

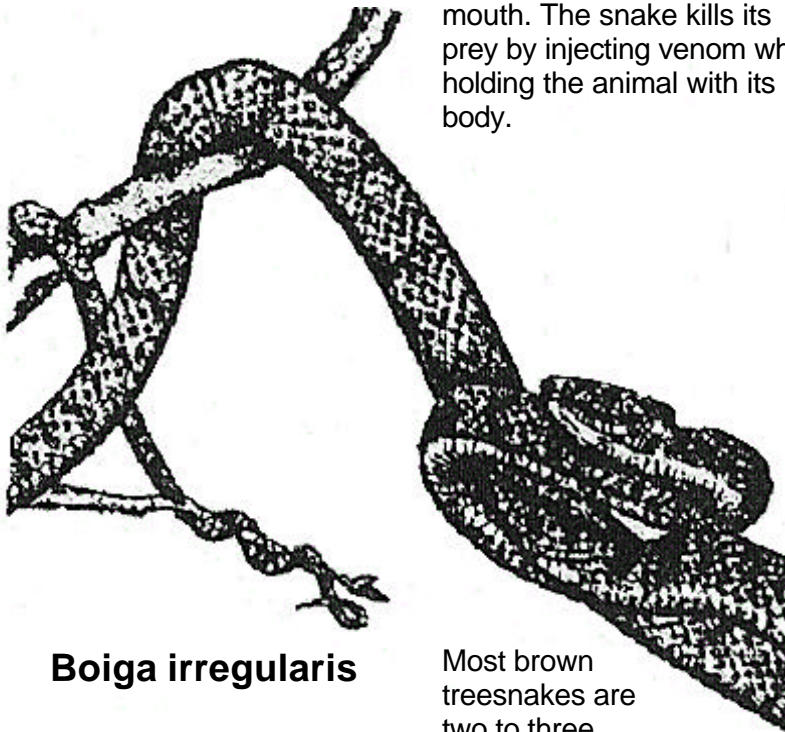
LIVING with WILDLIFE

Brown Treesnake

Where in the world?

Find Guam on a globe or world map. What other islands are found in that region?

Now find the countries where the brown tree snake is a native snake. How close are these countries to Guam?



Boiga irregularis

IDENTIFICATION

The color of brown treesnakes varies from olive brown to yellow brown and shades of green and gray. They may have faint yellow and brown banding. The snakes have a broad, flat head with large yellow eyes.

Brown treesnakes have mild **venom** which trickles down grooved teeth at the rear of the mouth. The snake kills its prey by injecting venom while holding the animal with its body.

Most brown treesnakes are two to three feet in length. In rare cases, adults can reach 11 feet and weigh about 5 pounds.

HABITAT

The brown treesnake is **native** to Indonesia, New

Guinea, Solomon Islands and Northern Australia. They now are also found in every area on Guam.

HABITS

Brown treesnakes live on the ground and in the trees. They are **predators** that eat birds, lizards, small mammals, poultry, eggs and pets. They have a keen sense of smell. They are most active at night (nocturnal) and are rarely seen during the day. Any site that provides protection from bright light and high temperatures may serve as a daytime retreat.

Brown treesnakes mate infrequently, but the females are able to lay fertile eggs for as long as six months after mating. She lays 4 to 12 eggs per **clutch** in caves, hollows of trees or other damp places where the eggs are protected from drying. She may lay two clutches a year. The female lays her eggs then abandons them. The young snakes hatch in about 90 days and are about 15 inches in length. The snakes grow to about 3 feet during the first year of life. They reproduce when they are about 3 years old.

Brown treesnakes were unintentionally brought to Guam in cargo.

Living in Harmony, Living in Conflict

Living in harmony . . .

on their native island, brown treesnakes and humans live in harmony.

- Brown treesnakes are an important predator of small mammals
- Brown treesnakes help control rodent and bird populations



Living in conflict . . .

- When introduced to a new area, brown treesnakes can threaten or cause the **extinction** of native bird and mammal populations
- Brown treesnakes kill endangered or **threatened** mammals and birds
- Brown treesnakes can bite humans
- Brown treesnakes can cause electrical outages when they climb electrical equipment
- In Australia, brown treesnakes raid outdoor bird cages

Preventing Damage Done by Brown Treesnakes

One of the biggest fears with brown treesnakes is that they will spread from Guam to other places, like Hawaii, and destroy native wildlife populations. Stopping the spread of the snake is a top priority. Some techniques used to prevent snakes from crawling into shipping areas include:

- using traps around port areas to catch snakes
- using a spotlight at night to search for and capture snakes
- using dogs, like **Jack Russell terriers**, to sniff out any snake that may have crawled into cargo
- building snake-proof fences around airports and docks

- removing vegetation and small mammals that might serve as habitat and prey for the snakes
- educating people in the cargo and transportation industry about the problems the snakes cause.

Research currently being conducted at the National Wildlife Research Center in Colorado involves developing new ways to control snake populations including:

- possible baits and **attractants** that would make it easier to trap snakes
- possible **biological controls** like diseases or parasites to reduce snake populations



- control tools for snakes like toxicants, repellants and contraceptives.

Brown treesnakes can hold 3/4 of their body length off of the ground to reach places to climb.

Economics of Damage

Brown treesnakes have wiped out most of the native forest birds of Guam. Nine species of birds have disappeared from the island and three other species have been reduced to very low numbers. The brown treesnake has also eliminated several species of native lizards and is a threat to the native bats of Guam.

Snakes crawling on electrical lines frequently cause power outages and damage to electrical equipment. Many people seek medical treatment for snake bites each year with more than 80% of the snake bites occurring at night while people are asleep. In some parts of Guam, it is estimated there are 12,000 brown tree snakes per square mile.

Legends and Folklore

There are many legends about snakes. Adam, Eve and the serpent in the garden of Eden is a well known story. The Aztec's creation story is about "Coatlique" or the "Lady of the Skirt of Snakes."

Quetzalcoatl, the Aztec Serpent God, was the king of the City of the Gods.



According to Cherokee legend, in ancient times there lived some very large snakes. They had two horns on their heads and they had the magical power of attraction. To see one of these snakes was always a bad omen. Whoever tried to escape from one always ran to-

ward it and was eaten by the snake.

Japan has its legend of the serpent and the Sea Queen and a young warrior named Toda who slays the serpent for the queen.

Many of these legends have given snakes a bad

reputation that is undeserved.

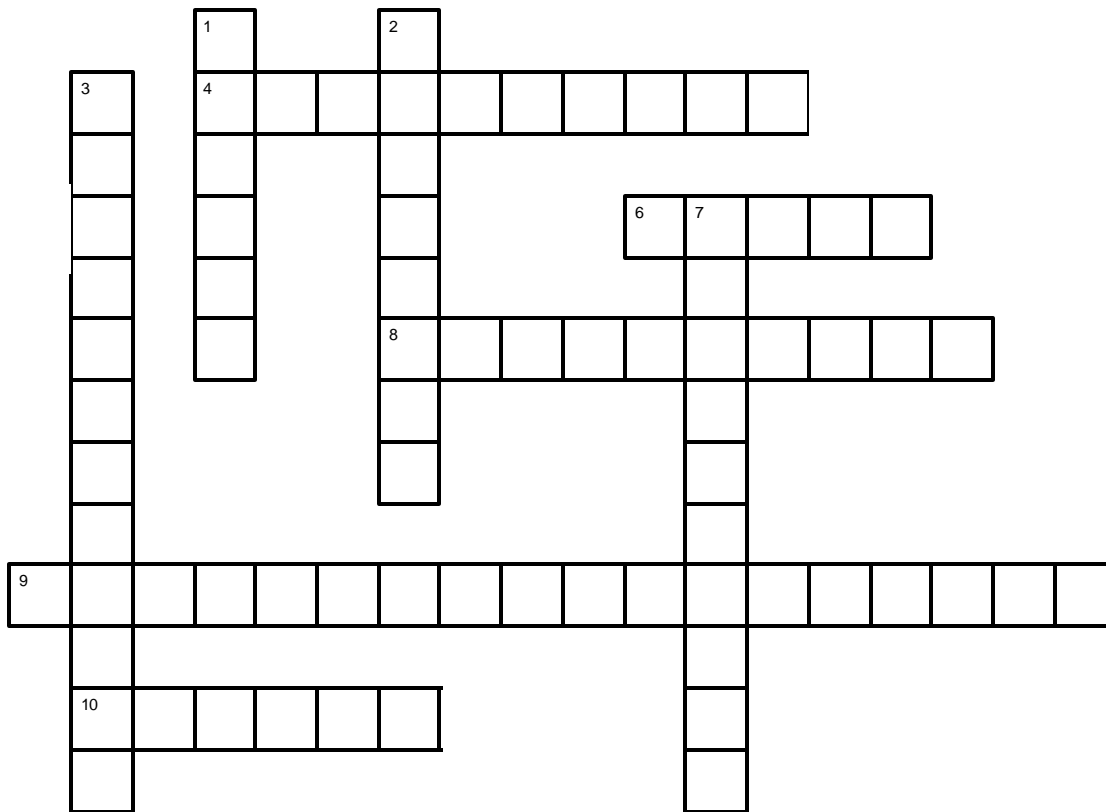
Your turn . . .

Creative Writing:

- ◆ Write a news story about brown treesnakes that gives a positive view of this animal.
- ◆ Write a legend about one of the extinct bird species on Guam that brown treesnakes caused to become extinct.
- ◆ Research and write a story on how to protect yourself when you see a snake.
- ◆ Write a story about a snake and a mouse from the mouse's point of view.
- ◆ Next write a story about a snake and a mouse from the snake's point of view.
- ◆ Write a story about a snake invading an island where it has no predators.

ACROSS: 4. attractant, 6. venom, 8. threatened, 9. Jack Russell terrier, 10. clutch
DOWN: 1. native, 2. predator, 3. biological control, 7. extinction

CROSSWORD REVIEW



ACROSS

4. Something that attracts animals
6. Poison produced by some snakes
8. The first step in the extinction of a species population is termed _____
9. The breed of dog used to sniff out brown treesnakes (3 words)
10. Group of eggs laid by snakes is called a _____

DOWN

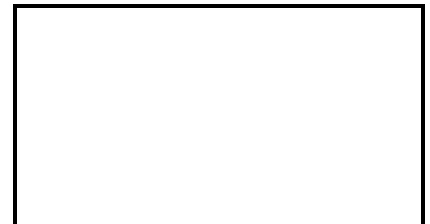
1. A plant or animal that originated in an area is considered _____
2. An animal that eats another animal is called a _____
3. Using disease, parasites or natural predators to control pest animals is called _____ (2 words)
7. When a species of plant or animal die outs, the result is _____

Additional Resources

Wildlife Activity Book and
1998 Wildlife Issue of the
Colorado Reader
Colorado Foundation for
Agriculture
P.O. Box 10
Livermore, CO 80536

National Biological Information
Infrastructure
Brown Treesnake Online:
[Http://www.nbio.gov/
browntreesnake](http://www.nbio.gov/browntreesnake)

U.S. Geological Survey
Brown Treesnake Information:
[Http://www.pwrc.nbs.gov/btree.
htm](http://www.pwrc.nbs.gov/btree.htm)



This activity sheet has been developed by USDA Wildlife Services. For more information about brown treesnakes contact your state's Wildlife Services office or USDA Wildlife Services at 301 734-7921.