

KISC QUARTERLY MEETING APPROVED MEETING MINUTES

Thursday, October 16, 2008
HDOA Conference Room
10:00 am to 12:00 noon

I. **Welcome/Introduce Guests/New Members**

[Attendees: Patrick Chee (DLNR-DOFAW), Carl Berg (Hawaiian Wildlife Tours), Jeffrey Herod (USFWS), Eric John Garcia (HDOA), Craig Kaneshige (HDOA), Nicolai Barca (TNC), Chris Mottley (DLNR-DOFAW), Joe Kona (KISC), Larry Kaneholani (KISC), Jackie Kozak (HISC), Andrea Ericksen (DLNR-DOFAW-Kaua`i Seabird HCP), Mathew Lemalu (KISC), Kevin Sasaki (KISC), Melissa Fisher (TNC), Jeff Schlueter (TNC), Scott Giarman (Kaua`i United Way), Paul Massey (Regenerations International Botanical Garden), David Burney (Nat'l Tropical Botanical Garden), Bridget Gardner, Allan Rietow (KISC/TNC), Bill Spitz (County of Kauai-OED), Jeri Ooka (UH-CTAHR), Keren Gundersen (KISC), Erik Burton (Hawaiian Banana Project), Wayne Souza (DLNR-State Parks), Laurie Ho (Garden Island RC&D)]

II. **Review Agenda Items**

III. **Review and Approve Minutes from May 8, 2008 Quarterly Meeting**

The minutes were unanimously approved without changes. You may view them at:
<http://www.hawaiiinvasivespecies.org/iscs/kisc/pdfs/kiscmeetingminutes20080508.pdf>

IV. **Guest presentation: "Mitigation of taro pond-field discharge and its effects on near-shore coral reefs" – Carl Berg**

Carl has been working on an EPA Targeted Watershed Initiative to clean up Hanalei Bay which is fed by Hanalei River, Waipa Stream, Waikoko Stream, and Waioli Stream. This work focused on clean up of cesspool systems, wastewater systems, livestock exclusion, mapping alien species in upper Hanalei watershed, and working on best management practices for taro field and bird pond discharge.

Carl has been studying discharge of the Waikoko stream which is fed through a system of taro loi ditches with nearby horse pastures. This estuary is polluted with respect to turbidity, ammonia, and bacteria. By studying this system, it has been determined that although horses and native water birds add to the high rate of ammonia discharge, the greatest amount comes from the farmers adding urea fertilizer to their taro fields. The rate of flow to each field is about 1 liter per second. After calculating the amount applied and testing the water over a period of 4 weeks, he estimates that about 10 lbs of ammonia is discharged during this period. Having the farmers either till in the ammonia to bury it and help it to bind to the soil, or using a time-released fertilizer will help to mitigate this discharge.

Floating rafts constructed with pvc and coconut cloth and were planted with taro, water lilies and other plants to see what their affect on the stream would be. Weeds thrived the best and the water-bound roots collected some of the fine silt in the stream, acting as a sort of filter. Plant growth took up nitrogen and phosphorous from the water.

By cleaning out the ditches, constructing the floats, and removing the grazing horses, an increase in coral settlement was detected in the Bay, especially in the deeper reefs. They detected up to 30% coral coverage on the reefs in deep water. They did detect, however, an invasive species invading Hanalei and Limahuli: a *Montipora* band disease (an invasive pathogen) that is invading colonies of coral. By initiating best management practices, they are trying to relieve the stress on Hanalei Bay reefs to counter the effects that will come with global warming.

[KG: Can the pathogen be stopped?] [CB: There are no methods that are known at this time.] [CM: What about using polymers to test sediment and floating silt barriers?] [CB: I've tried it already, but there is too much siltation. We can't raise the water in the ditches because of the taro loi. Barriers also affect the movement of native species.] [AR: Do you know the origin of the pathogen?] [CB: We don't know. It seems to be unique.] [JH: Has there been a stream survey been conducted on Kaikoko Stream?] [CB: Hanalei River has been surveyed. There hasn't been a full survey of the entire area. Waikoko has been ditches for a hundred years and has become a tidal estuary.] [DB: I think it is important to realize what is different now versus how this area originally was. The fundamental difference is the formation of the ditching system. What about using detention basins or retention ponds?] [CB: The problem now would be to get permission to alter a wetland. Sometimes there is a sandbar that gets built up at the mouth of the stream which acts as a detention basin. The discharge gets filtered as it percolates through the sand. The plant floats take up fine dirt and lots of nutrients. The drainage ditches equal the size of a basin. This whole area used to be a flood basin before the loi. It would be best if the flood plain could be re-built. We are currently under an emergency declaration for farmers for drought. Farmers near sea level will have problems with a rising sea level moving back onto land.] [AE: What is next?] [CB: I still have a little funding to continue monitoring water quality and the coral reef. I will continue working with the farmers and would like to find a way to purchase time-release fertilizer. I would also like to build more floating trays.] [PM: Are the farmers interested in harvesting the floats and using it as soil amendments?] [CB: The mud and plants from the floats were used to build up the berms along the ditches. It could have been put into the fields, but the farmer opted not to at this time. We are looking for high-nitrogen plants that can be used for composting.]

V. Updates:

- Partner Updates:

- **NTBG – David Burney**

We are completing a loop of collecting, propagation, and restoration in NTBG projects as well as in **collaboration with landowners**. We have 18,000 native plants in pots and planted 12,000 last year. NTBG restoration sites are moving along: **Lawai Kai** is almost completed and we have our first vertical restoration at **Lawai Cliffside**. We have taken out invasive plants on the cliffs by hanging on a rope. We have replace non-natives with natives well adapted to this environment. The **Lawai stream project** is just wrapping up. KISC is welcome to come help monitor this stream which is a corridor for moving invasive species. We are doing periodic controls to remove the invasive plants. We are taking things out by hand. We are doing more projects with **native plant restoration with private land owners**; Grove Farms, Bette Midler holdings, and at Kilohana. We are also working with DOFAW and US Fish and Wildlife Service for **native plant restoration on Lehua Island**. It has been a challenge to keep verbena under control.

- **USFWS - Josh Fisher**

Regarding Avian Influenza: it remains endemic in SE Asia. We are going into our 3rd year in a national surveillance plan. Last year we tried to do some **bird sampling on Kauai** but it wasn't as successful as on Oahu. The birds were more timid and not in very high numbers (working at the Refuge on the north shore). We will **try duck trapping on Maui** this year, both migratory and native; testing the environment and swabbing the birds. So far, nationally, **no High Path Avian Influenza strains** have been found and they will be stepping up working more on mortality and morbidity surveillance. There is a higher percentage of virus detection from mortality events. We are **working with KISC picking up dead chickens**. Most chickens that are sent in for testing from across the state are from Kaua'i. If this virus were to show up we would see it first in chickens because migratory shore birds are so spread out that if one did die from the virus it would be very likely that a chicken would encounter it.

- **DLNR – Kauai Seabird HCP, Andrea Ericksen**

We are now in the **avoidance and minimization phase** of seabird fallout. We are working with active participants to **regulate “take”** due to unfriendly lights. We are always looking for help with reporting of birds and lighting (give us call at 346-3489). We are finding places to **mitigate unavoidable take**. We are looking for sites on Kaua'i to **protect and enhance nesting sites** for Newell's shearwaters, Hawaiian petrel, and band-rumped storm petrel w/ management actions (like invasive plant removal, restoration, removing threats, and collecting data). All in all, things are looking dark on Kaua'i in most places!

[CB: Has there been a lot of fallout this year?] [TK: In the past two weeks there have been less than 30 bird which is a good sign.]

- **Regenerations Botanical Garden – Paul Massey**

We are a small **community-based botanical garden** based in Kapahi. We are focusing on events like **seed and plant exchanges in the spring and fall**. This is a great opportunity to educate the community on invasive species and to interrupt the flow of invasive plants and seeds exchanged at these events. We did stop a couple of things at our last event in September. Currently there are a large number of horticultural plants with potential for invasion. We are hoping to connect with one or more **volunteers to look at materials brought to these events** and be able to evaluate them for invasiveness. KISC partnered with us on the 1st event at KCC. **RBG has also reviewed the Voluntary Codes of Conduct** that was adopted by KLIC and NTBG and will be presenting it to our Board of Directors hoping to sign on. Our **next event will be Tuesday, October 21st at 6:30 pm at the Hanalei School**. It will be a free talk on growing taro by elder planter and protector, Jerry Konanui. You can even bring taro in for identification.

[PC: Have you considered looking at the Weed Risk Assessment to ID plants?] [PM: Yes. We use printed copies of lists of species, links on our website, etc. Sometimes people don't know what the plants are.] [JcqK: On the Garden Show on KKCR after the exchange someone had mentioned an invasive seeds brought. I was able to look it up on the WRA and it scored a -3!] [PM: The Weed of the Week materials presented on KKCR are great.] [JcqK: We want people to think about using the WRA to screen their plants before-hand or tapping into NTBG's program "Ask a botanist".]

- **DLNR DOFAW – Galen Kawakami (email update)**

Most of the projects that Sherri was doing are still in place. The on ground accomplishments have been curtailed because of Sherri's extended leave. Sherri did complete the design of the **Iliau Nature Loop plant identification plaques** and Stafford Soto has installed 8 of them.

- **USFWS – Jeff Herod**

First I'd like to thank **KISC for completing their HACCP plan**. We gave a training here and they developed one for Miconia as their target. We've submitted it to a national website and are waiting for it to be posted. When it gets posted online it will be the first HACCP plan from Hawaii and the first plan, nationally, that looks at an invasive plant. Thanks for doing this and setting a high standard. This past summer I spent time **in Guam and the Commonwealth of the Northern Mariana Islands conducting HACCP training** and also **non-native fish surveys** looking at urban environments as well as jungle sites. An interesting pattern that we observed was finding high numbers in large individuals of non-native fish in urban areas and hardly any up-slope and in more remote areas. There seem to be natural buffers where non-natives don't seem to be moving in (looked at tilapia, guppies, and sailfin molly). I'll be attending the **National Aquatic Nuisance Species Task Force meeting** at the end of October presenting brown tree snake information relating to activities planned by the military in the pacific mainly in Guam: Risks and mitigations. I'm also working with KISC on an **Aquatic Invasive Species Workshop**; bringing professionals together looking at Kauai-specific issues and developing a product looking at risks, resource needs, and planning. Date to be announced (we are now looking at February). This workshop will cover both marine and freshwater systems.

- **DLNR State Parks – Wayne Souza**
Kay Koike adopted the roadside along Koke`e Road and Waimea Canyon Drive from Waimea Canyon entrance up to the Meadow. She will be primarily controlling *Schizachyrium* (bushy beardgrass), clipping the seed heads and bagging. This shows that **one person can really make a difference**. At the **Wailua Marina** we are working to repair exterior lighting and replacing the shields to make them seabird friendly. Most lights are shut off due to seabirds and electricity costs. The **Buddleia at Kalalau Beach** was treated but has re-emerged, so we will be treating this. [KG: *Do you know which species it is?*] [WS: *No*] [JF: *What herbicide do you use to kill it?*] [WS: *Garlon*] [JF: *We have found that a mixture of Garlon and RU works best.*]
- **HDOA – Craig Kaneshige**
 We are still **working on Little Fire Ant** in Kalihiwai with KISC. Still trying to eradicate. We recently put out Talstar and Extinguish Plus which has a growth regulator. We will be following up with another survey and more treatments. We have also been **monitoring nettle caterpillar traps** that are place around the island. KISC is also educating the public on this because sooner or later this insect will arrive. I just finished **varroa mite training on BI**. Research is being done on poison baits as well as attractants. The varroa mite can now be **found in a 5 mile radius in the Hilo Harbor area**. There are a lot of feral hives in the mountains and around homes. But these bees are smart and they are not taking the bait. We are setting **46 swarm traps on Kaua`i**. So far, **Kaua`i is varroa mite free**.
- **DLNR DOFAW – Thomas Kaiakapu**
 We are working on many collaborative projects with various partners as described in the attached hand-out. One of the biggest projects is the **Mana Plains Wetland Sanctuary Development**. We have several grants covering different aspects of this project. Another project that involves many partners is the **Lehua Island restoration project**. Also working on this project is Jackie Kozak (HISC Outreach) who is working with the community to keep them informed and gather feedback. We have several projects focused on native birds including **Save our Shearwaters, Kaua`i Endangered Seabird Recovery Project, Puaiohi Recovery Project, and the Kaua`i Seabird Habitat Conservation Plan**. These projects involve many different partners.
- **USFWS – Michelle Clark**
 I have been with this job for 4 months and our primary purpose is to **develop habitat restoration projects** on private lands but there are also Hawaiian Homelands and county lands are eligible for these programs here on the island. I've been also able to **get out into the field with partners** in Kanaele Bog and Koke`e forest and assist them with killing weeds. I'm **working to develop proposals for funding to assist with implementation of the Kauai Watershed Alliance Management Plan**.
- **USDA WS – Scott Williamson (written report)**
 Basically, we have had **one mongoose sighting** since the last report I sent out. It was in the Kilauea area. We interviewed the person who reported the sighting, and Bill made a site visit. Several local people were interviewed and asked to report any unusual animals, but no traps or tracking boards were deployed. The report was not very "solid" and we are still short-staffed.
- **County of Kauai – Bill Spitz (Office of Economic Development)**
 There is not a lot of funding available in the coming years. OED is really a "Funder of last resort". **Revenue sources from the state are strained**. The coqui program is winding down with partners KISC and GIRC&D. They recently got \$50,000 from the council for CTAHR to **investigate an "odiferous substance"**; the weed growing near Canyon School in Waimea. The pesticides branch will write the scope.
- **TNC – Jeff Schlueter**
 The draft EA for the Alakai fence project is complete and is available at the www.hawp.org website (Hawaii Association of Watershed Partnerships). We have started doing work on the ground in Waineha Valley; setting pig traps and controlling of Australia Tree Fern. We

also have another project going with Resource Mapping collecting high resolution imagery for 78,000 acres across the middle of Kaua'i. You can see great detail and we are using it to identify weeds. If you are interested in looking at it come to the TNC office. Several people have come up to Kanaele Bog to help with weed control. The fence is finished (57 acres) and there are no pigs in there.

- **Hanalei Watershed Hui – Matt Rosener (email update)**

The Hui's current work in the area of invasive species includes an **apple snail control project** with Hanalei taro farmers, and ongoing **study of watershed processes** that includes investigating the hypothesis that exotic (and some invasive) plants and animals have caused and continue to cause increased soil erosion and subsequent sedimentation. Potential upcoming projects include **hau bush control** along the Hanalei River and **control of invasive fish species** in the bay. You may or may not know, but I work another job as a research hydrologist for the USGS on their Ridge-to-Reef program where we are **quantifying erosion rates** at a study sites on Kauai and Molokai, and looking into the **effects of feral animals** on them. We are doing this at Kawela, on Molokai, by setting up watershed experiments where treatments (such as animal exclosures) are being performed by project partners (e.g. TNC) and the USGS is monitoring the response (in vegetation recovery and erosion reductions).

- **Coqui Control in Lawai – Keren Gundersen**

The good news is that we are down to “countable frogs” at the Lawai site. During the months from May (our last update) we continue to do habitat modification with machinery, use herbicide to treat weeds and re-sprouts, and treat frogs with citric acid. Check out <http://www.hear.org/kisc/presentations/20081016kiscocoquiupdate/>.

- **HISC/KISC Outreach activities – Jackie Kozak**

I have been continuing to present the **Weed of the Week on KKCR** every week on Wednesday. The transcript of these is also posted on the web on our Early Detection Website. I figured that since the first one in June I've written over 17,000 words about invasive species! Our webmaster suggested I do a blog with the weed of the week information that we would link to the website. I've been trying to get the weed of the week into the Garden Island News, but it is not something that they can host right now. Even though a different species is featured each week, each species brings up a message; conservation activities, noxious weed list, biofuels, etc. The hosts of the program have really gotten behind this program and have been really supportive. I also give a native plant alternative. This is another message of the series: **Plant Native**. In light of the fact that coqui are still arriving, and there is much SuperFerry discussion, the Outreach working group is going to work on a **website that targets inter-island travelers**. They are looking into buying **dontpackapest.org**. This site will target topics such as transporting plants, shipping items on Young Bros., or hiking and activities; all relating to invasive species. I'm partnering with OISC on **key-chains with the coqui call**. These can be set up at nurseries as displays at the check out to inform and educate the public. I'm also doing **Lehua Island restoration project** outreach. Niihau has a strong interest in this project and we will be conducting a blessing for the project at NTBG. **Arbor Day is coming up!** I work with DOFAW advertising their **rare plant sale** as well as co-chair the Arbor Day committee. **1,500 native species** will be given away this year. It is going to be held **November 8 at Kukui Grove, behind Kmart**. This year we are also going to have lectures throughout the day as well as educational booths. I'm also working with **NTBG to host a workshop geared to the nursery and landscape industry**. This workshop will highlight the WRA as well as the list of plants that the Hawaii Association of Landscape Architects wants to remove from use. This will be like a mini summit on preventing horticultural invasions. It will be **December 5** at NTBG in the new building.

- **Early Detection – Keren Gundersen**

Troy Larsen, KISC's Project Facilitator, was starting on the follow-up work after the roadside survey was completed and Kristin Hall had to depart from KISC. The sad news is that **Troy submitted his resignation due to a family emergency** back on the mainland and he is no longer with us. Before he left, however, he was instrumental in having an **Early Detection page added to our website** to host information about species that we are working on or looking for. We have whittled down our list of ED species and are starting our **delimiting surveys**. **The US Fish and Wildlife Service as given us a grant** to go after these potentially eradicable species. We also are working on a program with funding from the county to **target hotels and ports to educate them** on the importance of early reporting. Check out <http://www.hear.org/kisc/presentations/20081016kiscarlydetectionupdate/>.

VI. New Items:

- **ISC Service Project – Keren Gundersen**

For the first time ever since the Invasive Species Committees started, we had an All-ISC Service project. KISC was the host and employees from all the ISCs as well as HISC came to Kaua'i to Koke'e to **help KRCP with targeted work**. We stayed at Camp Sloggett and had two full days of work which **targeted Buddleja, Himalayan ginger, privet, and strawberry guava**. We had over **60 people participate** and did team building activities as well. Check out the newsletter.

- **Legislature/Funding Update – Pat Chee**

Thanks for hosting us on the All-ISC Service Project, I'm sorry that Troy is not here to thank for all of his hard work. Thanks to Keren as well. As you all are aware, the **State is going through some serious funding shortages**, and the governor has clamped down on all spending. Any expenditures over \$10,000 has to go through her office for approval. As a result, on Wednesday, PCSU had to **shut down BIISC** laying off all employees except the manager. The good news is that the approval memos have been written and have made it through several steps. BIISC may be starting up shortly. **The other ISCs still are awaiting approval.**

[JK: One of the suggestions from the Kaua'i liaison from the Gov's office was to ask for an exemption for these projects. Is that a possibility?] [KG: I had a conference call with the managers and PCSU yesterday and mentioned this. Someone is looking into whether we would qualify for an exemption from this process under the "Risk to Human Health and Welfare" category. The good news is that we have funding available, but we don't have it "in the bank". KISC, with vacation payoffs, can go until December 15. Other projects have sooner deadlines like the Kaua'i bird projects.] [AR: This problem not only affects KISC and the ISCs, but all of the other watershed partnerships in the state.] [KG: This also does not just affect state funding. Our Forest Service funding needs a state match, so our federal money is in jeopardy as well.] [PC: In the past if an ISC ran out of money, PCSU would advance money, knowing that the money was coming. Now there is no assurance, so PCSU cannot give the advances. That is why BIISC shut down.] [CB: What is the probability of this getting passed by the Governor in light of all of the drastic cuts elsewhere in state agencies?] [PC: This is really a new day for everyone. We don't know for sure but as far as the funding goes for the ISCs we believe that they will be likely to pass. We are optimistic that since they are continuing projects they would be less likely to be cut. The new projects will be looked at with greater scrutiny. The HISC Resources Working group met yesterday and they forecast that we will be losing about half of our budget from this year – the loss of \$2M.]

- **KISC Structure- Formation of Executive Committee – *Allan Rietow***

With the absence of a chair-elect we would like the committee to consider the formation of an **Executive Committee**. Allan has agreed to remain chair as long as needed but we would like at least **2 or 3 people to sign on to be a part of group that can meet on a routine basis** to help make decisions that affect KISC concerning various things that come up. If anyone is interested please send an email to either Allan (arietow@tnc.org) or Keren (keren.kisc@hawaiiantel.net). This group would be a resource for Keren. It may also open up opportunities for state employees who felt they couldn't be a chair. Another advantage would be that someone could be more involved in the committee without the commitment of being the chairperson.

VII. Announcements:

- CGAPS Meeting – October 29, 2008
- Aquatic Invasive Species Workshop – TBA (Feb?)
- Arbor Day – November 8, 2008
- NTBG Workshop – December 5, 2008

Next Meeting – Strategic Planning Meeting, Thursday, January 15, 2009

Pau