

CFWG Minutes

Wednesday, July 23, 2003; 2:00-4:00 pm, Komohana Conference Room A, Hilo

Substitute Facilitator: Meg Jones

Attendance: See attached

Presentation: "Population Regulation in the Puerto Rican Coqui" by Dr. Larry Woolbright, Professor of Biology and Director of Environmental Studies, Siena College, NY.

Brief Summary: Habitat structure is the single driving determinant in coqui populations in Puerto Rico. Frogs require under-story nest or retreat sites for successful reproduction. Although coqui have many predators in Puerto Rico, predation appears less important than habitat in population regulation. Population numbers in Lava Tree are equivalent to the highest numbers ever seen in Puerto Rico. In Hawaii, it appears that male frogs are first to migrate and establish new populations.

Updates:

1. Education (M. Jones): Lava Tree state park sign and coqui frog website in progress.
2. Research (C. Jacobsen): Lava Tree long-term population surveys ongoing. Feral cats observed to hunt and eat frogs in cleared plots.
3. Research (R. Sugihara): The Kaua'i eradication effort is proceeding as planned. Massive 1000 gallon spraying effort has knocked population down to 3-4 calling males. These remaining frogs have been targeted for direct spraying. NWRC is working with Po'ipu resort staff to treat irrigation boxes for greenhouse frogs. Unexpected results indicate that citric acid is not as effective during times of prolonged drought. Future research will examine efficacy of citric on frogs maintained in wet and dry conditions.
4. Community (C. Cheetham, Koa'e Community Association): Large scale citric acid spray near Kapoho was not effective. Subsequent sprays with 3,300 gallons hydrated lime intended for soil amendment appear to have knocked down the frog population. Koa'e community association plans to try to eradicate frogs on a 20 acre area of hala next.
5. Community (R. Siracusa, Malama O Puna): M.O.P. is amassing plant material for Lava Tree reforestation effort. Planting will occur sometime in the near future.
6. Operations (K. Onuma): Wal-Mart is working with HDOA to rid their nursery area of frogs. Although the company does not want to spray, they have constructed a small quarantine area for hand-checking incoming plants. They may also be interested in constructing a hot water treatment facility. Onuma

visited Kona Wal-Mart after receiving complaints about frogs at that location, but was not able to find any in the nursery center. Hawaii Gardens native nursery reports that their sales have plummeted since the frog has become established in their nursery.

7. Operations (K. Tavares) Number of frogs in Volcano is increasing with each passing year. Inadvertent transportation inside car wheel-wells or undercarriage may be significant. The public needs to be educated to avoid accidental vehicular transport of frogs.
8. Quarantine (V. Kashiwamura): No new complaints from neighbor islands. No frogs found in neighbor island shipments.

J. Runnells (Plant-It Hawaii) reports that sticky traps or captive male traps (a calling male placed in the center of a child's pool filled with **16% citric acid**) are effective on frogs and are worth experimenting with. [NB: Early research in the Hara lab using sticky traps indicated that frogs were too moist for the trap to be effective. Additional research is planned.]

Homeowners Joanne and Steve Backmann of HPP thanked K. Onuma for coordinating the sprayer loans and training. They and their community sincerely appreciate HDOA's help.

Francis Benevides is serving as a volunteer consultant with DLNR and the Natural Area Reserve System on the Manuka State Park infestation - a small infestation in pristine native dry forest.

The next CFWG meeting will be held in September. Speaker TBD.