KISC QUARTERLY MEETING Approved Minutes

Thursday, April 16, 2009 HDOA Conference Room 10:00 am to12:00 noon

I. Welcome/Introduce Guests/New Members

[Attendees: Ken Taylor (private citizen), Jeri Ooka (UH-CTAHR), Allan Rietow (TNC, KISC Chair), Carl Berg (Hawaiian Wildlife Tours), Andrea Ericksen (DLNR-Kauai Seabird HCP), Mugs Kaneholani (KISC), Keren Gundersen (KISC), John Gordines (UH-CTAHR-KARC), Galen Kawakami (DLNR-DOFAW), Pat Porter (DLNR-DOFAW), Richard Agor (new KISC fieldcrew member), Joseph Aguon-Kona (KISC), Craig Kaneshige (HDOA), Paul Massey (Regenerations International Botanical Garden), Chris Buddenhagen (HISC), Melissa McFerrin (Kauai Farm Bureau), Cas Vanderwoude (HDOA), Michelle Clark (USFWS), Steve Thompson (DLNR-State Parks), Tony Doth (USDA-PPQ), Jackie Kozak (HISC), Joe Kona (KISC), Tim Flynn (NTBG)]

II. Unanimously Approved Minutes from October 16, 2008 Quarterly Meeting Please view these minutes at:

www.hawaiiinvasivespecies.org/iscs/kisc/pdfs/kiscmeetingminutes20081016.pdf.

III. Guest presentation: "Ants in your pants - current and potential threats from invasive ants" - Cas Vanderwoude, Statewide Ant Coordinator

Cas was hired to work on invasive ant problems in Hawaii and works under HDOA.

There are about 50 ant species in Hawaii (all introduced), but only 4-5 are problems including Little Fire Ant (LFA)(*Wasmannia auropunctata*), and Yellow crazy ant. We don't yet have Red Imported Fire Ant (RIFA) and Raspberry Ant. [CarlB: What about Argentine Ant?] [CV: Yes, it is in Hawaii, but I don't consider it to be as much of a threat.] LFA is not closely related to other fire ants present in the U.S. or HI.

LFA is from the tropical and sub tropical areas of South America. It has been spreading worldwide over the last 100 years (significantly in the 1920's to Florida and the Galapagos, and in the 1960's it made it across the Pacific). It is being spread in what I call a "Classical Pacific Introduction" pattern; spread via trade between islands.

Most ant species like to have open spaces. LFA likes shady and wetter places, but it does okay in lawns if there is moisture. This "tramp" species usually has many queens. The colonies interconnect and form "super colonies". At the end of the wet season they mate and spread to form new colonies that still interact with the old colonies.

There are many impacts of LFA invasion. Human health is one; they sting people. Although not really aggressive, if they get trapped in clothing they will sting. Since they are arboreal as well they can also "rain" down on you if you brush up against the plant.

LFA also promote sap-sucking insects on vegetation; usually anything that produces fruit or has soft leaves. This farming of insects harms production of tree crops. They especially love bananas and coconuts.

Vertebrates are also affected by LFA. The ants sting the animal's eyes creating micro-bacterial clouds on the corneas. Most wild vertebrate species move out of infested areas but domesticated animals are easily targeted by the ant.

Kauai has one population of LFA. [Craig Kaneshige: This population is in Kalihiwai, outside of Kilauea. We have been trying to contain it by creating a buffer zone. A lot of different kinds of ant bait have been tried. This area is too wet to use Amdro effectively. The population now covers about 6 acres (originally started with ½ acre in 1999). Access to the property is difficult; on nice days when we'd like to treat, we will not get permission to enter by the property manager.] [PM: Do you see LFA farming aphids up at this site?] [CK: You don't easily see the ant there. Another problem is that we believe them to be in a steep rocky cliff-side area that is hard to get to. We are working with Cas to try to come up with ways that we can eradicate this population.]

HDOA has done a great job of suppressing these LFA, but if they are not successful, LFA will spread across Kauai. Landowners can often be difficult to deal with. We plan on trying to

meet with them to outline, like we are doing today, what the threats are. [JacqK: This property owner (Ben Stiller) just gave \$100K to the Kilauea Light House. Sue Boynton has a good relationship with them and might be a good contact to help to reach them.] [CV: This could be a good way to reach them as LFA would have an impact to ground-nesting birds.] [AE: What kind of chemicals are being used on this population? Are they safe?] [CK: We have used Telstar, Extinguish Plus (it has a growth regulator in it), Amdro. Moisture deactivates most of them, which has been a problem.] [CV: Generally, we use baits that are safe around humans and animals.] [TD: Is anyone testing biologicals (like parasites) on LFA?] [CV: I know of bio-controls that will reduce populations up to 1-5% only.] Interestingly, most species are not a problem in their native habitat, but LFA is.

Currently, Hawaii is the only state in the U.S. with a suitable climate, where Red Imported Fire Ant (RIFA) isn't. RIFA is related to the Tropical Fire Ant that is already found here in Hawaii.

Originally from South America, RIFA arrived in the U.S. in the early 1900s and has spread across 300 million acres. This pest costs Billions of dollars annually and presents a huge threat all around the U.S.

This pest likes open places and builds ground nests. It has both single-queen and multiqueen forms. It is very aggressive and attacks when disturbed. I have seen their ground nests go 2 meters deep. They create foraging tunnels and tunnels to the water table. RIFA is attracted to structures (foot paths, trees, poles). This pest costs the cattle industry in Texas \$120M annualy as it will sting newborn calves and blind them, making them useless as cattle. On the whole, in Texas alone they spend \$1.2 Billion in Texas per year (the average Texan spends \$30/year) controlling ants.

RIFA has environmental issues as well. They get into the ecosystem displacing native ant species, preying on arthropods, bird eggs, and hatchlings. There are biodiversity declines where RIFA is established. This pest is not seen so much in closed forests.

Another ant (Raspberry Ant or Hairy Crazy Ant (*Paratrechinapubens sp.*)) is now spreading through Texas. It develops into incredibly large numbers and loves electrical wires, causing shorts. This ant also has the potential of arriving to Hawaii. There are other species of Crazy Ant currently in Hawaii but they aren't as bad as this Hairy Crazy Ant.

[AR: Are there other ant species that can out-compete LFA?] [CV: Not besides other Fire Ants.] [AR: Which is worse; RIFA or LFA?] [CV: LFA is worse in wet tropical areas. RIFA is worse in dry areas. Yellow Crazy Ants that build up in large numbers are bad anywhere.] [PM: Is LFA now established on the Big Island? Have agricultural operations ceased because of them?] [CV: Some agricultural ventures have abandoned their operations because of LFA. Others are treating LFA heavily with chemicals.] [AR: Can LFA displace coqui?] [CV: Probably yes. But I'd much rather have the coqui!] [PM: Treatment of LFA will probably cause problems with being able to grow organic coffee.] [CV: All of the coffee industry will be threatened. We are conducting research on an effective bait form (also one that is organic).] [CarlB: Is it true that LFA was found on compost on the BI?] [CV: It was found around the piles but not in the piles; but the potential to move LFA around is good. The county has developed a treatment program for their compost.] [CarlB: Are we checking greenwaste here on Kauai?] [CK: Yes.] [CarlB: Is there a quarantine on the Kalihiwai property from moving greenwaste off?] [CK: Yes.]

IV. Updates:

- Partner Updates:
 - DLNR Kauai Seabird HCP, Andrea Erickson

We are still working on an island-wide seabird habitat conservation plan. We now have a website: www.Kauai-seabirdhcp.info. We hope to have an inter-agency draft available June 30 and invite people to input on the plan. We are now working with 5 major participants and have interest from another 15 smaller entities. The historical shearwater fallout impact records show us where work is needed. [CarlB: Who has received "take" permits fro seabirds?] [AE: None that I know of.] [MC: Does the plan need to be in place before permits are given?] [AE: Interim permits are available. We hope to have a final plan in 2011.] [ChrisB: Is there mitigation for invasive species in the plan?] [AE: Yes. And we are working with TNC and NTBG looking at the plans they have in place where shearwaters nest. We need both protections and restorations to increase Newals populations. We are also working with other

organizations who are interested in seeing dark skies (like the astronomers) to help move county ordinances along.]

DLNR DOFAW – Galen Kawakami

Galen wanted to introduce Pat Porter who is the new Protection Forester. He started last December. He is new to the island following work with OISC and then Oahu DOFAW. Welcome Pat!

DLNR State Parks – Steve Thompson

I strongly believe that invasive species control on Kauai is important and appreciate hearing about the ants. Here on Kauai, we are stretched very thin; we have several vacancies but there is a hiring freeze. I come over from Oahu to help oversee personnel and construction projects. A recent project involving volunteers is being conducted at Polihale. We have a project to retrofit the lighting at Wailua harbor to make them more bird-friendly. Our ranger on the north shore would like to see more trail-work on the Hanakapiai trail especially work around the burn area.

KRCP - Katie Cassel (email update)

Headlining the Koke'e Resource Conservation Program report would be the Fern Video production on Thursday, April 23. Mark Jeffers and Storybook Theatre are going to video Ruth Aguraiuja in the forest showing identification features of the Australian Tree Fern vs. the native tree ferns and other ferns. This will be near Kaluapuhi Trail, but meeting at the CCC Camp at 8 am (to be confirmed).

From December `08 through March `09 we treated 237 privets on 13 acres; 617 Australian Tree Ferns on 14.25 acres; 622 *Buddleia madagascariensis* on 9 acres; and 156 *Buddleia asiatica* on 7 acres. Perhaps more significant items are that we found no Kudzu, and haven't seen any since 2005 (so that can probably be considered eradicated), and found only 1 pyracantha on .25 acres, so that is nearly gone also.

The kill rate on the *Buddleia madagascariensis* from the big ISC work day looks excellent; we were just out checking it and will be doing some follow-up to finish the areas during the rest of this month. Thanks so much for all that work on a daunting task!

Regenerations Botanical Garden - Paul Massey

We are involved in education, seed exchanges, and workshops making sure that invasive species are talked about. Thanks goes out to Tim Flynn who was on hand at our last seed exchange to make sure no bad invasives were there. I am also involved at KCC training others regarding food growing. This is a good outreach opportunity. Jill and I just cut down an Australian Tree Fern in a neighbor's yard. It was growing next to a native fern and it was a great opportunity to talk to them about invasive species. I was also part of the Kauai Agricultural Forum and our workgroup came up with good ideas and strategies regarding invasive species and how they affect the agricultural sector - this was received with lots of support. Lastly, there has been an initiative to update the ag plan for Kauai and invasive species are getting a lot of focus.

Hawaiian Wildlife Tours - Carl Berg

While recently working on his research project in a ditch-line in Hanalei he saw an interesting bright yellow frog. He tried to get an ID on it and, but at the time, didn't think to capture it. [ChrisB: It could be a PacMan frog. I just saw one at HDOA in Honolulu] [JacqK: This would have been a good opportunity to turn it in for ID at HDOA]

Carl also wanted to voice strong opposition to this introduced invasive species that is known to destroy habitats. Bass, tucanary, and bluegill should be eradicated and this should be supported by invasive species community. The state is giving \$1M to build and develop the Nature Center at the Wailua reservoir and centering it's program around invasive fish, not around what it takes to make a healthy native ecosystem. [MC: We need to educate people as to what an ecosystem is.] [AR: Recreation is also important, like hunting pigs. This is an accepted recreation that has been going on for years. You need to choose your battles. DAR works hard on making sure there is fresh water recreation.] [CarlB: The state is kissing off the native environment by promoting a fishing environment. DLNR is mandated to firstly protect

Hawaii's natural resources, then promote outdoor recreation, and then enhance commercial endeavors. I have my concerns about aquatic invasives and HISC should not neglect aquatic native ecosystems. The State is mal-managing because they get federal money to support recreational fishing.] [AR: We can still support native stream ecosystems.] [MC: There is not unlimited funding available for conservation and we need to focus on priority species and areas.] [PM: Oopu are hard to manage but very valuable to the ecosystem.] [AR: Wailua is anything but a native ecosystem. We still have a large percentage of streams that are native ecosystems.] [CarlB: Most of those streams are on the north shore. With global warming we'll lose a large number of those streams.]

Kauai Farm Bureau - Melissa McFerrin

The FB has several new programs and also the Garden Fair on Saturday. We have a lecture schedule going on throughout the day. The focus will be on growing and eating food. We'll also have a plant Dr. and a talk on Victory Gardening. We have a speaker from UH Livestock who will talk about backyard pastures and poultry.

The Kauai Farm Bureau also has a new newsletter that will also list upcoming ag events – so please contact Melissa to have them added. The FB has a new partnership with KCC to hold a farmers market on weekends. Over 30 venders want to participate. Look for it happening soon!

Ag Awareness Day is coming up and scheduled for May 14. 5th graders from around the island participate. The FB Scholarship program is still open. It is open to High School seniors, undergraduates, and graduates; anyone in the community. It is to support future farmers and has an April 30 deadline.

HDOA – Craig Kaneshige

Surveys are showing that there are no Varroa mites or tracheal mites on Kauai. All equipment and bees being imported or moved need to be inspected. On the Big Island HDOA tried to eradicate bees with Varroa mite in the Hilo area but a beekeeper took his infested hive out of the eradication zone. Because of this, the mite has spread to a 30 mile radius outside of Hilo (instead of 5). We still don't know where he took the hives.

A Myoporum thrips has been found on naio on the BI. This thrips causes galls. We have been checking with nurseries and on plants in the wild. If you see galls on plants, turn them in to HDOA for ID. [JacqK: Darcy at HDOA said that this could be another Erythrina gall wasp situation.]

Fountain grass was found in a landscape planting in Puhi. They've contacted the vendor and they have been growing it in pots in Kilauea. It may not be the same variety as *Pennisetum setaceum* but we want to point out that it can be mistaken for it and should not be used.

CTAHR Research Station - Johnny Gordines

The Research Station has many projects going. Jeri Ooka is working on a project involving canoe plants and we are working on diseases and controls for invasive plants.

We are maintaining a Hawaiian taro collection and doing traditional hybrids to battle pocket rot and leaf blight – helping the local taro farmers. We also established a taro collection at Limahuli and are working to get a collection at NTBG in Kalaheo. We have a couple of new ginger varieties along with tropical flower varieties – two of which have been released to the flower industry.

We are working on a papaya hybrid project, developing a papaya with a hard shell, good taste, and resistant to disease with good yields. We continue with tropical seed production of Sunrise papaya. We are doing sustainable soil management strategies (composting, etc).

We are working with erythrina gall wasp (evaluating control agents), and invasive aphid bio controls. An identification book for fruit flies and BBTV aphids is underway. Termite work is ongoing (working on baits) as well as work on invasive pasture grasses. We also work with DOFAW on native species varieties and we have KISC come up to work on Miconia accessed through the station.

USFWS – Michelle Clark

My office will be moving into the CTAHR Research Station soon (June 1)! I was successful in getting funding for the East Alakai project and am working on getting

more. I'm working on discretionary funding proposals for 5 projects focusing on protecting habitats for rare and endangered species. Recently, I went on a field trip with KRCP and can report that the wiliwili are looking good!

TNC – Allan Rietow

We get up to Kanaele (Wahiawa) Bog one to two times a month. The fence was completed to protect it from pig damage a few years ago and we area targeting invasive weeds like strawberry guava and melestome species.

We are in the permitting stage with DOFAW for the fenceline in the Alakai that will enclose about 2 thousand acres (600 acres State, and the balance owned by A&B). We have gotten a lot of support from the community for this project and are just waiting for the DLNR board to issue the permits. We hope to start on the fence in 3-6 months depending on funding.

We also have an MOU with A&B to work in the back of Waineha Valley treating Australian Tree Fern. We are also baiting for pigs using a silo technology. We have had good success with the baiting, but one time the pigs destroyed the trap when the food ran out!

TNC continues to support work by KRCP with ginger control.

USDA-Wildlife Services – Scott Williamson (email report, see attached)

Coqui Control in Lawai – Keren Gundersen

The frog project is coming along very well at the site in Lawai. We are now just down to countable frogs. We have not heard any calling throughout the site, only just around a private parcel that will not grant KISC access to spray with citric acid. Frogs are breeding and maturing there and then spreading back into the management area.

The Coqui Frog Working Group asked Mel Rapozo to step in and act as a mediator with the property owners asking permission to apply citric acid. We need to be able to stop the life cycle.

As a "Plan B", HDOA would like to go in and completely clear the back of this parcel of all vegetative debris and lay plastic over the ground to try to essentially "cook" the frogs. This method will be highly labor intensive and not proven as an effective eradication tool, but might be able to stop or slow the spread.

HISC/KISC Outreach activities – Jackie Kozak

The exciting news is that KLIC agreed to pass the bigger list of 140 species of ornamental plants, agreeing not to sell or use them any longer. Codes of Conduct strategies are being discussed by other agencies as something to add to their organizations to create "Best Management Practices".

I've also been working on state-wide rodent control outreach. The USFWS has contracted an outreach company focusing on answering questions on Kauai. I'm also working on a seminar to be held during the Hawaiian Conservation Conference about outreach in the community.

On April 29, at Chiefess Middle School, there will be an open house regarding the Strawberry Guava Bio Control being sponsored by the Forest Service. It will be held from 5:30 to 7:30 pm.

Lastly, I am sadly announcing that I will be leaving my position to go to graduate school. I will be working with Oregon State on a program with Community Development. My last day will be the beginning of June and I'm working on making this transition a smooth one.

V. New Items:

Legislature/Funding Update – Chris Buddenhagen

In the legislature, two bills have been introduced that greatly reduce the amount of the conveyance tax that gets passed along to conservation. This raiding of the NARS funds will help fund the state debt. The HISC budget is paid for with 25% of this conveyance tax. Revenue is already down from house sales and has reduced this

fund already by 50%. HB 1741 reduces the amount HISC gets to only 20%, but proposes to raise taxes on homes over \$1M which would help make up for some of the loss already felt by the slow market. The senate bill reduces it even further (to 10%) which paints a bleak forecast for conservation money. Please contact your reps to go with the 20% option so that the impact of funding loss will be minimal. The Governor can still veto this bill in favor of the more reduced version, so it important to lend a voice in this matter. The Hawaii conveyance tax is lower than most other states in the U.S. [JacqK: How will this shake out to the ISCs?] [ChrisB: Instead of a 50% reduction of funding from last year, it may be 40%; but we don't know how to project increases in taxes. The funding levels will be a big change no matter what. The 10% scenario would mean watershed partnerships shutting down and catastrophic for other programs like NARS, NAPS, HISC (and the ISCs), and Legacy Lands.

Aquatic Invasive Species Workshop - Jackie Kozak

USFWS is helping to fund this workshop that KISC is sponsoring. This will be an opportunity to bring the community and agencies together to discuss fresh water and marine water issues with regard to invasive species. DAR has agreed to help and to present. We are still open to suggestions for topics and looking for speakers. The setting and date will be announced.

VI. Announcements:

- Garden Fair (KCC) April 18, 2009, KCC (9 am to 4 pm)
- Earth Day Event (KCC) April 22, 2009, KCC (11 am to 4 pm)
- Open House re: strawberry guava bio-control April 29, 2009, Chiefess Middle School (5:30-7:30 pm)
- 2nd International Miconia Conference, Maui May 4-7, 2009
- Ag Awareness Day, CTAHR Research Station May 14, 2009
- CGAPS Meeting, Honolulu June 3, 2009
- Aquatic Invasive Species Workshop September 2009 (TBA)

Next Meeting – Strategic Planning Meeting, [TBA]

Pau

Mongoose Sighting/Report Update Jan. 1 – Apr. 2, 2009 Scott Williamson, USDA Wildlife Services – Kauai

There have been six reported sighting of Mongoose on Kauai so far in 2009.

- 1. 2/3/09- Kauai Island visitors reported seeing a dead mongoose in the middle of Hwy. 56 between Moloaa and Anahola. The initial report went to a USDA inspector, and the inspector contacted WS that morning. An interview and site visit was made the same day, but no carcass was seen during the site visit. [Note: There were two County employees working on the highway and when interviewed, they said they had seen a small dead pig in the road at approximately the same location as the reported mongoose carcass.] No further action was taken.
- 2. 2/18/09- A sighting report was funneled through KISC to WS that a mongoose was seen in the vicinity of Tree Tunnels. When WS contacted the reporting party it was revealed that he had not actually seen the mongoose, he were passing on information given to him 3-4 days prior by others who had made the sighting. He did not have names or contact information for the person(s) who reportedly saw the mongoose, so WS had no way to follow up on this report. No further action was taken.
- 3. 2/20/09- A sighting report was funneled to WS through DLNR (DOCARE/DOFAW) that a visitor reported seeing a mongoose in Kauai Marriott Hotel parking lot. WS interviewed the visitor and deployed traps around the parking lot where the reported sighting took place. Traps were baited with fish and left out for six days. The only animal captured was one Cane Toad. Traps were removed on 2/28/09 and hotel and maintenance personnel were asked to report any unusual animals to WS.
- 4. 3/30/09 A worker at Kauai Lagoons Resort reported seeing a mongoose on resort property. Al Silva already had cat traps in the area as part of the ongoing predator control to protect nesting nene, so he moved some of the traps to the sighting area and monitored them for several days. The traps were baited with fish and hot dogs, but nothing was captured during the response and traps were removed on 4/3/09. The person who reported the sighting never returned calls, so no formal interview was conducted. Resort personnel were asked to report unusual animal sighting to WS.
- 5. 3/31/09 (approximately) A dead mongoose was reportedly seen "on the highway between Hanalei and Princeville". No contact information was provided and the location was vague, so no further action was taken. [Note: One of our employees was in that area while off duty and he reported seeing a dead cat on the side of the highway in approximately the same area as the reported sighting.]
- 6. 4/2/09 Kauai Island visitors reported seeing a mongoose cross the road near the Hawaii Air National Guard station in Kokee State Park. WS made a site visit, but saw no indication of mongoose presence. A guard at the station said he had not seen any mongoose, but they did have "quite a few large rats in the area". He was asked to contact WS if he sees any unusual animals in the future.