

MAUI INVASIVE SPECIES COMMITTEE
2004 STRATEGY WORKSHOP
Meeting Minutes
August 27, 2004

Attendance: Randy Bartlett, Lloyd Loope, Bob Hobdy, Kim Starr, Forest Starr, Christy Martin, Pat Bily, Jordan Jokiel, Mach Fukada, Kim Langley, Rob Parsons, Ryan Smith, Rob Hauff, Adam Radford, Arnie Peterson, Mele Fong, Teya Penniman, Aaron Kogan, Mike Ade, Elizabeth Anderson

- The meeting was called to order by Randy Bartlett; MPC/Chair at 9:15am.
- Randy: we received a nice thank-you letter from Senator Akaka regarding the letter we sent on the Public Lands Conservation Act Bill.
- Teya: our primary emphasis for today's meeting is to review where we are on our target species, what we said last year regarding priorities, and where we want to go from here. Fern was not able to join us today because he is still out in Hana on the snake search. Mindy is with him. We can state our priorities, but there are things, like a snake report, that can throw everything off kilter.

BRIEF UPDATES

Banana Bunchy-Top Virus

- Teya: our original award from OED this year was \$200,000. They held back \$50,000 for an emergency fund and eventually gave it back to us with \$15,000 designated for banana bunchy top virus and the remainder for coqui frogs. Adam Radford was hired in a 14 week temporary position to do banana bunchy top work.
- Adam: I was given a survey area that includes approximately half of Makawao and ~500 households. Out of this area there is only one confirmed case, but it is on the edge of the area. We hope to push the survey area east. The second portion of my duties is to spearhead a public outreach campaign. MISC's efforts are behind the scene mostly. We are trying to direct the public to HDOA. I have been developing flyers and giving educational talks. We are trying to keep people from moving plants out of the core area. So far there have been a very small number of infected houses found. In two years of survey work only 40 households with infected plants have been identified.
- Pat: can you identify a pattern re: vectoring? Mach: so far nobody has claimed responsibility for bringing in an infected plant. It is unlikely an aphid could have been blown in from Oahu or the Big Island. This is a huge problem on the Big Island. Maui is technically considered an infected area so we can't send bananas out, but they can be infected when they are shipped in. Kim L.: what about the Molokai ferry? Is anything being done to control transport on the ferry? Mach: No. Teya: one of the things we are exploring is what it takes to get a quarantine area declared. On Kauai signs were put up and they were left in place after the quarantine was over. Adam: a pseudo-quarantine might be possible. Signage would be a valuable resource that could reach people who don't read the paper or listen to radio.
- Kim L.: MoMISC is working on controls on their end for the existing ferry and barge. Adam: one of the biggest problems with the surveys is manpower. Kim L.: Molokai hasn't really been surveyed yet. Adam: the sites that were found on Maui were quite advanced and had probably been around for awhile. We really need more people for survey work. Teya: MISC took banana bunchy top on as a short-term project. The current funding will be pau in October. We did not take this on as a long-term priority. Should we be seeking longer term funding for this?

Nettle Caterpillars

- Mach: we found live nettle caterpillars in Kihei on a nursery shipment from Hilo. The shipment came from a certified Hilo nursery that self inspects. All of the plants were sent back to Hilo. There also were ants in the shipment. The self inspection policy is not working. Forest: we are being shipped pests from the Big Island daily. We are finding weeds at nurseries that are only Big Island weeds. It is really eye opening. Mach: it doesn't seem like the caterpillar is established at that nursery. The Kihei nursery called and reported the problem after a worker was stung. They know it is their best interest to deal with the problem. Rob Hauff: what happens to the nursery that shipped the infected plants? Mach: I don't know. I forwarded the information to head of the HDOA Plant Quarantine Division.

Frogs

- Teya: there have been a couple of frog researchers here on Maui from Utah. They started off on the Big Island. They are looking at prey base and what the coqui diet consists of. From their initial observations it appears that the frogs on Maui are twice the size of Big Island frogs and there are some other morphological differences. They will share their results with us. They collected insects in the leaf litter and flying insects. They are particularly interested in the make-up of native/non-native species. In Maliko Gulch they captured 130 frogs in less than two hours.
- Bob Flint from the Kokomo Road "frog squad" joined the meeting briefly. Bob F.: we have been working relentlessly to deal with frogs. The community is trying to address the problem in their neighborhood. We want to thank Rob Parsons for the free citric acid he has provided. We have also been buying citric acid from BEI at ~\$39/bag. I go through at least four bags at a time. HDOA has been letting us borrow a sprayer. It would be very helpful if something could be done so we could get the citric acid for free. I live next to the old Howard's Nursery site. I have to spray every couple of weeks and I am also cutting back a lot of vegetation before spraying. It is a huge time commitment. Some bulldozer work would be helpful. They still come in from Howard's and so I have to keep spraying over and over. They keep coming back. I'm not winning with the effort I'm putting in. We are talking about a quality of life problem. The Big Island has already lost the battle, but Maui is still containable because there are discrete populations. We have to stop people from selling plants with frogs in them. Christy: how much citric acid would you need and for how long? Bob F.: probably 100 lbs a week would do it. Ryan: there is a plan for one of the nurseries on Oahu to actually dip the plants completely in a citric acid bath.
- Rob P.: I would encourage a message from this group to the County. We must stop distribution. As long as there are still channels of distribution we will never get anywhere. We need to stop the known nurseries. We can encourage stronger action from the Council and the Administration. There needs to be a strong statement from MISC. Teya: we also need to try to get the Mayor to declare a civil emergency. That was critical to prying loose federal money for the Big Island. Lloyd: it seems like it would be very easy for the Mayor to do something like that. Maui County should pass a resolution to say they will take action to stop further distribution. Rob P.: please address the Mayor and Council regarding both an emergency declaration and the distribution question.

Eradications

- Teya: we have added an eradicable species pelts. *Macaranga mappia* has been controlled. Mach: we found one more at Castleton's Nursery. It came in with a shipment from the Big Island. It often comes in as a contaminate in potted plants from Hilo. Teya: we should do an education campaign on this plant targeting the nurseries. Kim S.: pretty much any of the melastomes could be included. Pat: I would be guarded about saying that it is eradicated from Maui. We usually just see the tip of the iceberg. We don't know the history of the plant that was controlled. It is great that we controlled the one we are aware of, but there are so many other places it could be. Lloyd: it is best to say "all known individuals" have been eradicated. Teya: I participated in a weed tour on Kauai recently. It was amazing to see the *Rhodomyrtus* there. As far as we know, we have controlled all known *Rhodomyrtus* plants on Maui. Forest: that is another species where we should get some educational material out. It is very pretty. Pat: *Rhodomyrtus* is another one that can be vectored easily. Forest: to the best of our knowledge MISC has controlled all known plants.

HISC News

- Pat: in July the HISC Established Pests Working Group met for the first time. The meeting was packed with HDOA people. Larry Nakahara was the main spokesperson. He clarified the HDOA role. HDOA has no jurisdiction for vertebrate pests, but they will deal with invertebrates. In terms of dealing with critters that are harmful to humans, the primary agencies are DOH & DLNR. The meeting basically revolved around clarifying roles rather than talking about targets. Animal Rights Hawaii was also at the meeting. They want to be informed on any vertebrate issues. Larry made a point that HDOA sees a conflict with the ISC control efforts. HDOA is trying to encourage homeowners to deal with things on their properties and then the ISCs come in and take care of things. He doesn't like that. Forest: the HDOA mandate is agriculturally based, not environmentally based. Mach: even with insects they draw a line between an agricultural pest (i.e. papaya mealy bug) and something like hala scale, which has a cultural/environmental impact.
- Kim L: the HISC Prevention Group is chaired by HDOA (Neil Reimer). At the most recent meeting, discussions centered around how to best use the money that was allocated for prevention. Initially they had hoped to hire more inspectors, but given the State hiring freeze they can't do that. They have decided to hire temporary employees who can assist the inspectors. Basically they plan to use the funding to create data to help justify why they need more inspectors. There will be a statewide blitz to get hard data. Some of the funding will go to hire an aquatic invasives team and there is also some funding for work on ballast water and West Nile Virus. Lloyd: was there any discussion of the red imported fire ant? Kim: it did come up, but there was nobody there to speak to it. In a sense it will be covered through the inspections. With the inspections, they can track pathways.
- Christy: the HISC outreach group has had 4 or 5 meetings now. They are planning to hire three people: one on Oahu that will help support Maui/Molokai/Lanai, one for Kauai, and one for the Big Island. They will be continuing with the primary CGAPS messages.
- Teya: Kim do you know anything more regarding the final HISC funding levels for the ISCs? Kim L.: the overall total is down to \$3 million and this has resulted in some changes and re-budgeting. There has been a change in the percent allocated to different groups and as a result the budget must be re-approved by the Council. September 22 is next time the Council meets. At the earliest the funds will be released in mid-October. The ISC allocations will be fairly close to the original amounts. Research went down. That is the area that lost the most. Teya: that means less funding for things like bio-control. Randy: has a final budget been sent out? Christy: it can't be released until it is approved. Kim L.: the Legislature is going to want to see results quickly. I would start getting job descriptions out so you are ready to hire ASAP when the funding is available. Be ready to hire on October 1. We need to get people on the ground and ready to go.

Other Business

- Christy: we just ran an omnibus phone survey of 501 people statewide. Maui scored the highest on awareness. We asked people what number they would call if they saw a snake. The Humane Society was the number one answer. I will forward the final results to the list. Ryan: do the Humane Societies know what to do? It seems like they would be an easy population to work with. Christy: we are trying to get a statewide hotline number and we need a better phone tree.
- Rob P.: I was contacted by Ken Yamamura (he has taken Monnie Gay's old position) regarding the need for additional funding for fireweed. He wants to send someone to Madagascar to look for bio-control agents. Mach: Australia has a rust, but we brought it in to Hawaii and it was found to go to native species. There are two agents waiting for write-up for potential release already. It would be more productive to see these two through before looking for more.

BACKGROUND INFORMATION / PERSPECTIVES

- Teya: the primary reason that the ISC operation on Maui has been able to grow is diverse funding. The County has been a huge source of funding for us and we couldn't do without the NPS support in Hana for the miconia operation. We really must applaud our committee and supporters. Our total staff is up to ~24 people. We have really grown into an amazing program of people working on the ground. We need to keep the perspective of Maui Nui in mind as we prioritize. We had a meeting in June regarding the needs and priorities for the outer islands.

OVERALL EMPHASIS: PLANTS VS. ANIMALS

- Two handouts were passed out: a "Target Species Evaluation" table and a "Summary of Progress on Priority Target Species, 2000-2004." Teya: the % time column from the "Target Species Evaluation" table is based on field hours and does not include office support. We have basically been maintaining an 80:20 % ratio of plants to vertebrates in terms of field time. A few things have shifted a bit from last year. We have increased our work on pampas grass a bit and decreased ivy gourd. Miconia is up a little from last year and fountain grass is down a little. Overall the percentages are fairly close from last year to this year. We have always had a goal of 50% of our time on miconia and we obviously aren't hitting that. Elizabeth: the hours put in by the Hana miconia operation are not included in these overall percentages. Teya: this is just a snapshot way to look at how things fall out within our priorities. Forest: the successes that we have (i.e. eradicable species, *Rhodomirtus*) have taken very low effort in terms of the overall percentage of time spent. The effort on those to get "pelts" has been pretty low.

TARGET SPECIES EVALUATION

- Teya: we used three basic criteria last year for evaluation and rated each species as high, medium, or low for each criteria. The three criteria are:
 - Threat/risk to environment, agriculture, economy, quality of life;
 - Feasibility of eradication / control;
 - Cost / Effort to control.
- Teya: does anyone have input on the criteria and/or the process? Ryan: do you have a quantitative rating (i.e. low means it would take a specific amount of time). Teya: we don't have that level of rigor to our rankings. Forest: we did do that on the trial eradications project. We could quantify those more readily. Teya: how do you do it on Oahu? Ryan: often your proposed feasibility doesn't translate on the ground. Things typically take longer than expected and we find more. I don't know if there is a better way. We are struggling with this too.
- Christy: it is hard to rate something if you don't know the location, growth type, multiple vs. single properties, etc. Pat: do you consider factors like those in feasibility? Teya: yes. Biology, landowner access, status and distribution, geographic limits, seed-bank, etc. should all be considered. The ranking may change from year to year as we do more work on a species and learn more. Kim: New Zealand has a decision tree that differentiates between a site-led strategy and a weed-led strategy. Teya: because MISC has been working on these species for a number of years, we are not at a place where we are starting from scratch and trying to decide what we should tackle; neither are we at a point (like with the eradicables) where we have a certain fixed amount of funding to tackle a set of species. We need to look at where we are and decide how our efforts should be allocated on the species we have and if any species should be dropped. We need more staff to adequately address the targets we have. If we had more resources, where would we focus? I agree there are more rigorous methods, but I think we are really at a different point right now.
- Ryan: have you found any species that have overwhelmed you? Forest: with everything - the more you look the more you find. Lloyd: it seems like it would be good to have an assessment of what the populations were when we started and what they are now. Has there been progress made? Teya: that is a little hard to pull out of the data. Pat: you find new populations and your acreage increases even though you know you have made progress on what was there to begin with. Teya: for the existing targets we need to evaluate whether we maintain, increase, or decrease effort or drop a species. Where should our priorities be.

ARUNDO

General Discussion

- Teya: there are issues on how the plants are counted. The number of stems is irrelevant. It is usually not possible to count stems. Christy: from the data it looks like plants killed per acre inventoried has gone down. You have surveyed repeatedly the same areas. Teya: what we really need to do is to calculate the footprint for arundo.
- Teya: we are still finding new populations especially in upcountry gulches. Mike: when we get permission to enter new properties for other species, we often find arundo. Lloyd: I wasn't originally in favor of controlling this species. We put it on this list because we thought we could eradicate it and it is such a bad weed elsewhere. If we were to drop any species, it would be arundo.
- Christy: this is a good example of using a site-based strategy vs. a weed-based strategy. If it travels down a gulch into a natural area, we should get on it. If it is just spreading in someone's yard, it is not as much of an issue. Kim S.: the patches close to the water table and in moist areas are the most vulnerable. Randy: in light of this discussion I think it would be worth reevaluating some of our targets and looking at the possibility of weed-led vs. site-led strategies. I don't see arundo in people's yards in Kula as a big problem. Arundo needs water. It is the riparian areas that we need to be concerned about and if it approaches natural areas. If it is taking over a gulch filled with other weeds, it doesn't seem like a high priority. Pat: if we are using a site-led strategy, we would wait until it makes its way down a gulch to Kanaha before we control it. We don't need to deal with it higher up in the gulch.
- Teya: do we need to be concerned that it is part of our funding proposals? Ryan: maybe we have painted too black and white a picture with just looking at weed-led vs. site-led. It may be more effective to prioritize sites. Forest: the concept of putting buffers around important natural areas makes sense. We need buffer crews, but that is a capacity that hasn't been built on at all. Jordan: do you have the capacity to take on site-specific targets? For example, things that are incipient to natural areas. At OISC that was a big question and controversy - protecting natural areas from things you can't control on an island-wide basis. Lloyd: I think MISC has always taken a pragmatic approach and decided what to do by consensus. We have primarily aimed our resources at eradication or containment. We can consider other cases if the funding is there.

Threat/Risk to Environment, Agriculture, Economy, Quality of Life

- There is a high threat to certain high value sites, especially in wetter areas. The threat is low in other areas. Pat: in conforming to MISC mission, how do we identify key sites? I can't think of very many important lowland sites that are in line with the MISC mission. What is the risk? It isn't going to move uphill.

Feasibility of Eradication/Control

- It is always going to be difficult. It is not on the noxious weed list. Pat: control efficacy hasn't been very good and there is no seed bank. Mike: we are working on some new treatment methods that should give us more efficacy. The California control methods didn't work well here. Pat: if you have to go back and retreat repeatedly, the time totals go way up. One reason arundo was selected was because it didn't reproduce by seed. Mike: we want to try using Arsenal, but most of the places where we are finding arundo we can't use the Arsenal. We lost our control for monitoring in the one area where we tested it because heavy equipment came in and moved things around. Arundo likes to grow in rubbish. It is hard to get to the base. A foliar spray is what we really need to do.

Cost/Effort to Control

- High.

Decisions

- Deal with specific high priority sites as needed (Kanaha, Kealia, the end of the runway, Keanae). Drop the backyards and Kula gulches.

IVY GOURD

General Discussion

- Mike: Kahului is pretty much dead, but Kihei is still pretty bad. Randy: what natural resources are threatened? Should we do site-led or weed-led control?
- Lloyd: I would like to hear from Mach regarding bio-control on Maui. Mach: the bio-control agent on the Kona side of the Big Island has been recovered and is doing well. There is enough biomass to support the bio-control over there. With bio-control you are never going to achieve eradication. You will never get to the point where you won't see it. You must decide at what level you can tolerate it. On Oahu eradication is out of the question so the bio-control is the last possible resort. Forest: we will continue to have a reestablishment issue if it is on the other islands. Mach: people are continuing to bring it in to Maui. The fruit is a favored food in some cultures. The infestation in Kihei was started intentionally. Mike: there is one guy in Kihei who won't let us control the ivy gourd on his property. He harvests it. Forest: because it is a noxious weed, doesn't that mean it is illegal to possess, propagate, etc.? Mach: it might be worth seeing if we can go to Thailand to look for other bio-control agents, but I don't think it is worth going back to Africa. It is a cultivated vegetable in Thailand.
- Pat: at the time we selected ivy gourd there were two known locations. We now know this was just the tip of the iceberg. It is continually being reintroduced and the control methods aren't 100% effective. It is a problem in residential areas, but will it severely impact conservation areas or agriculture? Teya: do we need to continue with an island-wide focus because of the high likelihood of dispersal by birds? Randy: as long as people are continuing to bring it to Maui, it doesn't make sense to use a weed-led strategy. Lloyd: if you take that approach it will be too late. Does anyone care about ivy gourd besides us? How do the landowners view it? Mike: they are unhappy that we need to revisit so often. Some people are very thankful for our help. Lloyd: the birds are going to spread it. Mike: if we drop ivy gourd as a target, we may regret it. If we stop existing control efforts, it will be everywhere. Kim S.: it will jump from residential areas.
- Pat: we are assuming that bird dispersal is a big issue and that it is successful after bird dispersal. Do we have any evidence of long distance dispersal? Randy: we aren't finding it mauka up the valleys. Arnie: looking at the numbers it appears that there are more and more plants each year. These numbers don't tell us if we are being successful. The numbers don't tell us how much reproduction we are getting. Teya: it is a question regarding what data we need in order to address the questions we want to ask. Pat: if ivy gourd is bird dispersed, are we looking outside the core areas? Teya: we need to control the known sites and then we can focus on looking at buffers. Pat: given that the threat is with ivy gourd moving outside of urban areas into natural areas, we really need to start thinking about satellites sooner rather than later.

Threat/Risk to Environment, Agriculture, Economy, Quality of Life

- High.

Feasibility of Eradication/Control

- Low to medium because of the biology and the number of landowners involved. The more you look, the more you find. At our current level of effort, eradication seems unlikely. The potential for re-infestation is high.
- Mike: we kill every plant that we treat. Recruitment from seed is a problem. If we miss a single node, we have to retreat. It can also be very cryptic and drop all of its leaves, but still be alive. Randy: have you tried using a pre-emergent? Mike: we can't use a pre-emergent in residential areas. Randy: at the golf course you can use a pre-emergent. Mike: if there is a vine that has been stressed there will be 100's of contact points. Randy: use the pre-emergent wherever you can. Use it and monitor it. If that doesn't work, we may want to reevaluate. As far as Kapalua is concerned, I would be OK with walking away after a year of pre-emergent treatments.

Cost/Effort to Control

- High. We spend 15-17% of our field time on ivy gourd. The drive time to Kapalua is substantial. Randy: we need to see if we can get rooms donated from Kapalua to save drive time. That way the crew could stay out there for several days. Teya will draft a letter for Randy's signature.
- Mike: we might be able to spend less time and just use a two person crew instead of the entire crew. Kim L.: I like the idea of scaling down the crew size. You could concentrate and just have a couple of crew members focus on ivy gourd. Teya: we may be able to bring the cost down by reducing the number of people working on it and changing treatment methods to pre-emergent wherever possible. Lloyd: the seed bank probably lasts only a couple of years.

Decisions

- Keep ivy gourd as an island-wide target this year. Use a pre-emergent herbicide wherever possible and evaluate the effectiveness after a year. Reduce the size of the crews working on ivy gourd.

PAMPAS GRASS

General Discussion

- Lloyd: there has been controversy as to whether we should go after both species or just *jubata*. Teya: *selloana* has proved to be more invasive elsewhere. Lloyd: we don't have proof here that it is spreading and that is why we have the residential issues. Forest: we need to get *selloana* on the noxious weed list. The identification is very difficult. Pat: the noxious weed list should just list the *Cortaderia* genus period. Mike: in residential areas we have killed just about everything we have permissions for. It isn't a big drain on the crew at this point.
- Pat: in terms of outliers we have Jordan and his crew working further east. The Polipoli site is scary. Mike: we have good helicopter lines on it. It is easy to see from the air in that area. Pat: can we take a look at the amount of resources that have gone into pampas control by looking at the amount of herbicide used? I'd like to be hopeful that there is a decrease in the wildland areas with all the effort that has gone into it.

Threat/Risk to Environment, Agriculture, Economy, Quality of Life

- Very high. Pampas could invade Haleakala and the West Maui Mountains. It is on West Maui already.

Feasibility of Eradication/Control

- Still medium. Forest: if we can get *selloana* added to the noxious weed list, we stand a much better chance. We can deal with the areas and obtain access if *selloana* is listed. We are assuming the wild ones are *jubata*. Pat: I think your feasibility is more intensive in the residential areas than in wildland areas. At least in Honomanu the forest is not intact. There are openings in the canopy and the pilot can just spray as he goes. The residential areas are tough. They want you to dig it out instead of spray it. Forest: at least the seed bank is fairly short-lived.
- Pat we might want to look at other control methods. Rodeo and Round-up kill such a large area that there is a lot of room for recruitment. A large open area is left. We should continually look for more effective control methods. Mike: if we pull *selloana*, we do get re-growth sometimes. With *jubata* we get a lot of seedlings that come up. Pre-emergent herbicides are not really an option in residential areas. Pat: what about cutting loose *selloana* in residential areas?

Cost/Effort to Control

- Still high.

Decisions

- Stick with it and maintain roughly the same level of effort. Expand the wildland survey area and explore treatment options. Train the Hana staff in aerial identification of pampas grass.

RUBBER VINE

Threat/Risk to Environment, Agriculture, Economy, Quality of Life

- High.

Feasibility of Eradication/Control

- Forest: this depends on obtaining listing as a state noxious weed. That is the only way to deal with recalcitrant landowners. Mike: there are five properties left with rubber vine. Kim L.: there is more on Molokai than was originally thought. Teya: we have committed to go over and help with rubber vine on Molokai. Lloyd: we should continue this for another year and hope the HISC will get it on the noxious weed list. This is a real success story for us and it is very invasive. Forest: if it gets on the list, we may be able to have this as a pelt on the wall by next year. This is another species we should put out educational information on.

Cost/Effort to Control

- Low.

Decisions

- Continue. Randy: we are going to get the Legislature and County Council to pass resolutions to get HDOA to update the noxious weed list to include rubber vine.

MICONIA

General Discussion

- Forest: has there been any work on the bio-control front? Randy: there is work being done. We need to keep getting them money. There are half a dozen promising agents in the pipeline. Teya: we had a recent visit from Edgar Rojas and Tracy Johnson, who are working on bio-control for miconia. We took them on a miconia over-flight. They left us a copy of their draft poster from the Conservation Conference if anyone wants to look it over. Lloyd: it seems like miconia bio-control would be a really high priority for the HISC if there is any research funding left. Randy: Tracy and Cliff said they need \$50,000 a year to keep the work going.
- Teya: we aren't meeting the 50% time field expectation. I'm not sure what to do about that? We basically never meet that goal. Lloyd: the 30% isn't unreasonable given the NPS putting in what they are. Elizabeth: the NPS support was supposed to be above and beyond the 50% that MISC was committed to doing. Teya: we would love to have another crew of five people out there. Rob P.: the Mayor still wants figures on what it would take to do the job. Last year the Mayor requested a figure from MISC re: what it would take to head towards eradication. That number has never been given to him. Once he has that figure, he can go out and look at trying to get more funding. Kim L.: we need to look at a business plan concept. We could figure out with current methods what would it take to achieve eradication. If Maui County is really serious about it, we may have some places where we could leverage some big money. Randy: realistically let's plan on a draft by January. We need something to show the County and the Legislature. Teya: this needs to be a central topic for our October 1 miconia meeting.

Threat/Risk to Environment, Agriculture, Economy, Quality of Life

- Very High.

Feasibility of Eradication/Control

- Low.

Cost / Effort to Control

- High.

Decisions

- Deferred until the upcoming October 1, 2004 miconia meeting.

FOUNTAIN GRASS

General Discussion

- Teya: when we look, we find. We aren't really finding new sites, but we find more at the sites we have controlled. Randy: can we try a pre-emergent? Mike: we did a trial with 5% Velpar and didn't see any recruitment. Ryan: we have had success using spotting scopes to find fountain grass. Randy: what power. Ryan: I'll check.

Threat/Risk to Environment, Agriculture, Economy, Quality of Life

- High.

Feasibility of Eradication/Control

- High, very doable.

Cost/Effort to Control

- Low.

Decisions

- Maintain effort.

RHODOMYRTUS & OTHERS

- Teya: all known individuals have been controlled and we will keep going back to monitor. Forest: they weren't spreading sexually. This is another plant where we should put out educational information and ask, "Have you seen this plant?" Lloyd: it would be good to have a newspaper article on this one.
- Teya: for the other plants that are listed, we keep going back to check. Teya: *Rubus* is not really an adopted target. Lloyd: we know it will keep being found. We need to keep it on our radar. It will keep popping up. Forest: we need to deal with the hapuu trade as a source of interisland transport. Pat: there are other vectors out there (i.e. a bag of cinders).

TRIAL ERADICATIONS

- Progress to date on each species was reviewed briefly. Teya: we are not ready to evaluate the results of this project yet. When the project is finished, we will need to review the list and decide if we want to continue to work on or monitor any of them. This is an experimental project and we are learning things as we go. We have not hit a point where we are out of resources. Lloyd: we will evaluate these species after the end of the year. We will either wipe them out or find out why we can't. Forest: the time was underestimated on most of the species with two stars.

VERTEBRATES

- Teya: snakes will bump everything else. We are truly in a rapid response mode. We plan to call everyone together to do an evaluation after the search is over. We need to honor the effort and support that has come in. Kim L.: should we look at trying to find funds for snake rapid response? The feasibility of using funds like that may be difficult. Maybe an overtime fund would be useful.
- Teya: we had a vertebrate subcommittee meeting on June 24 during which we focused on frogs, conures, and chameleons. It wasn't really a decision making meeting and we didn't really look at how those individual species fit into the overall MISC strategy. Are people still comfortable with the 80/20 split between plant and vertebrates? Both our State and County funding this year includes vertebrates. Pat: if something breaks with the conures this year, we may be restricting ourselves by saying we will only do 20%. Lloyd: we need to maintain some flexibility. Teya: so are we comfortable with the way we have been allocating our resources? These targets are still OK and we will maintain flexibility. There is definitely a sense of priority and urgency with the coqui frog. Lloyd: the funding MISC has for coqui is insignificant.

FUNDING PRIORITIES

- Teya: we need to look at what we want to do with the funds from the HISC and what we would do if we received more funding. Our current baseline funding does not include the vertebrate position or the one field worker that was hired with eradication funds. If we are able to fund more field workers, where should the emphasis go? I would appreciate input on where the additional funding from HISC should go. Kim L.: you need to consider another staff person for MoMISC. Randy: email the list of unfunded items out and let everyone get back to you.