

Dangerous Animals



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Animals rarely are as threatening to the survivor as the rest of the environment. Common sense tells the survivor to avoid encounters with lions, bears, and other large or dangerous animals. You should also avoid large grazing animals with horns, hooves, and great weight. Your actions may prevent unexpected meetings. Move carefully through their environment. Do not attract large predators by leaving food lying around your camp. Carefully survey the scene before entering water or forests.

Smaller animals actually present more of a threat to the survivor than large animals. To compensate for their size, nature has given many small animals weapons such as fangs and stingers to defend themselves. Each year, a few people are bitten by sharks, mauled by alligators, and attacked by bears. Most of these incidents were in some way the victim's fault. However, each year more victims die from bites by relatively small venomous snakes than by large dangerous animals. Even more victims die from allergic reactions to bee stings. For this reason, we will pay more attention to smaller and potentially more dangerous creatures. These are the animals you are more likely to meet as you unwittingly move into their habitat, or they slip into your environment unnoticed.

Keeping a level head and an awareness of your surroundings will keep you alive if you use a few simple safety procedures. Do not let curiosity and carelessness kill or injure you.

Insects And Arachnids

You recognize and identify insects, except centipedes and millipedes, by their six legs while arachnids have eight. All these small creatures become pests when they bite, sting, or irritate you.

Although their venom can be quite painful, bee, wasp, and hornet stings rarely kill a survivor unless he is allergic to that particular toxin. Even the most dangerous spiders rarely kill, and the effects of tick-borne diseases are very slow-acting. However, in all cases, avoidance is the best defense. In environments known to have spiders and scorpions, check your footwear and clothing every morning. Also check your bedding and shelter for them. Use care when turning over rocks and logs. See Appendix D for examples of dangerous insects and arachnids.

Scorpions

You find scorpions (*Buthotus* species) in deserts, jungles, and forests of tropical, subtropical, and warm temperate areas of the world. They are mostly nocturnal in habit. You can find desert scorpions from below sea level in Death Valley to elevations as high as 3,600 meters in the Andes. Typically brown or black in moist areas, they may be yellow or light green in the desert. Their average size is about 2.5 centimeters. However, there are 20-centimeter giants in the jungles of Central America, New Guinea, and southern Africa. Fatalities from scorpion stings are rare, but they can occur in children, the elderly, and ill persons. Scorpions resemble small lobsters with raised, jointed tails bearing a stinger in the tip. Nature mimics the scorpions with whip scorpions or vinegar-rooms. These are harmless and have a tail like a wire or whip, rather than the jointed tail and stinger of true scorpions.

Spiders

You recognize the brown recluse or fiddleback spider of North America (*Loxosceles reclusa*) by a prominent violin-shaped light spot on the back of its body. As its name suggests, this spider likes to hide in dark places. Though rarely fatal, its bite causes excessive tissue degeneration around the wound and can even lead to amputation of the digits if left untreated.

You find members of the widow family (*Latrodectus* species) worldwide, though the black widow of North America is perhaps the most well-known. Found in warmer areas of the world, the widows are small, dark spiders with often hourglass-shaped white, red, or orange spots on their abdomens.

Funnelwebs (*Atrax* species) are large, gray or brown Australian spiders. Chunky, with short legs, they are able to move easily up and down the cone-shaped webs from which they get their name. The local populace considers them deadly. Avoid them as they move about, usually at night, in search of prey. Symptoms of their bite are similar to those of the widow's--severe pain accompanied by sweating and shivering, weakness, and disabling episodes that can last a week.

Tarantulas are large, hairy spiders (*Theraphosidae* and *Lycosa* species) best known because they are often sold in pet stores. There is one species in Europe, but most come from tropical America. Some South American species do inject a dangerous toxin, but most simply produce a painful bite. Some tarantulas can be as large as a dinner plate. They all have large fangs for capturing food such as birds, mice, and lizards. If bitten by a tarantula, pain and bleeding are certain, and infection is likely.

Centipedes and Millipedes

Centipedes and millipedes are mostly small and harmless, although some tropical and desert species may reach 25 centimeters. A few varieties of centipedes have a poisonous bite, but infection is the greatest danger, as their sharp claws dig in and puncture the skin. To prevent skin punctures, brush them off in the direction they are traveling, if you find them crawling on your skin.

Bees, Wasps, and Hornets

We are all familiar with bees, wasps, and hornets. They come in many varieties and have a wide diversity of habits and habitats. You recognize bees by their hairy and usually thick body, while the wasps, hornets, and yellow jackets have more slender, nearly hairless, bodies. Some bees, such as honeybees, live in colonies. They may be either domesticated or living wild in caves or hollow trees. You may find other bees, such as carpenter bees, in individual nest holes in wood, or in the ground, like bumblebees. The main danger from bees is their barbed stinger located on their abdomens. When the bee stings you, it rips its stinger out of its abdomen along with the venom sac, and the bee dies.

Except for killer bees, most bees tend to be more docile than wasps, hornets, and yellow jackets that have smooth stingers and are capable of repeated attacks. Avoidance is the best tactic for self-protection. Watch out for flowers or fruit where bees may be feeding. Be careful of meat-eating yellow jackets when cleaning fish or game. The average person has a relatively minor and temporary reaction to bee stings and recovers in a couple of hours when the pain and headache go away. Those who are allergic to bee venom have severe reactions including anaphylactic shock, coma, and death. If antihistamine medicine is not available and you cannot find a substitute, an allergy sufferer in a survival situation is in grave danger.

Ticks

Ticks are common in the tropics and temperate regions. They are familiar to most of us. Ticks are small round arachnids with eight legs and can have either a soft or hard body. Ticks require a blood host to survive and reproduce. This makes them dangerous because they spread diseases like Lyme disease, Rocky Mountain spotted fever, encephalitis, and others that can ultimately be disabling or fatal. There is little you can do to treat these diseases once contracted, but time is your ally since they are slow-acting ailments. According to most authorities, it takes at least 6 hours of attachment to the host for the tick to transmit the disease organisms. Thus, you have time to thoroughly inspect your body for their presence. Beware of ticks when passing through the thick vegetation they cling to, when cleaning host animals for food, and when gathering natural materials to construct a shelter. Always use insect repellents, if possible.

Leeches

Leeches are blood-sucking creatures with a wormlike appearance. You find them in the tropics and in temperate zones. You will certainly encounter them when swimming in infested waters or making expedient water crossings. You can find them when passing through swampy, tropical vegetation and bogs. You can also find them while cleaning food animals, such as turtles, found in fresh water. Leeches can crawl into small openings; therefore, avoid camping in their habitats when possible. Keep your trousers tucked in your boots. Check yourself frequently for leeches. Swallowed or eaten, leeches can be a great hazard. It is therefore essential to treat water from questionable sources by boiling or using chemical water treatments. Survivors have developed severe infections from wounds inside the throat or nose when sores from swallowed leeches became infected.

Bats

Despite the legends, bats (*Desmodus* species) are a relatively small hazard to the survivor. There are many bat varieties worldwide, but you find the true vampire bats only in Central and South America. They are small, agile fliers that land on their sleeping victims, mostly cows and horses, to lap a blood meal after biting their victim. Their saliva contains an anticoagulant that keeps the blood slowly flowing while they feed. Only a small percentage of these bats actually carry rabies; however, avoid any sick or injured bat. They can carry other diseases and infections and will bite readily when handled. Taking shelter in a cave occupied by bats, however, presents the much greater hazard of inhaling powdered bat dung, or guano. Bat dung carries many organisms that can cause diseases. Eating thoroughly cooked flying foxes or other bats presents no danger from rabies and other diseases, but again, the emphasis is on thorough cooking.

Poisonous Snakes

There are no infallible rules for expedient identification of poisonous snakes in the field, because the guidelines all require close observation or manipulation of the snake's body. The best strategy is to leave all snakes alone. Where snakes are plentiful and poisonous species are present, the risk of their bites negates their food value. Apply the following safety rules when traveling in areas where there are poisonous snakes:

- ▶ Walk carefully and watch where you step. Step onto logs rather than over them before looking and moving on.
- ▶ Look closely when picking fruit or moving around water.
- ▶ Do not tease, molest, or harass snakes. Snakes cannot close their eyes. Therefore, you cannot tell if they are asleep. Some snakes, such as mambas, cobras, and bushmasters, will attack aggressively when cornered or guarding a nest.
- ▶ Use sticks to turn logs and rocks.
- ▶ Wear proper footgear, particularly at night.
- ▶ Carefully check bedding, shelter, and clothing.
- ▶ Be calm when you encounter serpents. Snakes cannot hear and you can occasionally surprise them when they are sleeping or sunning. Normally, they will flee if given the opportunity.
- ▶ Use extreme care if you must kill snakes for food or safety. Although it is not common, warm, sleeping human bodies occasionally attract snakes.

Ways To Avoid Snakebite

Snakes are widely distributed. They are found in all tropical, subtropical, and most temperate regions. Some species of snakes have specialized glands that contain a toxic venom and long hollow fangs to inject their venom. Although venomous snakes use their venom to secure food, they also use it for self-defense. Human accidents occur when you don't see or hear the snake, when you step on them, or when you walk too close to them. Follow these simple rules to reduce the chance of accidental snakebite:

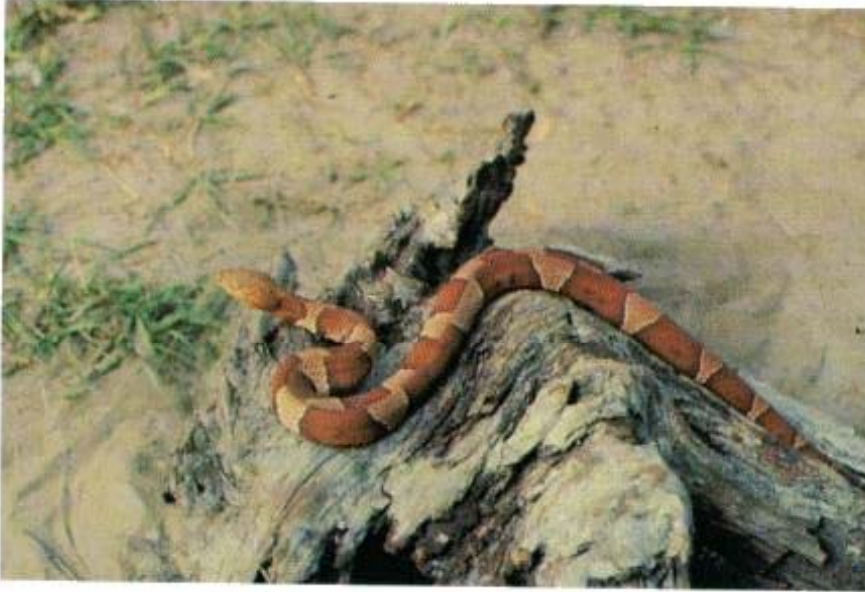
- ▶ Don't sleep next to brush, tall grass, large boulders, or trees. They provide hiding places for snakes. Place your sleeping bag in a clearing. Use mosquito netting tucked well under the bag. This netting should provide a good barrier.
- ▶ Don't put your hands into dark places, such as rock crevices, heavy brush, or hollow logs, without first investigating.
- ▶ Don't step over a fallen tree. Step on the log and look to see if there is a snake resting on the other side.
- ▶ Don't walk through heavy brush or tall grass without looking down. Look where you are walking.
- ▶ Don't pick up any snake unless you are absolutely positive it is not venomous.
- ▶ Don't pick up freshly killed snakes without first severing the head. The nervous system may still be active and a dead snake can deliver a bite.

Snake-Free Areas

The polar regions are free of snakes due to their inhospitable environments. Other areas considered to be free of poisonous snakes are New Zealand, Cuba, Haiti, Jamaica, Puerto Rico, Ireland, Polynesia, and Hawaii.

Poisonous Snakes Of The Americas

American Copperhead



Description: Chestnut color dominates overall, with darker crossbands of rich browns that become narrower on top and widen at the bottom. The top of the head is a coppery color.

Characteristics: Very common over much of its range, with a natural camouflage ability to blend in the environment. Copperheads are rather quiet and inoffensive in disposition but will defend themselves vigorously. Bites occur when the snakes are stepped on or when a victim is lying next to one. A copperhead lying on a bed of dead leaves becomes invisible. Its venom is hemotoxic.

Habitat: Found in wooded and rocky areas and mountainous regions.

Length: Average 60 centimeters, maximum 120 centimeters.

Distribution: Eastern Gulf States, Texas, Arkansas, Maryland, North Florida, Illinois, Oklahoma, Kansas, Ohio, New York, Alabama, Tennessee, and Massachusetts.

Bushmaster



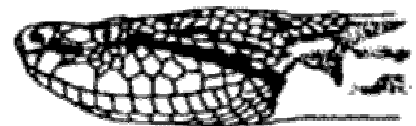
Description: The body hue is rather pale brown or pinkish, with a series of large bold dark brown or black blotches extending along the body. Its scales are extremely rough.

Characteristics: The World's largest pit viper has a bad reputation. This huge venomous snake is not common anywhere in its range. It lives in remote and isolated habitats and is largely nocturnal in its feeding habits; it seldom bites anyone, so few bites are recorded. A bite from one would indeed be very serious and fatal if medical aid was not immediately available. Usually, the bites occur in remote, dense jungles, many kilometers and several hours or even days away from medical help. Bushmaster fangs are long. In large bushmasters, they can measure 3.8 centimeters. Its venom is a powerful hemotoxin.

Habitat: Found chiefly in tropical forests in their range.

Length: Average 2.1 meters, maximum 3.7 meters.

Distribution: Nicaragua, Costa Rica, Panama, Trinidad, and Brazil.



Coral Snake



Description: Beautifully marked with bright blacks, reds, and yellows. To identify the species, remember that when red touches yellow it is a coral snake.

Characteristics: Common over range, but secretive in its habits, therefore seldom seen. It has short fangs that are fixed in an erect position. It often chews to release its venom into a wound. Its venom is very powerful. The venom is neurotoxic, causing respiratory paralysis in the victim, who succumbs to suffocation.

Habitat: Found in a variety of habitats including wooded areas, swamps, palmetto and scrub areas. Coral snakes often venture into residential locations.

Length: Average 60 centimeters, maximum 115 centimeters.

Distribution: Southeast North Carolina, Gulf States, west central Mississippi, Florida, Florida Keys, and west to Texas. Another genus of coral snake is found in Arizona. Coral snakes are also found throughout Central and most South America.

Cottonmouth



Description: Colors are variable. Adults are uniformly olive brown or black. The young and subadults are strongly crossbanded with dark brown.

Characteristics: These dangerous semiaquatic snakes closely resemble harmless water snakes that have the same habitat. Therefore, it is best to leave all water snakes alone. Cottonmouths often stand their ground. An aroused cottonmouth will draw its head close to its body and open its mouth showing its white interior.

Cottonmouth venom is hemotoxic and potent. Bites are prone to gangrene.

Habitat: Found in swamps, lakes, rivers, and ditches.

Length: Average 90 centimeters, maximum 1.8 meters.

Distribution: Southeast Virginia, west central Alabama, south Georgia, Illinois, east central Kentucky, south central Oklahoma, Texas, North and South Carolina, Florida, and the Florida Keys.

Eastern Diamondback Rattlesnake



Description: Diamonds are dark brown or black, outlined by a row of cream or yellowish scales. Ground color is olive to brown.

Characteristics: The largest venomous snake in the United States. Large individual snakes can have fangs that measure 2.5 centimeters in a straight line. This species has a sullen disposition, ready to defend itself when threatened. Its venom is potent and hemotoxic, causing great pain and damage to tissue.

Habitat: Found in palmettos and scrubs, swamps, pine woods, and flatwoods. It has been observed swimming many miles out in the Gulf of Mexico, reaching some of the islands off the Florida coast.

Length: Average 1.4 meters, maximum 2.4 meters.

Distribution: Coastal areas of North Carolina, South Carolina, Louisiana, Florida, and the Florida Keys.

Eyelash Pit Viper



Description: Identified by several spiny scales over each eye. Color is highly variable, from bright yellow over its entire body to reddish-yellow spots throughout the body.

Characteristics: Arboreal snake that seldom comes to the ground. It feels more secure in low-hanging trees where it looks for tree frogs and birds. It is a dangerous species because most of its bites occur on the upper extremities. It has an irritable disposition. It will strike with little provocation. Its venom is hemotoxic, causing severe tissue damage. Deaths have occurred from the bites of these snakes.

Habitat: Tree-loving species found in rain forests; common on plantations and in palm trees.

Length: Average 45 centimeters, maximum 75 centimeters.

Distribution: Southern Mexico, throughout Central America, Columbia, Ecuador, and Venezuela.

Fer-De-Lance



There are several closely related species in this group. All are very dangerous to man.

Description: Variable coloration, from gray to olive, brown, or reddish, with dark triangles edged with light scales.

Triangles are narrow at the top and wide at the bottom.

Characteristics: This highly dangerous snake is responsible for a high mortality rate. It has an irritable disposition, ready to strike with little provocation. The female fer-de-lance is highly prolific, producing up to 60 young born with a dangerous bite. The venom of this species is hemotoxic, painful, and hemorrhagic (causing profuse internal bleeding). The venom causes massive tissue destruction.

Habitat: Found on cultivated land and farms, often entering houses in search of rodents.

Length: Average 1.4 meters, maximum 2.4 meters.

Distribution: Southern Mexico, throughout Central and South America.

Jumping Viper



Description: It has a stocky body. Its ground color varies from brown to gray and it has dark brown or black dorsal blotches. It has no pattern on its head.

Characteristics: It is chiefly a nocturnal snake. It comes out in the early evening hours to feed on lizards, rodents, and frogs. As the name implies, this species can strike with force as it actually leaves the ground. Its venom is hemotoxic. Humans have died from the bites inflicted by large jumping vipers. They often hide under fallen logs and piles of leaves and are difficult to see.

Habitat: Found in rain forests, on plantations, and on wooded hillsides.

Length: Average 60 centimeters, maximum 120 centimeter.

Distribution: Southern Mexico, Honduras, Guatemala, Costa Rica, Panama, and El Salvador.

Mojave Rattlesnake



Description: This snake's entire body is a pallid or sandy color with darker diamond-shaped markings bordered by lighter-colored scales and black bands around the tail.

Characteristics: Although this rattlesnake is of moderate size, its bite is very serious. Its venom has quantities of neurotoxic elements that affect the central nervous system. Deaths have resulted from this snake's bite.

Habitat: Found in arid regions, deserts, and rocky hillsides from sea level to 2400-meter elevations.

Length: Average 75 centimeters, maximum 1.2 meters.

Distribution: Mojave Desert in California, Nevada, southwest Arizona, and Texas into Mexico.

Western Diamondback Rattlesnake



Description: The body is a light buff color with darker brown diamond-shaped markings. The tail has heavy black and white bands.

Characteristics: This bold rattlesnake holds its ground. When coiled and rattling, it is ready to defend itself. It injects a large amount of venom when it bites, making it one of the most dangerous snakes. Its venom is hemotoxic, causing considerable pain and tissue damage.

Habitat: It is a very common snake over its range. It is found in grasslands, deserts, woodlands, and canyons.

Length: Average 1.5 meters, maximum 2 meters.

Distribution: Southeast California, Oklahoma, Texas, New Mexico, and Arizona.



Poisonous Snakes Of Europe

Common Adder



Description: Its color is variable. Some adult specimens are completely black while others have a dark zigzag pattern running along the back.

Characteristics: The common adder is a small true viper that has a short temper and often strikes without hesitation. Its venom is hemotoxic, destroying blood cells and causing tissue damage. Most injuries occur to campers, hikers, and field workers.

Habitat: Common adders are found in a variety of habitats, from grassy fields to rocky slopes, and on farms and cultivated lands.

Length: Average 45 centimeters, maximum 60 centimeters.

Distribution: Very common throughout most of Europe.

Long-Nosed Adder



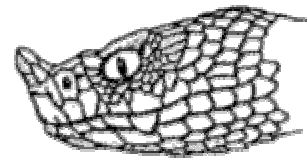
Description: Coloration is gray, brown, or reddish with a dark brown or black zigzag pattern running the length of its back. A dark stripe is usually found behind each eye.

Characteristics: A small snake commonly found in much of its range. The term "long-nosed" comes from the projection of tiny scales located on the tip of its nose. This viper is responsible for many bites. Deaths have been recorded. Its venom is hemotoxic, causing severe pain and massive tissue damage. The rate of survival is good with medical aid.

Habitat: Open fields, cultivated lands, farms, and rocky slopes.

Length: Average 45 centimeters, maximum 90 centimeters.

Distribution: Italy, Yugoslavia, northern Albania, and Romania.



Pallas' Viper



JOHN H. TASHJIAN / BERND VON SCHROEDER

Description: Coloration is gray, tan, or yellow, with markings similar to those of the American copperhead.

Characteristics: This snake is timid and rarely strikes. Its venom is hemotoxic but rarely fatal.

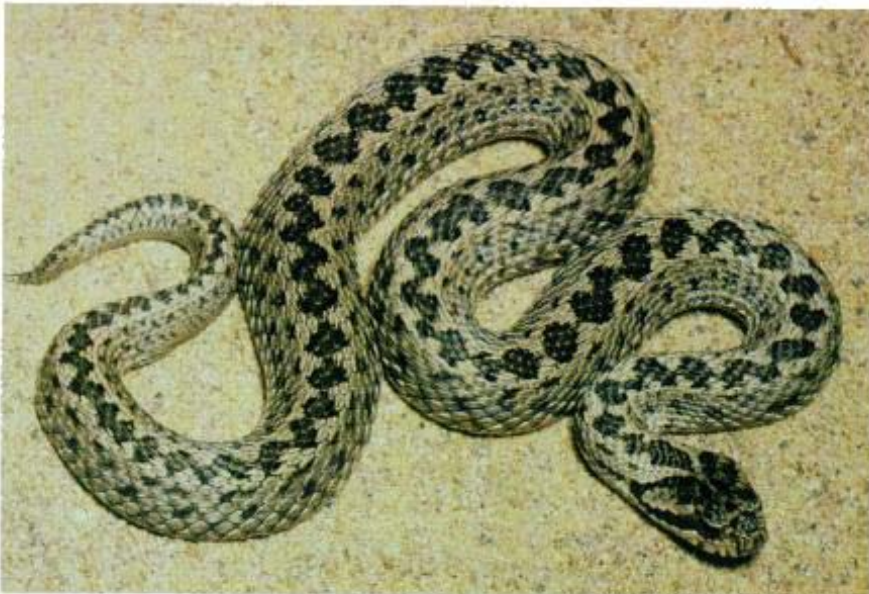
Habitat: Found in open fields, hillsides, and farming regions.

Length: Average 45 centimeters, maximum 90 centimeters.

Distribution: Throughout southeastern Europe.



Ursini's Viper



JOHN H. TASHJIAN/BÖRJE FLARDH

Description: The common adder, long-nosed adder, and Ursini's viper basically have the same coloration and dorsal zigzag pattern. The exception among these adders is that the common adder and Ursini's viper lack the projection of tiny scales on the tip of the nose.

Characteristics: These little vipers have an irritable disposition. They will readily strike when approached. Their venom is hemotoxic. Although rare, deaths from the bites of these vipers have been recorded.

Habitat: Meadows, farmlands, rocky hillsides, and open, grassy fields.

Length: Average 45 centimeters, maximum 90 centimeters.

Distribution: Most of Europe, Greece, Germany, Yugoslavia, France, Italy, Hungary, Romania, Bulgaria, and Albania.

Poisonous Snakes Of Africa And Asia

Boomslang



JOHN H. TASHJIAN/CALIFORNIA ACADEMY OF SCIENCES

Description: Coloration varies but is generally green or brown, which makes it very hard to see in its habitat.

Characteristics: Will strike if molested. Its venom is hemotoxic; even small amounts cause severe hemorrhaging, making it dangerous to man.

Habitat: Found in forested areas. It will spend most of its time in trees or looking for chameleons and other prey in bushes.

Length: Generally less than 60 centimeters.

Distribution: Found throughout sub-Saharan Africa.

Bush Viper



Description: Often called leaf viper, its color varies from ground colors of pale green to olive, brown, or rusty brown. It uses its prehensile tail to secure itself to branches.

Characteristics: An arboreal species that often comes down to the ground to feed on small rodents. It is not aggressive, but it will defend itself when molested or touched. Its venom is hemotoxic; healthy adults rarely die from its bite.

Habitat: Found in rain forests and woodlands bordering swamps and forests. Often found in trees, low-hanging branches, or brush.

Length: Average 45 centimeters, maximum 75 centimeters.

Distribution: Most of Africa, Angola, Cameroon, Uganda, Kenya, and Zaire.

Common Cobra



Description: Also known as the Asiatic cobra. Usually slate gray to brown overall. The back of the hood may or may not have a pattern.

Characteristics: A very common species responsible for many deaths each year. When aroused or threatened, the cobra will lift its head off the ground and spread its hood, making it more menacing. Its venom is highly neurotoxic, causing respiratory paralysis with some tissue damage. The cobra would rather retreat if possible, but if escape is shut off, it will be a dangerous creature to deal with.

Habitat: Found in any habitat cultivated farms, swamps, open fields, and human dwelling where it searches for rodents.

Length: Average 1.2 meters, maximum 2.1 meters.

Distribution: All of Asia.

Egyptian Cobra



Description: Yellowish, dark brown, or black uniform top with brown crossbands. Its head is sometimes black.

Characteristics: It is extremely dangerous. It is responsible for many human deaths. Once aroused or threatened, it will attack and continue the attack until it feels an escape is possible. Its venom is neurotoxic and much stronger than the common cobra. Its venom causes paralysis and death due to respiratory failure.

Habitat: Cultivated farmlands, open fields, and arid countrysides. It is often seen around homes searching for rodents.

Length: Average 1.5 meters, maximum 2.5 meters.

Distribution: Africa, Iraq, Syria, and Saudi Arabia.

Gaboon Viper



Description: Pink to brown with a vertebral series of elongated yellowish or light brown spots connected by hourglass-shaped markings on each side. It has a dark brown stripe behind each eye. This dangerous viper is almost invisible on the forest floor. A 1.8-meter-long Gaboon viper could weigh 16 kilograms.

Characteristics: The largest and heaviest of all true vipers, having a very large triangular head. It comes out in the evening to feed. Fortunately, it is not aggressive, but it will stand its ground if approached. It bites when molested or stepped on. Its fangs are enormous, often measuring 5 centimeters long. It injects a large amount of venom when it strikes. Its venom is neurotoxic and hemotoxic.

Habitat: Dense rain forests. Occasionally found in open country.

Length: Average 1.2 meters, maximum 1.8 meters.

Distribution: Most of Africa.

Green Mamba



Description: Most mambas are uniformly bright green over their entire body. The black mamba, the largest of the species, is uniformly olive to black.

Characteristics: The mamba is the dreaded snake species of Africa. Treat it with great respect. It is considered one of the most dangerous snakes known. Not only is it highly venomous but it is aggressive and its victim has little chance to escape from a bite. Its venom is highly neurotoxic.

Habitat: Mambas are at home in brush, trees, and low-hanging branches looking for birds, a usual diet for this species.

Length: Average 1.8 meters, maximum 3.7 meters.

Distribution: Most of Africa.

Green Tree Pit Viper



Description: Uniform bright or dull green with light yellow on the facial lips.

Characteristics: A small arboreal snake of some importance, though not considered a deadly species. It is a dangerous species because most of its bites occur in the head, shoulder, and neck areas. It seldom comes to the ground. It feeds on young birds, lizards, and tree frogs.

Habitat: Found in dense rain forests and plantations.

Length: Average 45 centimeters, maximum 75 centimeters.

Distribution: India, Burma, Malaya, Thailand, Laos, Cambodia, Vietnam, China, Indonesia, and Formosa.

Habu Pit Viper



Description: Light brown or olive-yellow with black markings and a yellow or greenish-white belly.

Characteristics: This snake is responsible for biting many humans and its bite could be fatal. It is an irritable species ready to defend itself. Its venom is hemotoxic, causing pain and considerable tissue damage.

Habitat: Found in a variety of habitats, ranging from lowlands to mountainous regions. Often encountered in old houses and rock walls surrounding buildings.

Length: Average 1 meter, maximum 1.5 meters.

Distribution: Okinawa and neighboring islands and Kyushu.

Horned Desert Viper



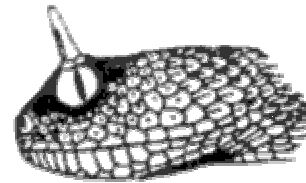
Description: Pale buff color with obscure markings and a sharp spine (scale) over each eye.

Characteristics: As with all true vipers that live in the desert, it finds refuge by burrowing in the heat of the day, coming out at night to feed. It is difficult to detect when buried; therefore, many bites result from the snake being accidentally stepped on. Its venom is hemotoxic, causing severe damage to blood cells and tissue.

Habitat: Only found in very arid places within its range.

Length: Average 45 centimeters, maximum 75 centimeters.

Distribution: Arabian Peninsula, Africa, Iran, and Iraq.



King Cobra



Description: Uniformly olive, brown, or green with ringlike crossbands of black.

Characteristics: Although it is the largest venomous snake in the world and it has a disposition to go with this honor, it causes relatively few bites on humans. It appears to have a degree of intelligence. It avoids attacking another venomous snake for fear of being bitten. It feeds exclusively on harmless species. The female builds a nest then deposits her eggs. Lying close by, she guards the nest and is highly aggressive toward anything that closely approaches the nest. Its venom is a powerful neurotoxin. Without medical aid, death is certain for its victims.

Habitat: Dense jungle and cultivated fields.

Length: Average 3.5 meters, maximum 5.5 meters.

Distribution: Thailand, southern China, Malaysia Peninsula, and Philippines.

Krait



Description: Black or bluish-black with white narrow crossbands and a narrow head.

Characteristics: Kraits are found only in Asia. This snake is of special concern to man. It is deadly--about 15 times more deadly than the common cobra. It is active at night and relatively passive during the day. The native people often step on kraits while walking through their habitats. The krait has a tendency to seek shelter in sleeping bags, boots, and tents. Its venom is a powerful neurotoxin that causes respiratory failure.

Habitat: Open fields, human settlements, and dense jungle.

Length: Average 90 centimeters, maximum 1.5 meters.

Distribution: India, Sri Lanka, and Pakistan.

Levant Viper



Description: Gray to pale brown with large dark brown spots on the top of the head and a "Λ" mark on top of the head.

Characteristics: This viper belongs to a large group of true vipers. Like its cousins, it is large and dangerous. Its venom is hemotoxic. Many deaths have been reported from bites of this species. It is a strong snake with an irritable disposition; it hisses loudly when ready to strike.

Habitat: Varies greatly, from farmlands to mountainous areas.

Length: Average 1 meter, maximum 1.5 meters.

Distribution: Greece, Iraq, Syria, Lebanon, Turkey, Afghanistan, lower portion of the former USSR, and Saudi Arabia.

Malayan Pit Viper



Description: Reddish running into pink tinge toward the belly with triangular-shaped, brown markings bordered with light-colored scales. The base of the triangular-shaped markings end at the midline. It has dark brown, arrow-shaped markings on the top and each side of its head.

Characteristics: This snake has long fangs, is ill-tempered, and is responsible for many bites. Its venom is hemotoxic, destroying blood cells and tissue, but a victim's chances of survival are good with medical aid. This viper is a ground dweller that moves into many areas in search of food. The greatest danger is in stepping on the snake with bare feet.

Habitat: Rubber plantations, farms, rural villages, and rain forests.

Length: Average 60 centimeters, maximum 1 meter.

Distribution: Thailand, Laos, Cambodia, Java, Sumatra, Malaysia, Vietnam, Burma, and China.

McMahon's Viper



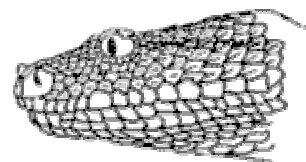
Description: Sandy buff color dominates the body with darker brown spots on the side of the body. Its nose shield is broad, aiding in burrowing.

Characteristics: Very little is known about this species. It apparently is rare or seldom seen. This viper is very irritable; it hisses, coils, and strikes at any intruder that ventures too close. Its venom is highly hemotoxic, causing great pain and tissue damage.

Habitat: Arid or semidesert. It hides during the day's sun, coming out only at night to feed on rodents.

Length: Average 45 centimeters, maximum 1 meter.

Distribution: West Pakistan and Afghanistan.



Mole Viper Or Burrowing Viper



Description: Uniformly black or dark brown with a small, narrow head.

Characteristics: A viper that does not look like one. It is small in size, and its small head does not indicate the presence of venom glands. It has a rather inoffensive disposition; however, it will quickly turn and bite if restrained or touched. Its venom is a potent hemotoxin for such a small snake. Its fangs are exceptionally long. A bite can result even when picking it up behind the head. It is best to leave this snake alone.

Habitat: Agricultural areas and arid localities

Length: Average 55 centimeters, maximum 75 centimeters

Distribution: Sudan, Ethiopia, Somaliland, Kenya, Tanganyika, Uganda, Cameroon, Niger, Congo, and Urundi.



Palestinian Viper



Description: Olive to rusty brown with a dark V-shaped mark on the head and a brown, zigzag band along the back.

Characteristics: The Palestinian viper is closely related to the Russell's viper of Asia. Like its cousin, it is extremely dangerous. It is active and aggressive at night but fairly placid during the day. When threatened or molested, it will tighten its coils, hiss loudly, and strike quickly.

Habitat: Arid regions, but may be found around barns and stables. It has been seen entering houses in search of rodents.

Length: Average 0.8 meter, maximum 1.3 meters.

Distribution: Turkey, Syria, Palestine, Israel, Lebanon, and Jordan.

Puff Adder



Description: Yellowish, light brown, or orange with chevron-shaped dark brown or black bars.

Characteristics: The puff adder is the second largest of the dangerous vipers. It is one of the most common snakes in Africa. It is largely nocturnal, hunting at night and seeking shelter during the day's heat. It is not shy when approached. It draws its head close to its coils, makes a loud hissing sound, and is quick to strike any intruder. Its venom is strongly hemotoxic, destroying blood cells and causing extensive tissue damage.

Habitat: Arid regions to swamps and dense forests. Common around human settlements.

Length: Average 1.2 meters, maximum 1.8 meters.

Distribution: Most of Africa, Saudi Arabia, Iraq, Lebanon, Israel, and Jordan.

Rhinoceros Viper Or River Jack



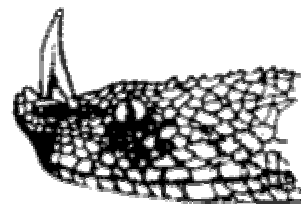
Description: Brightly colored with purplish to reddish-brown markings and black and light olive markings along the back. On its head it has a triangular marking that starts at the tip of the nose. It has a pair of long horns (scales) on the tip of its nose.

Characteristics: Its appearance is awesome; its horns and very rough scales give it a sinister look. It has an irritable disposition. It is not aggressive but will stand its ground ready to strike if disturbed. Its venom is neurotoxic and hemotoxic.

Habitat: Rain forests, along waterways, and in swamps.

Length: Average 75 centimeters, maximum 1 meter.

Distribution: Equatorial Africa.



Russell's Viper



Description: Light brown body with three rows of dark brown or black splotches bordered with white or yellow extending its entire length.

Characteristics: This dangerous species is abundant over its entire range. It is responsible for more human fatalities than any other venomous snake. It is irritable. When threatened, it coils tightly, hisses, and strikes with such speed that its victim has little chance of escaping. Its hemotoxic venom is a powerful coagulant, damaging tissue and blood cells.

Habitat: Variable, from farmlands to dense rain forests. It is commonly found around human settlements.

Length: Average 1 meter, maximum 1.5 meters

Distribution: Sri Lanka, south China, India, Malaysian Peninsula, Java, Sumatra, Borneo, and surrounding islands.

Sand Viper



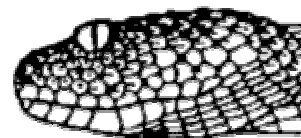
Description: Usually uniformly very pallid, with three rows of darker brown spots

Characteristics: A very small desert dweller that can bury itself in the sand during the day's heat. It is nocturnal, coming out at night to feed on lizards and small desert rodents. It has a short temper and will strike several times. Its venom is hemotoxic.

Habitat: Restricted to desert areas.

Length: Average 45 centimeters, maximum 60 centimeters.

Distribution: Northern Sahara, Algeria, Egypt, Sudan, Nigeria, Chad, Somalia, and central Africa.



Saw-Scaled Viper



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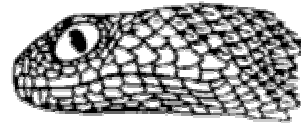
Description: Color is light buff with shades of brown, dull red, or gray. Its sides have a white or light-colored pattern. Its head usually has two dark stripes that start behind the eye and extend to the rear.

Characteristics: A small but extremely dangerous viper. It gets the name saw-scaled from rubbing the sides of its body together, producing a rasping sound. This ill-tempered snake will attack any intruder. Its venom is highly hemotoxic and quite potent. Many deaths are attributed to this species.

Habitat: Found in a variety of environments. It is common in rural settlements, cultivated fields, arid regions, barns, and rock walls.

Length: Average 45 centimeters, maximum 60 centimeters.

Distribution: Asia, Syria, India, Africa, Iraq, Iran, Saudi Arabia, Pakistan, Jordan, Lebanon, Sri Lanka, Algeria, Egypt, and Israel.



Wagler's Pit Viper Or Temple Viper



Description: Green with white crossbands edged with blue or purple. It has two dorsal lines on both sides of its head.

Characteristics: It is also known as the temple viper because certain religious cults have placed venomous snakes in their temples. Bites are not uncommon for the species; fortunately, fatalities are very rare. It has long fangs. Its venom is hemotoxic causing cell and tissue destruction. It is an arboreal species and its bites often occur on the upper extremities.

Habitat: Dense rain forests, but often found near human settlements.

Length: Average 60 centimeters, maximum 100 centimeters.

Distribution: Malaysian Peninsula and Archipelago, Indonesia, Borneo, the Philippines, and Ryuku Islands.

Poisonous Snakes Of Australasia

Australian Copperhead



Description: Coloration is reddish brown to dark brown. A few from Queensland are black.

Characteristics: Rather sluggish disposition but will bite if stepped on. When angry, rears its head a few inches from the ground with its neck slightly arched. Its venom is neurotoxic.

Habitat: Swamps.

Length: Average 1.2 meters, maximum 1.8 meters.

Distribution: Tasmania, South Australia, Queensland, and Kangaroo Island.

Death Adder



Description: Reddish, yellowish, or brown color with distinct dark brown crossbands. The end of its tail is black, ending in a hard spine.

Characteristics: When aroused, this highly dangerous snake will flatten its entire body, ready to strike over a short distance. It is nocturnal, hiding by day and coming out to feed at night. Although it has the appearance of a viper, it is related to the cobra family. Its venom is a powerful neurotoxin; it causes mortality in about 50 percent of the victims, even with treatment.

Habitat: Usually found in arid regions, fields, and wooded lands.

Length: Average 45 centimeters, maximum 90 centimeters.

Distribution: Australia, New Guinea, and Moluccas.

Taipan



Description: Generally uniformly olive or dark brown, the head is somewhat darker brown.

Characteristics: Considered one of the most deadly snakes. It has an aggressive disposition. When aroused, it can display a fearsome appearance by flattening its head, raising it off the ground, waving it back and forth, and suddenly striking with such speed that the victim may receive several bites before it retreats. Its venom is a powerful neurotoxin, causing respiratory paralysis. Its victim has little chance for recovery without prompt medical aid.

Habitat: At home in a variety of habitats, it is found from the savanna forests to the inland plains.

Length: Average 1.8 meters, maximum 3.7 meters.

Distribution: Northern Australia and southern New Guinea.

Tiger Snake



Description: Olive to dark brown above with yellowish or olive belly and crossbands. The subspecies in Tasmania and Victoria is uniformly black.

Characteristics: It is the most dangerous snake in Australia. It is very common and bites many humans. It has a very potent neurotoxic venom that attacks the nervous system. When aroused, it is aggressive and attacks any intruder. It flattens its neck making a narrow band.

Habitat: Found in many habitats from arid regions to human settlements along waterways to grasslands.

Length: Average 1.2 meters, maximum 1.8 meters.

Distribution: Australia, Tasmania, Bass Strait islands, and New Guinea.

Lizards

There is little to fear from lizards as long as you follow the same precautions as for avoiding snakebite. Usually, there are only two poisonous lizards: the Gila monster and the Mexican beaded lizard. The venom of both these lizards is neurotoxic. The two lizards are in the same family, and both are slow moving with a docile nature.

The komodo dragon (*Varanus komodoensis*), although not poisonous, can be dangerous due to its large size. These lizards can reach lengths of 3 meters and weigh over 115 kilograms. Do not try to capture this lizard.

Gila Monster



Description: Robust, with a large head and a heavy tail. Its body is covered with beadlike scales. It is capable of storing fat against lean times when food is scarce. Its color is striking in rich blacks laced with yellow or pinkish scales.

Characteristics: Not an aggressive lizard, but it is ready to defend itself when provoked. If approached too closely, it will turn toward the intruder with its mouth open. If it bites, it hangs on tenaciously and must be pried off. Its venom glands and grooved teeth are on its bottom jaw.

Habitat: Found in arid areas, coming out at night or early morning hours in search of small rodents and bird eggs. During the heat of the day it stays under brush or rocks.

Length: Average 30 centimeters, maximum 50 centimeters.

Distribution: Arizona, New Mexico, Utah, Nevada, northern Mexico, and extreme corner of southeast California.

Mexican Beaded Lizard



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Description: Less colorful than its cousin, the gila monster. It has black or pale yellow bands or is entirely black.

Characteristics: Very strong legs let this lizard crawl over rocks and dig burrows. It is short-tempered. It will turn and open its mouth in a threatening manner when molested. Its venom is hemotoxic and potentially dangerous to man.

Habitat: Found in arid or desert areas, often in rocky hillsides, coming out during evening and early morning hours.

Length: Average 60 centimeters, maximum 90 centimeters.

Distribution: Mexico through Central America.

Sea Snakes

Banded Sea Snake



Description: Smooth-scaled snake that is a pale shade of blue with black bands. Its oarlike tail provides propulsion in swimming.

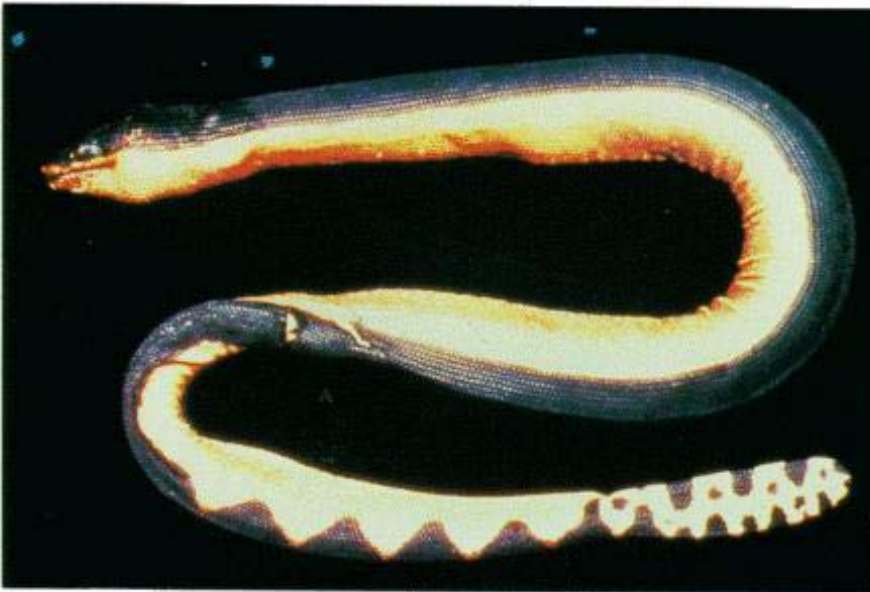
Characteristics: Most active at night, swimming close to shore and at times entering tide pools. Its venom is a very strong neurotoxin. Its victims are usually fishermen who untangle these deadly snakes from large fish nets.

Habitat: Common in all oceans, absent in the Atlantic Ocean.

Length: Average 75 centimeters, maximum 1.2 meters.

Distribution: Coastal waters of New Guinea, Pacific islands, the Philippines, Southeast Asia, Sri Lanka, and Japan.

Yellow-Bellied Sea Snake



WAIKIKI AQUARIUM

Description: Upper part of body is black or dark brown and lower part is bright yellow.

Characteristics: A highly venomous snake belonging to the cobra family. This snake is truly of the pelagic species--it never leaves the water to come to shore. It has an oarlike tail to aid its swimming. This species is quick to defend itself. Sea snakes do not really strike, but deliberately turn and bite if molested. A small amount of their neurotoxic venom can cause death.

Habitat: Found in all oceans except the Atlantic Ocean.

Length: Average 0.7 meter, maximum 1.1 meters.

Distribution: Throughout the Pacific Ocean from many of the Pacific islands to Hawaii and to the coast of Costa Rica and Panama.

