

Coqui's threat to island goes beyond being a noisy nuisance

Kia'i Moku

By Joylynn Paman



By day, residents near Maliko Gulch in Haiku endure the hum of weed-

whackers and the thud of machetes cutting back trees and tall grasses. By night, the hum is replaced with the drone of engine-powered liquid sprayers. These are the sounds of the Maui Invasive Species Committee (MISC) tackling a section of Maui's largest coqui frog infestation. The coqui have made over 127 acres of steep, treacherous terrain in Maliko gulch their home—permanently, if they were to have it their way. Enter the MISC crew, which has spent the better part of 2006 combating these vertebrate pests along the top rim of the gulch while the core of the population thrives below. Neighboring residents welcome the sound of citric acid sprayers if it means long-term relief from the raucous call of coqui.

If asked what harm this tiny quarter-sized Puerto Rican frog can cause to our islands, most residents immediately respond with versions of the male frog's signature mating call – “ko-kee, ko-kee,” which can project throughout the night like a broken record. But the harmful threats of coqui go beyond their 90-100 decibel evening chorus. Coqui can negatively affect our economy, environment, and quality of life.

On the Island of Hawai'i, the noise has some real estate agents singing the blues. Property values have been affected; it is difficult for home owners to sell their homes as they try to vacate coqui-infested areas. New home buyers must sign waivers stating that they are aware of the presence of coqui. Dur-

ing a recent survey, the Big Island real estate market reported a loss of \$11M in revenue due to coqui frogs. The frogs also affect the marketing and exporting of products from infested nurseries. These nurseries must take special precautions to inspect their merchandise before selling or shipping, creating additional costs for both the company and the consumer.

Coqui frogs also alter the ecosystem. At peak densities (ranging 8,000 to 10,000 frogs per acre), coqui can consume an average of 46,000 prey items per night per acre. This may sound beneficial; however, coqui diets can include native insects, spiders, and snails, while mosquitoes aren't normally on the menu! By removing a large percentage of the insect population, these frogs can indirectly affect native insect-eating birds. Future snake introductions are an important consideration as well. Coqui frogs are potential food for any snake that finds its way to Maui, thereby making it easier for the snake species to survive and thrive.

The wee amphibians were first found on Maui in 1997. Since then, hundreds of credible reports have been filed with MISC. MISC actively works on 12 main population sites on Maui while Molokai and Lanai celebrate being coqui-free. After a year and a half of stepped-up efforts on Maui, one site is now considered coqui-free. Four more



The harm of coqui frogs go beyond their 90- to 100 decibel evening chorus. They can negatively affect the economy, environment and quality of life. In the photo above, MISC field workers Adam Radford and Darrell Aquino survey Maliko Gulch. Photo: MISC

are in a monitor phase—meaning six months has passed since a coqui has been heard. The remaining seven are showing promising results with decreases in numbers of vocalizing males and infested acreage. However, the steep-sided Maliko Gulch will remain a coqui stronghold until adequate funds are available to begin work within the gulch. At this time, residents along the gulch's rim will feel comforted that MISC is removing coqui habitat by day and controlling its population by night.

The success of MISC's efforts depends upon continued funding and assistance. The state and county have provided a considerable amount of financial support, along with the Hawaii Department of Agriculture, which loans MISC large volume sprayers.

You too can help stop the spread of coqui. When purchasing new plants, ask the plant provider if they've recently experienced a coqui

infestation and if the source of their products is a coqui-free site. Be sure to inspect crevices in the leaves and between the pot and the soil, where coqui hide and lay eggs. Allow MISC access to your property to control these and other pests. Remove excessive vegetation that may provide habitat for coqui. Support legislation to continue funding coqui control efforts. Report coqui locations to 573-MISC (6472). Together we can preserve the peace and quiet of Maui County while also protecting our unique natural environments.

• Joylynn Paman, is the public relations and education specialist for the Maui Invasive Species Committee. “Kia'i Moku” (or “Guarding the Island”) is prepared by the Maui Invasive Species Committee to provide information on protecting the island from invasive plants and animals that can threaten the island's environment, economy and quality of life.