

# Keeping the Serpent at Bay

*A joint program between the defense and agriculture departments aims to keep snakes from escaping Guam*

by Tech. Sgt. Mark Kinkade 📷 photos by Master Sgt. Lance Cheung

**T**romping through the thick underbrush of Guam's northern jungles, Jess Guerrero paused and held up his hand.

"Shhh," he whispered. "Hear that?"

The jungle was quiet. The group following Mr. Guerrero looked curiously at the man.

"Exactly," the Department of Agriculture wildlife specialist said. "It's quiet. The jungle shouldn't be quiet. The birds should be calling. It should be noisy with birds. The snakes..." He let the words trail off.

Dozens of wire mesh snake traps hang at various spots along the Andersen Air Base, Guam, outer

flight line fence. Closer inspection reveals a separate compartment near the top of each trap where a small white mouse sits, out of reach from the snake, gnawing away on grain bars or a large potato.

On either end of the trap is a small narrow opening, large enough for brown tree snakes to enter, but funnel shaped to prevent them from getting out. Each

**Jess Guerrero, a Department of Agriculture wildlife specialist in Guam,** holds a brown tree snake retrieved from one of dozens of snake traps hanging on the Andersen Air Force Base flight line fence. The Air Force and the Agriculture Department are partners in the effort to contain the snakes and prevent accidental migration of the serpents to Hawaii and other Pacific islands.



**Learn more about the snakes**

Take a glimpse at the vital statistics of this venomous and menacing serpent at [www.af.mil/news/airman/0304/serpent.shtml](http://www.af.mil/news/airman/0304/serpent.shtml).

day, Mr. Guerrero checks the traps, and, on most days, he finds at least one snake during his rounds.

He carefully removes the serpent, replaces whatever potatoes or grain bars the mouse may have gobbled, and makes sure the “lure” is content to play its part in attacking Guam’s most troublesome wildlife problem. He stuffs the snakes in a sack and later deposits his haul in a large cage in a USDA warehouse on the base.

This is part of the strategy in Guam’s ongoing war against brown tree snakes. The plan: Contain the snakes on the island. Don’t let them hide in aircraft wheel wells or cargo shipments leaving by ship. Don’t let them get to Hawaii or other Pacific islands.

### One snake, big problems

All it takes is one egg-carrying female snake.

Wildlife experts and herpetologists on Guam worry that one day they’ll get a call that a single brown tree snake slipped through a gauntlet of security checks and made its way to Hawaii via commercial or military aircraft or vessel. Once that happens, they say, the balance of nature could swing wildly out of whack.

“If snakes made it to Hawaii and became established in the ecosystem, it could destroy much of the native wildlife on the island,” said Todd Pitlik, a Department of Agriculture wildlife biologist.

**Captured snakes end up in a wire cage** in a USDA-run warehouse on Andersen. The effort to contain the snakes has reduced the population on the island from a 1980s-high of roughly 10,000 snakes per acre in prime habitat jungle areas to about 40 per acre across the island.



The brown tree snake doesn’t look like it can cause much trouble. About three feet long and greenish-brown in color, the snake makes its home in the trees and underbrush of Guam’s lush jungles. It doesn’t usually attack people. In fact, it prefers to remain quietly in the background.

But it eats. A lot. It eats birds, mice, lizards and just about any snack-size creature hopping around the jungle. It enjoys eating so much it has caused several native lizard species and 10 of the 13 native forest birds to go extinct. It’s also limiting the population of a native fruit bat species.

The snakes are also the stuff of legend on the island. Some people swear they’ve found snakes in their toilets, their homes, even in children’s cradles. While snakes will readily enter homes if they can find an easy entrance, most of those tales are considered urban legends — in fact, most people go years on the island without seeing a brown tree snake, Mr. Pitlik said. But the snakes are responsible for many of Guam’s power outages because they like to crawl inside transformers and on power lines, causing shorts and breakages.

The list of offenses grows every day, explaining why in the roughly 60 years since arriving on Guam — probably in the cargo hold of a ship carrying surplus World War II material from the Solomon Islands — the snake has become public enemy No. 1 for biologists and animal life experts.

“The snake has changed the ecosystem here forever,” Mr. Pitlik said. “The species it has destroyed may never return.”

Experts say the brown tree snake population is about 40 per acre of good forest habitat. Even though evidence indicates the population densities have dropped over the past decade, that’s still a lot of snakes on an island about 35 miles long and eight miles wide.

There are a number of reasons the snake population is so large. Primarily, the snakes have no natural predators on the island, but they also don’t have to compete

for food and space, and face no known diseases or parasites. Combine that with a very hospitable environment, and it’s a natural mix for a rising population, said Daniel Vice, the assistant state director of USDA’s wildlife services in Hawaii, Guam and the Pacific islands.

For years, the Department of Agriculture and the Department of Defense have controlled the snakes. People have tried to kill off the invaders through large snake hunts. But in recent years, the USDA and the Air Force have teamed to contain the snakes on Guam.

“We may never get rid of the snakes,” said Dana Lujan, a game management expert with the agriculture department. “We can try to control them, to keep them from spreading, and then maybe we can reintroduce some of the vanishing wildlife once we have a handle on the snakes.”

### Air assault

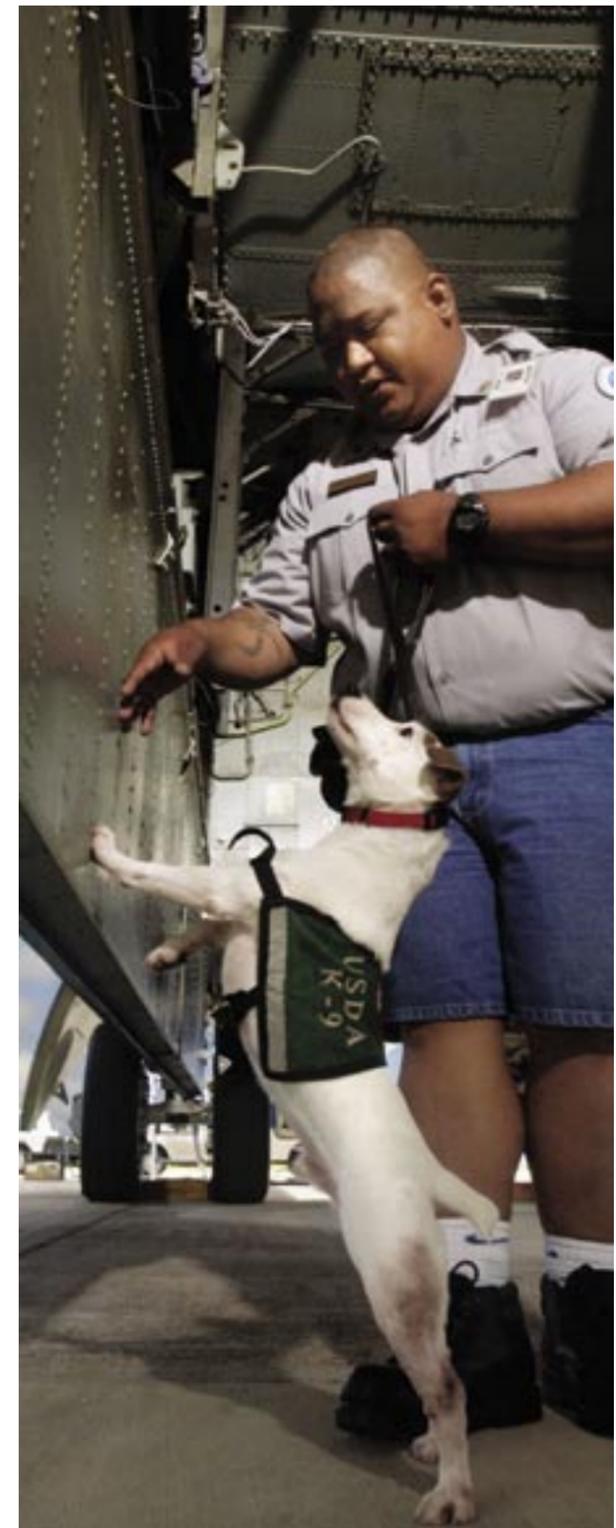
“Containment” doesn’t mean the snakes are left to pillage the jungles unabated. Captured snakes end up dead so they don’t go off and make more snakes. And officials continue to attack the snakes on all fronts. In 2002, for example, the USDA dropped hundreds of dead mice stuffed with acetaminophen from helicopters as part of a research project. The snakes, in theory, were to eat the mice, then slither off and die from painkiller poisoning. While the plan was successful in this limited application, experts are constantly looking for more effective ways to control the snakes.

“It worked to some extent,” Mr. Lujan said. “We know we probably won’t be 100 percent successful with any effort to kill the snakes, but if we took out a few, it had to help.”

The containment effort seems to have had the most success at keeping the snakes on the island. The flight line traps, for example, yield at least a few snakes each day, and some of Guam’s trees are fitted with metal cowlings that prevent the snakes from slithering to the high branches for a baby Mariana crow or egg snack.

On the flight lines and in the harbors, the USDA checks each shipment of Air Force and Navy cargo with Jack Russell terriers, a breed of dog not only adept at sniffing out snakes, but also willing to attack the serpents if they try to slip away.

“This is probably a lifetime effort,” Mr. Pitlik said. “They aren’t going to just go away. The snakes are just part of life on Guam.” ☼



**A USDA inspector leads a Jack Russell terrier through a snake search** of a B-52 Stratofortress at Andersen. Brown tree snakes like to hide in cargo and the wheel wells and other parts of aircraft. All Air Force and Navy cargo traveling through Guam is checked for the slithering stowaways.