

**Coqui Frog Working Group  
Minutes  
July 14, 2004; 2:00-4:00 pm; Komohana Conf. Rm A, Hilo**

To relay to Ed Texeira. State Civil Defense, the extent of the coqui frog problem on the Big Island, the government agencies, organizations and communities present at the meeting summarized their accomplishments and stated their concerns of what may be impeding further progress. The County of Hawai'i already issued an Emergency Declaration in April 2004, and if a State Emergency Declaration is warranted, there is a possibility of leveraging substantial federal resources for Hawai'i Island and the control of coqui frog infestations.

1. Committee Reports

- Public Education [Bill Kenoi, County of HI]
  - production of a website, brochure, poster, hotlines (USDA WS, HI DOA), presentation on public access TV, numerous live presentations from individuals of HI DOA, UH CTAHR, USDA WS, BIISC, MISC at public events, community group meetings, etc.
  - have met with nurseries, Board of Realtors, Hawai'i Tourism Authority regarding the impact of frogs on their respective focus areas
  
- Research [Arnold Hara, UHM; Will Pitt, USDA WS APHIS; Larry Nakahara, HI DOA] Revisions in bold 7/30/04 per W. Pitt
  - caffeine is not feasible due to too many restrictions **from the Hawaii DOA addressing unknown effects on nontarget organisms, including humans** (*Addendum from H. Ako 7/31/04: As investigators of caffeine, we agree and are finishing up our work in hopes of publishing it. This is completely academic. Our data suggest that caffeine is not too selectively toxic to amphibians.*)
  - Chytrid fungus, a promising biocontrol agent that has been associated with amphibian population decline world-wide, was tested on coqui frogs from Hawai'i by the University of Colorado. The coqui frogs do not exhibit any ill effects from exposure to the fungus.
  - 16% citric acid is effective but has **minor** phytotoxic (damages plants) effects if not rinsed off (extent of damage varies from species to species)
  - if sprayed with **a lower concentration of** citric acid together with pyrenone, **phytotoxic effects of citric acid may be reduced**
  - Data have been collected on the effects of citric acid on nontarget organisms
  - Note: 16% citric acid is labeled and available in premixed solution
  - Hydrated lime drench efficacy and its being less phytotoxic have been demonstrated on a test plot and in the lab but data collection is needed along with effects on nontarget organisms and efficacy of application methods
  - Submitted EPA exemption has still not been approved for hydrated lime
  - USDA WS and HI DOA will begin work on a National Environmental Policy Act (NEPA) document for hydrated lime
  
  - Alternate application methods and substances for coqui frog control are still being identified for evaluation
  
- Nurseries [Jamie Runnells, Big Island Association of Nurserymen]
  - Nurseries need other solutions besides hydrated lime that ruin the aesthetics of plants

- **(correction: 8/4/04 per J. Runnells) BIAN drafted letters to Gov. Lingle and Dr. Neil Reimer (USDA Dept of Agriculture) urging support of our certification program and a draft of a Coqui Frog Free Plant Certification program drawn up by BIAN members with guidance & input from Plant Quarantine, Andrew Kawabata & Larry Nakahara. The draft is a starting point to enable Nurseries to work with the various agencies & reduce the spread of the Coqui Inter-Island using various recommended methods set forth by the State.**
- Even if nurseries treat their property and plants for frogs, neighboring vacant lots and backyard growers that are not treated are a source of continued infestation.
- Quarantine [Kevin Horiuchi, HI DOA, Plant Quarantine]
  - A meeting was held this week regarding the self-certification program for nurseries
  - Two nurseries on the Big Island that ship plants 2-3 times per week are required by Plant Quarantine to treat their plants with citric acid before shipment because they are infested.
- Legislative
  - Gov Lingle signed two bills into law in May 2003 – one established the Hawai‘i Invasive Species Council (HISC) to coordinate efforts against invasive species in the state by various agencies with the National Invasive Species Council in Washington D.C. The other limits liability for landowners who allow access to their properties for the control or eradication of invasive species.
  - Residents need information on legal issues regarding spraying on vacant lots or lots with absentee landowners, also State and County protocol, if any, when frogs are found on their respective property to prevent spread to residential areas
- Tracking Funding & Resources [Tim Ohashi, USDA]
  - Since the Emergency Declaration, a proposal was sent to M Wilkinson (HISC). The proposal was approved by Undersecretary of Agriculture for \$3 million dollars per year for 3 years (reapply each year). October start date was moved up to July but no word yet.
- Public Relations (no report)
- Operations [Tim Ohashi, USDA WS; Bill Kenoi; Kyle Onuma, HI DOA]
  - Right-of-entry on vacant lots: Maui is working on getting legislation for cooperation as a County ordinance (Teya Penniman, Maui Invasive Species Committee)
  - HI DOA in Hilo alone gets 50-100 calls per month regarding control of the coqui frog, many of the calls represent new infestations
  - HI County is in the process of purchasing more sprayers that will be available through USDA WS; chemical subsidies will also be available to residents
  - (see e-mail from Scott Williamson, Dept. of Land and Natural Resources, Division of Forestry and Wildlife/Oahu Branch)
  - Contact info for Eddie Clark - employment wanted: estate “domestic servant” (ph 938-4844; e-mail eddie@stewardshipincorporated.org )
  - Contact info for Glenn Bousquet (e-mail: coquibusters@aol.com)

## 2. Community Reports (2-3 min per community/area)

- **Kukuihaele** (Phyllis Tarail/Joel Cohen)
  - need manpower because residents cannot do the physical labor
  - need coordination between land holders (portions of Waipi`o Valley are owned by state, Kamehameha Schools, etc.) to take care of the frogs before they spread to residents as well as the entire valley
  
- **Komohana Estates** (Hugh Ono)
  - Started with 300 frogs, but with “persistence” (continual vigilance and repeat applications) and “permission” (for vacant lots, absentee homeowners), the infestation is under control
  
- **Koa`e** (Clive Cheetham)
  - Hydrated lime drenching is done at about 6 month intervals at test plot during the day with large hose not regular garden hose
  - C Cheetham has a lot of experience and wants to share with USDA WS Operations what has worked and what hasn't as they prepare protocol for their upcoming trials
  
- **Hawaiian Paradise Park** (Joanne Backman)
  - community has raised \$32,700
  - need public education to emphasize that while you may hear just one frog, there may be many including noncalling females and juveniles – so action should begin even if only one frog is vocalizing
  - entering and treating vacant lots is a problem; need to translate the letter asking permission and also background material into Japanese since some landowners are in Japan (see Mrs T Kenoi)
  - citric acid works, so does hydrated lime for less and can be applied in the day
  - reapplication is necessary at 1-6 wk intervals, depending on reoccurrence of calling
  - some residents don't want to get rid of the frogs on their property – it's illegal to transport the frogs but not illegal to “harbor” them
  
- **Hawaiian Acres**
  - Anne Smith of Peace Talk radio (UHH) offered her show to present any educational information or updates on the coqui frog. A request can also go out to recruit UHH student volunteers or workers to do the labor for interested communities. (ph 968-0777; e-mail: joybubble@mymailstation.com)
  
- **Volcano** (see Kim Tavares' e-mails on treating the Carson property)
  
- **Leilani Estates** (Chas Stanton): modes of spread appear to be “hitchhiking” on vehicles and green waste disposal from infested area onto noninfested areas – so these need to be monitored and people need to be educated
  
- **Wood Valley** (see Rich Reha's e-mail)

- **Nanawale Estates** (see Neighbors Helping Neighbors, Karen Meyer's e-mail)

*(e-mails mentioned in the minutes were sent to CFWG and Community Groups e-mail lists)*

Date: Wed, 14 Jul 2004 10:14:10 -1000

Aloha Ruth,

I'm sorry that I will not be able to attend the meeting 7/14/04. I just wanted to give you a very brief update on coqui control/eradication efforts on Oahu.

1. We plan to carry out multiple, large scale sprays using citric acid in the Wahiawa/Schofield East Range area. This is the only "wild population" that we are aware of on Oahu, and we (DLNR/DOFAW, HDOA, OISC, Army Environmental DPW, and volunteers) have been working to rid the area of frogs for some time now. The infested area encompasses military land as well as private properties (residents' yards).

We have divided the area into 4 sectors, and will begin spraying the first sector on 7/15/04. We plan to completely saturate (to the best of our ability) 3 of the 4 areas, and use "spot-sprays" in the residential properties. The process will be repeated, with at least 2 complete sprays of 3 sectors and a third spray, late in the season, if necessary.

Our main problem in this endeavour is that, currently, we have only one large power sprayer (from HDOA) available to accomplish the sprays. DOFAW is purchasing an additional sprayer, but it will not be delivered in time to be of much help this summer. We are trying to borrow a sprayer from other agencies, but as yet do not have a positive response from any of them.

2. There are a few infested nurseries (that we know of) on Oahu, and they have recently begun to tackle the problem on their own (with assistance from DOFAW, HDOA and OISC). Methods employed include: spraying citric acid, hand capture, and using caged males to attract gravid females which are then captured and destroyed. Results so far are promising, but much more work is needed in this area.

Sorry this report is so brief and so late in coming, but I have really been scrambling to try and set up/co-ordinate the various activities. Hopefully, I will be able to attend some future CFWG meetings.

I hope the meeting goes well and would appreciate e-mail of the minutes when you have compiled them. Thanks for all the hard work.

Aloha, Scott

Scott Williamson  
Invasive Species Technician  
Dept. of Land and Natural Resources  
Division of Forestry and Wildlife/Oahu Branch  
2551 Waimano Home Rd., Pearl City, HI 96782  
Office: (808)453-6111, Cell: (808)286-4319  
Fax: (808)453-6113,  
E-mail: [Scott.P.Williamson@hawaii.gov](mailto:Scott.P.Williamson@hawaii.gov)

Date: Sun, 04 Jul 2004 09:10:15 -1000  
From: Rich & Sandra Reha <AlohaReha@Turquoise.net>  
Subject: Coqui update from Wood Valley  
To: duponte@hawaii.edu

Hi Ruth:

We here in Wood valley are all gone on trips and will miss your meeting, so here is our status:  
2 or three Coqui chirping frogs have surfaced in the last few months, and we will get them soon. It's  
easy to get them when it's only one or two frogs. We're waiting for a dry day!

So -- Wood valley is still Coqui free after about 6 months of no spraying.

Best wishes,  
Rich Reha  
Wood Valley, HI  
[AlohaReha@Turquoise.net](mailto:AlohaReha@Turquoise.net)  
808 928-0151

Date: Sat, 10 Jul 2004 11:18:57 -1000  
From: Kim Tavares <vbg@interpac.net>  
Subject: Re: Kahauale`a Coqui Update - 2 nites post spray-out  
X-Sender: vbg@interpac.net  
To: Tim\_Tunison@nps.gov

You're welcome! That's one down and a few more to go. Only 3 frogs left calling at that site, and I'm planning another outing there tonight. Hopefully the last. (?)

The next nearest site I recommend spraying is the one on the highway about 500 meters above Glenwood Road, and stretches another 500 meters mauka, in the state "green strip". Tibouchina and ginger mostly, with those monster eucs that cause a "tunnel effect" with the sound. It's getting hard to tell if any are on the makai side of the road because it echoes back and forth across the highway. We sprayed out 30 gallons of extra citric acid mix there before I returned the tank & pump to HDOA, but only in a small area compared to that whole population. If you're coming up from Hilo in the evening some time, you should pull over and listen to it - it's pretty scary.

There are quite a few hand capture sites just below Kahauale`a (Akatsuka's), however. Three that I know of, this side of Captain's drive in Fern Forest. Below Captains, I've been monitoring 3 sites that I know of, and people have spoken of one or two places where "there's just one frog and we like it".

I don't have a good fix on the Eden Roc situation, but there are at least one or two places for sure, plus a population near the highway on Kopua and one or two frogs in the miconia place at Tanouye's, but I think Kopua farm lots are still clean, unless the Fern Acres populations are starting to spill over the line. Fern Acres & Hawaiian Acres have major problems, which is where my line is drawn, for now. These subdivisions need to "seek professional help" and get sprayers going every night for the rest of this summer, and hand capture the individuals in between.

Mauka of the highway, N. Glenwood road has two small populations. One near the highway, and another near the end before the road turns (across Rick Rego). Maybe one at Hirano Store. (Recently caught one, so it might be the same report). A few populations between there and N. Kulani Road too. Kulani Road at Ihope used to be one, and that subdivision just before Ihope road was another. From descriptions I'm getting, these two are merged into one now, turning into a big mess (lots of small properties, many people to have to contact, etc.).

So that's the wrap on the buffer to the buffer. It wouldn't be impossible to control all of this - Volcano Golf Course to Kulani Road, if there were a few crews (6-9 people and 2 or 3 pumps?), more or less full time.

See you later,

Kim

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Date: Tue, 29 Jun 2004 10:47:52 -1000  
From: Kim Tavares <vbg@interpac.net>  
Subject: Carson's Coqui Site Survey Results

X-Sender: vbg@interpac.net

Hello!

There is good news from the Volcano coqui front lines. This year the Carson's on Kahau`ale`a are being cooperative. Last night Rob Culbertson and I conducted the first evening survey of the property, and it seems to be smaller than expected. It rained all day and was still rainy, so the conditions were good. It was probably around 62 degrees.

We located and sprayed citric acid on the most distant frog we could hear calling, since this isolated individual was in uluhe and out of arms reach. We spent most of time on two (or 3?) frogs that are on the end of the infestation, farthest from the road, but they're still there. And we hunted for frogs inside the hot-spot for a little bit. The infestation seems to be contained to an area less than half an acre in size, but has anywhere from 15 (Rob's low end guess) to 36 (my high end guess) calling males. The count refers to the entire population, although some are actually outside the drawn area, on the Koehler property.

The area the frogs are in is mostly uluhe, in young ohia / hapuu forest, and mixed aliens, such as strawberry guava and Himalayan raspberry.

When viewing the map, keep in mind the gps unit accuracy is +/- 10 meters or so.

HOTSPOT Coordinates:

X-271885

Y-2151945

See attached map: carson\_survey1.gif

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Date: Fri, 02 Jul 2004 10:05:27 -1000

From: Kim Tavares <vbg@interpac.net>

Subject: Citric Drench Plans - Carson's (on Kahau`ale`a)

X-Sender: vbg@interpac.net

To: Upper Puna Coqui Hunters <vbg@interpac.net>

X-Mailer: QUALCOMM Windows Eudora Version 5.1

X-MailScanner-SpamCheck: not spam,

SpamAssassin (Message larger than max testing size)

Aloha!

I wanted to let you all know that we will be at Carson's high(est) elevation established Coqui site in Puna, next week Monday & Tuesday. Monday we will be preparing for Tuesday's citric acid drench.

Arrangements have been made, and a few volunteers have already confirmed, but we could use a few more, at least for Tuesday. If you have time and interest, please RSVP to me so I can get you on my list. Hope to see you Monday (and/or Tuesday)!

Have a great Independence Day weekend!

Kim

Date: Thu, 08 Jul 2004 08:22:17 -1000  
From: Karen Meyer <wmehawaii@hotmail.com>  
Subject: Neighbors Helping Neighbors - A Nanawale Volunteer Project  
To: duponte@hawaii.edu  
Cc: nanawale@interpac.net

Aloha!

We have just been informed that the spray pump purchased with the \$10,000 grant money awarded to Malama O Puna has just arrived at Nanawale Association Long House. It will soon be available for residents and community leaders to borrow.

We desperately need an affordable solution and assistance to eradicate the growing numbers of coqui frogs because the terrain is a lot more rugged and dense with tall albizia trees and lush ground foliage. Majority of the residents in Nanawale are SENIORS retired in Paradise. They are on a limited budget and mobility.

In addition to this problem, the land areas are vacant and the real estate owners are out of state. We have effortlessly attempted numerous times to ask for their financial assistance to curb the on going problem.

Thus far, 2 out of 10 letters sent to out-of-state property owners were received with monetary assistance. We have opened an account with BEI Hawaii with the funds we received. We have countless volunteer hours spent in creating a barrier by cutting down young albizia trees bordering the eye of the storm of coqui frogs. Our small group of volunteers have been keeping track of our volunteer hours and personal expenses in hope that the Agency of Invasive Species will match our expenditures.

We need governmental assistance in manpower and subsidy to purchase the chemicals to eradicate the coqui frogs.

I hope to be there at the upcoming meeting on July 14, 2004.

Sincerely,  
Neighbors Helping Neighbors - A Nanawale Volunteer Project to control coui frog  
Karen Meyer  
[wmehawaii@hotmail.com](mailto:wmehawaii@hotmail.com)

Date: Fri, 09 Jul 2004 13:19:36 -1000  
From: Stephanie Whalen <swhalen@harc-hspa.com>  
Subject: Re: Fwd: Neighbors Helping Neighbors - A Nanawale Volunteer Project  
To: Ruth Niino-DuPonte <duponte@hawaii.edu>

You might want to check into Idaho's invasive weed (species) law or regulation that authorizes the government go in and eradicate the problem on absentee landowners property and send them the bill.

stevie