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Hawai'i Invasive Species Council

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U.S. Department of Agriculture
U.S. Department of the Interior
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HAWAI'I INVASIVE SPECIES COUNCIL

Thursday, August 18, 2011

2:00-5:00 PM

Council members and participants in attendance: Russell Kokubun (co-chair, DOA), William Aila (co-chair, DLNR), Ford Fuchigami (DOT), Jesse Souki (DBEDT), Sylvia Yuen (UH), Gary Gill (DOH), Keali'i Lopez (DCCA), Clarence Nishihara (Senate), Clift Tsuji (Representative), Kalani English (Senate).

Others in attendance: Keren Gundersen (KISC), Jono Blodgett (DAR), Neil Reimer (DOA), Teya Penniman (MISC), Rachel Neville (OISC), Kate Cullison (DAR), Carlton Saito (Office of Senator Gabbard), Cindy Young (DAG), Rowena Somerville (DAG), Ken Kakesako (Office of Senator Kahele), Kathy Kato (Office of Representative Hashem), Inga Gibson (Humane Society), Mark Fox (TNC), Josh Fisher (USFWS), Earl Campbell (USFWS), Jan Schipper (BIISC), Elizabeth Speith (USGS), Jacqueline Kozak Theil (HISC), Josh Atwood (HISC)

- 1. Call to Order (Russell Kokubun, Co-Chair, 2:10 pm)**
- 2. Member introductions**
- 3. Approval of minutes from June 27, 2011 meeting (requested by Josh Atwood, HISC Coordinator)**
 - Gill moved to approve minutes
 - Aila seconded motion
 - All approved
- 4. Briefing regarding the recommended FY2012 budget**
 - Process Overview (Josh Atwood):** Proposal guidelines were released on July 1st. We received \$2.87M total of budget requests with a \$1.8M budget, so we needed to trim numbers. Proposals were presented at Working Group meetings (Prevention, Public Outreach, and Established Pests). Attempted to assess level of interest with Research and Technology, but we decided not pursue proposal process for Research and Technology given funding limitations. At Working Group meetings, we reduced some requests through collaboration, others individually made cuts, and other cuts were made in evaluation committees based on discussions and a quantified rubric. Each Working

Group chair worked with the HISC Coordinator to reach a target number (totalling \$1.4M from NARS, \$400K from Legacy Lands Funds). At the Resources Working Group meeting, Mary Lou Kobayashi (DBEDT) moderated a discussion in which amounts were discussed and changes were made as necessary, to produce the current recommended budget.

b. Working Group Updates

- i. **Public Outreach (Chris Dacus, DOT, Working Group chair):** This year we met five times. In October we met with legislators and aides to talk about legislative issues and interfacing with legislators. In January we had a workshop on aquatic invasive species. In March we met to identify strategic objectives: education and outreach, species-specific response, and legislator outreach. The other two meetings were budgetary meetings. Our FY12 request is for \$194,757. We funded 8 projects. We funded the Pacific Basin Information Node (PBIN) and Hawaiian Ecosystems at Risk (HEAR) to help with the Plant Pono website project and web infrastructure. We funded a project to create pest ID cards for landscapers and arborists. We funded county-based outreach specialists with each of the ISCs.
 1. Aila: What information is kept in the Pacific Basin Information Node?
 - a. Elizabeth Speith (PBIN, USGS): We were originally part of the National Biological Information Infrastructure (NBII) under USGS. It was cut at the end of FY11. Parts of NBII were reabsorbed, but PBIN was not. PBIN's purpose is to provide data resources and help provide tools for data sharing for environmental organizations. We provide websites and support. HEAR is a group that we work with, and we support their outreach.
 2. Gill: I appreciate the overview. What specific data related to invasive species can you point to, and how would an average member of the public find it?
 - a. Speith: Some of the tools we have are streamlining the Hawai'i-Pacific Weed Risk Assessment (HPWRA) data interface, providing support for the Plant Pono website, and the ISCs statewide data reporting system. Allows the ISCs to create reports for funding organizations. We support an invasive species web mapping portal, which will provide a more public venue to invasive species data. The Hawai'i Early Detection Network has info about invasive species targets throughout the state. We are producing an early detection system for managers. HEAR.org is a parallel program and is one of the more definitive programs for information on invasive species data for Hawai'i and the Pacific basin.
 3. Gill: We would be allocating funds to PBIN?
 - a. Speith: PBIN will shut down by the end of the year. The funding is to transition to a new group supported by UH (within the Pacific Cooperative Studies Unit). We're looking for an interim 6 months of

funding to transition and to provide leverage for fundraising from other sources.

4. Gill: What if you don't get the funding?
 - a. Speith: We'd have to transition the data to other partners. There wouldn't be the same level of support. We've received [recommended] funding from the Public Outreach group, but we would need additional to maintain core support for the project coordinator and other elements. We are trying to find the additional money now.
5. Gill: Who is PBIN?
 - a. Speith: We are contractors that have worked with PBIN and USGS for 10 years, since its inception. There were two federal employees, who have been transitioned. We are hoping to grow and maintain some of these products.
6. Gill: How will we sustain this after the 6 months, after the transition?
 - a. Speith: The ongoing cost is around \$149k. That was the big number. For the past 7 years USGS has been filling the gaps between projects funded by the state (including the HISC) or the National Park Service. The transition money is to allow us to continue working with these other agencies. This money gives us leverage.

ii. **Prevention (Josh Atwood for Carol Okada, DOA, Working Group chair):**

Governor Abercrombie restored 10 agricultural inspector positions, though that still leaves us 40 inspectors short of where we were prior to the reductions in force. Other project updates for Prevention include the O'ahu Invasive Species Committee's work on naio thrips, coqui frogs, and the completion of a 3-year roadside survey by O'ahu Early Detection. The Hawai'i Ant Lab is working on export issues and port of entry surveys in Hilo and little fire ant (LFA) eradication on Maui. The HPWRA has had good voluntary use of their assessments through the Landscape Industry Council of Hawai'i (LICH). The working group received 5 requests, 3 of which were funded. The total amount is \$155,465.44. This includes the HPWRA (funding for two assessors, nominal supplies), Division of Aquatic Resources (DAR, funding to supplement recruiting of a Ballast Water/Hull Fouling coordinator), and HDOA (early detection of Africanized and other exotic honeybee species). The two unfunded proposals were for the Hawai'i Ant Lab (funding was found from another source) and PBIN. PBIN submitted requests to each Working Group. Public Outreach decided to fund them, but Prevention did not, due to funding limitations.

1. Souki: How does the process for the HPWRA work? Who submits and who assesses?
 - a. Atwood: We have two assessors with backgrounds in plant ecology and botany. The HPWRA was developed at UH, but they only created the program for use by others. Our assessors are the only ones providing assessments. Anyone can request an assessment. The assessors use a quantitative rubric based on plant characteristics that

assesses the likelihood for the species to naturalize in Hawai'i. The score is provided to the person who requested it and also held in a database maintained by PBIN, which is publicly available. The assessors are funded through the HISC. They work closely with the Bishop Museum, which hosts Patti Clifford, and the Maui Invasive Species Committee (MISC), which hosts Chuck Chimera.

2. Kokubun: A number of people are proposing plants to be brought into the state for biofuels. Would this be used for that?
 - a. Atwood: Yes, there was actually a project a few years ago funded by the HISC that looked at proposed biofuel species, and it utilized HPWRA scores to show potential of naturalization. If there are new species being considered for biofuels, that would be a good use of the system.
3. Lopez: Do you have a sense of how many requests there are on an annual basis?
 - a. Atwood: Their total to date is over 1100 species in the database, and I believe their annual amount is somewhere around 200 species, but I could be wrong.
 - b. Penniman: It takes about 2 days to do an assessment, and then they have other tasks.
4. Souki: Is there a requirement for using the HPWRA, and is there a fee?
 - a. Atwood: There is no fee and no requirement. It's voluntary. For conservation organizations it allows them to prioritize species they're working with. For example, the O'ahu Early Detection Project is using it on two projects right now: one is their roadside survey, for which they've recorded a number of incipient plant species, and they're using the HPWRA to prioritize the species that should be targets for control by the O'ahu Invasive Species Committee (OISC). The other project is with Lyon Arboretum: they're working on prioritizing a list of invasive species to remove from the arboretum's collection.
5. Souki: So it's good for people with good intentions, but not preventative yet.
 - a. Atwood: It's preventative in that, if you provide information to people, they can choose to use it. So it does rely on good intentions. But the LICH uses it to provide recommendations for what to plant in landscaping, which is a [preventative] example of how someone outside the traditional conservation community might use the HPWRA.
6. Nishihara: Is there a mechanism in place to charge a fee for assessments?
 - a. Atwood: There isn't a mechanism for that at this point, though it's something that we could consider. My understanding is that the assessments have always been provided free of charge to get the information into the hands of the people who requested it. If we charged, that might be a disincentive for using the assessment.

7. Nishihara: Do other states have a mechanism to check what might be plants of risk?
 - a. Atwood: I'm not aware of other states using a weed risk assessment. The other assessments I've seen have been for Australia, New Zealand, South Africa. I don't believe those countries charge a fee. This assessment is specific to Hawai'i and the Pacific.
8. Lopez: I've taken a look at the HPWRA. I found it fascinating. Is it your sense that people can find out about it through the website?
 - a. Atwood: There is an outreach component to the HPWRA. It'll be part of the Plant Pono website, and the assessors do outreach, speaking to community groups about the HPWRA. Curt Daehler at UH, who developed the HPWRA, maintains a website about the system, even though he is no longer doing the assessments.
9. Gill: It sounds like this system is set up to play catch up or response. People can bring in any plant they want, and then when we see it we have to figure out if it's invasive. This is contrary to other species, where they're prohibited from being brought into a state. Is it true that anyone can bring in any plant except those listed by the HDOA, of which there are a couple dozen?
 - a. Atwood: I believe there are 79 or so species on the HDOA's Noxious Weed List.
10. Gill: So other than those species, there is no check for what people are bringing in? And who is checking for plants on the Noxious Weed List?
 - a. Atwood: Those species are prohibited from entry, so in theory inspectors would catch it on the way in. If not, those species are also prohibited from sale, so someone might catch it before it is sold. For other species, the HPWRA is often used for species that are already here, but you can use it for species that aren't here yet but have some likelihood of coming here. It can be preventative.
11. Gill: Is there a reason that we have protections for alligators and slime molds but not plants?
 - a. Atwood: The Noxious Weed List is the only list of prohibited plant species at this time, and it's directed towards agricultural pests for the most part. DLNR does not have a plant list at this point, but the HISC is trying to produce a list of HISC-designated invasive species that we could work with.
12. Gill: My question is more broadly toward the legislators: is it a good idea to legislate a higher level of control for the importation of plant species?
 - a. Nishihara: I wouldn't argue against that. I have a question about miconia. If the Noxious Weed List had been around at the time it was introduced, would it have been included?
 - i. Atwood: Yes, I think if the list would have included miconia as a species known to produce widespread monocultures, but again

that list is primarily for agricultural pests, so it would have to be a species that would infest agricultural lands.

- b. Nishihara: What about nurseries that aren't agricultural? Would it make sense to have something put into place that would take into account these growing nursery operations? Maybe there should be some restrictions to things that should not be brought in?
 - i. Atwood: Yes, that would make a lot of sense. That's a real gap.
 - c. Nishihara: That's something we should maybe considering doing in this coming legislative session.
 - d. English: One of the things we've been grappling with for a long time is that the rules are geared towards agriculture, towards protecting sugar cane and not 'Ōhi'a. We have to go back and change the base policy. It takes the buy-in of the agricultural community. We spend all this money to protect stuff leaving Hawai'i, but if we inspect people coming in, people will say it affects the tourism industry. We have to change the base policy we deal with. You guys help us put it together, and we'll consider it in the next session.
 - e. Gill: I'd like to move that that be added to the agenda for a future meeting so we can work together to create a template to address the question.
 - f. Kokubun: No objections. And at this point, I see a lot of collaboration between the agricultural community and the environmental community. I think it is a good time to see support across the board.
 - g. English: Maybe the timing is correct for us to come up with how to shift the policy to protect agriculture and the environment as well.
13. Gill: Why is the amount for the Ballast Water/Hull Fouling coordinator so low?
- a. Atwood: This amount is in addition to funds from FY11. They've been trying to find someone but have had trouble attracting candidates. This amount is to make the offer for a soft-money position more appealing.
14. Gill: A lot of this money is going from the HISC (administratively through DLNR) back to DLNR or other agencies. Is that really the intent of this group?
- a. Atwood: There are different ways for the money to get to, say, DLNR, but I think the idea with the HISC is that this is a place where people would come to for those funds. If it didn't come to us, it could go directly to DLNR, but this Council allows us to coordinate efforts across departments.
 - b. Kokubun: Exactly. And it allows us to involve the community as well, and the Invasive Species Committees.
- iii. **Established Pests (Rob Hauff, DLNR, Working Group chair):** We received 15 proposals for over \$2M. During the meeting we discussed and identified priorities for the Working Group. One thing we noted in the meeting was that

we, in the past, have only met once a year. We resolved that we would meet more often to improve continuity. Our evaluation committee had representatives from DOFAW, UH, HDOA, and TNC. Of the 15 proposals we chose to recommend funding for 8 at a reduce amount, totaling \$1.2M. This included the island-based Invasive Species Committees (ISCs), the DAR Alien Invasive Species (AIS) program, HDOA ant control and biological control, and the Axis Deer Project. At the Resources Working Group meeting we discussed that most of these programs are still facing shortfalls even with these funding recommendations. Our staff is working to fill these gaps with other state and federal funds.

1. Fuchigami: What kind of rating system do you use to determine who gets what money?
 - a. Hauff: We came up with a set of criteria that went out in the proposal guidelines. The most valuable criterion was applicability to the strategic plan. Cost-effectiveness was another.
2. Fuchigami: How many members in the evaluation group? And were budget amounts included in proposals?
 - a. Hauff: Six members, and the proposals were very detailed as far as amounts of funding and what the funding would be towards.
3. Gill: How many deer will the Axis Deer Project address?
 - a. Hauff: The proposal was to create a program for locating deer populations. We are recommending partial funding. The project manager is here for questions.
4. Gill: What are we going to address this questions and what support do you need?
 - a. Jan Schipper (BIISC): Last week we had a training for our best shooters, for how to track and find deer. We have some permitting hurdles. We're finishing a strategic plan to go before the Big Island Deer Working Group. We're going to remove the individuals that we know of. We're using night scopes and forward looking infrared. We have some property access issues. We are looking at the Judas deer program for locating harder-to-find deer. It hasn't been used at this scale. No eradication has been at the scale of the Big Island, but then again we've never caught an invasion at this early stage. We have an issue of ongoing immigration. It's not within BIISC's kuleana to do enforcement. We're sticking with working with community and hunters, and conducting outreach and on-the-ground surveys. If we had the original request (\$160k) we'd jump right into the Judas deer program. With the revised amount (\$90k) we will shift our strategy and address the known deer populations. We don't want to start a Judas program without knowing that we'll be able to finish it. There are about 20 locations where we know there are deer, all over the island.

- b. English: During the last legislative session I put some language in a bill to address this issue. The law says that government agencies cannot move these animals, but some private individuals did. That was a big loophole. Did that bill go through?
 - c. Penniman: It didn't. There was a problem with the related clause.
 - d. English: In this particular case, someone released this animal. That person needs to be liable. I tried to deal with that in the law, but it came to me quite late. Next session, we can reintroduce that.
 - e. Kokubun: Sounds like we're getting an invasive species legislative package together.
 - f. Souki: Is this hunting? For feral pigs, hunting wasn't as effective as snaring. How effective is hunting?
 - g. Schipper: It's control. We'd be removing known individuals. This is a very different pest than we usually deal with. That's why we did the training. We're looking at successes from other areas. Hunting is the first step, and then comes the unknown. Snares wouldn't work for deer, and we'd have to build 10 foot fences. That's expensive. In a perfect world we could put the cost of control on the people bringing the animals in, but we're not there. The laws need to be fixed. It's unfortunate that the public is being made to pay for something that was introduced, with possible malintent.
 - h. Fuchigami: After the \$90k have been consumed, what is the reproductive rate of axis deer?
 - i. Schipper: That's a problem. The rate is about 30%, that's very high. There's no predation, limited hunting. In five years we're in trouble, in 30 years, you'd have deer everywhere. They have a longer longevity. You can't just hunt them, the deer adjust to hunting. Our current action plan is a 5-6 year program. We can start with the money we have now, but we'll need closing funding later.
 - j. Kokubun: The state veterinarians have volunteered to do the neutering for Judas deer, which will reduce costs.
 - k. Gill: Can I recommend that we look at this as a committee legislatively?
 - l. Kokubun: Yes, I think we're starting to see a number of proposals be generated.
- iv. **Research and Technology (Josh Atwood for Christopher Dunn, UH, Working Group chair):** This year we decided not to fund a proposal process for Research and Technology. If you look at the budget supplement (see document), you'll see that when our budget has been high, we've had a robust research program. When our budget is scaled back, as it has been in the past three years, we have tended to not fund Research and Technology in order to maintain the capacity we've built up in other programs.
- v. **Summary: (Josh Atwood):** I think the projects that we're recommending for funding are excellent. Most are returning projects that have built up capacity

over the years and are now the experts in their fields in Hawai'i. This is a good use of our funds. We were unable to fund a number of really good projects. In our Resources Working Group meeting we discussed priorities, should general funds become available. We'll also be pursuing state and federal moneys as well. The ISCs will need additional funds, as will PBIN. Dr. James Leary has developed an herbicide ballistic technology that could enhance the ISCs ability to control plants in unreachable areas. That is a project we would like to support but were unable to with this year's budget. The overall sentiment that I wanted to relay is that there is a lot of conservation work in the state that needs to be done. With our historic funding shrinking by over 50%, we're doing a good job of maintaining the capacity that we have, but even those programs have been scaled back. In the future we need identify additional funding to increase capacity or fund new projects.

5. Discussion of FY12 Budget Recommendation

- a. Yuen: When you're evaluating projects, how do you provide information about what was and was not funded, and why decisions were made?
 - i. Atwood: This is the first year that we've used the quantitative scoring rubric. The proposers receive their quantitative scores, as well as optional descriptive comments from evaluators. We were able to provide very detailed feedback forms to the proposers as far as why their proposal was or was not funded.
- b. For the Maui and Moloka'i Invasive Species Committees (MISC and MoMISC), are the projects different between islands?
 - i. Atwood: That's right. MISC and MoMISC apply for funding jointly (under Maui County), and they figure out amongst themselves how to handle the funding. They are independent Invasive Species Committees, though.
- c. Kokubun: I think we can move to approval of the budget. We could do more with more funding, but the recommendations with the funding available are on the mark. We will continue to look for more resources. That might also be part of the legislative package we are putting together. The co-chairs would appreciate a motion to approve.
 - i. Motion by Yuen, seconded by Fuchigami. Unanimous approval, FY12 budget approved as recommended.

6. Updates from the Invasive Species Committees

- a. **ISC Overview (Teya Penniman):** The state departments do not have sufficient staff to do inspections and on-the-ground work, or to work with the regulatory gaps and at-times conflicting mandates of state departments. About 10 years ago, state departments and environmental leaders got together and began to hire staff to address these gaps. That's where the ISCs originated. After 10 years we have anywhere from 5-20 staff per county in the field conducting conservation work. We do early detection, rapid response. We try to get species before they become the next miconia. We have eradicated, island-wide, 10-12 species to date. We support Prevention through outreach and hosting HPWRA technicians. The bulk of

our funding comes through Established Pests, but we have also benefited from Research and Technology in the past. Public Outreach is an important part of what we do. With no regulatory authority, we need public support for what we do. I want to say thank you for your involvement. The makeup of this Council is very exciting, and I appreciate the level of commitment.

- b. **Kaua'i Invasive Species Committee (Keren Gundersen):** I'll give an overview of what we've accomplished in the past year. We've continued surveying for miconia. We work with DOFAW, James Leary, UH CTAHR. Using adaptive management. Responding to coqui frogs. We've only had one population on Kaua'i and we are nearly complete with that eradication. No calls since May 2011. We are the primary responder for frog calls. We had seven calls outside of the known infestation over the past year and killed 10 frogs over all. Little Fire Ant (LFA) was discovered in recent years, and we have surveyed for that across the island, working with HDOA and USFWS. One new ant record for Kaua'i was recorded, but no additional LFAs. We conducted outreach with Elizabeth Speith and educated the public about reporting tools. The funding amount recommended today leaves us a bit short; we will search for other funds to avoid layoffs.
 - i. Kokubun: Do you receive county support?
 - 1. Gundersen: We get county support for coqui frogs, not every year, but we've made the existing funds last as long as possible.
- c. **O'ahu Invasive Species Committee (Rachel Neville):** A main focus for us is miconia on O'ahu. We removed over 800 immature individuals in the last year, but only found 2 mature individuals. Responding to coqui frogs, which are exploding on O'ahu. We removed 507 pampas grass from the island. Our early detection surveys have resulted in early elimination of invasive species: Mexican feather grass, cogon grass, feather-top fountain grass. We teamed up with HPWRA and CGAPS to conduct outreach with urban gardens and taught them about how people can use the HPWRA for planting decisions. We have volunteers that help with our miconia field surveys. Thank you for your continuing support. HISC funding is crucial for helping us leverage additional funds. The recommended amount leaves us \$260k short, which is 4-5 positions. I am writing proposals to find this funding.
 - i. English: Are you receiving county support?
 - 1. Neville: No. We've made requests in the past under a different administration, but we have not received support.
 - 2. English: I think you should continue to ask. If coqui frogs are exploding on O'ahu, the city needs to address that.
 - ii. Yuen: I'm glad you brought up the Master Gardner's Program. I'd love to see a more statewide programmatic integration between what you're doing and the Master Gardner's Program, so it can be included in their curriculum. They can help spread the word.
 - 1. Neville: One of the weed risk assessors, Patti Clifford, is working with them, as well as Christy Martin from CGAPS. We view them as an important outreach resource.

- iii. Tsuji: What control mechanisms are you using for miconia? Do you collaborate amongst the ISCs?
 - 1. Neville: We remove small trees by hand and expose their roots to air. Larger trees require a small amount of herbicide. The ISCs talk to one another about control methods for plants.
- d. **Moloka'i Invasive Species Committee (Teya Penniman for Lori Buchanan):** MoMISC removed over 800 albizia trees last year. They have caught coqui frogs arriving on plant shipments. Moloka'i does not have coqui yet. MoMISC staff go to nurseries to do surveys at night. They haven't found additional frogs, but they've found ants in plant shipments that are not known to Moloka'i. Lori will call Chuck, the HPWRA technician to get on-site assessments for plant shipments. They do aerial surveys to make sure that miconia does not establish. They eradicated fireweed on Moloka'i.
- e. **Maui Invasive Species Committee (Teya Penniman):** We have eradicated 11 of 17 coqui frog populations. Our biggest challenge is Maliko Gultch. HISC funded a research project to identify technology for addressing the population in uniquely steep terrain. We are using pipes and sprinklers on a larger scale than has previously been attempted in Hawai'i. There are a lot of issues that we could discuss, but I don't think people know what it is we're up against with the Little Fire Ant. It's spreading beyond control, or unchecked at least, on the Big Island. I've seen what it has done in Tahiti, New Caledonia, Papua New Guinea. If it's a war between the coqui frog and LFA, the LFA is going to win. This one species has the ability to change our native biodiversity, our way of life, our agriculture, everything that we know about Hawai'i. I'm not asking for money specifically for that, we're working on outreach. I would hope that you would consider looking at the issue of interisland movement of pests. We have to stop that. We're using tax payer dollars on control rather than prevention, and that needs to change. Thank you for your support.
 - i. Kokubun: We seem to be growing a population of people who are invasive species advocates. There is a mentality that we should be spreading invasive species. I'm concerned about that. We need to think about that issue. We need to have preventative measures in place and enforcement, and public support.
 - ii. Yuen: We started this discussion by identifying legislation to target a specific problem. As the discussion has moved on, we're discussing a more comprehensive legislative package. We need a more comprehensive, holistic view. It would be a good idea for Josh or someone to bring everyone together and take a look at these issues comprehensively, so we can work on these issues in a cost-effective way. We need to educate the broader community, we need a larger scale, sophisticated, sustained outreach campaign that reaches everyone in the state.
 - 1. Penniman: That's a good suggestion, and I think Christy Martin from CGAPS and Jackie Kozak Thiel (HISC) have been thinking about that.

- iii. Nishihara: Piecemeal legislation with invasive species does not work. Maybe it's time that we had an omnibus type of legislation for invasive species. Let's think about it.
- f. **Big Island Invasive Species Committee (Jan Schipper):** We increased our staff to 15 in the last year. We eradicated *Paullinia tomentosa* and *Parkinsonia aculeata*, and we are close to eradicating pampas grass. Completing a four-year roadside survey, which we will use for rapid response prioritization. Working on community involvement. Two of our staff were trained in Guam for brown tree snake response. This year we got the first photograph of a deer on the Big Island. Our priorities for the next year include axis deer, working on coffee berry borer by removing feral coffee outside of plantations, working on chinchillas and other animals that are released after being pets, finishing our early detection surveys and prioritizing future targets. Miconia is also a target, especially in the Kohala area. We are working to train the public to help manage their own communities. The recommended funding leaves us quite short; we may need to down-staff if additional funds are not found.
- g. **Summary (Lori Buchanan):** The issue of biofuels is an important one. We spent a lot of time removing *Arundo* from Moloka'i. Now people are talking about bringing it in for biofuels. What are we going to do when it's out of control? Our governor spoke at the Hawai'i Conservation Conference and said that, "Without the environment, there is no economy." He also said that tourism is still the number one driver for our economy. Tourists don't come to our islands to get bitten by little fire ants or to stay up all night listening to coqui frogs. He also said that clean water is the most important resource for conservation. The watershed partnerships and the ISCs are boots on the ground killing invasive species in our watersheds. We get from the state \$1.4M in special funds with \$400k additional from LLC is to combat the biggest threat to our economy and for the most important resources for protection. Maui County alone spent \$1.8M to protect the environment in the county of Maui Nui. The Maui County Council and the mayor of Maui County, they get it. They have to protect the environment to protect the economy. MISC and MoMISC ask for less from the HISC because we get money from the county. The other ISCs need county support. In the coming legislative season, please support what we've talked about today, as well as finding a stable funding source for the ISCs. Please support prevention, and let's stop the interisland spread of pests. The governor said at the Hawai'i Conservation Conference, "If we don't take action now, 5-10 years from now events will be decided for us." Events will be in the saddle, and they'll be riding us.
 - i. Fuchigami: You mentioned that the county provides support. Who specifically gives that support?
 - 1. Buchanan: The county council. We go to every budget hearing. We meet with each individual county council member. We meet with the mayor, the agricultural person, the resource person. Teya is the head of the Axis Deer Working Group. The ISCs are supposed to be the ones who know what's going on on our islands and what we can do. Outreach is important.

2. English: It's a long tradition in Maui. I was on the county council. The governor is saying that we need to do this, and now we need to back it up with funds. The mayor and council on Maui have done that. The state has a 10 billion dollar state budget, and we have to fight for these special funds. The counties need to provide support. Maui has a community that really supports conservation issues. O'ahu, with their budget, needs to support this work.
 - ii. Fuchigami: Have you shared your template with the other ISCs?
 1. Buchanan: Yes, we're trying to help the other ISCs get county support.
- h. **Division of Aquatic Resources Aquatic Invasive Species (DAR AIS) Program (Jono Blodgett):** We're a statewide program, but with limited resources we've focused over the past two years on Kaneohe Bay. We used the Supersucker to remove algae from patch reefs. We use native sea urchins to control the algae. We have a hatchery on Sand Island to raise the urchins. We have a NOAA grant to work on an additional section of reef. We work with UH researchers to conduct a nutrient analysis to understand what is allowing the invasive algae grow in the bay. We're putting up educational signage. We're still looking for the Ballast Water and Hull Fouling Coordinator. Hull fouling policy is a huge prevention gap.
 - i. Kokubun: Maunalua Bay is not your kuleana?
 1. Blodgett: No, Malama Maunalua and TNC have taken that on.
 - i. Atwood: Thank you for the updates. I think it's good to hear from these projects and to learn where the money goes and why these groups need additional funding. If it's of interest to the Council, I'd like to have additional project updates in the future, particularly from the other major component of our HISC budget, the HDOA's biocontrol, apriary, and ant programs.

7. Discussion of HISC Legislative Agenda (Paul Conry, DOFAW)

- a. Atwood: Thank you to the legislators for being here today, and for the Council this is a good opportunity to provide support.
- b. Kokubun: I suggest that we put this on the agenda for the next meeting, and we should have that meeting soon. We will ask you, Josh, to send some drafts of what we've been talking about policy-wise so far, and we will distribute that to the membership.
- c. Gill: The legislative package is on a timeline that would preclude us from making decisions. You can introduce anything at the request of HISC, but it gets a little muddy, trying to collaborate at such a late date. On a conceptual level we could support certain legislation, but it might be difficult to actually submit legislation.
- d. Kokubun: It may be as simple as that, providing a list of things we'd like to see. But we will coordinate and see what we can work out.
- e. Conry: I asked for this item to be added to the agenda so that we can talk about process. You've already done a great job of identifying items that need to be worked on. Do you want to form a working group, or have the staff put together a package? For the agencies, the submittal due dates are coming up. Will we work on a package that the legislative representatives could move forward, since they

have a later deadline than the agencies do? We need to discuss the process. The staff can start working with networks and organizations, pulling together ideas and what needs to be included. I think that within a month we could come back with ideas and the Council could take a look at it. Today we've discussed:

- i. An omnibus bill on invasive species
 - ii. Re-writing statutes to address imported plants
 - iii. Axis deer
 - iv. Interisland movement of pests
 - v. Funding for items that are on this agenda or a longer term funding source for the HISC.
 - vi. [Added later] Revisions to Ch 91 language to allow for emergency rule making.
- f. Alia: We're going to recommend that the staff put together a package within a month, and try to call a meeting within a month. Our deadline to the governor's office for submittals is September 23.
- g. Kokubun: There may be some flexibility on that date. Let's see some drafts and put forward an agenda. If there are individual members that have ideas, they can get them to the staff (Josh or Paul) by a certain date, and then we'll get them to the legislators to develop drafts.
- h. Conry: With the network we'll pull together ideas, and solicit ideas from the members, and bring it back for further discussion.

8. Updates from June Submittal Items (Josh Atwood)

- a. Submittal regarding HISC administrative rules: since the last HISC meeting we've met with a former DOFAW member who has rule making experience. She has produced a first draft of HISC administrative rules that will allow us to have a list of invasive species that incorporates existing lists from HDOA (e.g., Noxious Weed List) or DLNR (Injurious Wildlife) as well as new species that the Council reviews and designates as invasives. I hope to review those rules with the Council by the end of the year.
- b. Submittal regarding current invasive species issues:
 - i. Albizia: The motion was to designate albizia as an invasive species. When we have the administrative rules in place to create that list, albizia will be on it. We're still receiving calls from Hawai'i County asking for updates. They need to see albizia on a list before they can control it along roadways.
 - ii. Myrtaceae: The HDOA is in the process of making a rule for quarantine for Myrtaceae imports. Carol Okada presented the rule at the Hawai'i Conservation Conference. When the appropriate time in the rule making process arrives, we will provide a statement of support from the Council.
 - iii. Mosquitoes: The motion was to support finding ways to restore the capacity of the Vector Control Branch in the monitoring and control of mosquitoes. Since the June HISC meeting, Christy Martin and I met with Peter Oshiro and Lynn Nakasone from HDOH and Carol Okada and Glenn Sakamoto from HDOA to discuss ways that we might restore some of that early detection

and rapid response capacity through collaboration. We discussed HDOA inspection airport staff working with traps that are maintained by HDOH. HDOH has entomologists on staff for identification, and HDOA has entomologists on contract at the Bishop Museum for the same purpose. There aren't funds to add personnel, but we're hoping to continue meeting to talk about collaboration.

- iv. Axis deer: In addition to the work Jan is doing with BIISC, there are updates proposed to DLNR's Chapter 124 rules regarding the interisland transportation of introduced wildlife, and the HDOA is also working on rule changes to address that policy gap.
 - 1. Kokubun: With those rule changes, you might want to look at those from a statutory perspective as well.
 - 2. Alia: I would ask that we also address the Ch 91 statutory language to see if we could make it applicable for adopting emergency rules in certain conditions. There will be another instance that we're not contemplating now.
 - 3. Kokubun: Let's include that in the legislative package.
 - 4. Souki: The public should have the chance to look at the rules before we have the official public hearing. Stakeholders need to be involved. Just a recommendation, the earlier the better.

9. Announcements

- a. Dr. James Leary (UH CTAHR): My role is as a specialist in technology development. I work with the ISCs in developing field techniques. We have a new technique called herbicide ballistic technology (HBT) that demonstrates efficiency in the field and less herbicide used. We're submitting 24c registration (special local needs). Letters of support would be appreciated from the Council.
 - i. Aila: Can you provide us with the information?
 - ii. Leary: I'll coordinate through Dr. Atwood.

10. Public Comments

- a. None

11. Adjournment (Kokubun, 4:55pm)