist with the frog program. What he can do is fairly limited. Mach's is well versed in botany as well as entomology. He does host plant surveys for introduced insects, plant pathology, and insect vectored diseases. He is from the Big Island and is still learning about Maui. Mach added that they may be looking at a bio-control fungus for frogs, but it needs water to work.

#### **Parrot-Type Birds (Renate Gassmann-Duvall)**

- Renate is still doing surveys in Huelo. There have been some changes in the bird's behavior. They are not flying back and forth from the cliffs as often and they have become a little more quiet. They aren't flying in pairs now and are flying more erratically than in the past. During the summer months their flight was more in a straight line.
- The Huelo community wants to know about the feeding stations and what is going on with the capture program. There is a core group in Huelo that wants something more radical done. Renate mentioned that she thinks there is a TMK map that shows there is State land that could provide access to the property where the birds are. Fern countered that the cliffs are State property, but the landowner that owns the adjacent property doesn't want state people passing through his property. This landowner owns right up to where it drops off so access is not an option.
- Renate suggested that we need to explore whether the birds can be captured in the nest. There are several people in Huelo that are willing to observe the conures for us. They will fill out observation sheets.
- Renate needs to write her report summarizing her results for the 6-month contract that she is about to finish with MISC. She hopes to have the report done by the end of the month. She is wondering if she should put more emphasis on writing a management proposal rather than just another report. She thinks this will be a better use of her time.
- Renate received a call from Chris Biro. He works with mitted conures on the mainland and claims to have extensive knowledge of capture techniques for the birds. He is willing to serve as a consultant. Chris says you can't capture wild conures with a tame bird. He also suggested that there need to be a great deal of care taken not to alarm the birds. If one bird puts out an alarm, that is the end of your capture program. This information has been passed on to Dr. Van Sant through Christy.
- Renate is also working on an information sheet for pet stores encouraging people not to release birds. She is trying to get addresses for parrot breeders on Maui but is not having much luck.

- In the future Renate would like to see more involvement with MARS in capturing the birds. We need to do a mitred conure stakeout and really try to get a really good count. She would like to develop some educational sheets and write a management plan. The conures also need to be assessed for a bird disease study. Renate was asked by the Audubon Society to write an article for Elepaio. She did a photo session with Eric Nishibayashi and got some good photos of Moluccan cockatoos.
- They haven't been successful in capturing the Moluccans yet. A live pet bird may be helpful for catching them at their hole. Wailuku Agri Business wants to display the birds as invasives at Maui Tropical Plantation as an educational tool.
- Renate still needs to get more information on the rose-ringed parakeets. We don't know yet where they nest and what their life habits are. These are the birds that are causing seed corn problems on Kauai.
- There was a brief discussion regarding funding for extension of Renate's contract. There may be a bit of a delay until funds are available again. Now that we have better data on parrots spreading invasives we may be able to justify using the County miconia funds for Renate's contract.
- We really need a report regarding what MARS is doing. Based on their permit they have to report to Fern and they have reported no birds captured so far. Fred suggested we might be able to contract to ADC to do the control work after MARS is pau if the don't succeed.
- Jeremy had a sighting of green parrots at 10 or 11 a.m. offshore at Koki beach in December.

#### **Saffron Finches (F. Duvall)**

- Fern has tried three times to capture the Pukalani birds with a net and has gotten pretty close. He saw them last the 5<sup>th</sup> of January.

#### PLANT UPDATES (J. Peterson)

##### **Miconia/Emergency Environmental WorkForce (EEWF)**

- EEWF details were covered above. The MISC crew has been spending roughly 95% their time on miconia due to the EEWF.

##### **Miconia/Aerial/Peripheral Populations (J. Peterson)**

- We've conducted eight helicopter operations since the last meeting. Five of the eight operations were for miconia. Three were reconnaissance and two were spray operations. We had two scheduled helicopter operations cancelled due to weather and five were cancelled during the EEWF start-up in December because our crew was busy out in Hana.
- Jack went over to the maps. This map is already dated. We have a new map here that shows we have extended our reconnaissance further towards the park boundary. We did reconnaissance in the lower elevation areas and Jeremy has covered the upper elevation areas. We found 5 plants further south than we knew. A couple were seeding trees. We were able to go back and spray those this last Wed. We hit those five, all the ones in yellow on the map, and then hit 450 more with spray-con above the Hana core.
- This is a map of the core. We've GPS'd the roads and cut some trails. This is the area already covered by the EEWF crew. We are going to start moving the crew up the valley. This is an area that can be worked by the EEWF crew. We can and do intend to get them up the mountain further away from the core without a road.

- Fern asked how many fruiting trees we think there are in the core. The answer was 1000's. They can go from flowering to fruiting within two months.

#### **Miconia Hana Crew**

- There has been more progress in transferring the Hana crew to RCUH. Paperwork by RCUH was to have been completed this week and transfer to their payroll is scheduled for the 1<sup>st</sup> week of February. The Hana Crew is still one person short and a new hire will be started upon transfer to RCUH.

#### **Miconia/NPS Exotic Plant Management Team (EPMT) (Jeremy Gooding; HALE-NP)**

- Jeremy is holding off on miconia work until he sees what happens with the federal budget instead of using the EPMT funding for miconia

#### **Miconia Bio-Control**

- Mach went out with Eloise on December 10 to look at bio-control areas. It seems like the fungus is established. We need to go look again at how things are going after all the wet weather lately. The fungus could be getting spread around a lot with the water. Pat asked if there is secondary infection happening. Mach responded that they don't know. That is something they still need to look at. Pat also asked about the impact on larger trees. Mach replied that they don't know if it is enough to slow them down. There are still questions regarding the mobility of the fungus. Jeremy asked about boom spraying it? A broadcast spray might work.
- Jack mentioned that we have GPS points on the last two fungus sprays. They are in areas where the ground crew couldn't possibly go.
- The future of the bio-control program is in MISC/DLNR hands now. Eloise is looking at moving on to another project possibly. There is money in MISC's County budget set aside to support bio-control work. Steve noted that we should be mass producing the fungus. We need the capacity to put it in our spray mix. Evidently it isn't typically killed by Garlon at low concentrations, but we don't know at what concentration of Garlon it might be killed.

#### **Pampas Grass**

- The MISC crew did 1.5 days work in residential areas since the last meeting.
- We also conducted three pampas grass helicopter operations killing 145 seeding plants. In the watershed we don't spray unless there is a seed head visible since several native species look virtually identical. Even very small *C. jubata* (one year old?) usually have at least one inflorescence. It is very difficult to get a weather window for pampas heliops. A number of the helicopter operations that were cancelled because of the EEWf program would have been for pampas.

#### **Rubber Vine**

- There was a half day of rubber vine work done since the last meeting.

#### **Ivy gourd**

- Two days of work yielded 315 plants controlled.
- Mach commented on bio-control for ivy gourd. He is interested in working on *Coccinia* bio-control, but they are not going to do anything on this island until it becomes apparent that mechanical/chemical control is not feasible any longer. HDOA needs to be on the same page with MISC on this issue.
- Mach also mentioned a new *Coccinia* infestation near Costco by the waterfall place. The infestation on Alamaha by Verizon has come back. We need to do a weed tour with him. Mach is willing to be eyes for us while he is out driving around.

### **Fountain Grass**

- The aerial Kanaio surveys for fountain grass were repeated by the NPS Exotic Plant Management Team. Jeremy will do a summary report and copy MISC on it. They had good coverage and didn't find anything.
- MISC spent one day revisiting the fountain grass core. There were a small number of individuals found. We still need to deal with the rappelling issue for the plants on the cliff.

### OTHER ONGOING BUSINESS

- Philip noted that there is a new article on snakes by Fred Kraus and Domingo Cravalho. The article is posted on the HEAR web-site and is being passed around.

**Next Meeting Date/Time: Friday, 2/22/02, 9am-12noon**

### MISC ACTIVITY SCHEDULE November 9, 2001 to January 11, 2002

- 11/9: MISC Meeting  
Fountain Grass: Waiehu Dunes
- 11/12: Veteran's Day Holiday
- 11/13: Miconia: sweeps, Wailua nui  
Christy gave a talk at the Hawaiian Islands Humpback Whale National Marine Sanctuary
- 11/14: Miconia: sweeps, Wailua nui  
Parrot/Miconia seed study planning meeting: Christy, Art Medeiros & MARS staff
- 11/15: Miconia: sweeps, Wailua nui
- 11/16: Crew meetings with Randy  
Pampas Grass: GPS points in Olinda  
Jayson Barangan's last day of work  
Mayor's meeting to plan EEWF hiring for Maui: Christy, Dr. Pang, Nathan Varns, & Natalie Powell in attendance. MISC's proposal presented.
- 11/19: Helicopter Operation: Pampas Grass, cancelled by weather  
Rubber vine: Wahikuli Rd. Lahaina  
Miconia decontamination, vehicle and grounds maintenance
- 11/20: Helicopter Recon: Pampas Grass, Honomanu  
Helicopter Recon: Miconia, Waiohonu  
Pampas Grass: Makawao Forest Reserve & Olinda Water Facility
- 11/21: Helicopter Spray: Pampas Grass, Honomanu  
Create rinseate containment/recycling process
- 11/22: Thanksgiving Holiday
- 11/23: Crew vacation day
- 11/26: Miconia: leaf samples for DNA project & berry collection for parrot feeding study
- 11/27: Helicopter Operation: Pampas Grass, cancelled by rain  
Vehicle and building maintenance and repairs  
MISC/MARS staff began Miconia seed study (Christy, Art Medeiros, Tracy Erwin)  
Christy to Akaku Community Television training course
- 11/28: Helicopter Recon: Pampas Grass, West Maui  
Helicopter Spray: Miconia Bio-Control, Hana

- Ivy Gourd: Wailuku Industrial Park
- Arundo: monitor Kula locations
- Pampas: monitor Kula locations
- Vehicle maintenance and repairs
- Frankie the mitred conure ate Miconia berries. (Luv'ed um!)
- 11/29: Ivy Gourd: check Hank's sightings (not found) & control Kapalua sites
- Vehicle repairs
- Christy to Akaku training course in preproduction
- 11/30: Rubber Vine: Wahikuli St., Maui Seaside Hotel
- Ivy Gourd: Kapalua sites
- Building and grounds maintenance
- Miconia: meeting with Jeremy to plan for EEWf hiring
  
- 12/3: MISC crew travels to Hana for EEWf adventure
- Christy on Hot Topics with Fern Duvall, Domingo Cravalho, Mark Redecker RE: frogs
- 12/4: Miconia: cut trail in the core with Daryl and Sam Sr.
- Miconia video meeting with Art, Lloyd, Masako Wescott, Chris Riekert
- 12/5: Miconia: cut trail in the core, afternoon rained out
- 12/6: EEWf crew orientation and training. Videos, Slide shows, & Presentations by Christy, Jack, Mike, & Erik. to 47 East Maui EEWf staff
- 12/7: EEWf crew orientation and training
- MISC crew returns from Hana
  
- 12/10: MISC crew travels to Hana
- EEWf herbicide training w/ HDOA Pesticides Branch (J. Anderson , HDOA; Mike & Erik)
- Christy to Central Maui EEWf hiring
- Christy to Tri-Isle planning workshop at Cameron Center
- 12/11: Begin setting up Hana Baseyard for EEWf crew
- Start issuing gear to EEWf crew
- 12/12: EEWf baseyard and gear preparation
- 12/13: EEWf baseyard and gear preparation
- EEWf paperwork at Ohana Makamae
- Christy, Jeremy Gooding, Pat Bily conduct Central Maui training on invasive species
- 12/14: East Maui EEWf crew, dengue crew in first-aid training with Sharon Ringsven & Christy
  
- 12/17: Purchase supplies and MISC crew travels to Hana
- Christy, Duane Nelson, Tom Ishii, Les Matsuura, Nelson Ho, Laura Hillis meet in Honolulu RE: EEWf press opportunities & planning
- Christy participates in Hot Topics filming as part of Akaku training
- 12/18: EEWf baseyard and gear preparation
- 12/19: EEWf baseyard and gear preparation
- Christy to Arborist meeting
- 12/20: Helicopter Recon: Miconia, Hana
- MISC crew returns from Hana
- Christy in dengue training and begins first-aid training for Central Maui EEWf
- 12/21: EEWf planning in office & Supply purchasing
- EEWf crew works with dengue crew
- Central Maui EEWf staff in first-aid training with Christy, 2 additional instructors
  
- 12/24: EEWf crew works with dengue
- MISC crew takes vacation day for holiday weekend
- 12/25: Christmas Holiday

- 12/26: MISC crew travels to Hana  
Continued baseyard improvements (shed and water)  
Vehicle maintenance
- 12/27: EEWF crew data training (Mike Walker) 1/3 day in classroom.  
Miconia: 1st day in the core for EEWF crew (trail cutting, sweep methods, data collection)
- 12/28: Miconia: w/ EEWF crew in Hana core  
MISC crew returns from Hana
- 12/31: Part of MISC crew travels to Hana  
Part of MISC crew on vacation for holiday weekend  
Miconia: w/ EEWF crew in Hana core
- 1/1: New Year's Day Holiday
- 1/2: Remainder of MISC crew travels to Hana  
Miconia: w/ EEWF crew in Hana core (herbicide control)  
Christy, Bob Yonehara (HDOA), Mach Fukada (HDOA), 2 EEWF frog staff train in the fine art of frog wrangling
- 1/3: Miconia: w/ EEWF crew in Hana core  
Christy to Hilo
- 1/4: Miconia: w/ EEWF crew in Hana core  
MISC crew returns from Hana  
First-aid training for Big Island EEWF crew leaders with Christy
- 1/5: Christy, Steve Lohse to legislative lobbying workshop at capitol
- 1/7: MISC crew travels to Hana  
Miconia: w/ EEWF crew in Hana core  
Interviews w/ five candidates for open MISC Field Crew position  
Christy continues with Akaku training working on Hot Topics crew
- 1/8: Miconia: w/ EEWF crew in Hana core  
Christy, Art, Masako, Lloyd, Chris Miconia video meeting
- 1/9: Miconia: w/ EEWF crew in Hana core  
Helicopter Spray: Miconia, Hana (Jack, Erik, Mike)
- 1/10: Miconia: w/ EEWF crew in Hana core  
Christy gave talk to Wailuku Rotary club
- 1/11: Miconia: w/ EEWF crew in Hana core  
MISC crew returns from Hana  
MISC Meeting