BY PENNY LEIGH

Snakes Off the Plane

Terrier noses are protecting Hawaii from a reptile invasion.

The beautiful island of Guam sits midway between Australia and Japan and features lush foliage and lovely coastlines.

If you venture into the jungles, however, you will find that something is missing—bird calls. The silence of the wild areas is not because birds aren't native to the U.S. territory, but because most have been wiped out.

A deadly snake, brought into the country in the 1940s and 1950s, destroyed 10 of the territory's 12 native birds, including a kingfisher found nowhere else in the world. Japan occupied Guam during World War II until it was freed in 1944 by the U.S. Forces. It is believed invasive brown tree snakes rode on military equipment brought from neighboring New Guinea.

With no natural predators and abundant prey, the snakes flourished on the island. While their venom is not too harmful to humans, it is devastating to birds and rodents.

But today, a team of 17 heroes is fighting to prevent the brown tree snake from doing harm to other areas. These unlikely soldiers stand about 12 inches tall and weigh about 12 pounds, but their hunting ability is huge.

Russell Terriers and Parson Russell Terriers work the airports and ports and use their keen noses to locate snakes that might be stowed away in cargo or smuggled out by passengers.

The breeds have a high prey drive, having been developed to hunt fox and rid farms of vermin. The U.S. Department of Agriculture (USDA) trains the dogs to alert to the smell of snakes, and the result has been positive.

"The canine teams are vital in preventing the snakes from leaving the island and potentially becoming established on other islands where there are no snakes," says Jennifer Anderson, training specialist with the USDA National Detector Dog Training Center (NDDTC) in Newnan, Georgia. "They inspect all outgoing commercial cargo, military shipments, and airplanes for hitchhiking snakes."

While the dogs patrol Guam to keep the reptiles from leaving, they work in Hawaii to keep them out of the snake-free state.

"The Hawaii Department of Agriculture has two canine teams deployed on Oahu to search aircraft and cargo arriving in Hawaii from the territory of Guam and other countries where the brown tree snake is established," Anderson

LEFT ©ART WAGER/GETTY IMAGES; INSET: ©AUSSIESNAKES/GETTY IMAGES

says. "A third team is scheduled for training this year. The teams are an essential backup system in ensuring the brown tree snake is not introduced to Hawaii."

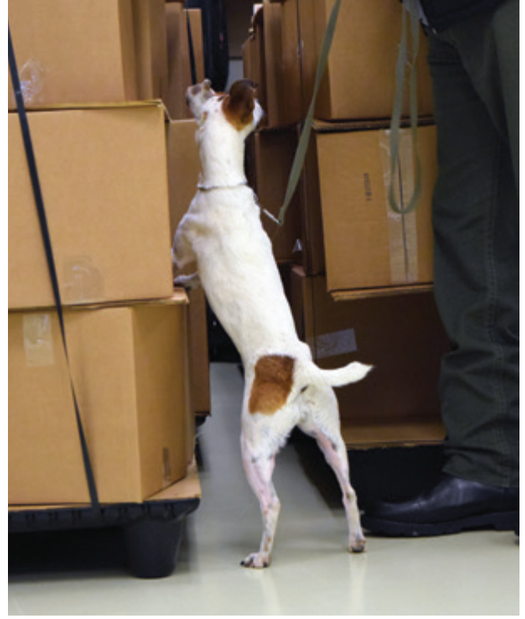
The snakes also are detrimental to reptile populations and infrastructure. "Should brown tree snakes become established in Hawaii, there are estimates up to $1.7 billion dollars in damage per year," says Jonathan K. Ho, acting manager of the Hawaii Department of Agriculture Plant Quarantine Branch.

Another plus to using these terriers is their small size, which enables them to enter most any hiding place.

"They can access small areas in tight quarters in the airplanes and cargo. Handlers will often pick their dogs up to search high areas such as the undercarriage of the airplane," Anderson said. "The dogs learn to scratch if a snake is present while being held up off the ground. It is then the handler's job to find the exact location of the snake and remove it."

The USDA started the snake detection program in the early 1990s. Initial training teaches the dogs to dig or scratch on a box containing a snake. The dogs are rewarded with treats. After the dogs can search several boxes and correctly indicate the box containing the snake, the snake is moved into more challenging searches.

The dogs learn to scratch within proximity of the reptile, without coming into direct contact with the snake.



No slithering out of this! Terriers in training to find snakes no matter where they are hiding.

"Because the programs are on islands where there are no native snakes, the canines are trained to find any species of snake," Anderson says.

Since they cannot bring the brown tree snake into the United States, the training center uses various types, such as rat snakes or pythons, to train their recruits.

The USDA obtains dogs for its snake detection and other programs from shelters, rescues, and breeders. When the dogs arrive at the training center, they are evaluated for key traits.

"One of our training specialists will evaluate the dog for food drive and sociability. The trainer then will bring the dog up to the airport in Atlanta to assess how the dog reacts to various parts of the work environment," USDA Training Specialist Jodi Daugherty says. "We want to see how quickly the dog can adapt to the environment, since most dogs have never seen a luggage carousel or a forklift. The ideal candidate remains confident throughout the evaluation, actively seek out treats no matter what distractions are present, and if startled by something novel, quickly recovers and investigates the novel item."

After passing the temperament evaluation,

JENNIFER ANDERSON

Protecting Ports of Entry: Millie and Amezquita

the dogs must pass a medical evaluation, checking for soundness of hips, spine, and patellas, blood work showing good internal function, and no signs of chronic medical issues. After passing the medical tests, candidates are accepted into the program and begin training, first at the Georgia center followed by training with their future handlers on their respective islands.

BEAGLES TO THE RESCUE

In addition to the snake detection program, the NDDTC prepares dogs for a variety of roles that protect the country's natural resources.

The USDA established the center in Orlando, Florida, in 1997 to conduct agriculture detection canine-team training for federal, state, and international agencies. The NDDTC moved to its current 17-acre-campus in Georgia in 2009.

It is best known for the Beagle Brigade that it trains for its largest client—U.S. Customs and Border Patrol.

"We are responsible for preventing the entrance of prohibited fruits, vegetables, plant material, and meat that can introduce insects and diseases into the United States," says Kathleen Amezquita, U.S. Customs and Border Patrol K-9 Agriculture Specialist. "This would have a negative impact on America's agriculture. It could cost the U.S. billions of dollars in eradication, crop yield, animal effects, and economic trade."

Amezquita and her Beagle-mix partner, Millie, work at the Miami International Airport. Millie was an abandoned dog that a rescue group saved. Then a USDA scout spotted her and put her to work in the Brigade. Already the little dog has shown her talents.

A large pot of clay arriving in Miami from Cuba seemed harmless until Millie alerted. Some digging revealed heads of goats, chickens, and turtles, most likely sent for a religious ceremony.

"Millie is a high-energy dog, and that's perfect because she is always ready to work," Amezquita says. "She is also stubborn; she won't give up until she finds any odor she is trained to detect."

The NDDTC trains 45 to 60 canine teams a year and is always looking for candidates as demand for their dogs continues to grow.

"The characteristics that we look for include high food drive, great sense of smell, desire to hunt down desired odor and track that odor to the source, friendly around people, and confident in busy and novel environments," Daugherty says. "Beagles and Labrador Retrievers, and mixes that are predominantly one of those breeds, are likely to have all the characteristics needed."

Millie certainly fits the profile of the ideal detection dog, Amezquita says. "She is super smart. She is friendly but not too friendly, meaning when she is in work mode she won't get distracted by passengers trying to pet her."

Best of all, Millie is always ready to go.

"Even when she is off-duty, she likes to use her bed as a trampoline and jump a lot. She is always jumping or running like a 'crazy puppy' and, in fact, that's her nickname." **FD**

The NDDTC is seeking candidates for its programs and invites interested breeders to contact the staff at 770-254-2523.

You can keep up with the NDDTC via its Facebook page.

COURTESY US CUSTOMS & BORDER PATROL

Penny Leigh is the project manager of the AKC Detection Dog Task Force.