

DANGEROUS CREATURES



SURVIVAL GUIDE

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DANGEROUS CREATURES

The insects and other creatures shown here are not a major problem for survivors if sensible precautions are taken — but can easily become one if not treated with respect.

ARAHNIDE AND INSECTS

- **Scorpions** are found in deserts forests and jungles of tropical, subtropical and warm temperate areas, one kind living at 3600m (1200ft) in the Andes, and are mainly nocturnal. Most desert kinds are yellowish to light green, those from moist or higher mountain areas brown or black. Average size is 2-5cm (1in) but giants in southern Africa and New Guinea reach 20cm (8in). Some burrow but they are usually found under tree bark, rocks, or other shelter, including your gear. The sting is in the tail. Many kinds cause only trivial discomfort, a few produce nerve toxins causing temporary paralysis for 24-48 hours. Some scorpions from the Middle East, Brazil and west Mexico can inflict a fatal bite, but this is very rare and death is more likely in young children and the old or ill, who offer little resistance to it.



- **Recluse or Fiddleback Spider** (*Loxoscees reclusa*) of North America is recognized by a violin shape on the back of the head. There are several different kinds, but **L reclusa** is the worst. Bite produces fever, chills, vomiting, joint pain and spotty skin, within 24-48 hours. Although rarely fatal, tissue degeneration around the wound can cause disfigurement, or even lead to amputation, if left untreated.



- **Black Widow or Hourglass Spiders** (Latrodectus) occur in warmer areas, including deserts, over much of the world. Small, dark, all can be recognized by the red, yellow or white markings on the abdomen, hourglass shaped in some. Bites produce severe pain, sweating, shivering and weakness, disabling the victim for up to a week. They are rarely fatal.



- **Funnel webs** (Atrax) are large greyish or brownie spiders of Australia. Chunky, with short legs, their name alludes to their web's shape. It is Nocturnal, and not found in hot, dry, sunny conditions. A bite can kill; symptoms as for the Black Widow.



- **Tarantulas** (Theraphosidae and Lycosa) are very large hairy spiders of tropical America; one kind occurs in southern Europe. Of menacing appearance, but although a bite is painful the poison is fairly mild and not disabling.



- **Centipedes and millipedes** are mostly small and harmless but some tropical and desert kinds may reach 25cm (10in). Their feet have sharp claws, which can puncture the skin and cause infections, and a few kinds have a poisonous bite. Brush off in the direction they are moving - there is less chance of them digging into you.



- **Hornets** occur in swarms and make nests that are guarded ferociously. Some tropical kinds are very aggressive and very poisonous, and should be well avoided. The sting is like being punctured by a hot rivet and several at once could be fatal.



- **Ticks** are large and common in the tropics; flat-bodied and round, with a small biting head that eats into a wound. Do not pull off; the head will remain and cause infection. Use heat, petrol, alcohol or hot water to make it drop off.



- **Leeches** are blood-sucking wormlike creatures of tropical jungles and other moist areas, waiting, thread-like, on vegetation before attaching themselves to a victim. Better not to pull off: remove with fire or a pinch of salt. Leeches often carry infections.



FLYING MAMALS

- **Vampire Bats** (Desmodus) occur in Central and South America. Small, nocturnal, they suck the blood of sleeping victims. Their bites may carry rabies. Keep covered at night in these areas.



POISONOUS SNAKES:

WARNING!

Unless indicated to the contrary, these snakes should be regarded as deadly poisonous. Do NOT approach, provoke or handle.

SAFETY RULES

- **Watch where you step:** On average snakes eat only once a week. After eating and at the times when they shed their skin they are sluggish and more easily trodden on.

- **Look closely** before parting bushes, picking fruit, some snakes are arboreal.
- **Never tease, pick up or corner:** A few snakes, such as the Bushmaster of South and Central America, Black Mamba of Africa and King Cobra of Asia will attack when cornered or guarding a nest.
- **Use sticks, not hands** to turn over stones and logs and for digging.
- **Wear stout boots** - if you have them. The teeth of many snakes are too small to penetrate them.
- **Check bedding, clothes, packs** before putting them on. Snakes may use them as shelter.
- **Stay calm** if you encounter a snake. Do not move suddenly or strike at it. Back off slowly. In most cases the snake will be only too eager to escape.
- **To kill:** If you have to kill a snake use a long stick, preferably with a spring to it, and a single chopping blow to the back of the head. Make it effective first time - a wounded snake is very dangerous.

NORTH AND SOUTH AMERICA

- **Rattlesnakes** (Crotalus and Sistrurus). Many kinds occur in all parts of North America, varying from 45cm (Win) to over 2-1 m (7ft). All have a chunky body, wide head and rattle on the end of the tail that is usually but not always sounded as a warning. The largest are the various Diamondbacks, with distinctive diamond-shaped blotches.



- **Copperhead** (*Agkistrodon contortix*) averages 60-90cm (2-3ft), with a stout body colored buff or orange- brown with rich brown bands and a copper-red head; mainly in the eastern United States. Fairly timid; bites are only rarely fatal.



- **Cotton mouth or Water Moccasin** (*Agkistrodon piscivorus*) averages 60-130cm (2-4ft) with a thick brown or brownish-olive body, sometimes blotched, and a yellowish, also blotched, belly; the inside of the mouth is white. Aquatic, in and by freshwater in the southern United States. Belligerent - do not annoy!



- **Tropical Rattlesnake** (*Crotalus durissis*) averages 1-5-2m (5-6ft), with diamond-shaped marks, two dark stripes on the neck and a rattle on the tail; nocturnal, in drier areas from South America north to Mexico. Large, aggressive, very dangerous.



- **Fer de Lance** (*Bothrops atrox*) is brownish with paler geometric markings and averages 1-3-2m (4-6ft); causes many deaths. Its many relatives vary from grey to brown or reddish with similar markings. **Bothrops** vipers occur in South America north to Mexico; some are arboreal. All loop their body before striking.



- **Bushmaster** (*Lachesis muta*) is large-headed, pinkish-brown marked with large dark brown triangles and averages 2-2'6m (6-8ft) or more; nocturnal, in lowland forests, often using burrows and holes, in Central and South America. Vicious if cornered; the most feared of all New World snakes.



- **Coral Snakes** average 45-90cm (V/2-3ft), are slender and strikingly colored in bands of black and red separated by bands of yellow or white; from the southern United States into South America. (Similar kinds occur in Southeast Asia.) Small-mouthed, reluctant to bite but deadly.



There are NO rules for identifying poisonous snakes. Cobras usually show hoods and rattlesnakes rattle on their tail, but these are NOT reliable guides. Poisonous snakes must be learned individually. If in doubt, treat every snake as poisonous.

EUROPE

- **Adder** (*Viper berus*) averages 30-75cm (12-30in), varying from olive-grey to reddish-brown with a zigzag pattern of darker coloring; especially on heaths, moors and open areas, into mountains. IT IS the only poisonous snake of northern Europe, hardly ever fatal, but with larger and more dangerous relatives in southern Europe.



AFRICA AND ASIA

- **Puff Adder** (*Bitis arietans*) is thickbodied, short-tailed and large-headed, straw-brown with darker markings and averages 90-130cm (3-4ft), in semi- arid areas often near water, of Africa and the Arabian Peninsula. Similar relatives occur in other habitats. Many different vipers are found in all parts of Africa and Eurasia, from sandy areas to thick jungle.



- **Saw-scaled Viper** (*Echis carinatus*) is rough-scaled, pale reddish to sandy- brown with darker markings and white blotches, and averages 40-55cm (!6-26in); in arid areas from North Africa west to India. Vicious, common; causes many fatalities.



- **Russell's Viper** (*Vipera russelli*) averages 1-1 -25m (40-50in), brownish, with three rows of spots formed of white-bordered black rings with a reddish-brown centre; in most areas except thick forest from Pakistan east to Taiwan. Responsible for most viper bites in the area.



- **Malay Pit Viper or Moccasin** (*Calloselasma rhodostoma*) averages 60-80cm (24-32inj and is fawn, reddish or grey marked with geometric patterns, the belly yellowish or spotted greenish-brown in light growth in south-east Asia and parts of Indonesia. A frequent cause of bites and with many relatives in the area. AVOID any that resemble it.



- **Cobras** occur from Africa east through India to Indonesia and the Philippines. They usually average 1-5-2m (5-6ft) and, when alarmed, are recognizable by the raised head and spreading, often marked, hood. Common in some areas, especially rocky and semi-arid ones.



- **Mambas** (*Dendroaspis*) are smallheaded, very slender, typically with large green or greyish scales and averaging 1 -5-2-1 m (5-7ft); in Africa south of the Sahara, usually in trees but the large Black Mamba *D. polylepis* is largely terrestrial. Often quick to strike, fatal in almost all untreated cases.



- **Boomslang** (*Dispholidus typus*) averages 1-3-1 -5m (4-5ft), very slender, varying from greenish to brownish or blackish; in trees and very hard to spot, in savannah parts of Africa south of the Sahara. Highly venomous; it inflates its throat when alarmed.



- **Kraits** (*Bungarus*) average 90-150cm (3-5ft), are small-headed and some have black and white or black and yellow bands down the body, in both open and forested areas from India to Indonesia. Nocturnal, inoffensive, but bites are often fatal.



SPITTING SNAKES

A few cobras, including the ringtails of southern Africa, spit poison as well as bite. This is a purely defensive measure and is not dangerous unless the poison reaches an open cut or the eyes. If it does, wash out immediately with water or, in an emergency, with urine.

AUSTRALASIA

- **Death Adder** (*Acanthophis antarcticus*) is brownish, reddish or grey with darker banding, thickbodied and averages 45-60cm (18-24in); in sandy areas of much of Australia, Papua New Guinea and some nearby islands. Well camouflaged; highly venomous, but not so dangerous as the Tiger Snake and Taipan.



- **Australian Black Snake** (*Pseudechis porphyriacus*) averages 5-2m (5-6ft), slender, bluish-black with a bright red belly; in or near fresh water over much of Australia. There are several different kinds. Very rarely fatal, it flattens its neck when aroused.



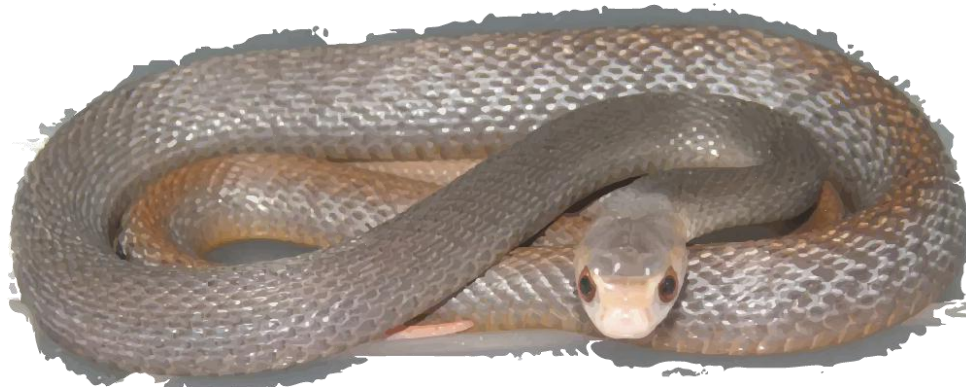
- **Australian Brown Snake** (*Pseudonaja textilis*) is slender, yellowish-grey to brown with a pale belly and averages 1-5-2m (5-6ft); in drier parts of Australia and Papua New Guinea. There is more than one kind. They are Aggressive and very poisonous.



- **Tiger Snake** (*Notechis scutalus*) averages 1-3-1-6m (4-5-5ft), thickbodied, large-headed, tawny-ochre banded with greenish-yellow, grey or orange-brown; in semi-arid areas of Australia and in Tasmania. They are Aggressive, very poisonous, the principal cause of fatal bites.



- **Taipan** (*Oxyuranus scutellatus*) is uniformly light to dark brown with yellowish-brown on the sides and belly and may grow to 3-5m (10ft); in open and forested parts of northern Australia. They are Ferocious when provoked, deadly poisonous.



- **Sea Snakes** occur in the Indian and Pacific Oceans; some are partly terrestrial, in estuaries and coastal swamps. They vary in color and size, averaging 1-3-1-5m (4-5ft) with a flattened, paddle-like tail. Their scales distinguish them from eels. Not aggressive, but some are the most venomous snakes of all.



Snakes have excellent camouflage, only movement gives them away. In snake-infested areas you will pass many every day without ever noticing them.

The chances of being bitten are small and all but the worst cases recover. In Malaysia, more people are killed each year by falling coconuts and in India rat-bites produce many more cases for hospitalization!

A bite from a poisonous snake should always be taken seriously, but there are degrees of severity. When biting in self-defense, many snakes inject only a little venom, occasionally none at all. If the snake is out of condition or has recently bitten something else, its venom may not be fully potent and there may be only a little in its venom sacs. Clothing or shoes may have deflected the full force of the bite. In many poisonous snakes the dose of venom needed to kill a man far exceeds the amount that can be injected in one bite.

SNAKE FREE!

There are NO poisonous snakes in New Zealand, Cuba, Haiti, Jamaica, Puerto Rico, Ireland, Polynesia and the Polar Regions.

LIZARDS

- **Gila Monster** (*Heloderma suspectum*) is a lizard found only in the deserts of Arizona, Mexico and nearby areas. Large rounded head, thick chunky body, and short stumpy tail and brightly patterned in yellow. The average size is 37-45cm (15-18in). Bite is poisonous but likely only when handled.



- **Beaded Lizard** (*Heloderma horridum*) resembles the Gila monster but is darker and larger, with a slenderer tail, and spots rather than a mottling of color; in a few arid parts of Mexico and Central America. Docile, but the bite is poisonous. Do not handle.



DANGEROUS SEA CREATURES:

These fish and sea creatures are dangerous. Most are either poisonous to touch or have poisonous flesh.

RIVER DANGERS

- **Electric Eels** (*Electrophorus electricus*) may reach nearly 2m (7ft) long and 20cm (8in) thick, rounded, colored olive to blackish, and paler underneath, native to Orinoco and Amazon river systems of South America. Often prefer shallow water where there is more oxygen. The shock from a large one can be 500 volts, enough to knock a man off his feet.



- **Piranhas** (*Serrasalmus*) occur in the Orinoco, Amazon and Paraguay River systems of South America. They vary in size but may be up to 50cm (20in) long and are all deep-bodied and thickset, having large jaws with razor-sharp interlocking teeth. They can be very dangerous, particularly in the dry season when the water levels are low.



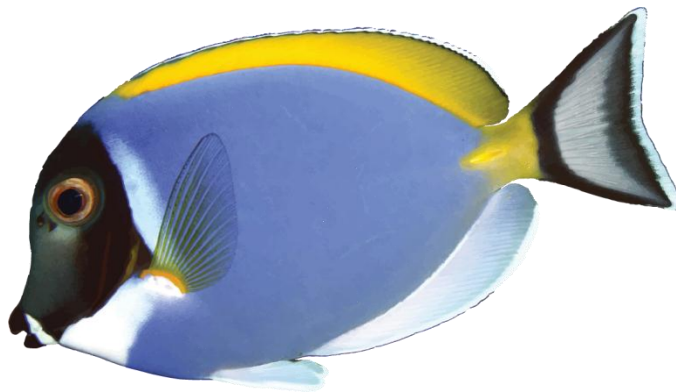
SEA AND RIVERS

- **Stingrays** (Dasyatidae) are a danger in shallow waters, especially tropical ones, and not only on sandy shores. Very variable, but all with the distinctive ray shape though hard for the wader to spot. A few kinds occur in rivers in tropical South America and West Africa. The freshwater stingrays rarely exceed 30cm (1ft) long. They do not occur in rivers that flow into the Pacific. Venomous spines in the tail can inflict severe, sometimes fatal, injury.



SALTWATER DANGERS

- **Rabbitfishes or Spinefeet** (Siganidae) occur mainly on reefs in the Indian and Pacific Oceans, averaging 25-30cm (10-12in); edible but with sharp spines in most fins. These are said to be venomous. Handle with care.



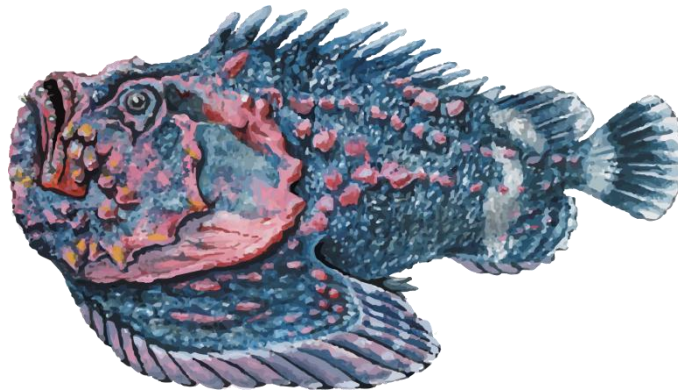
- **Tangs or Surgeonfishes** (Acanthuridae) average 20-25cm (8-10in), deep-bodied, small-mouthed, very colorful, with lancet-like spines on the sides of the tail that can inflict severe wounds when it is lashed. In all tropical waters.



- **Venomous Toadfishes** (*Batrachoididae*) occur in tropical waters off both coasts of Central and South America. Averaging 3-4cm (7-10in), they are dull-colored and large-mouthed. They lie buried in sand and have sharp, very poisonous spines on the back.



- **Scorpionfishes or Zebrafishes** (*Scorpaenidae*) are found mostly on reefs in the tropical Indian and Pacific Oceans. Averaging 30-75cm (12-30in), very variable, but usually reddish with long, wavy fin rays and spines. A sting is intensely painful. Less potent relatives occur in the Mediterranean and Atlantic.



- **Stonefishes** (*Synanceia*) occur in the tropical Pacific and Indian Oceans. Reaching 40cm (16in), their drab colors and lumpy shape make them almost impossible to see. When trodden on, dorsal spines inject venom that is agonizingly painful, in the worst cases fatal.



The venomous Toadfish, Stonefish and Zebrafish are edible. If you land one strike on the head then handle it with great care only when completely dead.

Though not venomous, there are other fish with dangerously sharp spines, which are not always easy to detect, except at close quarters. The spines usually occur on the back but may also be on fins on the side of the fish. Even a small spine can inflict a bad prick with consequent risk of infection. Large spines - and some spiny catfish grow as large as a man are as effective as stilettos.

Sea urchins can also inflict painful injuries and Sea anemones can sting.

- **Weeverfishes** (Trachinidae) tapering, dull-coloured, about 30cm (1ft) long, lie buried in sand off the coasts of Europe south to West Africa and the Mediterranean. Venomous spines on back and gills produce disabling pain. Soothe it by applying very hot water.

POISONOUS TO EAT

Many inshore fish, living in reefs and lagoons, are poisonous to eat. The majority are confined to the tropics but, wherever you are, be wary of eating any fish that you cannot identify.

Some fishes that are otherwise / good to eat, such as the Barracuda v and Snapper, are inedible when taken from reefs and lagoons, where they will have absorbed poisonous substances with their own food.

The most poisonous kinds, such as puffer fish, usually have rounded bodies with hard, shell-like skins covered in bony plates and spines. They also commonly have parrot like mouths, small gill openings and either lack pelvic fins or have only a small one.

- **Porcupine Fishes** (Diodontidae) occur in all shallow tropical waters. Variable, reaching 50-60cm (20-24in), but when alarmed all inflate into a very spiny ball. Their flesh is poisonous.



- **Puffer Fishes** (Tetraodontidae) occur in all tropical and many warmer temperate waters, a few kinds in rivers in south-east Asia and tropical Africa. Stout-bodied, rounded, 15-75cm (6-30in) long, most kinds with spines; when alarmed they puff up into a ball. Their blood, liver and gonads are poisonous; 28mg (1oz) can kill.

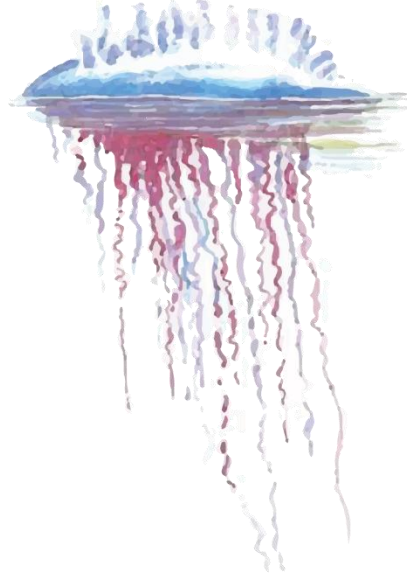


OTHER SEA CREATURES

- **Portuguese Man-of-war** (*Physalis physalis*), not a jellyfish but a colony of hydroids, is mainly subtropical but common in the Gulf Stream which may take it to British shores. Southern currents carry it, for example, to New Zealand. The floating bladder may be only 15cm (6in) long, but the tentacles, which carry stinging cells, can stream out for 12m (40ft). Not fatal but enough to incapacitate, so extremely dangerous.



- **The Common Jellyfish** (*Aurelia aurita*), a milky saucer-shape with purplish horseshoe marks inside, is not dangerous to humans but many others are, especially the **Sea wasps** or **Box Jellyfish** (*Chironex fleckerij*, with a cube shaped bell 25cm (Win) long and clusters of tentacles at the corners up to 9m (30ft) long. In big doses venom can be fatal. Avoid all jellyfish streamers - even when washed up on the beach.



- **Blue-ringed Octopus** (*Hapalochlaena lunulata*), small, sometimes only fist-sized, found off eastern Australia, particularly around the Great Barrier Reef, is greyish white with iridescent ring-like markings. Very poisonous, potentially lethal bite if trodden on or handled. Treat all tropical reef octopuses with caution.



- **Cone shells** (Conidae), subtropical and tropical gastropods, have a venomous harpoon-like barb. All are cone shaped but shell patterns may be obscured by a membrane. Some very poisonous, a few, in the Indo-Pacific, lethal. DO NOT TOUCH.



- **Augers or Terebra Shells** (Terebridae) temperate and tropical seas, particularly the Indo-Pacific, also have a stinging barb. They are much thinner and longer than cone shells. The sting is not as serious as the Cone's, but do NOT eat.

