

IMPORTANT VENOMOUS SNAKES AND SPIDERS OF AUSTRALIA

FIELD GUIDE FOR AUSTRALIAN DEFENCE FORCE PERSONNEL

NOT FOR SALE – FOR USE WITHIN
ASUTRAIAN DEFENCE FORCE ONLY

Defence Centre for Occupational Health
Brindabella Park
CANBERRA ACT 2600



Photos: (left) Peter Mirtschin, Venom Supplies, Tanunda SA (right) ©Dr Ron Atkinson

Vuee-Tuee insert pack module

http://intranet.defence.gov.au/dsg/sites/Australia/docs/Aust_Snakes_spider_vuee-tuee.pdf

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SYMPTOMS – SNAKEBITE

Symptoms may only start to appear an hour or more after the person has been bitten.

- Early symptoms: there may be 1, 2 or more puncture marks or scratches (but bite marks are not always visible), nausea, vomiting and diarrhoea, headache
- Later symptoms (>1 hr): double or blurred vision, drooping eyelids
- Later symptoms (>2-3 hrs): breathing difficulties, drowsiness, giddiness or faintness, problems speaking or swallowing, pain or tightness in chest or abdomen, breathing difficulties

FIRST AID FOR SNAKE BITE, FUNNELWEB SPIDER BITE (or any large, black spider in South East Australia), ALSO BLUE-RINGED OCTOPUS, CONE SHELL

- DRABCD
- Rest and calm casualty
- Apply **pressure immobilisation bandage** – heavy crepe bandage 15 cm wide up bitten limb
- Apply bandage firmer than for a sprained ankle
- Immobilise limb using a splint (use second bandage)
- **DO NOT** remove splint or bandage once applied
- Do not cut or wash the bite site
- **Ensure casualty does not move**
- Call 000 for an ambulance – priority 1 – These bites may be a life-threatening emergency
- **Call Poisons Information Centres 131126 (24 hours)**

If you encounter a snake:

- Stay still – do not panic or run
- Do not attempt to touch or catch the snake
- Allow it to move away

FIRST AID – REDBACK SPIDER BITE

- DRABCD – Rest and calm casualty
- **DO NOT APPLY** pressure immobilisation bandage
- Apply ice packs for pain relief
- Transport patient to hospital – priority 2 or 3 depending on severity

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IMPORTANT VENOMOUS SNAKES & SPIDERS OF AUSTRALIA

This is a quick-recognition guide for ADF personnel when operating within Australia and the Torres Strait islands. If bitten or stung by a spider or venomous snake, follow the first aid instructions below and refer the patient for urgent medical attention. There are more than 100 species of snake in Australia; only the potentially most medically important are included in these notes.

This is NOT a complete list of Australian venomous snakes or spiders, just some of the most important ones. More creatures may be added to these notes later. Where a particular type of snake is thought to occur in a particular Training Area, this is stated, but it is possible that they might also occur in other Training Areas not listed here.

When referring the patient, if you have attempted to identify the snake/spider, include that information in documentation being sent back with a patient. However, remember that many snakes look alike, and a positive identification cannot be made on the basis of a photograph. Similarly, it is very difficult even for an expert to identify spiders.

If you are bitten you do NOT need to take the snake with you to hospital. If the patient is showing significant symptoms from a snake bite, a Snake Venom Detection Kit will be used by the hospital to determine what type of antivenom to use.

There are no venom detection kits for spiders. If the spider can be safely caught (without getting anyone bitten) and securely kept in a clear plastic container with a screw-top lid and a legible label, it may be useful for identification purposes.

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**For help – Poisons Information
Centres 13 11 26 (24 hours)**

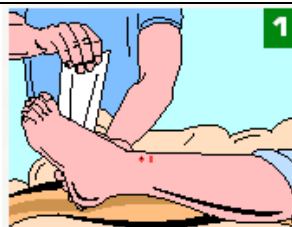
ADF medical / health personnel – see <http://www.toxinology.com> or *Manual of Envenomation & Poisoning—Australian Fauna and Flora* at <http://defweb.cbr.defence.gov.au/home/documents/adfdocs/hlthman/hlthmanv22.htm>
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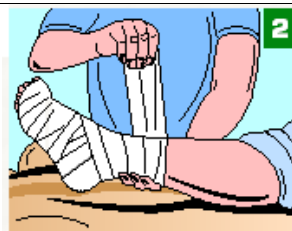
FIRST AID FOR SNAKE BITE, FUNNELWEB SPIDER BITE (also for CONE SHELL STING, BLUE-RINGED OCTOPUS BITE)

Immediately: If others are present, have someone phone for medical assistance. If unable to phone, send someone for help. Reassure the patient and encourage them to remain calm and still.

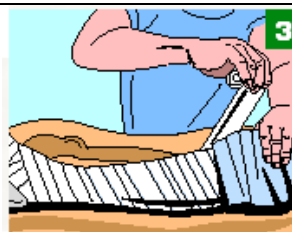
APPLYING A PRESSURE-IMMOBILISATION BANDAGE TO LOWER LIMB



1 As soon as possible, apply a broad pressure bandage from below bite site. Start first with a bandage around the bite site, then apply another bandage, upward on affected limb (starting at toes, bandaging upward as far as possible). Leave fingers or toes unbandaged to allow victim's circulation to be checked. Do not remove pants/ trousers, just bandage over top of clothing.



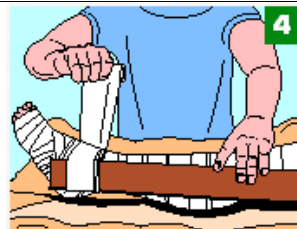
2 Bandage **firmly** as for a sprained ankle, but not so tight that circulation is prevented. Continue to bandage upward from the lower portion of the bitten limb.
(Reference Australian Resuscitation Council Guideline 8.9.1 February 2005
<http://www.resus.org.au/>)



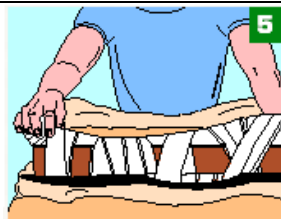
3 Apply the bandage as far up the limb as possible to compress the lymphatic vessels.

Images ©CSL Ltd

APPLYING A PRESSURE-IMMOBILISATION BANDAGE TO LOWER LIMB

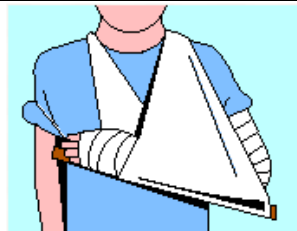


4 It is vital to now apply a splint. Bind a stick or suitable rigid item over the initial bandage to splint the limb. Secure the splint to the bandaged limb by using another bandage, (if another bandage is not available, use clothing strips or similar to bind). It is very important to keep the bitten limb still.



5 Bind the splint firmly, to as much of the limb as possible, to prevent muscle, limb and joint movement. This will help restrict venom movement. Seek urgent medical assistance now that first aid has been applied.

APPLYING A PRESSURE-IMMOBILISATION BANDAGE TO HAND OR FOREARM



1 As soon as possible, apply a broad pressure bandage around the bite site, then apply another bandage from the fingers of the affected arm, bandaging upward as far as possible. Bandage the arm with the elbow in a bent position, to ensure the victim is comfortable with their arm in a sling. Leave the tips of the fingers unbanded to allow the victim's circulation to be checked.
2 Bind a splint along the forearm.
3 Use a sling to further prevent limb movement.

Illustrations and text of pressure-immobilisation technique modified from Australian Venom Research Unit website, IAW ARC Guideline 8.9.1 (2005). Images © CSL Ltd

BLACK SNAKES

COLLETT'S BLACK SNAKE, or DOWNS TIGER SNAKE



Distribution. QLD: Central western QLD,

Colour/Description. Variable. Back light/dark brown, reddish or black. Cream, pink, salmon, tan, red, grey or brown bands and spots. Belly white, cream, light yellow or orange. Head is usually darker.

Length. Maximum 2 metres, average 1.25 to 1.5 metres

Habitat/Habits. Black soil plains, Mainly active at night. May be nervous if provoked

Risk. **PROBABLY DANGEROUS, PARTICULARLY LARGER SPECIMENS.** Correct first aid is essential. Administration of antivenom in hospital may be required.

BLACK SNAKES

PAPUAN BLACK SNAKE



Distribution. New Guinea & Saibai Island (Australian territory, Torres Strait Islands.)

Colour/Description. Glossy or matt black, or gunmetal black, blue-grey, gunmetal-grey, or blackish brown or dark brown. Throat and tip of snout yellowish or cream. Neck whitish, yellowish or cream with black flecks. Belly usually grey, bluish-grey or blackish.

Length. Average adult 1.4 metres, maximum 2.4 metres

Habitat/Habits. Hunts by day. Inhabits coastal swamps, monsoon forest in swampy areas, bamboo thickets, sometimes savannah woodland, rainforest and rubber tree groves. Nervous disposition, bites readily, ferocious if cornered.

Risk. **DANGEROUS, POTENTIALLY LETHAL.** Severe illness or death if bitten. Correct first aid is essential. Administration of antivenom in hospital may be required.

BLACK SNAKES

BLUE-BELLIED OR SPOTTED BLACK SNAKE



Distribution. QLD: SE inland. BSFTA. NSW: NE inland, down to Hunter Valley.

Colour/Description. Back glossy black, or glossy dark brown, light brown, dark grey, or cream/brown with dark markings around scales & darker head, may have cream spots. Belly blue-grey to blue-black, sometimes with yellow spots. Heavy build, narrow head, neck not particularly distinguishable. Small eyes, round pupil, black iris.

Length. Maximum 2 metres, average adult size 1.25 to 1.5 m.

Habitat/Habits. Grasslands, rocky hills, floodplains, coastal forest, swampy areas, sometimes drier habitats. Hunts by day except in hot weather when it hunts at night.

Risk. **MODERATELY DANGEROUS.** Bite rarely fatal. Correct first aid essential – if required – administration of antivenom in hospital.

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BLACK SNAKES

FALSE MULGA SNAKE

Distribution. Not known, and may be Australia-wide but the only known specimen so far has come from the Mt Isa area.

Colour/Description. Similar to but more slender than the Mulga snake. The neck is not particularly distinguishable. Colour similar to Mulga snake

Length. 1–1.5 metre

Similar snakes: Mulga Snake. Western Brown Snake (Gwardar)

Habitat/Habits. Not known at this stage

Risk. **DANGEROUS, POTENTIALLY LETHAL.** Correct first aid is essential. Administration of antivenom in hospital may be required.

BLACK SNAKES

BUTLER'S OR YELLOW-BELLIED BLACK SNAKE



Image ©Australian Venom Research Unit website

Distribution. WA: arid inland mid-west from Meekatharra/Wiluna to Gibson desert

Colour/Description. Speckled appearance. Upper side black, speckled with brown, cream or yellow-centred scales; very variable between specimens. Underside of head and throat is often reddish-brown. Underside cream or bright yellow, with black flecks.

Length. Up to 1.6 metres

Habitat/Habits. Little is known about this snake.

Risk. **POSSIBLY MODERATELY TO VERY DANGEROUS**

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BLACK SNAKES

MULGA SNAKE or 'KING BROWN' SNAKE

The name 'King Brown' Snake is now outdated and is not correct. This is a Black Snake, not a large Brown Snake



Distribution. **QLD:** Most of QLD except some southern areas between Townsville /Rockhampton /Gladstone to NSW border. **WBTA, AFTAT, CBTA, BSFA.** **NSW:** Most of inland NSW, but probably not much of

eastern or coastal NSW. **VIC:** Possibly occurs in far NW corner. **SA:** Throughout northern part, but may not occur in far SE tip or along much of the SA coastline. **EATA.** **WA:** Most of WA except possibly not far SW tip. **NT:** Probably throughout NT, including Melville Island, Bathurst Islands, Groote Eylandt. **MBTA, BFTA.**

Colour/Description. Variable. Light or darker copper brown, reddish brown or dark olive brown, sometimes nearly yellow. May have green/yellow-green 'netted' appearance. Sometimes some reddish spots. Southern specimens may be darker, sometimes almost black. Belly white, cream, pinkish cream or yellow-green; may have orange blotches

Length. Up to 3 metres, average 1.5 to 2 metres.

Similar snakes: Brown Snakes (Eastern Brown Snake is slimmer and may have orange belly blotches); Taipan; Water Python (harmless).

Habitat/Habits. Wide range of habitats – drier areas (forests, woodlands, plains) but may be rarer in very arid areas. Inhabits rabbit holes, wells, under larger rocks or logs. Hunts at night particularly in hot weather and in northern Australia. Flattens neck and body as a warning. May be aggressive. When it does bite, it often inflicts multiple bites and chews at the bite site.

Risk. **DANGEROUS, POTENTIALLY LETHAL.** Not all bites result in envenomation, but envenomation from a bite can cause severe illness, or death. Correct first aid is essential, and – if required – administration of antivenom in hospital.

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BLACK SNAKES

RED-BELLIED BLACK SNAKE



Distribution. Along E part of QLD (incl SWBTA, WBTA, CBTA, BSFA, AFTAT and possibly Canungra) to NSW, ACT, much of Vic, some parts of far SE of SA (incl EATA).

Colour/Description. Back colour is shiny black, sides (usually visible) reddish, underside dull red or pink, underside of tail black. Some specimens have a lighter-coloured snout. Fairly heavily built, narrow head, neck not particularly distinguishable.

Length. Up to 2.5 metres in length (max), average adult size 1.2 to 1.5 metres.

Habitat/Habits. Live on land, but can climb. Often found under large rocks creeks, swamps, rivers



and timber but keep near and lakes, where they hunt. Active by day. If provoked, will flatten neck and body. Eats frogs, fish, reptiles, small mammals. Will move away if possible and if cornered will put up a bluff display. Unwilling to bite. If angered it will flatten its neck before striking.

Risk. **MODERATELY DANGEROUS.** Not all bites deliver venom, but if it does so, the bite is very rarely fatal. Correct first aid is essential, and – if required – administration of antivenom in hospital.

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BROWN SNAKES

BROWN SNAKE, COMMON OR EASTERN



Above: Adult specimens
Lower: Juvenile specimens

Distribution. **QLD:** Cape York S to NSW border. **SBTA, CBTA, BSFA, AFTAT, WBTA,** possibly also Canungra. **NSW ACT, VIC, SA:** SE of SA. **EATA.** **NT:** parts of inland NT.

Colour/Description. Variable, from pale grey-brown to tan to reddish to dark brown, with or without darker bands or spots. Underside colour is cream/yellow with orange or grey blotches. Juveniles may have from 3 to 50 dark cross-bands and dark markings on head. Slender build, relatively small head which is not distinct from the neck.

Length. 2.3 metres max, average 1.3 metres.

Habitat/Habits. Dry forests, grasslands, arid areas. Swift-moving. Lives on ground, active by day, fast moving, eats mainly, small mammals (especially mice), frogs. Will retreat if able to do so but if provoked, will hold up the front of the body, holding the neck and head in an 'S' shape, and lunge forward to bite. Bites without provocation. When striking, holds its head high and bites may be higher on arm or leg. Often gives multiple bites. More likely to produce scratches than classic fang marks when biting.

Risk. **Highly venomous, VERY DANGEROUS.** Not all bites result in envenomation, but envenomation from a bite can cause severe illness, or death.

BROWN SNAKES

DUGITE

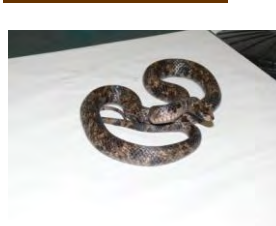


Figure 29. Dugite or Spotted Brown Snake from near Lake Grace.



Top right: photo ©
2004 Brian Bush
& Brad
Other photos:
©Peter Mirtschin

Distribution. **WA:** SW (including Perth metropolitan area, wheat belt, goldfields, and S coast from Esperance to SA border. **SA:** limited distribution in far SW coastal areas. 3 subspecies—occurring in SW and far S of WA, and far coastal SW of SA, Rottnest Island, and offshore islands of WA such as the Recherche Archipelago Group.

Colour/Description. Slender build, narrow neck, no distinguishable neck. Large eyes, round pupil with a golden ring around it. Back colour is grey or any shade of brown, yellowish-brown, olive or green-brown. Blackish scales on back of neck often form a V or W –shaped marking. May have black scales scattered over body. Belly has dark flecks and orange, yellow, olive, grey, light brown, light pink or salmon-coloured blotches. Juveniles are greenish or brownish with a dark head. Specimens from Eucla to Esperance have larger, darker spots and some specimens may be completely black; others may have black at the back of the head, with 10 or more wide black bands along the body on a light brown background.

Similar snakes. Gwardar. Western Tiger Snake. © Commonwealth of Australia 2010

DUGITE (continued)

Length. Maximum 1.8 to 2 metres, average adult size 1.5 metres. Subspecies on islands are smaller (0.8-1.2 metres) and darker

Habitat/Habits. Fast-moving. Not common in completely built-up areas. Hunts by day, attracted to populations of rodents. Not usually active by night except in warm weather. Aggressive if cornered or handled. Excitable and bites readily. Tends to bite high up, on leg or arm and can deliver bites accurately. Fangs are small and fang marks may be hard to see, scratches being more usual than puncture marks. Juveniles are common in February and March.

Risk. **HIGHLY DANGEROUS.** Correct first aid and administration of antivenom in hospital are essential.

FIVE-RINGED OR RINGED BROWN SNAKE



Photos: Jiri Lochman, ©Lochman Transparencies, from http://www.threatenedspecies.environment.nsw.gov.au/tsp/profile/profile_data.aspx?id=10691&cma=Lower+Murray/Darling

Distribution. **QLD:** Western QLD and NE QLD. **NSW:** Western NSW. **VIC:** May only occur in far NW corner of the State. **WA:** Much of WA except for far N end and far SW tip and southern coastal strip. **SA:** Northern SA. **NT:** Most of NT except far top end and far NE corner.

Colour/Description. Slender; head barely distinguishable from neck. Back olive, tan, pale grey-brown or reddish-brown with 4 –17 or more narrow black evenly-spaced cross-bands at approx 6–10 cm intervals. These markings may be paler or missing on larger specimens. Top of head may be black or dark brown with a separate dark broad stripe across the back of the neck. Underside cream to pale yellow, sometimes with orange or grey blotches. Juveniles have narrow, sharply-defined black rings on body.

FIVE-RINGED BROWN SNAKE OR RINGED BROWN SNAKE (continued)

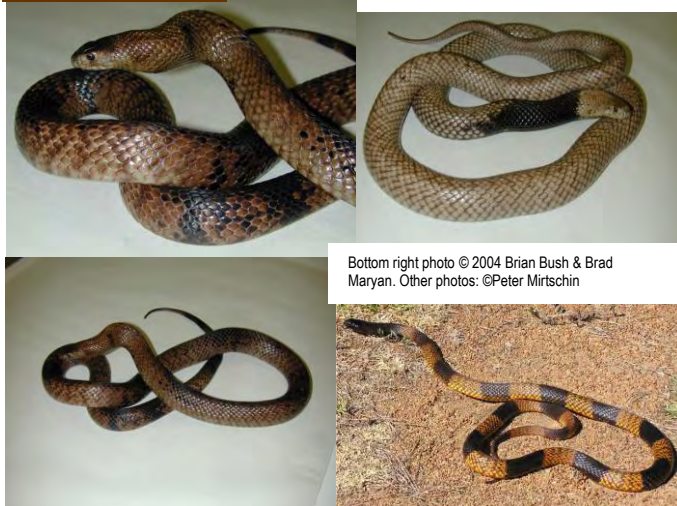
and tail, and upper surface otherwise bright orange.

Length. 0.5–0.6 metre (a small snake)

Habitat/Habits. Less aggressive than other Brown Snake species.

Risk. **PROBABLY MODERATELY DANGEROUS.** Not all bites deliver venom, but if it does so, the bite is very unlikely to be fatal. Correct first aid and administration of antivenom in hospital are essential.

GWARDAR OR WESTERN BROWN SNAKE



Bottom right photo © 2004 Brian Bush & Brad Maryan. Other photos: ©Peter Mirtschin

Distribution. **QLD:** Much of QLD except strip next to E coast and adjacent areas, and except most of Cape York Peninsula. **WBTA, AFTAT, BSFA.** **NSW:** All of NSW except for a strip down the E coast. **VIC:** NW corner of Vic. **SA:** all except far SE corner of SA or Yorke Peninsula. © Commonwealth of Australia 2010

GWARDAR OR WESTERN BROWN SNAKE (continued)

Peninsula or Kangaroo Island. Abundant in N of SA. **WA:** Occurs throughout WA but may be rarer in the extreme SW and far SE and possibly in the Kimberley region. Very common in the northern and central wheatbelt, but less common further N and inland. **NT:** Most of NT, except some northernmost regions. **MBTA, BFTA**

Colour/Description. Very variable, as there are probably up to 5–7 species/subspecies. Many specimens have black or darker marking around the head and neck, and in some cases may have either a glossy black, head and back of neck, or V- or W-shaped black marks on the neck. However some specimens have a very pale head and neck.

Back colour is very variable – whitish to olive-grey, yellow, orange, red, light brown, dark brown, or nearly black.

Some specimens are banded, sometimes 'tiger-like' bands, sometimes alternating broad dark brown and narrow lighter brown bands. Some specimens are uniform in colour, some have a light netted effect due to darker edges on each scale, and some specimens have a speckled effect with orange and darker markings. **NQLD** specimens which have strongly banded colouration are known locally as "Tiger Snake" but they are actually Brown snakes. Belly is cream, grey or orange, with dark blotches, often with orange spots. Some specimens have random dots all over the body. Slender build, relatively narrow head with chisel-like shape when seen from above (no distinguishable neck)

Similar snakes: Taipan; Inland Taipan; Mulga Snake; Five-ringed Brown Snake; Blue-bellied Black Snake; Tiger Snake.

Length. Maximum 1.8 metres, average up to 1.4 to 1.5 metres

Habitat/Habits. Fast moving, occurs in environments ranging from desert to woodland. Active mostly by day in southern Australia but also hunts by night in very hot weather. In northern Australia it tends to hunt by night. Will become aggressive if provoked. When striking, holds its head high and slightly flattens neck. Can give multiple bites. More likely to produce scratches than classic fang marks when biting.

Risk. Not all bites deliver venom. **Highly venomous, VERY DANGEROUS.** Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

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INGRAM'S BROWN SNAKE



Distribution. **NT:** Barkly Tableland, extending into QLD. **QLD:** NT border to far W of QLD. **WA:** may extend from NT as far west as Kununurra.

Colour/Description. Reasonably heavy build. Colour extremely varied. May be coloured like eastern Brown Snake, but may be chocolate or reddish-brown. There are at least 5 different colour forms. , from glossy black-brown to golden brown to pale olive-brown. Underside is white or cream, with orange blotches. Scales are all darker at the tips. Inside of mouth is mostly black.

Similar snakes. Speckled Brown Snake (*Pseudonaja guttata*), Eastern Brown Snake (*Pseudonaja textilis*)

Length. Average 1.2 metres, maximum 1.8 metres.

Habitat/Habits. Active by day only except in hot summer conditions when it is active by night, evening or early morning. Known to hide in deep earth cracks. Inhabits black soil plains and tussock grasslands. Reluctant to bite

Risk. **POTENTIALLY HIGHLY DANGEROUS.** Correct first aid and administration of antivenom in hospital are essential.

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BROWN SNAKES

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PENINSULA BROWN SNAKE



Photos: ©Peter Mitschin



Distribution. **SA** : Eyre Peninsula and southern Yorke Peninsula and nearby islands including Wardang Island. Not found more than 50 km from coast. Very common in Coffin Bay National Park.

Colour/Description. Usually dark brown but may be light brown, dark tan or almost black. Some specimens may be greenish-brown and/or have bluish/black spots on the head and body. Underside has marked grey or blackish spotting over a lighter pale brown or grey undersurface. Juveniles are usually light tan in colour.

Similar snakes. Dugite (*Pseudonaja affinis*)

Length. Maximum 1.5 metres

Habitat/Habits. Swift-moving. Active by day. Tends to have a quiet temperament. Fangs are small and so fang marks may be hard to see, scratches probably being more usual than fang puncture marks. Attracted to mice populations.

Risk. **POTENTIALLY HIGHLY DANGEROUS.** Correct first aid and administration of antivenom in hospital are essential.

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BROWN SNAKES

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SPECKLED BROWN SNAKE



Distribution. **QLD**: Central western QLD and Barkly Tableland. **NT**: Central far eastern NT. **SA**: Far NE of SA.

Colour/Description. Either single-coloured. With speckling, or less commonly banded with 12 to 18 broad dark cross-bands.

Photos ©Peter Mirtschin

Length. Maximum 1.05—1.4 metres, average 0.5—1.25 metres

Habitat/Habits. Back light brown to creamish-brown, olive or apricot to salmon colour, sometimes bright orange-brown, with many dark-edged scales. Head may be lighter in colour. Throat and lips may be whitish. Belly white to creamy-yellow to bright orange, with brighter orange or apricot blotches. Inside of mouth is mainly black.

Risk. **PROBABLY NOT DANGEROUS.** May be able to cause unpleasant symptoms. Correct first aid, and referral to hospital if symptoms develop, are recommended.

COPPERHEADS

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LOWLAND, HIGHLAND, & PYGMY COPPERHEADS



Above: Lowlands Copperhead (Photos by Peter Robertson © Museum Victoria)



Above: Alpine Copperhead (Photos by Peter Robertson © Museum Victoria)

Distribution. 3 subspecies. **Highlands or Alpine Copperhead**: mainly at higher, cooler altitudes in upland regions of NSW and ACT, and E of Vic. **Lowlands Copperhead**: SA/Vic border, S of Vic, possibly far SE corner of NSW, Tas. **Dwarf or Pygmy or Adelaide Hills Copperhead**: Kangaroo Island, S of Mt Lofty ranges SA **Colour/Description.** Variable, and also depends on species. **Highlands Copperhead** – As for Lowlands Copperhead but usually darker – dark slate-grey back, sides and underside yellowish. Upper lip usually has white-and-brown striped or barred effect. **Dwarf Copperhead** – similar to Lowlands Copperhead but darker and with marked barring on lips. **Lowlands Copperhead** – adults, and may have dark band across neck and down centre of back (these markings may persist into adult specimens).

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COPPERHEADS

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LOWLAND, HIGHLAND, & PYGMY COPPERHEADS (continued)



Above: Pygmy Copperhead (Photo: ©P. Mirtschin)

Small head, barely distinguishable from neck. Large eyes, round pupils. variable from very dark brown to light coppery to blackish or reddish, depending on locality; sometimes with pink or red stripe along side; underside yellow, cream or grey. May have dark neck stripe or neck collar (with yellow border). Belly yellow, cream or grey. May have white or cream bars on lips. Juveniles usually lighter in colour than

Similar snakes. Dark-headed, juvenile Common Brown Snakes are often mistaken for Highlands Copperhead; sometimes mistaken for Red-bellied Black Snakes, or wrongly called 'yellow-bellied black snakes'. May be confused with Tiger Snakes. Pygmy Copperhead is more slender than Highlands and Lowland Copperhead, which have more stocky build than Tiger Snakes.

Length. **Highlands Copperhead** 1—1.2 m, **Dwarf Copperhead** 0.6—0.8 m, **Lowlands Copperhead** – 0.6—1.3 m (max 1.8 m on Bass Strait Islands).

Habitat/Habits. Inhabits swampy or marshy country, especially dense grass; can also occur in woodlands. Moves swiftly and can climb trees and low bushes. Tends to prefer cooler conditions and may be active on days when other snakes are not; may hunt at night in hot weather. Not aggressive.

Risk. **POTENTIALLY DANGEROUS.** Not all bites deliver venom, but if it does so, the bite is very rarely fatal. Correct first aid and administration of antivenom in hospital are essential. Bites to humans are rare.

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DEATH ADDERS

COMMON, NORTHERN & DESERT DEATH ADDERS



Above: Common Death Adder (Photos: P. Mirtschin)



Above: Desert Death Adder (Photos: P. Mirtschin)



Above: (left) Northern Death Adder (Photos: ©P. Mirtschin); (right) Desert Death Adder, © 2004 Brian Bush & Brad Maryan. © Commonwealth of Australia 2010

ROUGH-SCALED SNAKE

ROUGH-SCALED SNAKE OR CLARENCE RIVER SNAKE



Distribution. QLD: Central N coast between Nambour and Tully/Cairns/Mt Molly/Mossman Fraser island. Also includes Binna Burra, Canungra and Tamborine Mountain, and S coast near NSW border. CBTA, AFTAT. Not known to occur between Rockhampton and Tully, nor SBT. NSW: N coast around Clarence River, down to Barrington Tops.

Colour/Description. Variable colour -- back olive-green to green-brown, dark or light brown; often has indistinct darker 'tiger-like' stripes across body -- particularly at the front of the body -- or a 'netted' effect or black flecking. Belly cream to grey or grey-green, olive-green, cream or yellow; may also have black flecking or blotches. Lips usually cream-covered.

Length. Average 0.7—0.75 m, maximum adult size 1.0 metre.

Habitat/Habits. Found close to water in damp, forested country particularly wet sclerophyll forests and rainforests. Limited to higher-rainfall areas. May also occur in urban areas and in pastures. Ground and tree-dweller. Active by day or night, but mostly by night. Shy but highly aggressive if aroused, and bites readily and swiftly, sometimes with multiple bites.

Similar snakes. Can be mistaken for the harmless Keelback which is a dangerous mistake.

Risk. POTENTIALLY VERY DANGEROUS. Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

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DEATH ADDERS

COMMON, NORTHERN & DESERT DEATH ADDERS (continued)

Distribution. 3 subspecies. **Common Death Adder:** WA : SW WA except for far SW tip & far southern WA. SA: far southern SA. VIC NW tip. NSW: much of eastern and SW of NSW. QLD: E QLD up to Cairns & Normanton, but not Cape York. SBT, WBTA, AFTAT, BSFA. NT: parts of NE of NT. **Northern Death Adder:** WA : Kimberleys. QLD : Cape York Peninsula. NT: Northern third. MBTA, BFTA, CBTA. **Desert Death Adder:** QLD: Far SE and far central west. NSW: possibly in far NW tip. SA: Northern half. EATA. WA : Much of mid-northern WA except SW, far SE and far N. NT: Southern two-thirds.

Similar snakes. Unlikely to be mistaken for other snakes, except possibly for the non-dangerous Ornamental Snake which occurs in central eastern QLD

Colour/Description. Thickset short body. Tail is very thin and ends in a spiky scale. The head is large, distinct from the neck, and almost triangular in shape with a blunt tip. The scales around the head may be prominent and spiky. Colour is variable, depending on type and on location. **Common Death Adder:** Back light brown, reddish brown to black. Can have light and dark 'tiger-like' but 'lacy' stripes across body. Belly grey or yellow to cream, sometimes with brown or pink spots or blotches. Sometimes there are black and white blotches around the lips, jaws and head. Juveniles may have different colouring. **Northern Death Adder:** Similar to Common Death Adder but darker and more strongly coloured. Belly is usually whitish. **Desert Death Adder:** The back is brighter, more reddish or orange in colour than the Common Death adder, although some specimens can be greyish. Can have indistinct cross bands or conspicuous yellow bands. Underside is white or cream, and the tail is usually black but can be white.

Length. **Common Death Adder:** Average 0.65 metre, max 1.1 m. **Northern Death Adder:** Average 0.4 metre, max 0.7 m. **Desert Death Adder:** Average 0.75 m.

Habitat/Habits. **Common Death Adder and Northern Death Adder:** Leaf litter, loose sand or gravel, usually in low scrub/ bushland. Active on warm nights, sometimes by day. Flattens body before attacking. Sluggish; may not move out of the way if disturbed. Placid unless trodden upon, then bites rapidly at low level. Bites are usually to foot, ankle or hand. May hang onto the victim after biting. **Desert Death Adder:** Occurs in arid areas, on rocky slopes and inland porcupine grass areas.

Risk. VERY DANGEROUS. Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

SEA SNAKES

SEA SNAKES



Left: photo ©Peter Mirtschin.
Lower two photos from http://animaldiversity.uconn.edu/site/research/phil_myers/classic/pcd4614_003.jpg/view.html (bottom left: Yellow-bellied Sea Snake; bottom right: Sea Krait)

Distribution. 12 different species occur from Sydney to Perth/Augusta. A few species have also been found in the waters off Victoria, South Australia and Tasmania. Sea Kraits occasionally occur in northern Australian waters.

Colour/Description. Most sea snakes have a flattened tail, with the exception of the Sea Kraits. The colouration of most sea snakes is shades of brown or grey, creamy-white or blackish or purplish. One or two species have black and yellow rings or brown and yellow, rings, bands or blotches around the body. the Sea Kraits have black and blue or blue-grey bands, and a cream or yellow belly. The Yellow-bellied Sea Snake is black above, and cream, yellow or brown on the underside.

Length. Depends on species, varying from 0.6—1.5 metres, with some specimens occasionally reaching up to 2 metres.

Habitat/Habits. Depending on species may be found on reefs, in upper tidal reaches of rivers, tidal waters, deeper water or in open ocean waters

Risk. POTENTIALLY DANGEROUS TO VERY DANGEROUS, DEPENDING ON SPECIES. Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

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SMALL-EYED SNAKE

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SMALL-EYED SNAKE



Photo: © Peter Mirtschin

Distribution. There are two closely-related species, Northern and Eastern Small-eyed Snakes. **Northern Small-eyed Snake:** NT: Northern parts of NT. **WA:** Possibly NW of WA. **Eastern Small-eyed Snake:** QLD: Eastern Cape York down to NSW border, as far inland as the Darling Downs, SBTA, WBTA, AFTAT, BSFA, CBTA. **NSW:** Entire E coast and adjacent inland area, including near Sydney. **ACT:** Rare. **VIC:** E third of Vic.

Colour/Description. Shiny very dark grey or black back; underside may be white, cream or bright pink, sometimes with dark blotches. May be mistaken for a juvenile Red-bellied Black Snake.

Similar snakes. Black Snakes, possibly some Tiger Snakes.

Length. Average 0.5 metre. Maximum 1.2 metres.

Habitat/Habits. Secretive. Hides under rocks or logs or other debris, or in crevices, during the day. Active by night. Occurs in a range of habitats including rainforest to coastal heath.

Risk. Venomous and **POTENTIALLY DANGEROUS** – the Eastern Small-eyed Snake is known to have caused at least one human death. © Commonwealth of Australia 2010

TAIPANS

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COASTAL or MAINLAND TAIPAN



Photos: © Peter Mirtschin



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TAIPANS

COASTAL or MAINLAND TAIPAN (continued)

Distribution. QLD: most of E coast, much of Cape York. Known to occur in Brisbane/Ipswich/Toowoomba region and on Fraser Island. Common near Beaudesert, Elsie, Gympie. CBTA, BSFA, AFTAT, WBTA. **NSW:** small area at far NE corner down to Grafton. **NT:** northern tip and Melville Island. BFTA, MBTA. **WA:** Far NE tip (Kimberley region/Mitchell Plateau). **SA/WA:** A newly-discovered, related species (*Oxyuranus temporalis*) is reported to occur in mid-eastern WA (central ranges) near SA border.

Colour/Description. Back is uniform brown, olive, coppery red or yellowish-brown, sometimes fawn to dark grey or near black. Snout (sometimes whole head) is always lighter, often cream. Belly cream to yellow, with pink, orange or reddish speckles or blotches. Eyes orange-red, with round pupil.

Similar snakes. Eastern Brown Snake; harmless Water Python; Gwardar; in limited areas where both snakes occur, perhaps Rough-scaled Snake; perhaps a large specimen of Black Whip Snake; Keelback.

Length. Average up to 2.0-2.5 m, max 3.35 m

Habitat/Habits. Fast-moving, agile. Wide range of habitats, often in grassed tropical woodlands, particularly wetter coastal areas, also lantana, sugar cane. Favours rock heaps, ground debris, attracted to vermin-infested habitats. Usually active by day, occasionally late afternoon/early evening/twilight, or at night in very hot weather. Reticent but will stand ground if cornered, becoming extremely aggressive; strikes quickly and may deliver multiple bites.

Risk. **Highly venomous, VERY DANGEROUS.** Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

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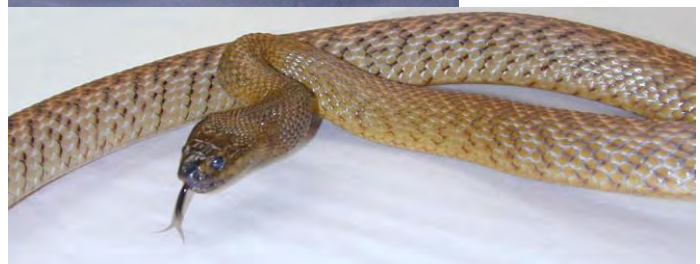
TAIPANS

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INLAND TAIPAN, or FIERCE SNAKE



Photos: © Peter Mirtschin



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TAIPANS

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INLAND TAIPAN, or FIERCE SNAKE (continued)

Distribution. **QLD:** SW and W. Cooper Creek, Diamantina and Georgina river drainage areas (QLD and SA). **NSW:** W to far NW, Bourke area. **SA:** NE, possibly in small area in central SA, Coober Pedy **NT:** far SE (Cooper / Diamantina River systems)

Similar snakes. Gwardar, Mainland Taipan

Colour/Description. Head often glossy black, mostly in winter. Back light brown to dark brown or olive-brown with darker lines or spots. Occasionally cross-bands (may be faint). Throat may be dark. Belly cream or yellow, with dark edges to scales. Eye black (different to Taipan). Inside of mouth varies from blue-grey to off-white.

Length. Average up to 1.7- 1.9 m, max 2.5 m

Habitat/Habits. Burrows & cool, moist environments, but distributed in dry areas with limited rainfall. Blacksoil plains, 'ashy downs, and mostly in flood plains & channel country, where it lives in solution holes, gibbers, sand dunes. Not aggressive, ferocious if provoked. Tends to hang on after biting (unlike the Mainland Taipan). Active by day.

Risk. **Highly venomous, VERY DANGEROUS.** Envenomation can cause severe illness, or death. Correct first aid & administration of antivenom in hospital are essential.

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TAIPANS

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PAPUAN TAIPAN



This specimen is from Saibai Island.
Photo: ©Peter Mirtschin

Distribution. **NG.** Also occurs on Saibai Island, (Australian Torres Strait Islands)

Colour/Description. Closely related to the Coastal or Mainland Taipan

Similar snakes. Eastern Brown Snake, Coastal Taipan, Keelback, Papuan Black Snake

Length. Average 1.8—2.5 metres, maximum 3.4 metres.

Habitat/Habits. Lowland savannah and dry savannah woodland. May occur near areas of human settlement. Does not occur in rainforest or wet monsoon forest. If cornered, threatened or startled, will strike ferociously and with multiple bites

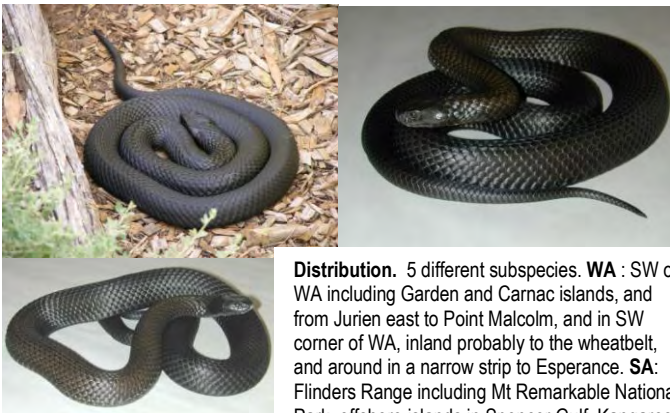
Risk. **Highly venomous, VERY DANGEROUS.** Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

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TIGER SNAKES

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BLACK TIGER SNAKES



Distribution. 5 different subspecies. **WA :** SW of WA including Garden and Carnac islands, and from Jurien east to Point Malcolm, and in SW corner of WA, inland probably to the wheatbelt, and around in a narrow strip to Esperance. **SA:** Flinders Range including Mt Remarkable National Park, offshore islands in Spencer Gulf, Kangaroo

coast of SA, coastal sand dunes of lower Eyre and York Peninsulas. **EATA. TAS:** Chappell Island and badger island in Funeaux Grop, Flinders, Cat, babel, Forsyth and Vansittart Islands, King Island, Seal Rocks, Christmas Island, New Year Island, Bruny island, mainland Tas

Colour/Description. Solid build, broad head. Colour varies with type and location. Usually black but can be olive brown, grey, fawn, yellow, brown or steel blue-black. Some specimens have faint to bright cream/yellow bands or stripes, or faint, flecked black bands. Juveniles may have white bands. The sides of some specimens may be yellow. The head may be dark olive grey or jet black; in some specimens there may be faint white markings around the jaw. Underside blue, cream, dark grey or black.

Length. Depends on type. Average 0.9-1.8 metres, maximum up to 2.4 metres.

Habitat/Habits. Tend to be less aggressive than Eastern Tiger Snakes. Active by day and by night in warm weather. Tolerant of cold weather, and may hunt on cool nights as well as during the day. May occur near water.

Risk. **VERY DANGEROUS.** Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

TIGER SNAKES

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EASTERN OR MAINLAND TIGER SNAKE



Distribution. **QLD:** Parts of SE QLD. **NSW:** Parts of highlands of N NSW, central NSW, coast and western slopes of central, much of southern NSW, Murrumbidgee region. **VIC:** Murray River valley. **SA:** parts of SE of SA.

Colour/Description. Very variable, from light grey to olive brown or reddish brown or orange to dark brown or blackish brown. There are banded and unbanded specimens, and dark and light specimens. Bands (if present) are usually a series of narrow, lighter, yellowish cross-bands. Banded juvenile Common Brown Snake are often mistaken for 'baby Tiger Snakes'.

Length. Up to 1.2 metres

Habitat/Habits. Active by day, or by night in hot weather. Only aggressive if aroused. Will attempt to escape if encountered and may try to bluff, but may inflate its body, flatten the head and neck, and strike.

Risk. **Highly venomous, VERY DANGEROUS.** Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

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Photo (left): ©P. Mirtschin



Photos (above) by Peter Robertson © Museum Victoria

Distribution. VIC: Western/north-western areas. NSW: SW. WA: SW. SA: Southern areas.

Colour/Description. Back colour is variable – may be grey, olive, brown or brick-red. Lips are usually dotted with white. There may be pale flecks on the head, neck and sides. The underside is cream to grey or pale brown-grey or salmon.

Similar snakes. Death Adder.

Length. Average 0.3 metres, maximum 0.6–0.7 metre.

Habitat/Habits. Active by night. Often found in arid areas

Risk. UNCERTAIN. While most bites do not result in severe symptoms, it is possible that some bites might result in envenomation symptoms very similar to those from the Death Adder. Correct first aid is essential and possibly administration of antivenom in hospital. There is also a chance of mis-identification with the Death Adder, which is dangerous.

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Distribution. QLD: Cape York Peninsula. Possibly most of QLD coastal regions. Mornington Island. SBTA. NT: Northern part including Melville Island and Groote Eylandt. BFTA.

Colour/Description. Variable. Back colour may be grey, olive, green, brown, black or reddish, with many dark markings or dark cross-bands. Usually has salmon-pink to black edges to scales on the underside; the scales themselves are cream, olive, olive-green, brown or salmon in colour.

Similar snakes. Rough-scaled Snake (which differs in colour, having grey-green belly)

Length. Average 0.5 metre, maximum 1 metre.

Habitat/Habits. Always found in close proximity to permanent water, although it does not spend all its time in the water. Active by day and night but encountered more often at night. When agitated it inflates itself, displaying blue skin between the scales. Bites only as a last resort. Will rear up into a strike posture and may attempt to chase intruders.

Risk. HARMLESS but there is a chance of mis-identification with the dangerous Rough-scaled Snake, which could be a dangerous mistake.

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FUNNELWEB SPIDER, SYDNEY

Photo: (left) ©R. Lowe, Australian Venom Research Unit, (right) ©Australian Museum Online



Distribution. NSW: East coast, from Newcastle/Hunter River to Nowra/Shoalhaven river, inland as far as Lithgow (Blue Mountains) and including Sydney region. According to the Australian Museum, they 'especially favour the forested upland areas surrounding the lower, more open country of the central Cumberland Basin. This includes the Hornsby Plateau to the north, the foothills of the Blue Mountains to the west, and the Woronora Plateau to the south. Funnel-web occurrence is low in much of central-western Sydney, and also the sandy coastal parts of the eastern suburbs and the Botany Bay area.'

Colour/Description. Large dark brown-black spider. The carapace (head/thorax) is shiny dark brown to black. The abdomen may be a dark reddish-plum to black, and is not patterned. There are four spinnerets in two pairs at the rear. Males have smaller bodies and longer legs than females, with a mating spur on each second leg. Large jaws and dagger-like fangs. The eyes are closely grouped together.

Length. Body length 1.5 to 3.5 cm

Habitat/Habits. Forest dwellers. Prefer moist, cool habitats. Burrow is 15 to 35 cm deep, located near logs, rocks, roots near trees or gardens. Burrow consists of a silken entrance, rather funnel-like, with irregular silk trip-lines spread out. These spiders hunt by night from the burrow entrance. Male spiders may wander at night in search of a mate in December–June. According to the Australian Museum, 'they do better in areas of sandy clay, shale or basaltic soils that can retain moisture more effectively.'

Risk. VERY DANGEROUS. Treat a bite by any large black spider in SE Australia as a potential Funnelweb spider bite. Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

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FUNNELWEB SPIDER, OTHER TYPES, INCLUDING TREE-DWELLING



Photos: ©Dr Ron Atkinson

Distribution. There are quite a number of other species of Funnelweb spider, occurring from SE QLD through NSW to VIC, TAS and parts of SA. Some of these species are dangerous.

Colour/Description. Large spider, size depending on species and location. Carapace generally shiny dark brown to black, abdomen generally light to dark brown and velvety or hairy.

Similar spiders. Trapdoor Spiders, Black House Spider, Mouse Spiders

Length. Varies according to species, sex and location. Body length from 1.5–3.5 cm (male) and 2.5 to 6 cm (female), depending on species.

Habitat/Habits. Varies according to species, age and location, but build funnel-like webs with trip lines; tend to hunt and wander like the Sydney Funnelweb.

Risk. POTENTIALLY VERY DANGEROUS, DEPENDING ON SPECIES. The area from SE QLD (including the Brisbane area and Nambour/Maleny/Gympie) through to the S coast of NSW has several potentially very dangerous species. Treat a bite by any large black spider in SE Australia as a potential Funnelweb spider bite. Envenomation from a bite can cause severe illness, or death. Correct first aid and administration of antivenom in hospital are essential.

REDBACK SPIDER



Photos: Female Redback Spider: (left) ©Peter Mirtschin; (right): ©Museum Victoria

Distribution. Throughout mainland Australia and Tasmania

Colour/Description. This spider has a small cephalothorax (head/thorax) and a large spherical abdomen. Female Redback spiders are black or dark brown, with a red, orange or pale stripe (sometimes with a red dot in front of it) along the back of the abdomen. The male spider is lighter in colour than the female, and has white or orange markings on the back of the abdomen, with a red spot underneath.

Similar spiders. Brown House Spider, Brown Widow Spider, Cupboard Spider, possibly Garden-orb Weaver Spider

Length. The length of the body is about 15 mm, the abdomen being about the same size and shape as a pea. The male spider is much smaller, about 5 mm long.

Habitat/Habits. Rarely if ever occurs in natural forest. The adult female makes an untidy silken web in hidden areas amongst debris, rocks & logs, and underneath objects. Very long silken threads may extend from the web. May hide under outdoor toilet seats, in shoes and clothing. Not aggressive but will bite if disturbed.

Risk. POTENTIALLY MODERATELY DANGEROUS. Apply ice packs for pain relief, and seek medical attention if symptoms are severe.

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ABBREVIATIONS / ACRONYMS USED IN THESE NOTES:

AFTAT	Army Field Training Area, Tully (N QLD)
BFTA	Bradshaw Field Training Area (NT)
BSFTA	Barakula State Forest Training Area (QLD)
CBTA	Cowley Beach Training Area (N QLD)
EATA	El Alamein Training Area (SA)
MBTA	Mount Bunday Training Area (NT)
SWBTA	Shoalwater Bay Training Area (QLD)
WBTA	Wide Bay Training Area (S QLD)

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