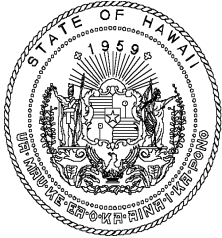


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Governor

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Lieutenant Governor



# Hawai'i Invasive Species Council

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U.S. Department of Agriculture  
U.S. Department of the Interior  
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## Established Pests Working Group (EPWG) of the

## Hawai'i Invasive Species Council

Meeting Minutes

November 15, 2011, 2:30 pm

Rm 322B, Kalanimoku Building, 1151 Punchbowl St, Honolulu, HI

## PRESENT:

Josh Atwood, HISC	Kate Cullison, DAR AIS
Carlton Saito, Sen. Gabbard's Office	Barry Brennan, CTAHR, UH
Keren Gundersen, KISC	Rob Parsons, Maui County
Christy Martin, CGAPS	Teya Penniman, MISC
Senator Clarence Nishihara	Lori Buchanan, MoMISC
Jono Blodgett, DAR AIS	Rachel Neville, OISC
Mary Ikagawa, OISC	Darcy Oishi, HDOA PPC
Pingjun Yang, DOH	Joshua Fisher, USFWS
Christine Ogura, USFWS	Rob Hauff, DLNR

A list of abbreviations is available at the end of this document.

## AGENDA:

1. *Call to order*
2. *Approval of minutes*
3. *Project updates & needs*
4. *Discussion of Maui County Council request for assistance with established populations of axis deer in Maui County*
5. *Discussion of working group goals*
  - a. *Fundraising options*
  - b. *Role of EPWG in HISC*
6. *Announcements*
7. *Adjournment*

## MINUTES SUMMARY:

- First meeting of the EPWG outside of the budget setting process.
- Project updates included coqui detected on O'ahu, plans to eradicate Little Fire Ant from Kaua'i, Maui Invasive Species Committee's hosting of the House Ways and Means Committee, Division of Aquatic Resources' procurement of a Ballast Water and Hull Fouling Coordinator, and more!
- Teya Penniman provided a summary of the Axis deer problem on Maui. The group agreed that we should identify appropriate agency contacts at DLNR, HDOA, DOH, and DOT to assist in drafting a long term management plan.
- The deer issue should also be taken up at the county level with mayor's offices, as the problem with deer varies by county.
- Teya will look into a legislative proposal to change to HRS 263 allowing federal agencies to conduct aerial hunting and herding.

- The group discussed the need for new funding sources and the likelihood of new taxes or increased revenues from existing taxes.
- The group discussed the role of EPWG as identifying priorities for the funding cycle and potentially developing strategic plans for top priorities (similar to the existing Ant Plan).
- The group discussed the need to update HISC's strategic plan to reflect an accurate role for working groups and a structure for identifying new funding sources.

**FULL MINUTES:**

1. Call to order: Approximately 2:30 pm

2. Approval of minutes:

- Minutes amended to reflect Mark Fox as an evaluator for FY12 proposals addressed to the EPWG group. Motion by Josh Fisher, seconded by Kate Cullison.

3. Project Updates and Needs:

- Josh Atwood: This is the first time that EPWG has met outside of the budget setting process, which is progress for us. I am working on disbursing the FY12 funds. There are about 10 purchase orders; half have been approved by DOFAW and are awaiting accounts at UH, the other half are still being processed as PCSU proposals. We're making good progress. In the meantime, if there are updates, it would be great if anyone wants to share.
- Keren Gundersen: Do you think that the FY12 funds will be available by the end of the year?
- Josh Atwood: I would say yes. The KISC PO has been approved by DOFAW and is at UH. You just need a UH account number and you should be all set.
- Darcy Oishi: What about the interdepartmental transfer of funds [for the HDOA biocontrol program]?
- Josh Atwood: The JV has been processed by DLNR, but is being heldup by an A-19 form from Armi [Cabulisan, HDOA accounting] that has an error in it. Armi is aware of the error and is working to fix the problem. She is working with Dennis Takahashi and I.
- Darcy: We are borrowing money from the general fund to do exploration. Mohlson is going to Africa for three months in December. We are clearing out our budget for the year.
- Rob Hauff: At the last meeting, Neil said you guys had funding from last year. Are you using that?
- Josh Atwood: Those funds were sent back to DLNR because there was a sunset on their use. But the Council approved their reissue at the Sep 30 meeting, so the FY11 funds are part of the transfer that is tied up by that A-19 form.
- Darcy: With last year's money and this year's money we're doing two explorations: one in Africa and one in Asia. We don't want to lose the seasonal window of opportunity, so we are moving forward with the Africa trip now.
- Christy Martin: What species are you looking at for targets?
- Darcy: First priority is fireweed, fountain grass, and small hive beetle. In Asia, it will depend on where we go in Asia. We're not sending Mohlson to any politically unstable places this time.

- Jono Blodgett: For AIS, we finished the first round of baseline monitoring on patch reefs in northern Kaneohe Bay where we'll do removal. We started yesterday. Finishing up the first reef by the end of the year, and we'll put urchins on it as we go.
- Rachel Neville: For OISC, with respect to miconia control, we have to survey the seed bank every three years. So there is a certain amount of acreage that is up for survey each year. The field crew has finished what they need to do for this year except for a few spots that are private property. For coqui frog we're working with HDOA. There are some frogs that are disturbingly close to a forested area in Waimanalo. OISC, HDOA, and DOFAW did a spray but the residents are still hearing frogs. We're going to keep spraying and monitoring and try to hammer it until we don't hear them anymore. It seems to be one or two frogs that don't call consistently. We worked with Lyon Arboretum to remove *Piper aduncum*, which has a high weed risk assessment score and has been a problem on other Pacific islands. We removed the original population and have been doing surveys. We haven't found any within 200m but will keep looking.
- Josh Atwood: With the coqui in Waimanalo, do you have an estimate of how long that population has been there?
- Rachel: Well, it's the nursery center of O'ahu, so what I would say is that coqui are continually introduced into Waimanalo all the time. It's hard to know. We have not heard it this close to the forest below.
- Josh Fisher: Is it by the drainages?
- Rachel: It's near the powerlines. We're waiting for HECO, who doesn't want anything underneath their powerlines. They have contractors that are scheduled to clear vegetation under the lines. We're trying to get that moved up in the rotations, which would help us bring in equipment.
- Darcy: For the ant project, for Established Pest funds, we have the Maui infestation in the bag right now (LFA). We've been working with the Pesticides Branch to develop the eradication plan for Kaua'i. We've identified and proposed a chemical, had the discussions with EPA and Pesticide Branch. We can use a State Experimental Use Permit. That is faster for approval, but it means it's a one shot deal. We can't use that chemical bait combination again at any other site. We're hoping to have a start date in January, but rain will be a huge factor in that control program because of wash-off. We've developed our sixth master blaster and spackler of death. We developed an ant-stinguisher, which is capable of destroying bait spray quickly, and we can mount them on mobile vehicles. The Brentigator is a pressurized cannon with water balloons containing pesticide and gel. We can deploy anywhere from 20 to 200 yards. We've been in an eradication position on Kaua'i since LFA got there. It's about 13 acres. I have to thank Keren and KISC for their survey work over the years. Hopefully by next meeting it will have started.
- Josh Atwood: You said it might start in January, about how long would it run?
- Darcy: We have to do at least eight treatments, but we will probably schedule 12 because of rain issues.
- Keren: The mayor has given support for paying for signage around the area. There are two trails there, so people are leaving the area constantly. We feel that informational signs on the trailhead will be important. The signs will have the dates of treatments and a waterproof holder for fliers.
- Darcy: The bait was a peanut butter matrix, but it went bad, so we've switched to a corn oil base. It's a compromise between safety and efficacy. We have a plan that

incorporates about three different usage patterns and four pesticides based on situations. It has to be a liquid based matrix for plants. It has to go on leaves because at a certain point LFA can carry out its entire life cycle in the upper part of trees. Historically, we have wiped out ants on the ground, but the ants retreated up into the palm trees and we couldn't get pesticides up there. The ants then move back down and re-establish. Unless we get arboreal treatments going, all it is a containment exercise. Now that we have that system we have a much better shot at successfully eradicating. This would be the 3<sup>rd</sup> major eradication of an insect in Hawai'i.

- Rob Hauff: DAR AIS, did you guys get the Ballast Water and Hull Fouling Coordinator?
- Jono: Yes, we did.
- Keren: For KISC, last year we contracted the O'ahu Early Detection team for a roadside survey. We've pared down the list to do delimiting surveys for. This is a whole new ballgame for us. They are incipient species present in low numbers, usually deliberately planted in yards. As we survey, we're finding that the plants aren't outside of the yards, but the landowners aren't willing to remove the plants. It's a learning experience. We had Tiffany, our outreach person, and John, our outreach specialist, working to put together packets for each of these species, for homeowners. We have cards we can leave for the homeowner if they're not there. It's been quite involved. We had a workshop with NTBG on collecting vouchers; we'll be trying to collect vouchers at each of our survey sites for NTBG and Bishop Museum. We've removed the only bingabing (*Macaranga mappia*) from Kaua'i. There were three clones of a male plant. It was in Allerton and was planted years ago. It hadn't gone anywhere.
- Josh Atwood: What's the process for working with resistant homeowners? What's the next course of action?
- Keren: They continue to do delimiting surveys. We have to consider how widespread is it, can we remove it, and can we get the original homeowner to assist? And is it still being sold in nurseries, because if it is, what is the point of trying to remove it? Also, I wanted to add that Kaua'i had one coqui infestation, and we haven't heard anything in 7 months. We're counting down to a year.
- Teya Penniman: [For MISC] We finished our push for pampas grass. It flowers in the summer/fall, making it more visible, but of course that means it has flowered and is close to setting seed, which isn't good. We do helidrops and try to get people in on the ground. We've used that technique in East Maui and have seen the number of mature plants drop. That has been successful. We're now trying that in a new area as well. West Maui, we're still having a hard time getting a hand on the population there. There are no good places to camp because it's so steep. For fountain grass we had a discovery a couple of months ago of a huge planting. Someone moved from the Big Island and may have planted it. He didn't want to get rid of it. We offered replacement plants. It was fairly expensive to revegetate, but he's happy with it and for us it's worth it to make sure fountain grass doesn't get established on Maui. At the beginning of this month we hosted the House Finance Committee and flew them to see the miconia infestation in Hana. They heard the story of why miconia is bad and how it's being managed. It was a great opportunity. Fourteen of the House Finance Committee and three staffers as well. Unfortunately a few days later a helicopter went down on Moloka'i. We don't use the same kind of helicopter, but it brought it home to me how important we think this work is, that we are willing to use tools that are inherently dangerous, and that we need to be sure we're using the right tools.

- Keren: Did any of the committee members ask if there was miconia on their island?
- Teya: We informed them. We had Derek Kawakami and Dee Morikawa from Kaua'i. We also talked about the importance of biocontrol.
- Rob Hauff: Thanks for organizing that.
- Lori Buchanan: [For MoMISC] We're going to start our aerial surveys on Moloka'i. We have 12 flight hours. We do it every year starting in 2005. The weather isn't good. We haven't detected any miconia on Moloka'i so far. We got a big coqui frog that came in on a truck shipped from Hilo. We completed our initial suppression of tree daisy, over 500 trees. That's a long historical target in Honouliuli Reserve. The whole month of September we did an island-wide survey for LFA, and we didn't find any, but we did find some new records for ant species that were verified by Forest and Kim Starr.

#### 4. Discussion of Maui County Council request for assistance with long term management plans for Axis deer

- Rob Hauff: The next item on the agenda is axis deer on Maui. Teya is going to lead the discussion.
- Teya: I think one of the reasons this came up was the resolution Maui County Council sent to the HISC. For some history: axis deer came to Maui in about 1959. Since that time they have reproduced and the population has grown. No one really knows how many deer are on Maui at this time, but I've heard various numbers. Studies have been done on growth rates, and in 2002-2003 there was supposed to be between 1-4,000. The growth rate is about 20-30%. That would mean anywhere from 4,300-42,000 deer on Maui, or more, at present. No one really knows. Our ranchers and farmers are really getting hammered by the deer. They eat crops, they eat forage before cattle can get to it, they're decimating crops like lettuce, they knock down fences, and wreak havoc on our local agriculture. More so in a drought year. The deer stay up at higher elevations during wet years. When there isn't as much vegetation in higher elevations, the deer come down. It's impacting golf courses as well. Herds can have 1,500-2,000 animals together. Huge groups of animals. That poses safety hazards, with car accidents, and a food safety issue. If a health inspector comes to a farm and finds a whole lot of deer poop, they can't sell that product. That's something that I don't think people have looked at, but it's a real health risk.
- Darcy: If a deer poops on farm property, you have to prove you've done mitigating efforts. It's a huge food safety issue. Farmers who supply to Costco, Costco has their own standard that people have to follow. They have to report that kind of activity and what they did to mitigate it.
- Teya: Wildlife control permits are issued by DLNR DOFAW for deer, pigs, and other animals. If you can show they're causing damage to your property, you can get a permit to control it. We had a DOFAW intern on Maui look into the number of people looking to get control permits for deer control. She took a random sample of permits and looked at the number of deer control permits between 1995 and 2009 and it's clear that the deer numbers are going up dramatically. About a year ago, ranchers, farmers, and Maui County Farm Bureau got together to start talking about the problem. I've been facilitating those meetings. MISC is not taking on axis deer as a target species. This is not a new problem on Maui. Before 2002, there was the Maui Axis Deer Working Group. They came up with a plan to address the issue. They needed \$60,000 to enact the plan, but never got it, and nothing ever happened. Since that time, the group has realized

that outreach is important, and one individual in particular is looking at a culling program with the idea of harvesting and selling the meat. It would mitigate impacts, but not curb overall numbers. In terms of public relations, we asked people and they said, whatever you do, make use of them eat. Don't waste it. There was a meeting with Mayor Arakawa and a number of representatives from the Maui Axis Deer Working Group. Rob, do you want to give a summary?

- Rob Parsons: When I came on with the administration in 2003, we had a meeting before we even got into office discussing this issue. Here we are nine years later and the population is growing exponentially. Both the Mayor and the County Council have expressed willingness to do something in the upcoming budget cycle, to support management recommendations. Teya has taken on the task of putting out an iteration of what would constitute overall management. It's been a moving target. There was a time when the working group was looking at aerial hunting or herding. I think there is more recognition now that that might have some bad PR from a couple different angles. The most promising thing now is overcoming USDA hurdles and the cost of insurance on private lands. To have a USDA veterinarian on site they have to do a pre-mortem on site, with binoculars, saying, that looks like a healthy animal, it should be killed with a headshot, and taken to a facility within 2-3 hours to be a sellable animal. What's happening now is that there are a lot of private hunters on private lands doing culling at night, away from residential areas, keeping and dressing the meat themselves. There are individuals looking for support for a more organized hunt and working with slaughterhouses to get something into the restaurants, to look at what a desirable food source this is. The resolution states that the county is seeking to partner with HISC, with the state, looking for ways that we can collaborate on funding, organizing, and managing this species.
- Teya: The meeting with the mayor is what led to the resolution. Council member Mike White was there as well. Two objectives were identified: bring the numbers down to what could be considered an acceptable level of impact, and at the same time develop a long term sustainable management plan for the population. So, decrease the impact on farmers, figure out what is an acceptable level of deer, and figure out how to keep it at that level. It's still unclear how that needs to be done. That's what the management plan needs to get done. Hopefully it's not just us figuring that out, because a lot of people are facing this all over the country. Some promising things on the statewide level: the launch of the watershed initiative, which clearly states that ungulates should be removed from high priority forested areas. That's consistent with that 2002 plan, that had zero tolerance zones. To see that move forward, particularly in Maui County, would be a very promising thing. If you're trying to move them out of higher elevation ranches, you don't want to be just pushing them into high priority watershed areas. There needs to be some collaboration. The other positive development is a statewide but Maui-based position that focuses on increasing access to public and private hunting, which has been filled by Jordan Jokiel, who was the former coordinator for East Maui Watershed Partnership. Based on Maui, but to look at how we create more opportunities for hunting. Maybe it will address insurance issues or cooperative management. Overall, looking for involvement and pulling together a management plan. Personally I would like to see a statewide approach, though every island is different. Obviously we're not going to Moloka'i and saying "this is how we're going to manage your deer." The state has a lot of resources. I think you're right there being hesitation about aerial shooting, even though that was the management recommendation. There's

thought of doing aerial herding, where you herd them into an area, and then there are shooters on the ground, and it would be easier to recover the venison.

- Senator Nishihara: Two years ago we passed the bill that allowed tourists to come over and hunt on private land with appropriate safeguards, eg they had to go with a guide. Apparently there is that law now that allows them to hunt on private land. The question becomes how do you make it safe, and there is a liability issue as well. In this case I guess the landowner took up the liability, not the state.
- Teya: The ranchers, some of whom are asking for help, have also pay a fee for hunting where they might make some money for bringing in a buck with a nice rack. So they want it, but they don't want it. It's a complex issue.
- Josh Atwood: I would say that's one of the problems with trying to do a statewide approach: if you want to promote a system where tourists could come in and hunt on private land, you might want that on Maui, but not on the Big Island because they're trying to not commoditize deer hunting there.
- Rachel: I understand that people don't like the idea of wasting meat, but aside from those people who are actually hunters, how many people are actually going to dress the meat themselves? There's a supply chain issue. One of the outreach messages we've been working on is that there's also the issue of Maui's ability to feed itself because the deer have an impact on agriculture. There's two sides to the issue.
- Josh Fisher: When you were talking about the promotion of that resource as a commodity, I think that we have to be careful. We can recognize that there's that aspect, but we have to look at what our long term goals are. It might make long term goals harder. I don't know if it needs to be promoted as a commodity.
- Teya: Like the farmers, the state is of two minds. It has to manage resources and also has a mandate to promote hunting.
- Senator Nishihara: If you try to promote the value of the meat, at some point you should have to manage the herd so you don't eliminate the meat you are trying to promote. You're working at cross purposes. The fact that one county might have a different view of it, it seems like you really need to get the mayors get together. Can you really have a statewide plan? Maybe you should get the mayors together, see what they can agree to, and then have them come to the legislature and say, can we craft a specific law that everyone can live with within these needs?
- Josh Fisher: If you don't have their support, you'll be spinning in circles.
- Carlton: Does the resolution only apply to Maui island?
- Teya: Yes. That's where the impetus came from, and the group would not try to mandate what happened on Moloka'i and Lanai without having a sense of what the community there wanted.
- Carlton: Why doesn't Maui commission hunters from Moloka'i to come over and hunt axis deer?
- Teya: One of the problems that arises from this situation is that because the deer are so plentiful and people want to hunt them, landowners have a lot of trespassing and hear shots on their land. There is a lot of unauthorized hunting going on. There's no simple answer.
- Josh Fisher: They've had that issue with pigs here in Manoa Valley. Landowners get upset because the pigs are on their land, then the state open up hunting, but then there's trespassing and vandalism and people get upset.
- Rob Hauff: Is anyone from DLNR participating?

- Teya: Fern Duvall has been a regular attendee, Jon Medeiros, Shane DeMattos. Shane is the game person. Lisa Ferrentinos has been helpful in providing examples of agreements needed for aerial control work on private policies.
- Rob Hauff: Are there other DLNR policies that hinder local efforts to reduce herds?
- Teya: Not that I'm aware of. There are various policies. A firearms policy, a helicopter operating policy, an aerial shooting policy for feral animals. It was one of the things that pushed us toward the idea of a comprehensive management plan. What about Wildlife Services? By state law they are prohibited from aerial hunting on private land, or state land. They can only do it on their own land. I think it was Scott Fretz who said that there have been efforts in the past to change that law, and that DOFAW and Wildlife Services would like to see that changed. The other option is having DLNR staff do the aerial control. According to Mike Pitzler, they need a certain number of hours of work to keep their certification, and they could use the hours.
- Rob Hauff: So just exempting Wildlife Services might be a significant option.
- Carlton: What section of HRS is that?
- Teya: HRS 263 section 10.
- Christy: That aerial gunning bill has gone in a few years ago, and it gets completely shut down within the first hearing round.
- Rachel: Who's the opposition?
- Christy: from what I remember it's hunters and animal rights folks. It was in the same session as snaring.
- Teya: It's ok to shoot them by air if it's the state doing it, but not if it's the feds doing it.
- Carlton: What is the state established a statute for limited liability immunity for private property owners that allow for hunting.
- Teya: They would like that, I'm sure.
- Senator Nishihara: The liability is the issue. The state didn't want the liability for that. When landowners said they were willing to accept the liability, then everybody said it was ok. If you say the state will have to take the liability, everyone pushes back. I don't know how many of the directors would sign off and say that they would accept the liability.
- Carlton Saito: If we grant immunity for property owners, does that necessarily mean that the state accepts more liability?
- Senator Nishihara: Someone has to be liable.
- Josh Atwood: Why can't the hunters be liable? Is there individual liability?
- Senator Nishihara: Well, you could say the National Rifle Association has to take on the liability, but then only NRA members would be able to hunt. It seems that each county wants to operate their own way.
- Teya: The other issue is that where large landowners might want to take on liability, that's not going to work for small farms.
- Senator Nishihara: The small farmer doesn't want the deer on his land. Maybe he would shoot one on his own land, but then he takes on that responsibility.
- Lori: You can do that now. You can get an HDOA permit to hunt deer on your own land. Right now USDA APHIS is shooting all the deer in our seed corn. Last year we did three days of aerial shooting by DLNR and NARS staff on the north shore of Moloka'i. They've been doing aerial control of goats as well. It makes a difference. After year 4 or 5, you can tell how many ungulates you have to dispatch to maintain a certain population size. If you're a Watershed Partnership and ungulates are increasing sediment, it might be a



violation of the Clean Water Act. You can mitigate the problem. On Moloka'i the farmers work with the community, they get family members and friends with an ag permit to shoot deer at night. Of course we have a more rural situation than they have on Maui.

- Teya: That wouldn't work in Makawao.
- Lori: You're gonna need a ten foot fence. When you start to fence large properties, it starts to funnel the deer.
- Teya: Christy asked for a summary of vehicle accidents related to axis deer. There were 11 or 13, but two of them were Maui County Police Department.
- Christy: Sadly the reports have gone up quite a bit, but the records aren't conducive to getting data.
- Rob Parsons: I've pulled that data, too, and there were a fair number for Moloka'i.
- Lori: That's only the reported ones. If you get a busted up car and you don't want to pay the deductible, you're not going to report that damage.
- Rob Parsons: And if the collisions happen at night, as most of them do, people may have had a couple of drinks and may not want to report that collision. We've had reports of DOT cleaning up hit animals, but there's no report of a collision. So the numbers of collisions are probably low.
- Rob Hauff: But there have been no fatalities so far?
- Rob Parsons: Only to the deer.
- Rob Hauff: Josh, just to double check: this request was sent to the Council, but the Council hasn't discussed this?
- Josh Atwood: No, the Council discussed this at the September 30, 2011 meeting. They provided a written reply to the Maui County Council saying that HISC will provide advice and expertise in the development of a long term management plan and that they support the efforts of the Maui County Council and the Maui Axis Deer Working Group. Subsequent to that meeting I've been talking to Russell and William and they named this group (the Established Pest Working Group) specifically as a resource for the County Council.
- Rob Parsons: [quoting from the HISC co-chair's written reply]: "We would be happy to have the issue of Axis deer in Maui County discussed by our Established Pests Working Group, chaired by Rob Hauff at the DLNR." And then it further says, "We would like to hold a future HISC meeting on Maui to better engage the Maui community and to witness the impact of Axis deer first hand." So they're also discussing a HISC meeting on Maui to specifically discuss this issue.
- Josh Atwood: That would probably happen after the upcoming legislative session, so we're likely looking at May.
- Rob Parsons: I had a question about what went in as far as the deadline for submitting legislative proposals being in September. Does the HISC know what will be going in for this legislative session?
- Josh Atwood: From the HISC we have one proposal related to adopting emergency rules relating to threats to the environment, an amendment to HRS 91. That's the only bill that the HISC has submitted for this upcoming session. So the deadline in September was a departmental deadline, but there are still options to submit bills for this session directly through legislators.
- Carlton: Opening day is Jan 18. The deadline is Jan 25 [for submitting bills]. But legislators need time to have bills drafted. Don't come to us with an idea on 12 noon on the 25<sup>th</sup>.

- Josh Atwood: The reason that we went the departmental route is that HISC is administratively housed by DLNR. We had that bill added to DLNR's legislative package. There's no reason that working with a legislator we couldn't have an additional bill.
- Rob Parsons: I'm looking at the minutes from the August 18, 2011 meeting, and there's a discussion here of a legislative agenda by Paul Conry. It said there was talk of an omnibus bill on invasive species, axis deer, interisland movement, recommending that the staff put together a package in a month. What wound up in the package?
- Josh Atwood: At the September 30, 2011 meeting, we discussed not only that list, but the general HISC network came up with a list of topics that they'd like to see addressed in the future. We discussed whether those topics would be addressed legislatively, through administrative rules, or through other projects. So the only legislative item we ended up submitting was the HRS 91 amendment. But some of the other items are being addressed through administrative rule changes, or there are projects already in progress that are addressing those issues. Some items were longer term projects that we weren't going to solve by the September deadline, but we will keep working on, such as axis deer. If there is a topic you want to know about, I can tell you about what's happening with it in greater detail. One relevant update is that DLNR is updating their Ch 124 rules for injurious wildlife. It's a strong change. There are two classes: "introduced wildlife" is any species introduced to the state by humans, and "injurious wildlife," which are species known to be particularly harmful. The new structure of the draft rules is that transport and release of introduced wildlife is prohibited. Just a blanket prohibition. There is an additional restriction on injurious wildlife where they cannot be exported from the state, and that avoids commoditizing those species. There are some exceptions for HDOA permitted individuals. These rules would apply to axis deer. It would be illegal to transport and release the deer. We're also looking at removing the clause that previously only limited release in areas where a species was not already established. Under the new rules it wouldn't matter whether a species was established in a given area, transport and release would be prohibited. That would apply to Maui. [Note: as of this meeting, those are draft rules only and the amendments have not been approved for adoption]
- Keren: So would that apply to this commodity group trying to sell meat out of state?
- Josh Atwood: Axis deer are not injurious, so the export restriction would not apply. They are considered introduced wildlife. They can't be considered injurious because they're also considered game mammals.
- Josh Fisher: It's classified as a game mammal?
- Rob Hauff: For certain islands.
- Josh Atwood: Game mammals are still introduced wildlife. There is no exception there. They can't be transported and released.
- Senator Nishihara: That's an administrative bill? Will that address the concern that Senator Kahele has about deer being moved to the Big Island?
- Josh Atwood: Yes, that's what started this review. There's a forfeiture clause in the draft rules, where in addition to a penalty schedule, equipment used for illegal transport can be seized.
- Christine Ogura: Are those rules internal? Have they gone to public comment?
- Josh Atwood: No, they were just introduced to the board last week. They'll go under internal review and then public commenting.

- Lori: So when I domesticate my Axis deer on Moloka'i, how is that going to affect me? If I need to capture deer, in quantities and in a time interval and then I need to pen in my cows in other areas, is that going to affect me?
- Josh Atwood: You would not be able to release the deer from enclosure. As for transporting deer, that might be prohibited, but you could likely get a permit.
- Teya: There's a great book called the Deer Wars about deer in New Zealand. The government was controlling it, and then people realized they could sell it, and now the deer are farmed. The deer are penned in.
- Darcy: But they're also still in the forested areas. They're still a problem.
- Rob Hauff: As far as this group providing advice on creating a management plan, I don't know that the people sitting in this room necessarily have expertise on axis deer, but we can certainly provide a facilitation role and coordination with the departments. If there is legislation that you want to pursue and get someone from Maui to submit, we can work with the partner agencies to make sure that's in harmony with their agencies and will get beyond initial committees.
- Teya: What if I could put together draft language to come from the Established Pests Working Group to go to the HISC... although the co-chairs have already said that they support the Maui County Council and developing a plan.
- Josh Atwood: Yes, the Council supports that. One thing that I think was a little unclear in the original letter they received from the County Council: the development of the plan, which group would take that on? Are they looking for the HISC to provide language, or just a resource for advice and review?
- Teya: Well, the specific language of the resolution urges that state of Hawaii and relevant federal agencies to join with the County of Maui to develop a long term management plan to immediately reduce the Maui axis deer population. The request is to help us develop that.
- Josh Atwood: And that was not just to the HISC, but to the constituent state departments as well?
- Teya: Yes. What we need is someone to work with.
- Carlton: Do axis deer transmit deer?
- Teya: There is concern about bovine tuberculosis.
- Carlton: Does that taint the meat?
- Teya: It's unusable, but you can't detect it by smell or appearance of the meat.
- Rob Hauff: The contacts would be DLNR and HDOA, correct? And DOH?
- Josh Atwood: So we need to identify staff from those agencies to take an active role in developing the plan?
- Josh Fisher: Maybe staff from DOT as well.
- Teya: And if you can think of any other relevant federal agencies.
- Rachel: Maybe whatever agency is in charge of certifying meat.
- Teya: That's USDA APHIS as well. They've been involved. Ok, thank you.
- Josh Atwood: Any other action items before we leave this topic?
- Teya: Well, the legislation we talked about. The legislation for HRS 263.
- Senator Nishihara: Before miconia became a crop, it was probably brought here by nurseries, right? Is there an agency that checks seeds companies that people buy for planting in their yards?
- Darcy: HDOA does. Chemical and Seed Programs are contracted by USDA to do sampling of seeds that are coming in for different purposes, to look for Noxious Weeds.

- Senator Nishihara: So seeds that are sold at Home Depot, those are checked?
- Darcy: They're doing sub sampling of lots. So it's not comprehensive. That is essentially a two man operation for the whole state.
- Rob Hauff: That's only for plants on the noxious weed list?
- Darcy: It depends. If it's a federal referral, it's the federal noxious weed list. If it's the state doing its job, we're looking at the Weeds for Control list, chapter 68.
- Rachel: There are a lot of invasive species that aren't on that list.
- Senator Nishihara: I remember once I saw a seed packet that said "Cannot be sold in Hawai'i."
- Darcy: We also can't get ants in kits and things that are sold.

##### 5. Discussion of Working Group goals: Funding and role of the EPWG

- Rob Hauff: The next topic on the agenda is discussing fundraising options. Rachel is going to lead that. A quick announcement first: some of the projects that were not funded in FY12 through the Established Pests group have been submitted elsewhere for funding. Dr. Leary's Herbicide Ballistic Technology proposal was submitted to the US Forest Service. It ranked out as the region's top proposal. It stands a good chance. It was a one year proposal for \$50k. The proposal for control of Australian tree fern in the Kaua'i Natural Area Reserve, a larger proposal was submitted to the US Forest Service. That's a three year, \$300k proposal. Some of those projects still have hope of receiving funds elsewhere.
- Rachel: The reason that I had asked Josh if we could talk about this is that traditionally this group met once a year for budget proposals, when we're all trying to get money from the HISC. It's always uncomfortable. Most of the HISC budget is spent in the Established Pest Working Group, so I thought it might be useful to talk about increasing the pie for the Established Pests Working Group. Are people interested, and how would we do it? Would we advocate at the legislature for the HISC to have more funds? Do we look for private donors? Every time we're at the Established Pests Working Group, there are so many good projects. That gets at what is the role of the Established Pests Working Group in the HISC. So, do people think that that is an appropriate role for this group to have, and is it something that this working can do?
- Josh Atwood: In theory, according to the Strategic Plan, it's something that the Resources Working Group should do, but in reality I think a discussion of how to fund projects is a conversation that any Working Group could have, and this being the most expensive Working Group, that'd be a fine item to pursue.
- Darcy: I think Outreach and Prevention need to be grown also. All the Working Groups that have a deliverable realistically need to be expanded in order to meet the gaps that the HISC was created to address. I think there's got to be creative thinking, and we're not necessarily the ones to do it. The programs that I normally tap into outside of the HISC, it's looking pretty dismal right now. Farm Bill, normally requests come up in May, and it's now November and it still hasn't come up. Some of our cooperative agricultural pest surveys are being cut, Western Plant Diagnostic Network, it's questionable that it will last through the next federal fiscal year. That's about half of our usual extramural funding that we receive through the HDOA. We need new funding streams. I don't think that's unique to us.
- Rachel: Who is the chair of the Resources Working Group?
- Josh Atwood: It's Mary Lou Kobayashi, from DBEDT.

- Teya: It's made up of the chairs of the other Working Groups.
- Rachel: Historically, Josh is right. The purpose of that group was to find funding for invasive species projects, but they've only met once a year to approve the HISC budget. They're all busy people.
- Rob Hauff: I don't see any problem with any other Working Group pursuing funding.
- Teya: I guess I wouldn't phrase it as what do we see as the role of the Established Pests Working Group, but rather what do we see as our priorities. Within the picture of the Established Pests Working Group there's a list of objectives, but I don't recall there being priorities. We just spent a big chunk of time talking about deer. We could have spent time talking about biocontrol or some other topic. Species specific or programmatic. We haven't ever done that as a group. To sit around and identify topics and rank them as priorities, if we did that we could go into the budget process with a clear sense of what the highest priorities are. I like that a lot better than it being based on a high ranking if you're a good proposal writer. That might not meet the highest need that we collectively see.
- Darcy: To me one of the biggest failings of this community is that we do not have strategic plans. We do not sit down and determine how we're going to deal with an existing problem. What we need are comprehensive plans. We need to leverage extramural funding. If we can come up with a strategic plan, since we had that workshop on ants, to work on ants with different agencies with clearly defined roles, then our ability to seek extramural funds outside of the HISC increases exponentially. You need partnerships. You can't go in as a lone ranger. So why aren't we sitting down, developing strategic plans, and pursuing it as a group.
- Rachel: Well, HISC has a strategic plan, and there's an ant plan. And plans take time. I'm not against strategic plans. I like them. But it takes resources away from work on the ground.
- Keren: I can only think of one other strategic plan that was done comprehensively, and that was for apple snail. That was completed two years ago and nothing was ever done with it. I agree with Rachel the need for plans is there, it's a black hole, but on the other hand I'm not completely sold on the certainty of funding attached to having a plan.
- Darcy: I'm not saying it's a certainty, but we increase the likelihood of funding if we have partnerships.
- Teya: I like the way Public Outreach Working Group does this. They did well with brainstorming what the stated objectives are. The strategic plan for HISC needs to be updated soon anyway. We look at how it needs to be updated, we take the top priorities, and then we do a plan for that priority and assign responsibilities.
- Darcy: That's what I'm getting at. It doesn't have to be really detailed, but we need to have a generalized framework. The more people we have on board, the more likely we are to get more funding.
- Christy: We shouldn't throw out the existing strategic plan out with the bathwater, but it was a first draft. There's nothing in there about watersheds. We need to think about partners and update it.
- Darcy: I don't view the HISC strategic plan as an actual strategic plan, it's an outline document. It's a start, but giving that document five years was excessive. It should have been fine tuned years ago to maximize the effectiveness of the HISC, along with generating administrative rules to give the HISC real power without opening itself up to litigation.

- Josh Atwood: Well, we're working on the administrative rules now, and we could do an update to the strategic plan.
- Christy: This is the update, though. The first version was written, and then it was updated, and that's what we're working off of.
- Josh Atwood: When was it updated?
- Christy: Circa Chris Buddenhagen.
- Darcy: About 2009.
- Teya: We could start with this group.
- Josh Atwood: And the goal would be to adopt something before 2014, when we would need a new plan anyway?
- Darcy: We're not bound to the 2014 date anyway.
- Rob: That sounds about right for how long it's going to take anyway.
- Christy: One of the best funding mechanisms is the one we already have, and that's the Natural Area Reserve Fund. It's not just for HISC, but for other conservation programs as well. It would be great to see an analysis if we could increase the percentage. The distribution to it was stopped, and that is supposed to sunset soon. We should get distribution to it once again. We had turned off the tap basically. Will a projection of that fund help, knowing our situation with housing sales. Is it possible that the conveyance tax percentage could be increased, even temporarily, to get us back to where we need to be?
- Teya: Because we're all at about 50-60% of where we were a few years ago.
- Carlton: When you identify your priorities, could you also identify things that cause houses problems, like miconia? That might help the legislature identify which sectors they want to go after, either through regulations or fees and taxes.
- Darcy: On Plant Pest Control's part most of the pests we have to deal with come in to east Hawai'i Island and then are distributed to the rest of the state, to Guam and to California. Guam just got Little Fire Ant. California is so paranoid about ants that even one ant on a shipment is cause to burn the entire shipment. It's a big economic cost.
- Teya: There's a lot of hesitancy. DOA is like DOFAW in that it has a dual mandate: you have to promote agriculture.
- Darcy: We're switching our focus to promoting safe goods. We cannot pre-empt USDA. We're not California where we can just do whatever we want. Things that come in aren't usually on our radar, like Erythrina gall wasp, or on nursery shipments.
- Josh Atwood: What's the likelihood of a new tax being adopted? How difficult is it to create a new tax? I know the governor is trying to decrease the amount of new taxes.
- Senator Nishihara: Bills float up all the time. You never know what will get shot down. At least if you try it gets people to think about it. I think you should think more about how to get a little bit more of what you're already getting.
- Christy: You could have a tax break for locally grown agriculture.
- Carlton: Many times it takes two or three years. This is the last year of the biennium. Whatever dies this year has to be reintroduced next year. Next year is a reapportionment year. All of the legislators are up for reelection. All of them. It's hard to pass a tax in an election year. Any kind of tax or fee that's proposed, whoever is target is going to strongly oppose. The proponents of that tax need to come out even stronger to have any chance at all.
- Keren: The nursery industry is teaming with the Farm Bureau to increase their lobbying strength.

- Teya: We're trying to develop a positive relationship with the horticultural industry. Since we don't have laws to prevent horticultural shipments with pests, we try to work with them voluntarily. It would be difficult to lobby for taxing them at the same time.
- Kate Cullison: Taxing is taboo, but if we can explain to the public that control already costs money, then maybe it would be better understood.
- Darcy: That's why I did an ant communication workshop. On our bee program, we had Alan Wong backing our Adopt a Hive program.
- Senator Nishihara: I have half a hive now. You're buying food security. It's not a tax.
- Carlton: You need to show the economic cost of not doing anything.
- Rachel: There have been several analyses of costs. I know Maui did one on miconia.
- Josh Atwood: That's something that the HISC needs to do in the next year. In our annual legislative report we provide an estimate of what is being spent.
- Keren: It's not a question of what is currently being spent; it's what the cost would be of not having control programs.
- Teya: On Maui, we're all chasing down coqui frogs. On Kaua'i they're basically eradicated and on O'ahu they have one that's brewing. So what's the cost of the program on Maui? That's a cost to tax payers that could be compared to the cost of having interisland treatment facilities that would prevent the infestation in the first place. It's about \$20,000 for a small hot water treatment unit I believe.
- Senator Nishihara: You get all those costs together and then you have to give it to the public and ask what they want.
- Carlton: What's the status of the proposed state and federal joint inspection facility at the airport?
- Darcy: I'm not familiar with the status. It's been on and off for years, scaled up and scaled back.
- Josh Atwood: I don't think anyone is actively working on it right now. It was brought up at the Sen. Akaka field hearing last month. He asked if having a joint inspection facility was a priority.
- Darcy: It's a departmental priority. The pressing issue for Hawai'i is not domestic threats, it's international threats that we do not have control over. That will be expanding with the military buildup on Guam. I'm not losing sleep over what we have now, I'm losing sleep over what we're going to be dealing with in the near future. There's been little attention from USDA on that. We've got to make changes on that. There is a lot of attention to bees. 80% of food is associated with bees. Any pest on Guam usually shows up in Hawai'i. If the number one pest for honeybees comes into Hawai'i, that means a complete shutdown of all queen bee honey exports to the Western world. That's the potential impact of the Guam buildup.
- Teya: I vote for bees as a priority.
- Senator Nishihara: Yesterday I went to Pioneer. There's a monastery up there. I asked what these people do. The guide said they make honey. They used to have 14 hives, now they have 2, because of Varroa mite.
- Darcy: We've been working with them.
- Senator Nishihara: It shows you how significant the loss of bees can be, especially for the crops nearby.
- Darcy: It costs about \$500-700 per bee hive on the Big Island. That is in contrast to the almond crop, which provides \$1.8 billion of revenue for a two week period, they charge \$125 for a hive for two weeks, just to put it there.

- Senator Nishihara: They rent a hive essentially.
- Darcy: The value they get right now is incredible. If you want a business that makes money quickly, sell hives on the Big Island.
- Teya: Why isn't this top priority?
- Darcy: It is top priority. We need long term funding for our bee program. The legislature made it a priority by creating Act 200, creating a voluntary bee keeper registry program, which provided an apiary specialist, a planner, and two technicians, but the funding mechanism was removed from the act. So we have those positions on the books but no funding for them. We're waiting for the new biennium. The idea was to pay for it with the barrel tax, but the barrel tax is tight. We're waiting to see what happens with Maui and the DOT, with funding for the ASAP program [airport inspections at Kahului].
- Josh Atwood: Before we start dispersing, are there identifiable action items from this discussion.
- Rob Hauff: We need to continue the discussion on the role and priorities of this working group, but I think that that can be done by revising the strategic plan. Everyone feels we need to do that. Maybe the next time we meet we can think about more concrete ways to come up with our priorities. How do you feel about that?
- Josh Atwood: I would support it. It seems like something that we should get approval on from the Council.
- Teya: We wouldn't necessarily need approval, but we could let them know that this is something that we could inform them about.
- Josh Atwood: Sure. I don't believe the other working groups will meet before that Council meeting, so it would be a good forum for exploring that idea.
- Rob Hauff: We need to communicate the message of how much control programs cost. In the past the Public Outreach group has had key messages that they promote. Maybe there should be a new message on the amount we have to pay for these state services, and relate it to the need to increase funding for prevention and control.
- Keren: I think it should be more about the cost in terms of how it affects their lives. For example, we have no food. Systems effects.
- Rob Hauff: We could communicate to the Public Outreach group that we would like them to convey that message.
- Darcy: I think that outreach should be worked into HISC proposals, and that money should go to the Public Outreach group, since they're the ones that will get the message out. They get to policy makers and the public more effectively than the people in this room.
- Josh Atwood: We can do that now. Every project that receives HISC funds produces a very consumable 2-3 page annual report for our legislative report. We could highlight the use of those reports by the Public Outreach group to inform some of their messaging.
- Carlton: Why aren't the chairs of each working group on all the other working groups?
- Josh Atwood: There's nothing preventing them from being on other working groups. They are free form groups, whoever wants to show up can. All the working group agendas are sent to the entire HISC network.
- Carlton: Maybe Chair Aila and Chair Kokubun should strongly encourage the working group chairs to attend the other working groups.



- Kate: There needs to be better communication so we can focus our efforts a bit more. If we've identified potential sources of funding that need to be promoted, we need to talk to the Public Outreach group.
- Rob Hauff: I'll attend the next Public Outreach meeting.
- Josh Fisher: The amount of money going into outreach is miniscule. If you look at outreach campaigns for anything, their budgets are huge. But we're trying to get out messages on a small scale.
- Josh Atwood: Dean Yuen had suggested at one point having a large-scale, coordinated outreach effort. I'm not sure how that would be funded or coordinated, but it would be interesting.
- Lori: What about when HDOA and DLNR is doing their own outreach and the message is intertwined? I saw yesterday that DLNR is hiring an outreach person. DLNR is hiring, the Watershed Partnerships are asking for \$11 million. I'm curious what the legislators think about the funding request, which talks about invasive species. I'm wondering if it's a message that our legislators will understand, meaning that if they fund this watershed initiative for invasive species, would the legislators then think that invasive species are covered, and they'd be taking funding away from the Invasive Species Committees?
- Josh Atwood: That's not the intent of the watershed plan. I agree that the wording of the plan is unfortunate in that it highlights only one specific framework for how invasive species work can be done. But I've talked to Emma Yuen about this several times and she does not see this as decreasing the amount of work or funding that would be relevant to the Invasive Species Committees. In theory, the version of the barrel tax proposal that's currently out there would provide funding not only for watershed programs, but invasive species programs that are sponsored by DLNR and the Natural Area Reserve Fund.
- Rob Hauff: Paul Conry and Emma Yuen will be presenting about the watershed initiative at CGAPS tomorrow.
- Kate: We've all heard that in theory this might benefit the HISC.
- Rob Hauff: You can ask Paul Conry tomorrow.
- Carlton: Don't pin your hopes on the barrel tax, unless the governor is also willing to raise the barrel tax.

## 7. Announcements

- Josh Fisher: At the last wetland workshop, Fern Duvall had a call to put together a predator control working group, for things like cats and mongoose. It would be a technical group on equipment and research needs. Katie Swift wanted me to bring that up to see if anyone would be interested in getting involved or coordinating it.
- Rob Hauff: Maybe write up a blurb and get it to Josh [Atwood] for our mailing list.
- Josh Fisher: OK. I could be wrong but I think it's to focus on techniques and current traps for small predator control.
- Lori: Techniques other than predator control fences that cost \$250 a foot.
- Josh Fisher: And that's without continued management costs.
- Keren: I wanted to add that as of November 1<sup>st</sup>, Kaua'i has official formed a Kaua'i Conservation Alliance.
- Carlton: Also, we're looking at doing a contest for high school students to create PSAs about energy and environmental topics. Would it be possible for HISC to create a two page fact sheet that students could work off of?

- Kate: Talk to Jackie.
- Carlton: They need messages to base their PSAs on. That would help to create public outreach.
- Teya: Radio or video?
- Carlton: Video.
- Josh Atwood: Jackie can coordinate with other outreach folks. Also, I wanted to announce that Carlton is helping us put together a legislative briefing session for January. Christy and I will be in touch trying to get speakers and data for that session. When would everyone like to meet next?
- Kate: Let's coordinate with the CGAPS meeting since people are already here.
- Rob Hauff: Thanks everyone for coming. This was our first non-budgetary meeting in the history of the HISC, so it's good to get the conversation going. Mahalo.

8. Adjournment: Approximately 5:00pm.

Abbreviations used:

CGAPS: Coordinating Group on Alien Pest Species

CTAHR UH: College of Tropical Agriculture and Human Resources, University of Hawai'i

DAR AIS: Division of Aquatic Resources, Aquatic Invasive Species

DLNR: Department of Land and Natural Resources

DOFAW: Division of Forestry and Wildlife

DOH: Department of Health

HDOA: Hawai'i Department of Agriculture

HISC: Hawai'i Invasive Species Council

KISC: Kaua'i Invasive Species Committee

MISC: Maui Invasive Species Committee

MoMISC: Moloka'i Invasive Species Committee

OISC: O'ahu Invasive Species Committee

PPC: Plant Pest Control

USDA APHIS: United States Department of Agriculture, Animal Plant Health Inspection Service.

USFWS: United States Fish and Wildlife Service