

If vigilant, Hawai'i could avoid Guam's big problem with brown tree snake

Kia'i Moku

By Joylynn Paman



When the brown tree snake was introduced accidentally to Guam after the end of World War II, no one predicted the effect this drab, non-descript serpent would have in the decades to follow. In fact, it took years and detailed studies to prove finally what local residents had already figured out: The brown tree snake was devouring Guam's native birds, chickens, cats, dogs, and lizards. Unfortunately, it also was changing the way of life for Guam residents.

The brown tree snake has no natural predators on Guam. It can see well in the dark but also uses chemical sensors to detect prey when needed. A female snake can store sperm, producing viable eggs several years after mating. It can live for months without food and is an adept climber, defying gravity by using small bumps on the wall to gain traction. It is arboreal (tree dwelling), but can shift to feeding on the ground. It is secretive and cryptic, but aggressive when startled or trapped. And it is very good at getting into houses.

The brown tree snake population exploded on Guam.

Power outages and blackouts increased ten-fold over a nine-year period as snakes short-

circuited power lines.

Residents learned the hard way that larger snakes have more venom and that the snakes seemed to be attracted to babies while they slept – in their cribs, and even in parents' beds. Hospitals began to admit bitten infants, with occasional cases of respiratory arrest.

Densities of the brown tree snake continued to rise – up to 48 snakes per acre.

And the forests grew silent as bird life all but disappeared from Guam. Nine of 11 species of native birds, two lizards, and one bat species have gone extinct, unable to fend off this predator of the night.

The brown tree snake is believed to have hitched a ride to Guam on military cargo from New Guinea.

Hawai'i is a primary destination for military cargo from Guam. Between 1981 and 1994, seven brown tree snakes were brought accidentally into O'ahu via cargo shipments and were captured. Many of these were found near or on airport runways.

Heroic efforts are taking place on Guam and O'ahu to keep the snakes out of Hawai'i.

However, with the military buildup on Guam there will be an estimated 500 percent increase in construction activity over the next three years. Most of the cargo flights will route through O'ahu, significantly increasing the chances of brown tree



This 7-foot-long adult brown tree snake was captured on Guam. (CGAPS)

snakes making it to our islands.

Hawai'i has abundant suitable habitat and prey for the brown tree snake. We easily could experience the same level of devastation to our environment and quality of life.

Different agencies on Maui – including the Hawai'i Department of Agriculture, Hawai'i Department of Land and Natural Resources and the Maui Invasive Species Committee – have participated in training for how to quickly and safely respond to snake reports.

Select individuals have gone to Guam for a three-week intensive training program that focuses on how to detect and safely capture brown tree snakes. These skills have proved useful on Maui when occasional snake sightings are reported.

To help prevent the establishment of any snakes in Hawai'i, residents and visitors should understand that snakes are not native to Hawai'i and there are no known populations (with the exception of the small harmless blind snake).

If a snake is encountered, the situation is extremely urgent – call 911 immediately!

If it's safe and possible, kill the snake – and do use extreme caution. If killing the creature is not possible, keep an eye on the snake and call 911 immediately. Do not let it out of your sight.

Because the change was so gradual and the brown tree snake is so cryptic, it took nearly 30 years to identify the culprit on Guam. We now know that we can't afford to wait that long.

Help do your part by spreading the word about the brown tree snake and the importance of reporting any snake sightings. Help keep our islands snake-free!

- "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. Joylynn Paman, is public relations and education specialist with the MISC.