

COQUI FROG WORKING GROUP

Minutes to meeting on June 17, 2002, 12:30 – 4:30 pm
Komohana Agric. Complex, Conference Room A
875 Komohana Street Hilo, HI

1. ATTENDANCE (see attachment)

- Coordinator: Arnold H. Hara
- Facilitator: F. Benevides Jr.
- Recorder: R. Niino-DuPonte

2. OVERVIEW

- Discussed CFWG Objective and Purpose (inserted in binder)
- Established facilitator, facilitator duties and responsibilities (handout)
- Established working group Norms (handout)
- Established that meeting minutes will come from information captured on the flip charts and recorder's notes
- Breaks will be taken at least 10 minutes each hour.
- To update your CFWG contact information: please forward corrections to R. Niino-Duponte at email duponte@hawaii.edu or call 974-4105 (fax 974-4110).

3. INFORMATION SHARING [Group] (*Responses to questions raised are italicized*)

- Maui has not begun to spray caffeine.
- What are coqui frog elevation and temperature ranges? *K. Tavares noted that frogs are calling in Volcano area (4,000 ft. elev.) during the warmer, summer months (temperature range: 55 – 72° F).*
- Average egg cluster size is about 30
- What is the status of testing animals, eggs etc. in the lab? *A.Hara and D. Vincent mentioned that the University must comply with the Animal Welfare Act and approval is required before testing. UH work with vertebrates needs Institutional Animal Care & Use Committee (IACUC) approval that may take 1-2 months to obtain.*
- Is there enough time to test lab animals due to effects of treating with lime?
- Where and what is the 10 million dollars for? *M. Pitzler stated that a \$10 million eradication proposal was submitted by USDA-APHIS-WS and prior to the September 11th attack, funding looked promising; however, since 9/11 no funds available except for a grant via the University of Hawaii to support caffeine registration and comply with the National Environmental Policy Act (NEPA) to allow the operational control of the frogs. However, future finding of the \$10 million is supported by Senator Inouye's office.*

4. DISPLAY [A. Hara, S. Chun]: Coqui frogs and eggs in rearing cages; life cycle (inserted in binder). (*Presenters' responses are italicized*)

Egg mortality in laboratory observed with fungal growth: C. Jacobsen will forward cultures to Eloise Killgore, HDOA Plant Pathologist, to identify.

5. DISPLAY [F. Benevides]: Sound level instrumentation; typical use.

6. PRESENTATION [K. Onuma, C. Jacobsen] (*Presenters' responses are italicized*)

- Preliminary results of sound levels associated with recent treatment of Puainako study area with hydrated lime (handout): Both treated and control sites show a linear rise of about 0.5 dB per day. Daily changes between treated and control sites correlate well. After almost two weeks, the treated site is holding at about 3 to 4 dB below the control site, representing at least a two-fold difference in sound pressure level between sites.
- Can hydrated lime be used to treat eggs? Hard to do in field because eggs are hidden.
- Results may have been different if there were repeated applications compared to one-time spraying; frogs were in canopy (strawberry guava, gunpowder trees, ohia, mango, banyan) higher than the sprayer could reach (20-25').
- How long does it take to mobilize a group to treat an area larger than 1 acre? It took 60 man-hours to do this 1-acre trial, including cutting trails.
- How long did it take before frogs succumbed to lime? 48 hours
- Where was contact area? Dorsal surface and eyes
- Why is there an increase in the control area? Possibly because population did not reach saturation point yet, so frogs continue to move in/down.
- Is there an increase in calling with increased moisture? Possibly; seems louder when it rains.
- Females and froglets were also affected by lime, but since they do not call, their mortality would not be reflected in sound level changes.
- Disadvantages of spraying hydrated lime: terrain was difficult, technical difficulties (power outage, etc.)
- What was the effect on non-target species? Is knowing this an EPA requirement for using hydrated lime? There were live crickets, centipedes, and millipedes observed after spraying. It is supposed to wipe out slugs and snails. L. Wong stated that agencies need exemption or approval to use lime in a non-label way, but growers can use lime because they already use lime as soil amendment, etc.
- Infrared night scope causes frogs' eyes to appear fluorescent so they can be readily seen.

7. GROUND RULES [F. Benevides]

- Brainstorming techniques (handout).
- Polling versus voting (handout).
- Consensus versus majority rule (handout).

8. NEW ACTION ITEMS [Group]

- Contact H. Ako to request that he give a short presentation (about 15 minutes) at the next meeting on the use of pyrrolic compounds with caffeine on coqui frogs. **[A. Hara]**

- Contact a local frog grower to request a short presentation (about 15 minutes) at the next meeting on typical conditions for frog mortality. [**G. Sahara**]

9. SUBMISSIONS TO AGENDA [Group]

Notes: Numbers in () indicate number of participants interested in discussing item. Underlined items indicate closure, resolution, and/or discussion.

- How do we address homeowner calls regarding coqui frog control? (21)
- Is eradication of coqui frogs in Hawaii possible? (13)
- If it is possible, how can we eradicate coqui frogs in Hawaii? (13)
- What regulations are hindering the use of caffeine (and other substances)? (7)
- How can hydrated lime be legally used to eradicate coqui frogs? (8)
- Brainstorm quarantine issues. (11)
- How do/can we enforce individuals who knowingly spread coqui frogs? (3)
- Who are our stakeholders? (5)
- How can we prepare for public controversy? (10)
- Can we consider biological controls? (23)
- Develop educational programs for industry and homeowners. (11)
- What is the impact of coqui frog on Hawaii's ecology? (12)
- What are alternative treatment techniques for potted plants moving between islands and landscape plants? (11)
- Seek humane (i.e. quick kill) methods for controlling coqui frogs. (7)
- Identify all potential funding sources. (11)

A. What Regulations Are Hindering The Use Of Caffeine?

- Not enough certified applicants.
 - Current certified applicants are: R. Bachman, R. Sugihara, K. Onuma, J. Peterson
 - Volunteers to get certified: M. Wilkinson, S. Veriato, T. Ohashi, L. Wong, G. Santos
- Label restrictions include:
 - Don't apply near pregnant women, children under 2 years old, individuals with AD/HD, asthma, high blood pressure or heart problems.
 - 100 foot buffer zone needed if applying in upward direction (25 feet otherwise) and 50 feet from any water source
 - Treated area must be secured from human intrusion at least 24 hours after treatment.
- Specific data collection required by EPA by 09/27/02 to continue possible use of caffeine beyond new fiscal year. M. Pitzler requested identification of potential blocks of land to do caffeine assessment on non-target organisms on a timely basis.
 - Treated sites will be less than ¼ acre.
 - Frog population not required for trial area, but the population and level of insects may differ if frogs are present.

- Some locations have mostly exotic invertebrate species, but data will still be valid and useful.
- A location with little/no groundcover will ease collection of non-target species.
- Non-target invertebrate data may not be accurate at nurseries due to routine and frequent pesticide treatment at these sites.
- County may not agree to close down transfer stations for 24 hours; hence, these sites may not be good alternatives for treatment.

Resolution/Action: Three or more sites are to be identified by [R. Sugihara] and inspected by [G. Sahara] for suitability. Standard operating procedures (SOP) for collecting non-target data will be drafted by [R. Sugihara and staff]. Non-target data will be collected by [R. Sugihara's staff]. Treatment will be implemented by [K. Onuma]. Possible sites mentioned include: Lava Tree State Park, Puainako, Manuka State Park, Stainback Highway, Kapoho papaya road, Carsons behind Akatsuka Orchids, Kurtistown nurseries, Puna District, Kea`au Transfer Station, Maliko Gulch (Maui), and forested area above Onomea Ranch.

B. Can We Consider Biological Controls?

Resolution/Action: E. Killgore has volunteered to give a short presentation (about 15 minutes) at the next meeting on the potential for biological control of the coqui frog.

1. MEETING EVALUATION [Group]

- **Pro Issues:** Many individuals and agencies involved, numerous ideas, brainstorming, priorities, cooperation, facilitated, large turnout (> 30), open discussion, no one is wrong, number of breaks, networking, information sharing, common cause.
- **Suggested Changes:** no later than 4:30 p.m., more than one bathroom, pro-frog input, have meetings on other islands also, more input from quiet participants, more nursery input.

2. NEXT MEETING

- Monday, 07/15/02.
- 1:00 P.M. to 4:30 P.M.
- Department of Land and Natural Resources, Division of Forestry and Wildlife, 19 East Kawili Street, Hilo, HI 96720

3. TENTATIVE AGENDA

- PRESENTATION: The Use of Pyrrolic Compounds and Caffeine to Control the Coqui Frog - Harry Ako
- PRESENTATION: Typical Conditions for Frog Mortality –
- PRESENTATION: Potential for Biological Control of the Coqui Frog – Eloise Killgore
- BRAINSTORMING: How do we address homeowner calls regarding coqui frog control?
- NEW ACTION ITEMS