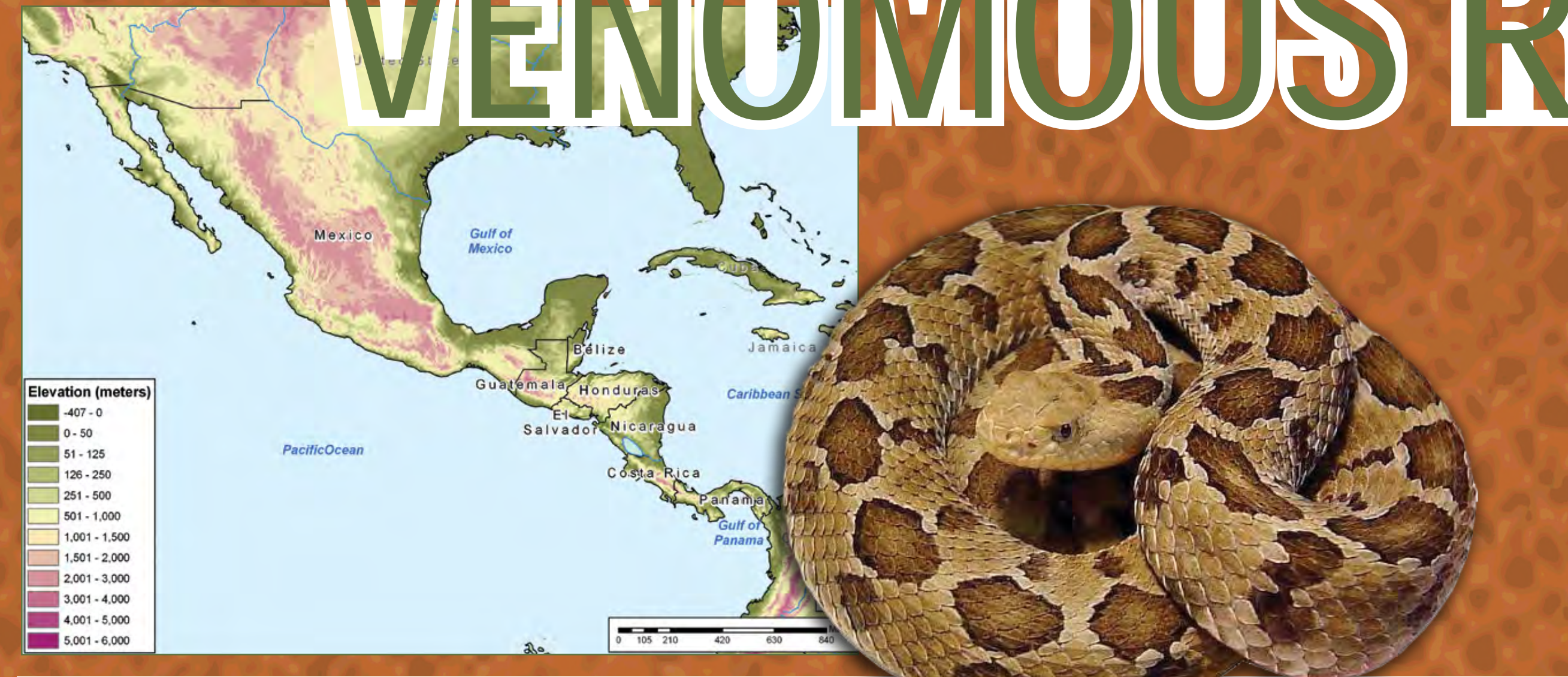


VENOMOUS REPTILES OF CENTRAL AMERICA



Copperheads and Cantils

SPECIES	GUATEMALA	EL SALVADOR	HONDURAS	NICARAGUA	COSTA RICA	PANAMA	ROCKY WOODED CANYONS	
							PRESENT	ABSENT
<i>Atractaspis reticulata</i>	X	X	X	X	X	X	X	X
<i>Atractaspis lateralis</i>	X	X	X	X	X	X	X	X
<i>Atractaspis reticulata</i>	X	X	X	X	X	X	X	X

- DISTRIBUTION AND HABITATS**
- Active mainly during dusk and nighttime hours.
 - When encountered during the daytime, these snakes are usually basking in the sun or coiled under vegetation.
 - Live close to water sources and are often found swimming.
 - When cornered or provoked, will thrash tail, display an open mouth, and strike repeatedly.

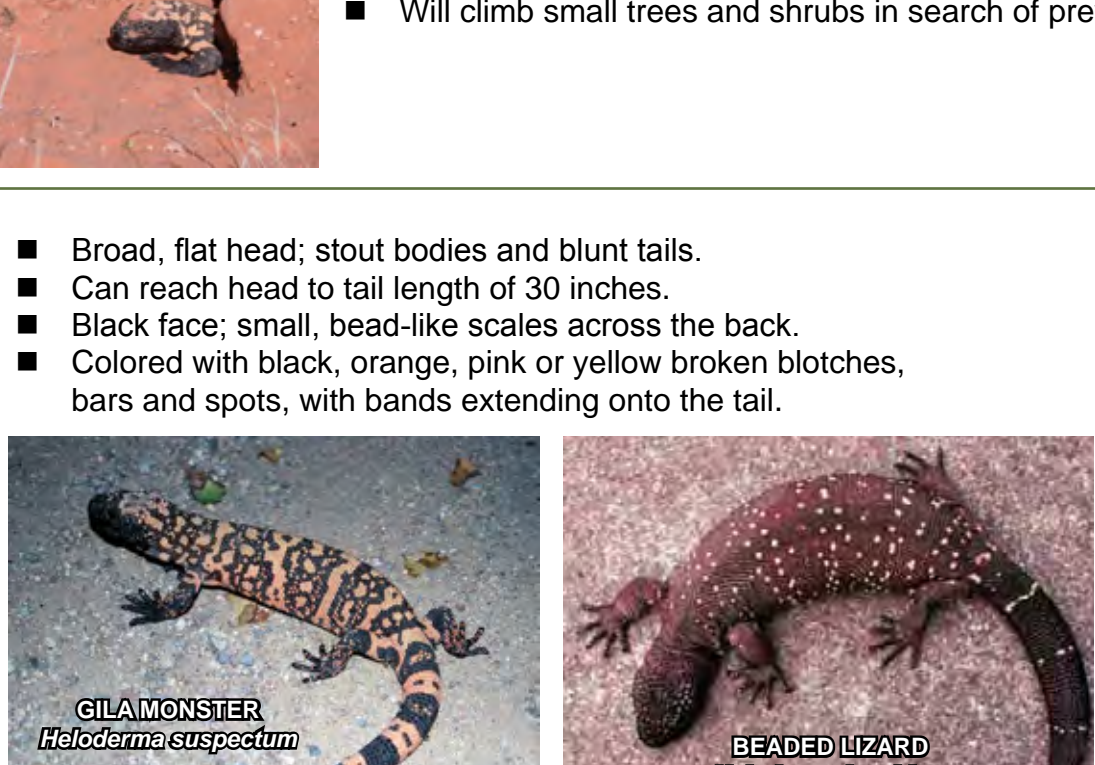


- IDENTIFICATION AND APPEARANCE**
- Copperheads average 20-30 inches in length; cantils can reach 40 inches in length.
 - Copperheads have straight edged, scaly, brown or chestnut-colored cross bands with dark borders along the back.
 - Cantils are characterized by black and white bands with light stripes on the sides of the head.
- BITES AND VENOM**
- Copperheads and cantils have hemotoxic venom - it attacks blood cells and also destroys both muscles and blood vessels.
 - Venom causes severe swelling, pain, and discoloration at the site of the snakebite.
 - The venom of Central American cantils is more dangerous than their North American relatives, and these snakes are feared by the locals due to the amount of tissue damage associated with their bites.

Beaded Lizards

SPECIES	GUATEMALA	EL SALVADOR	HONDURAS	NICARAGUA	COSTA RICA	PANAMA	ROCKY HILLSIDES	
							PRESENT	ABSENT
<i>Phyllorhina maculata</i>	X	X	X	X	X	X	X	X
<i>Phyllorhina maculata</i>	X	X	X	X	X	X	X	X

- DISTRIBUTION AND HABITATS**
- Active at dawn, dusk, and on overcast days.
 - Shelter in abandoned animal burrows.
 - May appear sluggish and tame, but can turn very quickly to bite.
 - Aggressive only when cornered or an attempt is made to capture them.
 - Will climb small trees and shrubs in search of prey.



- IDENTIFICATION AND APPEARANCE**
- Broad, flat head; stout bodies and blunt tails.
 - Can reach head to tail length of 30 inches.
 - Black face; small, bead-like scales across the back.
 - Colored with black, orange, pink or yellow broken blotches, bars and spots, with bands extending onto the tail.
- BITES AND VENOM**
- Venom glands are located in the lower jaw; at the base of each tooth there is a groove and pit for venom delivery.
 - Venom is delivered by a chewing motion; the lizard's jaws are strong and their bite is not easily broken.
 - Bites are rarely fatal, but are extremely painful and may result in severe lacerations.
 - Severe envenomations may result in swelling, edema, bleeding, nausea and vomiting.

Snakebite Prevention

- Venomous snakes are found throughout Central America. Assume that any snake you encounter is venomous. Leave snakes alone. Many people are bitten because they try to kill a snake or get a closer look at it.
- As tactical situations permit, avoid high risk snake habitats. Locate bivouacs away from piles of brush, rocks, or other debris. Swim only at approved beaches.
- Get rid of things that attract snakes. Remove wood piles, rock piles, construction debris, dumps, dense undergrowth, and similar shelter for snakes. Store supplies elevated off the ground. Practice good sanitation. Control rodents.
- Practice "SNAKE-SMART" behavior. Shake out bedding and clothes before use. Sleep off the ground, if possible. Wear thick leather boots for the best foot protection. Avoid walking alone. Keep to clear paths.
- Be alert in areas where snakes may be hiding or sunning. Don't reach or place parts of body in places you cannot see into directly, especially high grass or among rocks. Keep hands off of rock ledges. Never sit on or step over large rocks or logs without first checking to see what is on the other side.
- In the unit compound, keep doors, windows, and vents closed whenever possible. Block holes in foundations, crawl spaces, ceilings, and roofs.
- Do not pick up a "dead" snake; it may only be injured, stunned or playing dead. Even a recently killed snake can bite by reflex action. ONLY IF NECESSARY, use a stick, or shovel and place dead snake in a hard-sided container. Never handle the head when transporting a dead snake that needs to be identified.

Lancehead, Horned, Montane, Jumping, and Palm-Pitvipers

SPECIES	GUATEMALA	EL SALVADOR	HONDURAS	NICARAGUA	COSTA RICA	PANAMA	RESTAURANT-OUTLETS	
							PRESENT	ABSENT
<i>Lancehead pitviper</i>	X	X	X	X	X	X	X	X
<i>Horned pitviper</i>	X	X	X	X	X	X	X	X
<i>Montane pitviper</i>	X	X	X	X	X	X	X	X
<i>Jumping pitviper</i>	X	X	X	X	X	X	X	X
<i>Palm-pitviper</i>	X	X	X	X	X	X	X	X

- DISTRIBUTION AND HABITATS**
- Active during the daytime and nighttime hours.
 - Palm-pitvipers are often found coiled in shrubs and branches of large trees.
 - Many species strike quickly if stepped on or threatened.
 - Most snakebites are inflicted on the legs of farmers, plantation workers, herdsmen, and hunters.
 - Development in jungle areas has increased the number of snakebites.
 - Some species are frequently found beneath large logs and boards, old sheets of tin, or under piles of dead limbs, especially along the edges of man-made or natural forest clearings.

- IDENTIFICATION AND APPEARANCE**
- Broad, flat, triangular head that is distinct from the narrow neck.
 - Cylindrical body with a short to medium-length tail.
 - Ground-dwelling species range from 3 to 5 feet in length, some tree-dwellers are only 1 1/2 feet long.
 - The color of ground-dwelling snakes is variable: from gray to olive, brown, or reddish, with dark triangles edged with light scales; many have yellow throats and a dark streak from the eye to the mouth.
 - The color of tree-dwelling palm-pitvipers varies between golden-yellow, green, olive green, brown, and grayish-brown, often with blotches or cross bands in various colors.
 - The eyelash palm-pitviper and horned pitvipers have spine-like scales above their eyes.



- BITES AND VENOM**
- Mild to lethal hemotoxic venom - affects the circulatory system by destroying blood cells, skin tissues and causing internal hemorrhaging.
 - Immediately after venom is injected, pain is intense.
 - Other symptoms can include fall in blood pressure, weakness, rapid pulse, nausea, shortness of breath, vomiting, and kidney failure.
 - Death of skin, cartilage, and muscle tissues can occur around the bite site.
 - Lancehead pitvipers are responsible for most of the snakebite deaths in Central America.
 - Throughout its range, the tarpetop is considered one of the most dangerous snakes due to its large size, potent venom, and habit of living close to human dwellings.
 - Montane pitvipers are considered the least dangerous of the venomous snakes, due to their small size, mild venom, and small fangs.

Rattlesnakes

SPECIES	GUATEMALA	EL SALVADOR	HONDURAS	NICARAGUA	COSTA RICA	PANAMA	COASTAL WOODLANDS	
							PRESENT	ABSENT
<i>Crotalus durissus</i>	X	X	X	X	X	X	X	X
<i>Crotalus durissus</i>	X	X	X	X	X	X	X	X
<i>Crotalus durissus</i>	X	X	X	X	X	X	X	X
<i>Crotalus durissus</i>	X	X	X	X	X	X	X	X
<i>Crotalus durissus</i>	X	X	X	X	X	X	X	X

- DISTRIBUTION AND HABITATS**
- Active mainly at night and during rainy, overcast days; on the move at sunset.
 - Sit and wait predators: remain coiled next to a regularly used animal path, and wait silently for prey to come within striking distance.
 - Tail rattle is shaken vigorously to warn off intruders.
 - Common in areas with abundant rodents; often found near farms and towns.
 - Some species are relatively docile, while others are quite aggressive when approached.

- IDENTIFICATION AND APPEARANCE**
- Can almost always be identified by the jointed rattle at the tip of the tail.
 - Stout bodies with flattened triangular heads.
 - Different species vary widely in size: some barely reach 2 feet in length while others can grow to 8 feet.
 - Background color often matches environment: shades of brown, gray, green, red, pink or yellow.
 - Most species have dark pattern colors in the shape of ovals, squares, or diamonds along the back, and a dark streak running from each eye to the angle of the jaw.
 - White or cream-colored belly.

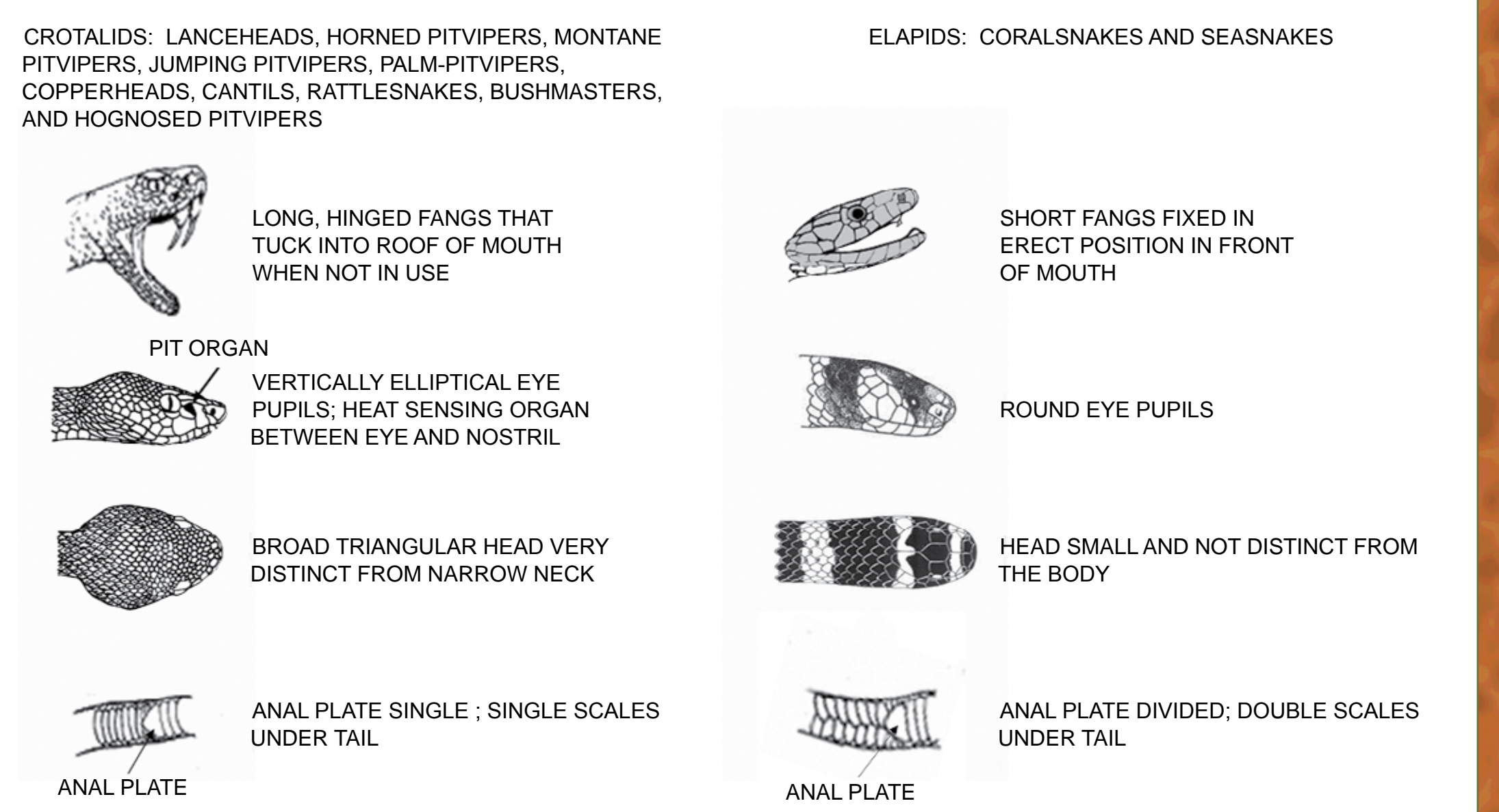


- BITES AND VENOM**
- Central American rattlesnakes have hemotoxic venoms - it attacks blood cells and also destroys both muscles and blood vessels.
 - Immediately after venom is injected, pain is intense.
 - Other symptoms can include fall in blood pressure, weakness, rapid pulse, nausea, shortness of breath, vomiting, and kidney failure.
 - Death of skin, cartilage, and muscle tissues can occur around the bite site.
 - Most rattlesnakes have relatively weak venoms when compared to the region's other pitvipers and coral snakes.
 - Large rattlesnake species are especially dangerous; they are widely distributed, can strike about one-third to one-half their body length, inflict deep puncture wounds, and inject large amounts of venom.

Snakebite First Aid

- Avoid Panic!
 - Move victim out of danger and place at rest.
 - Reassure and calm the victim.
 - Remove constrictive items, such as jewelry, watches, rings, or shoes.
 - Lightly immobilize injured part of body and place in comfortable position.
 - Record the appearance and progress of symptoms in as much detail as practicable.
 - Transport victim to medical facility as soon as possible.
 - Safely try to note the appearance of the snake (shape of head, body color, shape and length, etc).
- Venomous snakebites cannot be treated in the field. Don't waste valuable time trying. If bitten, always seek medical attention immediately. In a medical facility equipped to maintain stable body functions and with antivenin, no one need die or suffer permanent disfigurement/disability from a snakebite. Antivenins are available to treat the symptoms of the venoms of many of the most dangerous Central American venomous snakes.

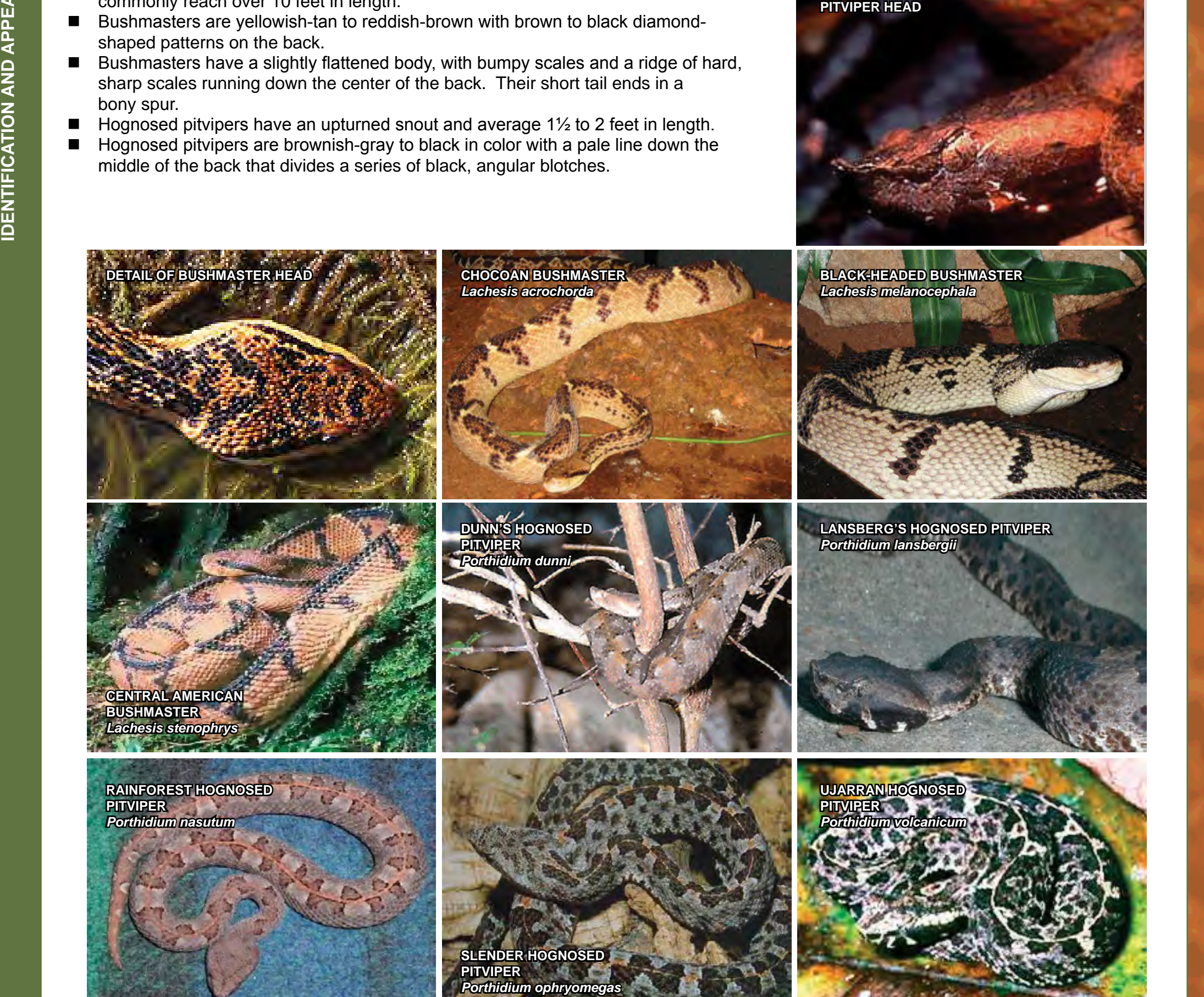
Venomous Snake Identification



Bushmasters and Hognosed Pitvipers

SPECIES	GUATEMALA	EL SALVADOR	HONDURAS	NICARAGUA	COSTA RICA	PANAMA	FORESTED HIGHLANDS	
							PRESENT	ABSENT
<i>Bushmaster</i>	X	X	X	X	X	X	X	X
<i>Hognosed pitviper</i>	X	X	X	X	X	X	X	X

- DISTRIBUTION AND HABITATS**
- Active mainly at night.
 - Hognosed pitvipers are not aggressive but will bite quickly if threatened or disturbed.
 - Hognosed pitvipers are responsible for many of the snakebites inflicted on farm workers.
 - When agitated, bushmasters produce a warning sound by shaking their tail tip against foliage.
 - Bushmasters are not frequently encountered, but rain forest development has increased snakebites and fatalities.



- BITES AND VENOM**
- Bushmasters and hognosed pitvipers have hemotoxic venom - it attacks blood cells and also destroys both muscles and blood vessels.
 - Bushmaster venom is relatively weak but it is produced in great quantities and can kill by causing internal bleeding.
 - Bushmasters are extremely dangerous due to the large amount of venom injected deeply by long fangs.
 - The venom of hognosed pitvipers typically causes severe pain, swelling, and permanent stiffness around the bite site.
 - Fatalities from hognosed pitvipers are rare, but serious bites cause tissue death around the bite site and swelling extending beyond the bitten limb.