Work update at Lawai infestation site

Upcoming control work is scheduled to continue the week of February 11, 2008. Crews will be arriving in the afternoon and working until around 7:30 pm.

Field crew work is scheduled for February 11 and 12.

The weather was quite wet this past week which hampered control work at the infestation site. The crew was, however, able to treat hau on the intake side of the reservoir with herbicide in sections 18 and 19.

Inspections also took place at several nurseries including WalMart and Kmart garden stores. No frogs were heard calling.

Next week, the crew will be applying lime in sections 14-16. Herbicide work will continue in sections 20 through 22.

As we move into these wetter months, the crew will continue to monitor at the infestation site as well as check out nurseries across the island for new importations of coqui frogs.

Weather conditions may, in some cases, cause work-plans to change. Wet and slippery conditions will be avoided to prevent unwanted accidents.

Help KISC by reporting any frogs heard at the site by calling either the KISC office, or the crew supervisor (numbers listed at the right).

Mahalo for your support!

A male coqui guards the clutch of eggs laid by the female.


Report coqui frogs! 643-PEST

Contact Phone Numbers:
- KISC: 246-0684 (from 7:00 am to 4:00 pm)
- Crew Supervisor: 651-8781
- Hawaii Department of Agriculture: 274-3069
- Pest Hotline: 643-PEST

Tidbit

Coqui egg clusters (called clutches) are laid approximately every 8 weeks and comprise from 3-45 eggs.
Coqui reproduction

Coqui frog males emit a two part call consisting of a "co" which is used when threatened by another male and the "qui" which attracts females. Once a nesting territory is established, males and females fight off intruders by chasing, jump attacks, and sometimes biting. This territorial behavior is exhibited by males as well as females. ("Invasive Species Database", 2005; Fogarty and Vilella, 2002; Parsons, 2000)

In Puerto Rico, Eleutherodactylus coqui reproduce year round, but reproduction rates increase during the rainy season. Fertilization occurs internally in the female and approximately 3-45 eggs are laid in the nest. Clutches are laid approximately every 8 weeks. E. coqui embryos do not emerge as tadpoles, but develop directly into froglets and emerge approximately 17 to 26 days after the eggs are laid.

The male remains to guard the nest for many days after froglets hatch. The absence of the tadpole stage allows nesting to occur in dry sites devoid of standing water. Nesting sites occur in protected cavities such as tree holes and the petioles of rolled palms. Abandoned bird nests are also utilized by E. coqui for nesting sites. The bananquit (Coereba flaveola portoricensis), Puerto Rican bullfinch (Loxigilla portoricensis) and Puerto Rican tody (Todus mexicanus) are all birds which share nests with E. coqui. ("Invasive Species Database", 2005; Schwartz and Henderson, 1991)

For more information check out: http://animaldiversity.ummz.umich.edu/site/accounts/information/Eleutherodactylus_coqui.html

Coqui home range

Field studies in the Luquillo Experimental Forest (LEF) have revealed some interesting aspects of coqui natural history, behavior, and movement. Homing behavior has been demonstrated in individuals displaced as much as 100 m away from their territories (Gonser and Woolbright 1995). In the evening, coquis climb tree trunks into the canopy, presumably to avoid ground-based nocturnal predators (Stewart 1985), and remain there all night. Then, just before dawn, they jump to the ground from high in trees and land with a "plop" (Beauchat et al. 1984), but on the way down, they "parachute" by spreading their feet and toes and partially extending their legs, which slows their air speed significantly (Stewart 1985). Coquis apparently do not have webbing between their toes as much as some tropical frogs (e.g., Hyla venulosa and Agalychnis spurrelli), which are capable of parachuting or even controlled gliding by stretching their digital webbing like four tiny bat wings or "foot umbrellas" that would impress even Mary Poppins!

For more information check out: http://invasions.bio.utk.edu/invaders/coqui.html

Informational Links

Please visit the following sites for more info:

- Work Notification Policy:
  http://www.hear.org/kisc/pdfs/200704coquiworknotificationpolicy.pdf

- http://animaldiversity.ummz.umich.edu/site/accounts/information/Eleutherodactylus_coqui.html

- http://invasions.bio.utk.edu/invaders/coqui.html

Puerto Rican tody (Todus mexicanus)
Source: Mark Swan / Birds of Puerto Rico.

Male coqui guarding a clutch
Photo from http://www.flickr.com/photos/onthespiral/314462460/

Flying frog?
Photo by Mimi Moscow

Wallaces Flying Frog is one of the largest of all tree frogs in Borneo. It is capable of gliding down from the forest canopy by using its enlarged webbed feet as parachutes. See http://www.wildborneo.com.my/umb.php7c=51&c=51