

Coqui Frog Research and Management Efforts on the Big Island



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Big Island Timeline

- Coqui come to the Big Island around the late 80s and early 90s
- Firmly established by mid 90s
- 1998 USDA/NWRC conducts chemical research
- Large treatment does not occur until 2002 with citric acid
- 2005 Hydrate lime registered for use by HDOA

Economic Effects on the Big Island

- Sleep loss for residents and tourists
- Inter-Island quarantine
- Shifts in plant purchasing behavior
- Real estate loses
- State of Emergency for Hawai'i County
- The cost of coqui control



Big Island Research Efforts and Control Methods

➤ Chemical

- Caffeine
- Citric Acid
- Hydrated Lime



➤ Mechanical

- Barriers
- Traps
- Vegetation Management
- Hot water treatment



Coqui Frog Spread

- 2006 – 7000 acres
- GIS spatial data analysis of the coqui frog locations revealed an increase to 20,000 acres in 2007

Frog Locations and Treatments on the Big Island



Statewide Distribution



Coqui Frog Working Group and Management Strategies

- County of Hawaii – Community grant, incipient populations, outreach
- UH-CTAHR – Research and outreach
- USDA/WS – Operations, Sprayer Loan Program
- USDA/WS/NWRC - Research
- BIISC – Citric Acid Matching Program
- HDOA – Nurseries and outreach
- DLNR – High value natural areas
- HIEDB – Provide community assistance

Management Goals

- Contain or eradicate known populations
- Protect high value areas
- Community support
- Rapidly respond to incipient populations
- Prevent reintroduction
- Disseminate information and resources
- Challenges . . .



Outreach and Education

- Public awareness
- Public reporting
- Access issues and development of long-term relationships
- Facilitate community based efforts



Quarantine Measures

- HDOA inspection and treatment of infested products
- Hot water treatment facilities at ports of entry
- More stringent inter and intra-island inspection and treatment measures
- “Coqui-free” nursery certification



Conclusion . . .

- Coqui problem on the Big Island continues to grow
- Eradication?
- Continue to support the control of frogs for nurseries, communities, and high value natural areas
- Quarantine

Acknowledgements

- County of Hawaii
- HDOA
- USDA/WS Operations and USDA/WS/NWRC
- UH Hilo and UH CTAHR
- BIISC, OISC, MISC, KISC
- Big Island nurseries
- Big Island Communities

Questions???

