

COQUI FROG WORKING GROUP

Minutes to meeting on Sept. 9, 2002, 2:00 – 4:00 pm
Komohana Agric. Complex, Hilo HI

1. ATTENDANCE (see attachment)

- Coordinator: Arnold H. Hara
- Facilitator: William Kenoi
- Recorder: R. Niino-DuPonte

2. INTRODUCTIONS [Group]

1. PRESENTATION [J. Giffin]: Dept. of Forestry and Wildlife Jurisdiction

- Two years ago, DOFAW noticed greenhouse frogs in the arboretum and were concerned about spreading them via shipping plants, replanting on Arbor Day, etc., so Ed Brodie and Arnold Hara devised a hot water drench treatment facility
- Six months later, coqui frogs also showed up in the baseyard in Hilo and were also able to be controlled by the hot water drench (as long as water actually achieves target temperature)
- A year ago, the first invasive species technician, Bruce Namihira was hired
- Areas under DOFAW jurisdiction that are infested with coqui frogs have been reported by Kim Tavares (Manuka Natural Area Reserve, Nanawale Forest Reserve, Akaka Falls, Waipi`o Valley, Malama-Ki, Hilo Arboretum and Baseyard) – traps and hand-capturing for the most part; possibility of testing caffeine
- Legal authority, Administrative Rules (mention of injurious wildlife, specifically transport and release)
- Maui received a National Park Service grant to do caffeine trials (Mitchell Craig, MISC) on four sites (see committee report)
- Is there a timeline to control the coqui frog on DOFAW lands? No, because there are higher priority projects that are more critical at this time.

2. PRESENTATION [A. Ford]: Dept. of Land and Natural Resources Enforcement

- Handout: Poster, Administrative Rules, HI Revised Statutes
- In order to successfully prosecute someone who purposely releases coqui frogs in a new area, there needs to be reliable eyewitnesses and hard evidence
- Under the wording of the law, a retailer is not liable for selling coqui-contaminated plants (no transport involved), but the consumer who buys it and transports it home is liable. Plant nurseries can also be liable if it can be proven that the frogs were on the plants during transport to the retailer.

1. PRESENTATION [L. Nakahara]: Dept. of Agriculture, Coqui Magic Wand Demonstration

2. NEW ACTION ITEMS [Group]:

- Invite legislative personnel [B. Kenoi] Status: OPEN

3. OLD ACTION ITEMS:

- Invite a state parks representative (Glen Toguchi) to discuss what they plan to do to control coquis on their lands [J. Giffin] Status: OPEN
- Contact Invasive Species Committee's Christy Martin as potential Public Relations person for all coqui inquiries [M. Craig] Status: She's in the process of moving; position not officially established; will keep in contact with her OPEN

8. COMMITTEE REPORTS

1. Public Education [W. Kenoi, County of HI and B. Mautz, UHH]
 - website by K. Tavares <http://everyfroghasastory.tripod.com/index.html> and <http://amazingforums.com/forum1/EVERYFROG/forum.html>
 - County can do all printing for any educational materials
 - Kona Farm Fair: September 12 – 15 and Hilo Jaycees Fair: September 19 - 22

2. Research [A. Hara, UHM and R. Sugihara, USDA]
 - Visit from Dr Larry Woolbright (Sienna College), recommendations (will be sent out as attachments) – primarily habitat modification in addition to any chemical control
 - C. Jacobsen reported on 4 nights of visual surveys on plots in Hilo that are similar to those set up by L. Woolbright in Puerto Rico. Densities in Puerto Rico are about the same or higher as those found in Lava Tree State Park.
 - Greatest population spike in coquis seen after a hurricane in Puerto Rico, indicative of habitat disruption.
 - While there are predators of coquis in Puerto Rico, population is controlled more by habitat modification (urbanization) than by the predators
 - Vapor heat treatment of a variety of potted plants to see if they can withstand temperature/duration that would be lethal to coqui frogs
 - 45° C for 45 minutes (eggs are killed by 20 minutes)
 - Phytotoxicity observed only on orchids (darkening of leaves indicating plant cells bursting and losing water) particularly on older shoots of epidendrins, dendrobium and a vanda
 - No noticeable effect on dracaena, palms or anthuriums
 - Mechanical injury on a red bromeliad seemed intensified by vapor heat
 - A citrus (tangerine) tree with a flush of new leaves was mildly damaged (blackening of tips but can be pinched off without adverse effects to the plant)
 - Concern is that heat penetration is not consistent throughout a pot and sheltered frogs or eggs will not be killed
 - Can this be done on a commercial scale? At what cost?
 - Screening of citric acid by USDA
 - Between 15-16% is ideal resulting in 100% mortality
 - Caffeine spraying by Maui Invasive Species Committee (see Operations report)

3. Nurseries [J. Runnells, Big Island Association of Nurserymen] D. Fell
 - Retailers were surveyed and are being more discriminating about where they purchase plants and do not want the reputation of spreading coqui frogs
 - Nurseries want to do the “right thing” but the bottom line is economics
 - They need control measures (biocontrol, trapping)

4. Quarantine [M. Enriques, HI DOA, Plant Quarantine] V. Kashiwamura, D. Cravalho
 - Two shipments from the Big Island were rejected on O`ahu for frogs
 - Self-certified nurseries will lose their certification with a frog violation
 - Inspections may be done a night at Young Brothers

5. Legislative [G. Santos, BIISC]
 - Noxious Weed List vs. Noxious Species List
 - Language in DNLR Authoritative Rule
 - Quarantine inspection for fruits, vegetables, etc.

- Authority to control vertebrates and to access certain property – DNLR and DOA laws need to be aligned
6. Tracking Funding & Resources [T. Ohashi, USDA]
 - Sen. Inouye mentioned Interior appropriation of \$2.7 million
 - Will an agency pursue biocontrol present Puerto Rico?
 7. Public Relations (see action item regarding Christy Martin)
 8. Operations [S. Veriato, USDA; G. Santos, BIISC, M. Craig MISC]
 - A portion (1/4 acre) of a nursery in Kihei with 100s of frogs was sprayed once with caffeine (2% or 180 lb/ac) – dramatic decrease in sound level and number of frogs, definite mortality (odor and carcasses). A second site mainly used hand-capture as a means of control. Non-target kills observed: earthworms, slugs. Non-lethal effects included paralysis of a skink and discoloration of slugs. There were a number of live organisms observed. Sampling, trapping, sweep netting, soil sampling to continue monitoring the sites.
 - Two other sites (1 large nursery and a dry, frog-free area) will be sprayed and non-target organism data will be collected.

9. NEXT MEETING

- Monday, October 7, 2002
- 2:00 P.M. to 4:00 P.M.
- UH Manoa CES, Komohana Agricultural Complex, 875 Komohana Street, Conference Room A (upstairs), Hilo, HI