

Key to the Snakes of South Australia



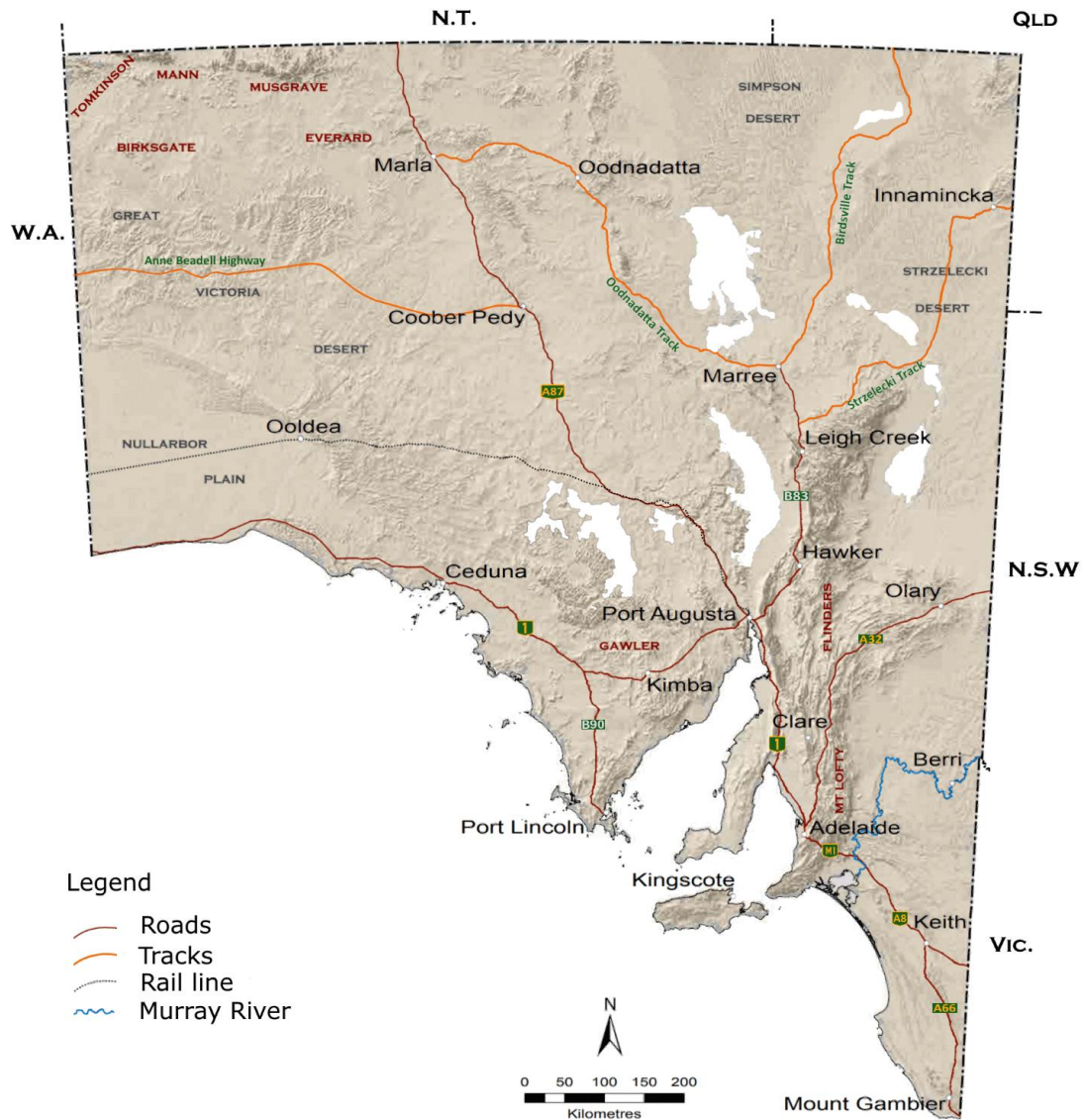
Woma, Aspidites ramsayi

Mark Hutchinson & Ian Williams

THE SNAKES OF SOUTH AUSTRALIA

(SEE ALSO THE SEPARATE KEY AND MAPS FOR Blindsnakes, TYPHLOPIDAE)

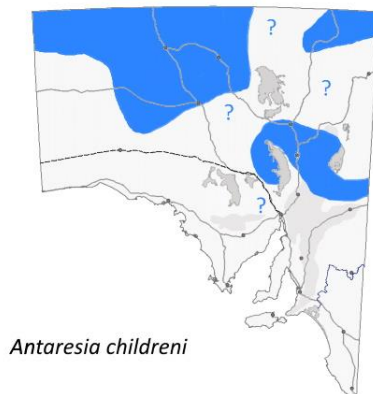
GEOGRAPHIC DISTRIBUTION



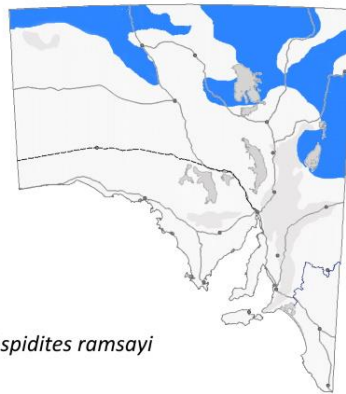
Map modified from the Vertebrate Census of South Australia showing place name and geographical features as well as some main roads and major desert tracks, to assist with interpreting the following distribution maps.

Distribution maps show known and likely occurrence, given suitable habitat.

Family Pythonidae (pythons)



Antaresia childreni



Aspidites ramsayi

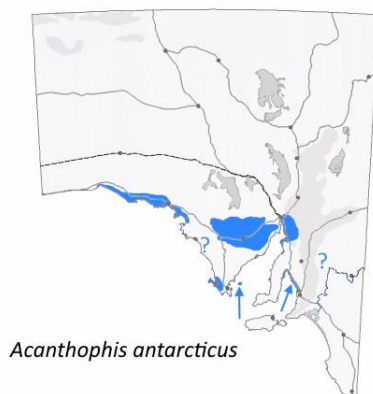


Morelia imbricata

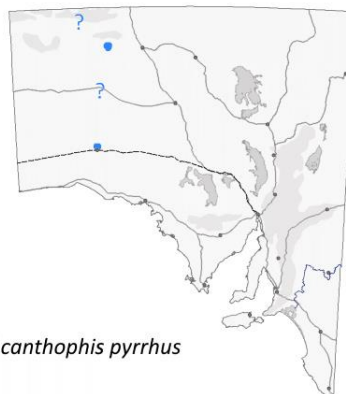


Morelia spilota

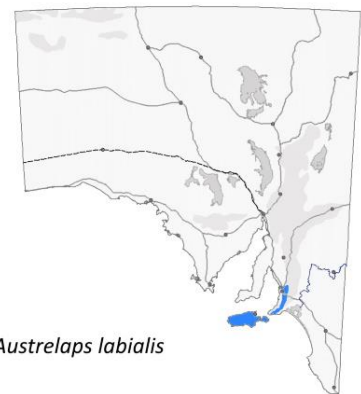
Family Elapidae (cobras, seasnakes and relatives)



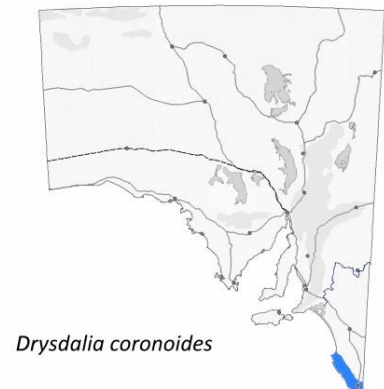
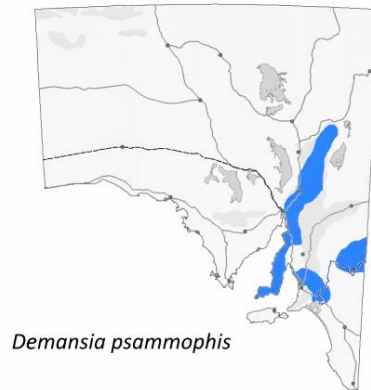
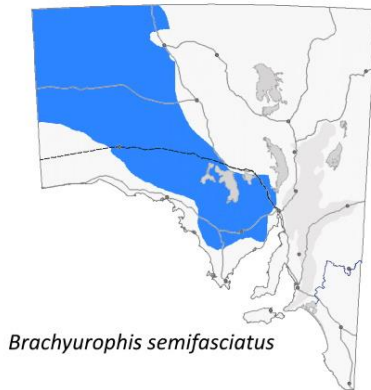
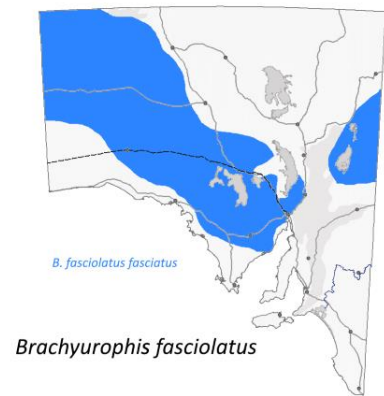
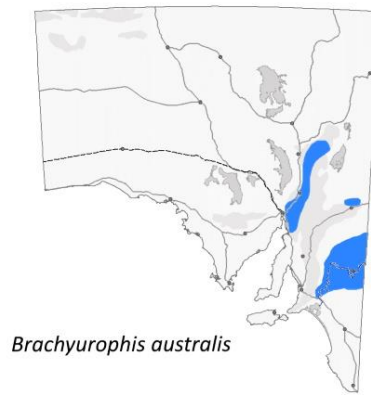
Acanthophis antarcticus

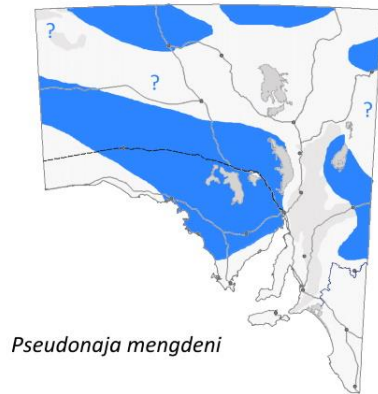
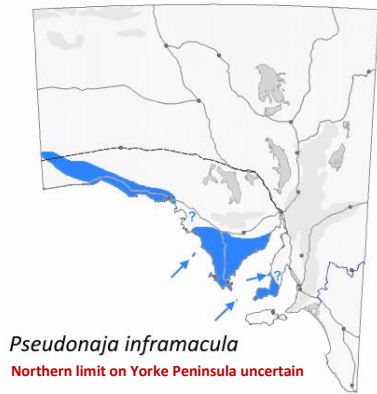
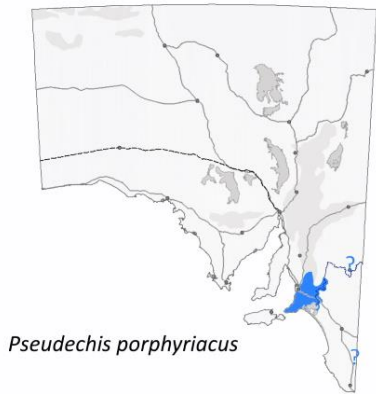
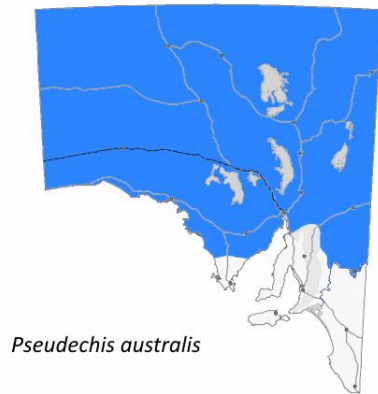
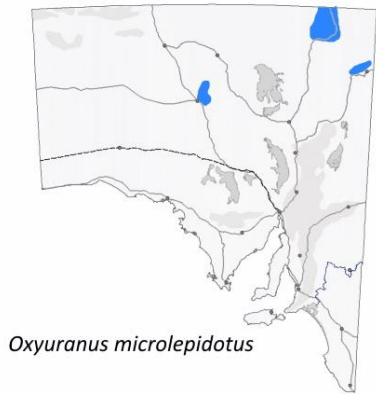
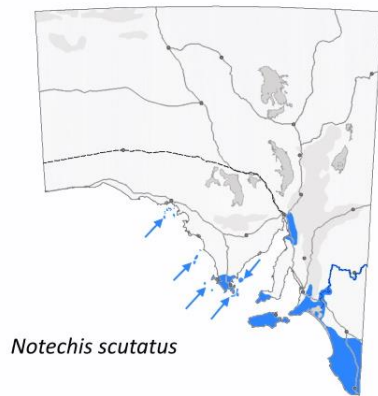
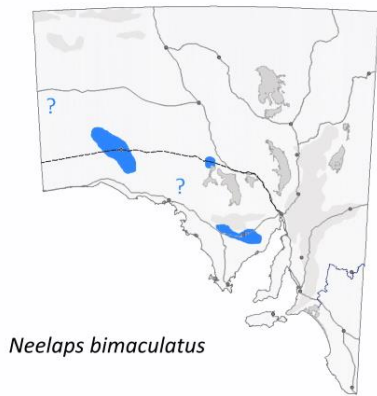
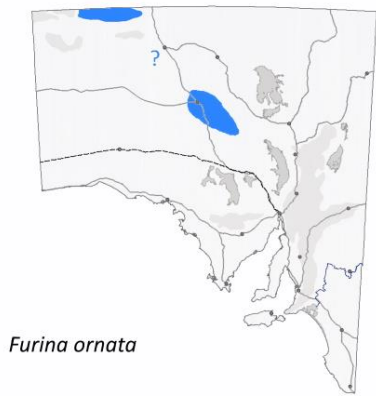


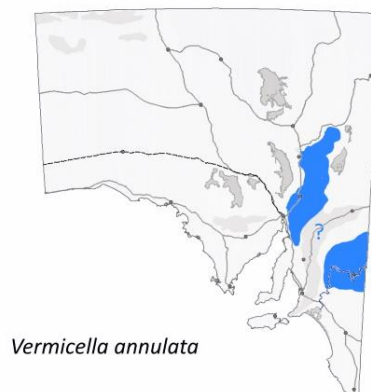
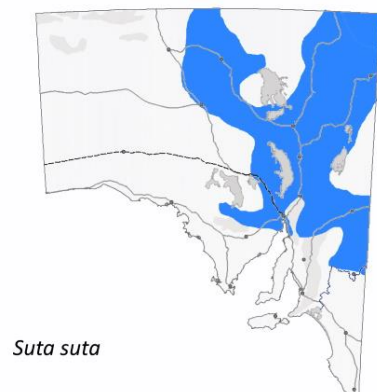
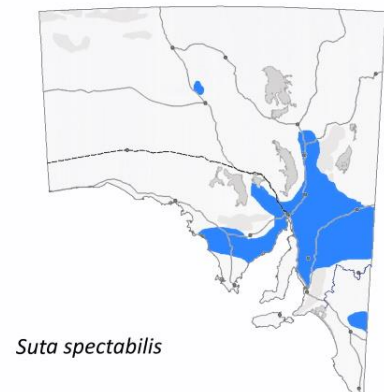
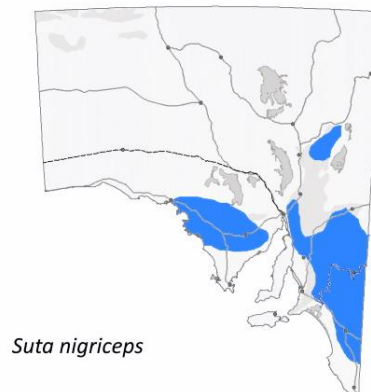
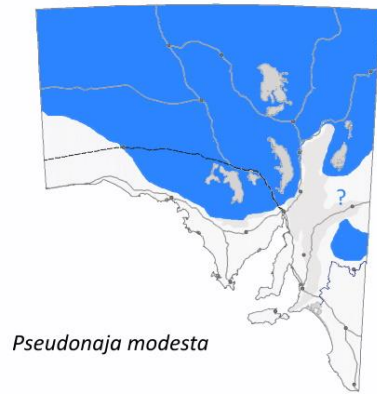
Acanthophis pyrrhus



Austrelaps labialis







KEY TO THE SNAKES OF SOUTH AUSTRALIA

ELAPIDAE, PYTHONIDAE

Snake identification traditionally depends on scale features, especially the arrangement of scales under the tail, the number of body scales on the back and sides of the body and the arrangements of the larger scales on the head and lips. Close examination is therefore sometimes necessary and so it must always be kept in mind that an unidentified snake could be a dangerously venomous snake.

As far as possible we have aimed to use distinguishing features that can be seen in a photograph or observation of a live snake without handling, but in many cases precise identification will require handling by a trained person, or be limited to dead specimens.

1. a. Eyes rudimentary, visible as small dots buried under head scales; tail extremely short, blunt, tipped with a small spine; no enlarged belly scales **Typhlopidae** Blind snakes
Refer to separate key for blind snakes
- b. Eyes obvious; tail tapering, not blunt-ended; a single row of enlarged scales runs down the middle of the belly **2**



1a. *Anilius bicolor*



Anilius bicolor

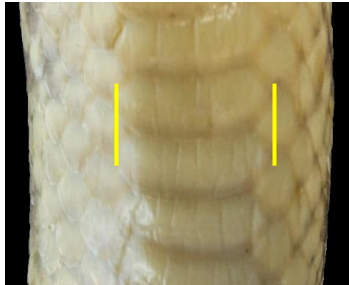
1a. Tiny head and rudimentary eye



Anilius bicolor

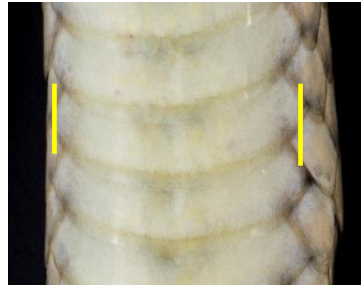
1a. Blunt tail with spiny tip

2. a. Belly scales not covering the full width of the belly; more than 30 mid-body scale rows **Pythonidae**
Pythons **3**
- b. Belly scales cover the full width of the belly and wrap slightly onto the lower sides of the body; 23 or fewer mid-body scale rows . . . **Elapidae** Venomous
land snakes **6**



Antaresia stimsoni

2a. Narrow belly scales



Demansia psammophis

2b. Broad belly scales

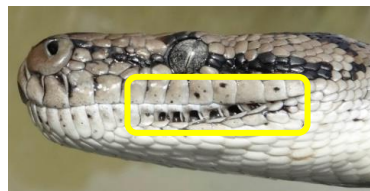
Family Pythonidae (pythons)

3. a. Lower lip and snout scales smooth, without pockets; pale yellow-brown to dull olive with brown blurry crossbands, sometimes very faint in large adults ***Aspidites ramsayi***
Woma
- b. Lower lip scales, and sometimes the snout scales, with central pockets; strongly patterned with irregular blotches or bands . . . **4**



Aspidites ramsayi

3a. All lip scales smooth



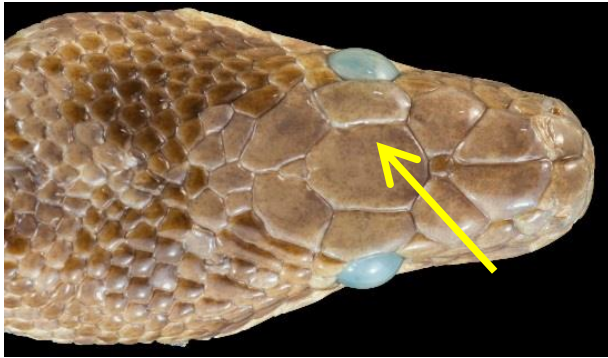
Morelia spilota

3b. Some lip scales have 'pockets'



3a. Weakly banded pattern of *Aspidites ramsayi*

4. a. Scales on the top of head (between and behind the eyes) forming large symmetrical plates; rostral and anterior upper lip scales not deeply pitted ***Antaresia childreni***
Children's Python
- b. Scales on top of head (between and behind the eyes) small and irregular; deep pits in the rostral and anterior upper labial scales. **5**

*Antaresia stimsoni***4a.** Large symmetrical plates*Morelia spilota***4b.** Irregular small scales*Morelia spilota***4b.** Pockets in scales on the front of the snout

- | | | |
|----------|---|--|
| 5 | <p>a. East of Spencer Gulf</p> <p>b. West of Spencer Gulf</p> | <p><i>Morelia spilota</i>
Carpet Python</p> <p><i>Morelia imbricata</i>
Southwestern Carpet Python</p> |
|----------|---|--|

Family Elapidae (cobras, seasnakes and relatives)

- | | | |
|----------|---|---|
| 6 | <p>a. Body relatively short and stout and strongly patterned with cross-bands; tail much narrower than the body and tipped with a single spiny scale; head very broad posteriorly and distinct from neck</p> <p>b. Various body and head shapes, from moderately stout to very slender; tail tapering gradually to the tip, not ending with an enlarged spiny scale</p> | <p><i>Acanthophis</i> (p. 10)</p> <p style="text-align: right;">7</p> |
|----------|---|---|



Acanthophis antarcticus

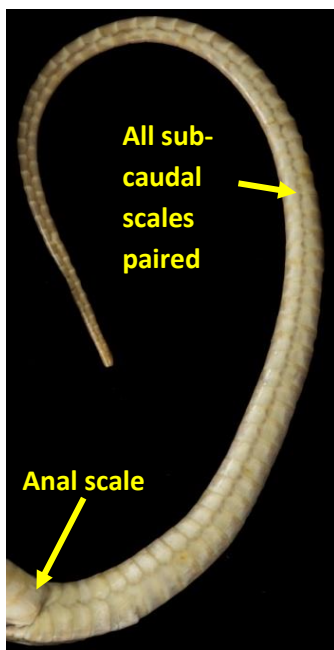
6a. Broad head, many narrow cross-bands, tail narrows abruptly



Acanthophis antarcticus

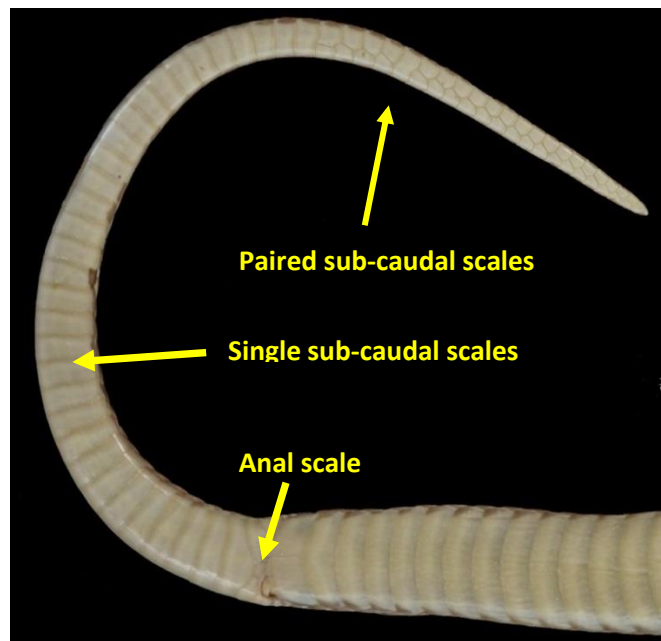
6a. Spiny tail tip

7. a. All sub-caudal scales paired 8
 b. At least some sub-caudal scales single 15



Pseudonaja textilis

6a. All subcaudals paired



Pseudechis australis

6b. Most subcaudals single

7. a. Anal scale entire; mid-body scales in 21 or more rows **Oxyuranus** (p. 14)
 b. Anal scale divided; mid-body scales in 21 or fewer rows 8



9a. *Simoselaps bertholdi*

- 10 a. Eyes with the iris distinct from the pupil. 11
 b. Eyes 'beady', appear solidly black, iris not distinguishable from pupil 12



Pseudonaja guttata

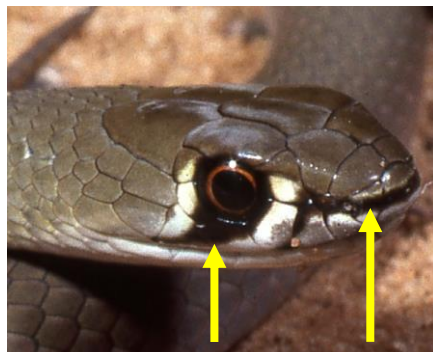
- 10a. Golden ring on the iris makes pupil distinct



Brachyuropsis semifasciatus

- 10b. Iris dark, similar to pupil

- 11 a. Eyes with a black, pale-edged comma-shaped marking surrounding the eye, and a pale-edged dark line that runs over the rostral from nostril to nostril *Demansia* (p. 12)
 b. No yellow markings or comma-shaped patch over the eye; small individuals with a black patch on top of the head and/or a black collar *Pseudonaja* (p. 16)



Demansia psammophis

- 11a. Comma-shaped eye markings and line crossing snout

- 12 a. Tail short, 30 or fewer pairs of sub-caudals; body patterned in transverse rows of black, reddish-brown and/or cream scales . . . *Brachyuropsis* (p. 11)

- b. Tail longer, with 35 or more pairs of sub-caudals; body with a uniform pattern of dark-edged scales giving a 'fishnet' appearance and typically a red patch behind the head followed by a black patch or collar (red collar lost in larger specimens of *Furina ornata*)

13

12a. *Brachyuropsis semifasciatus*

- 13 a. Top of head uniformly black; upper lip scales white
- b. Top of head with black patch that stops at the level of the eyes; upper lip scales coloured like adjacent scales

Furina (p. 13)*Neelaps**bimaculatus*Black-Naped
Burrowing Snake*Furina ornata* (A. Fenner)

- 13a. Black cap continues to snout

*Neelaps bimaculatus*

- 13b. Black cap stops at the eyes

- 14 b. Anal divided (see fig. 7b); some, sometimes most, of the sub-caudals divided
- a. Anal entire (see fig. 7a); all sub-caudals single
- 15 a. A narrow white stripe edged above by black runs from the nostril across the upper lip and below the eye to the neck; dorsal scales matt
- b. If pale lip stripe present, scales glossy; if white markings on upper lip scales, they take the form of pale scale edges or vertical bars (see figs 19a and 19b)

Pseudechis (p. 15)

15

Drysdalia (p. 13)

16

*Drysdalia coronoides*

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *ACANTHOPHIS*

1. a. Head scales rough and keeled. ***A. pyrrhus***
Desert Death Adder
- b. Head scales smooth ***A. antarcticus***
Common Death Adder



Acanthophis pyrrhus

1a. Scales with central keel



Acanthophis antarcticus

1b. Scales without central keel

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *AUSTRELAPS*

1. a. Upper lips with strongly contrasting pattern, each scale dark brown, most with a sloping white bar along the leading edge of each scale; maximum length 75 cm, usually smaller; Mt Lofty Ranges, Fleurieu Peninsula and Kangaroo Island ***A. labialis***
Pygmy Copperhead
- b. Upper lips with weakly contrasting pattern, each scale whitish to pale brown with narrow white leading edge; maximum length 1.4 m; lower South-East of SA ***A. superbus***
Lowlands Copperhead



Austrelaps labialis

1a. Sharp-edged lip pattern



Austrelaps superbus

1b. Blurry lip pattern

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *BRACHYUROPHIS*

1. a. Snout relatively unmodified, head rather flat ***B. fasciolatus***
Narrow-banded Snake
- b. Front of snout with a curved-up sharp edge ending in a point,
head rounded **2**



Brachyuropis fasciolatus

1a. Head flat, no 'shovel'



Brachyuropis australis

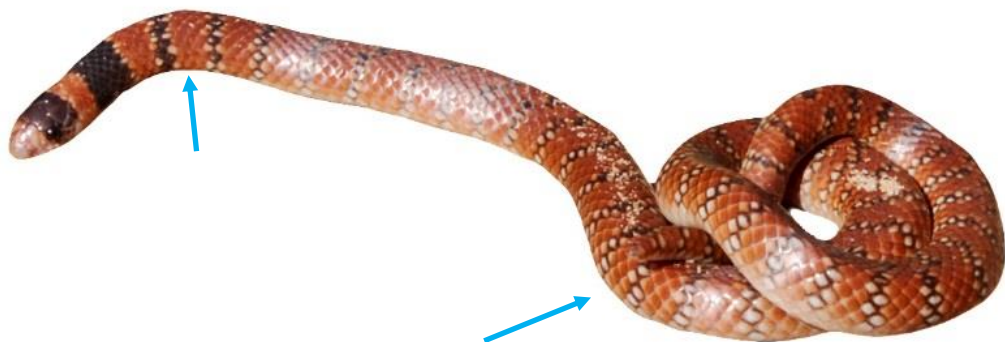
1b. Head domed; snout with sharp-edged 'shovel'

2. a. Dorsal surface of body with alternating even bands of reddish
and blackish grey ***B. semifasciatus***
Southern Shovel-nosed Snake
- b. Body dull to bright red with narrow black bands, each including
a regular scattering of white scales ***B. australis***
Australian Coral Snake



Brachyuropis semifasciatus

2a. Pattern lacks white scales.

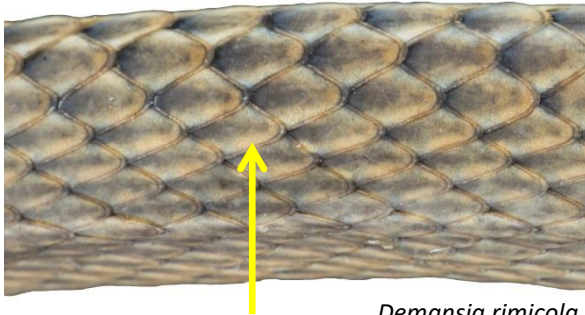


Brachyuropis australis

2b. White scales mixed with black

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *DEMANSIA*

1. a. A pattern of pale light narrow lines running along the dorsal scale edges; belly 'sunset coloured', orange or pink and yellow; ***D. rimicola***
Blacksoil Whipsnake
- b. No trace of light longitudinal lined pattern on dorsal scales (scales may have dark, not light, edges); belly whitish to pale grey, sometimes with a darker midline zone. **2**



Demansia rimicola

- 1a.** Light streaks run along the edges of the scales



Demansia psammophis

- 1b.** No light lines along the body

2. a. Head and tail same colour as body; faint to prominent pinkish wash along either side of the back on the neck and forebody . . ***D. psammophis***
Yellow-faced Whipsnake
- b. Head and tail sandy brown to yellow-orange, contrasting with the main dorsal colour of greenish- or bluish-grey ***D. "reticulata" ****
Desert Whipsnake



Demansia psammophis

- 2a.** Uniform body colour



Demansia reticulata

- 2b.** Head and tail different to body

*A widespread but taxonomically unresolved group of populations that has been arbitrarily allocated to either *D. psammophis* or *D. reticulata*. Research currently in progress to clarify its status.

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *DRYSDALIA*

1. a. Yellow or orange collar ***D. mastersi***
Masters' Snake
- b. No pale collar ***D. coronoides***
White-lipped Snake



Drysdalia mastersi

1a. Pale collar



Drysdalia coronoides

1b. No pale collar

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *FURINA*

1. a. Red patch separates the black head from the black collar ***F. ornata***
Orange-naped Snake
- b. Red patch surrounded by black, the black collar connected on either side to the black head colouring ***F. diadema***
Red-naped Snake



Furina ornata (A. Fenner)

1a. Red collar interrupts black



Furina diadema (A. Fenner)

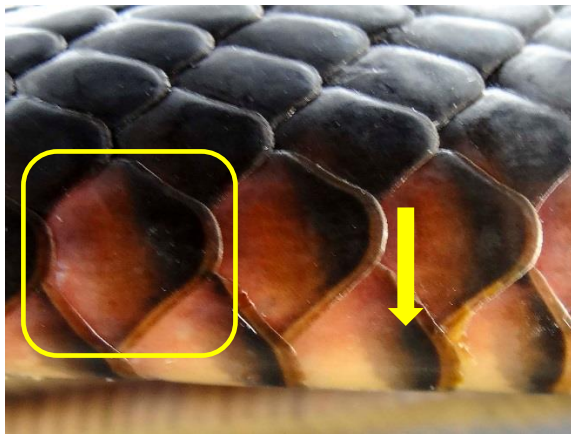
1b. Red collar surrounded by black



1a. *Furina ornata* - large individuals become dark and drab (A. Fenner)

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *PSEUDECHIS*

1. a. Dorsal scales uniformly jet black; each of the scales in the lateral-most scale row half black and half red; belly pale greyish to pink, with the trailing edge of each ventral scale black ***P. porphyriacus***
Red-bellied Black Snake
- b. Dorsal scales all light at the base and dark along the trailing edge producing a 'fish-net stocking' effect; colour of dorsal scales with pale beige to yellow bases and dark brownish grey tips (central and northern SA): grading to almost yellow and black (Eyre Peninsula) or light and dark reddish brown (adjacent to eastern border); belly uniformly cream or dull yellow, sometimes salmon pink in eastern populations ***P. australis***
Mulga Snake



Pseudechis porphyriacus

- 1a.** Last scale row on each side crimson at the base with a black trailing edge; belly scales with a black trailing edge



Pseudechis australis

- 1b.** All body scales light at the base and dark along the trailing edge

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *PSEUDONAJA*

1.
 - a. 21 (sometimes 19) mid-body scale rows; far northeast corner of South Australia; adults extremely variable in colour and pattern, sometimes with fine dark speckles on all dorsal scales, sometimes with broad, indistinct cross-bands. ***P. guttata***
Speckled Brown Snake
 - b. 17 (a few far SW corner *P. affinis* have 19) mid-body scale rows **2**
2.
 - a. Maximum length 60 cm, frequently smaller; colour pattern (sometimes only weakly present in larger animals) a black head patch and collar, with about five black bands each about as wide as the collar widely spaced along the light brown to pinkish brown body and tail; face markings include a dark snout and pale patch in front of the eye ***P. modesta***
Ringed Brown Snake
 - b. Maximum length greater than one metre; young animals with black head patch and collar but sides of snout pale and no contrasting pale patch in front of eye; body pattern highly variable but never with just five narrow black bands **3**



2a. *Pseudonaja modesta*, strongly marked



2a. *Pseudonaja modesta*, weakly marked



2a. *Pseudonaja modesta*, lateral head pattern, strongly marked



2a. *Pseudonaja modesta*, lateral head pattern, weakly marked



2b. *Pseudonaja mengdeni*, juvenile lateral head pattern



2b. *Pseudonaja textilis*, juvenile lateral head pattern

3.
 - a. Length 50 cm or less, with obvious black head markings (juveniles) **4**
 - b. Length greater than 50 cm. (sub-adults to adults) **8**
4.
 - a. Black head markings a continuous black cap from above the eyes to the nape, with no collar and tending to blur into the adjacent body colour). **juv. *P. affinis***
Dugite
 - b. Black markings consist of a black cap over the eyes and a black collar separated by pale brown to pinkish or orange (see figs 5a and 5b below) **5**



Pseudonaja affinis, juv.

4a. Black cap continuous

5.
 - a. Black cap over the eyes well-defined and sharp-edged; body occasionally with numerous narrow black crossbands **6**
 - b. Black cap over the eyes often less intense than neck patch, tending to merge with lighter colour around it **7**



Pseudonaja textilis, juv.

5a. Cap uniformly black, sharp-edged.

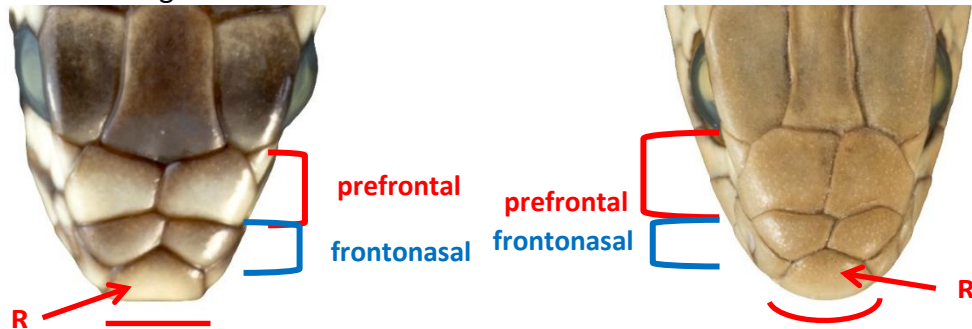


Pseudonaja aspidorhyncha, juv

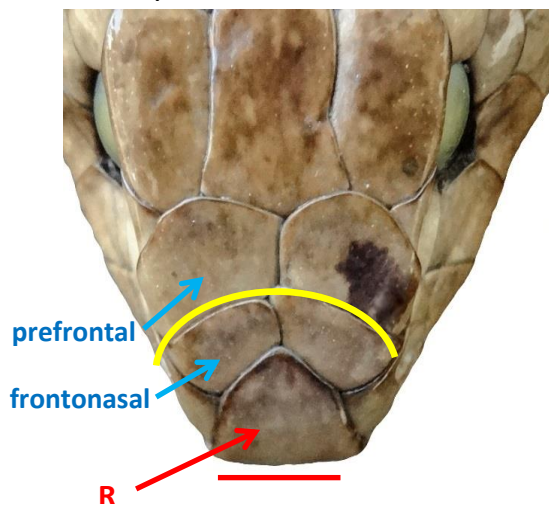
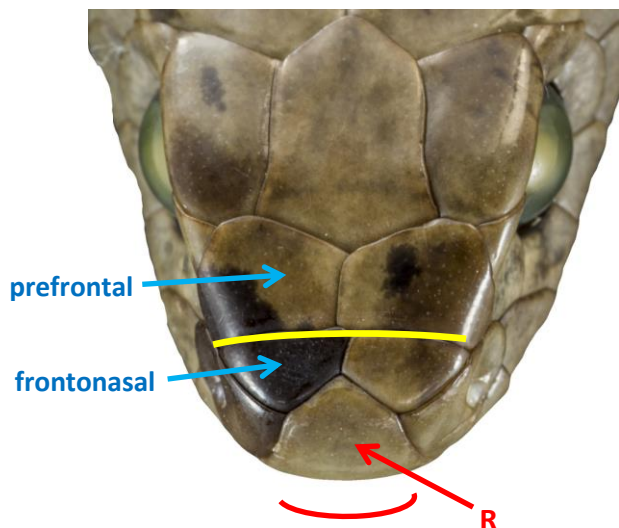
5b. Cap brownish and black, margins blurred

6.
 - a. Eastern SA, as far west as northern Yorke Peninsula and the northern Spencer Gulf coast **juv. *P. textilis***
Eastern Brown Snake
 - b. Southern Yorke Peninsula west to the southern Eyre Peninsula and the Nullarbor Plain **juv. *P. inframacula***
Peninsula Brown Snake

7. a. Margins of rostral scale (R) somewhat raised compared to adjacent scales, and front of snout almost straight-edged when viewed from above; prefrontal scales less than twice as long as frontonasal scales. **juv. *P. aspidorhyncha***
Strap-snouted Brown Snake
- b. Margins of rostral scale flush with adjacent scale margins, front of snout rounded when seen from above; prefrontal scales twice as long as frontonasal scales **juv. *P. mengdeni***
Western Brown Snake

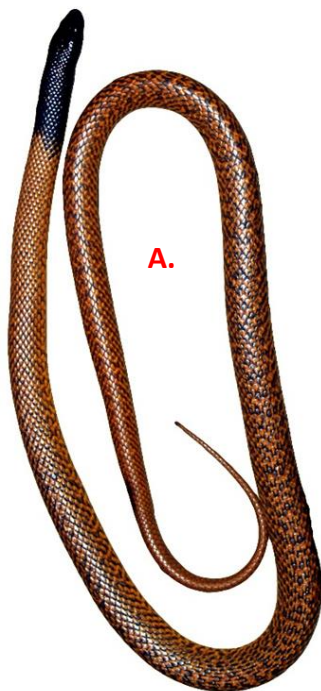
7a. *Pseudonaja aspidorhyncha*, juv7b. *Pseudonaja mengdeni*, juv

8. a. Margins of rostral scale (R) somewhat raised compared to adjacent scales, and front of snout almost straight-edged when viewed from above; contact between prefrontal scales frontonasal scales curved or angled backwards. ***P. aspidorhyncha***
Strap-snouted Brown Snake
- b. Margins of rostral scale flush with adjacent scale margins, front of snout rounded when seen from above; contact between prefrontal scales frontonasal scales almost a straight line. **9**

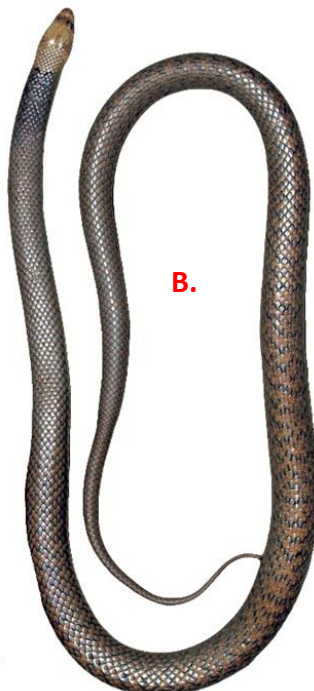
8a. *P. aspidorhyncha*8b. *P. affinis*

9. a. Lining of mouth pale pink; body usually uniformly coloured with no irregular or contrasting dark body or head markings ***P. textilis***
Eastern Brown Snake

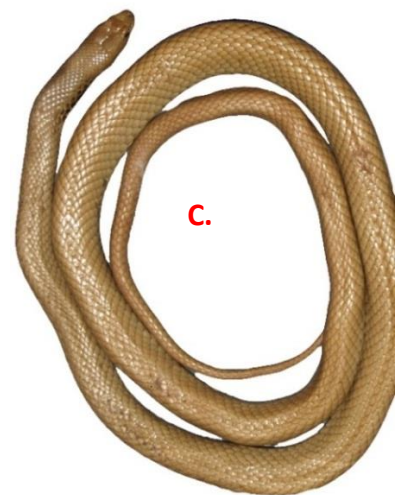
- b. Lining of mouth dark greyish pink to black; head and body may have either irregular spots or contrasting dark markings on the head, neck or body **10**
- 10. a.** Lining of mouth black; belly cream with bright orange freckles; dorsal colour conforms to one of three morphs (A) body yellow to bright tan heavily flecked with black; head and neck uniform glossy black above; (B) body pale sand to grey-brown with darker scale edges; head and neck pale creamy brown to bone coloured usually with a darker greyish zone or group of scales on the nape; (C) body and head golden brown; chin and throat may be blackish ***P. mengdeni***
Western Brown Snake
- b. Lining of mouth dark greyish pink; belly either a duller version of the dorsal colour or dark grey to black; dorsal colour often irregularly speckled and spotted, not conforming to any of the three morphs of *P. mengdeni* . . . **11**



Black-headed morph



Pale-headed morph



Gold morph

10a. *P. mengdeni*

- 11. a.** Ventral scales of adults plain dark grey, their lateral margins off-white to pale brown; on southern Yorke Peninsula ventrals may be spotted in grey rather than solidly grey . . . ***P. inframacula***
Peninsula Brown Snake

- b. Ventral scales of adults a paler version of the dorsal colour with obscure darker speckling; underside of neck black . . . *P. affinis* Dugite



11a. *Pseudonaja inframacula*



11b. *Pseudonaja affinis*

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *SIMOSELAPS*

- | | | | |
|----|----|--|---|
| 1. | a. | Head mostly black | <i>S. anomalus</i>
Centralian Banded
Snake |
| | b. | Head whitish mottled with pale brown | <i>S. bertholdi</i>
Southern Desert
Banded Snake |



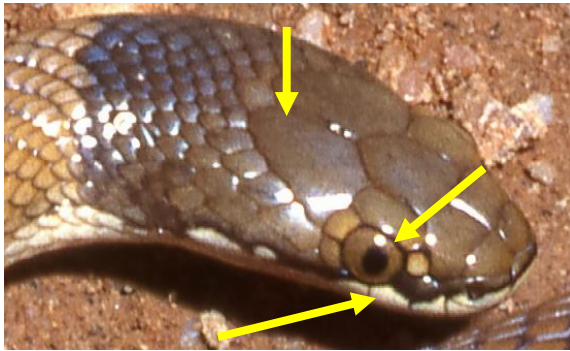
1a. *Simoselaps anomalus*



1b. *Simoselaps bertholdi*

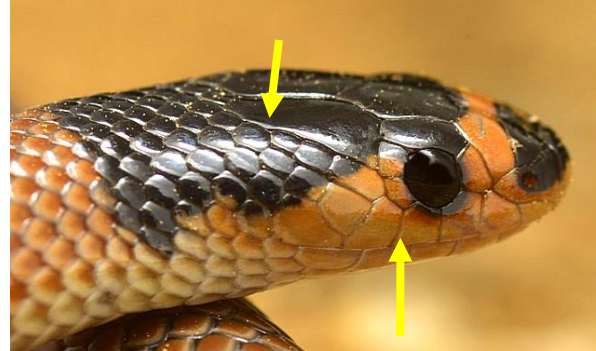
KEY TO THE SOUTH AUSTRALIAN SPECIES OF *SUTA*

- 1
 - a. Eye brown with vertical oval pupil; head usually brown rather than black (blackish in young animals, < 20 cm long); wavy white upper lip stripe. ***S. suta***
Curl Snake
 - b. Eye black, pupil not distinguishable from iris; head patch black; no upper lip stripe **2**



Suta suta

- 1a.** Pupil distinct, head patch brown in adults, wavy white upper lip stripe



Suta spectabilis

- 1b.** Pupil not distinct, head patch black, upper lip lacks white stripe

- 2
 - a. Top of head uniformly black from snout to eyes; upper lips whitish **3**
 - b. Black head colouring with a pale spot or complete cross-bar dividing the black between the eyes and the nostrils; upper lips pale brown to beige **4**



Suta monachus (A. Fenner)

- 2a.** Black scales in front of the eye not interrupted by a pale blotch or band on snout



Suta spectabilis

- 2b.** Black scales in front the eye interrupted by a pale blotch or band on snout

3.
 - a. Mid dorsal zone blackish, sometimes reduced to a short streak behind the head ***S. nigriceps***
Mitchell's Short-tailed Snake
 - b. Mid-dorsal zone same orange to brownish colour as rest of the dorsal surface, no suggestion of a black vertebral stripe ***S. monachus***
Monk Snake

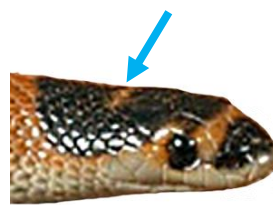
*Suta nigriceps*

3a. Broad, black vertebral stripe

4. a. 17 mid-body scale rows; black hood always interrupted in front of the eyes, but uninterrupted from the eyes to the nape ***S. flagellum***
 Little Whip Snake
 b. 15 midbody scale rows; black hood may be continuous to snout and may be broken on the neck by a pale streak or collar. **5**

*Suta flagellum*

3a. Pale bar across snout and black hood is unbroken on nape

*Suta spectabilis*

3b. Black hood with pale break on nape

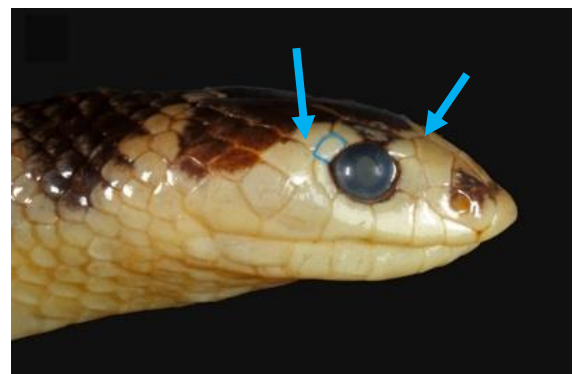
*Suta gouldii*

3b. Black continues to snout

5. a. Black colouring usually continuous down the middle of the head to the snout; parietal scale and upper postocular completely black ***S. gouldii***
 Gould's Hooded Snake
 b. Black colouring discontinuous, divided completely by a pale bar across the snout; sometimes an additional partial or complete pale bar across the back of the head; upper postocular scale and front corner of the parietal usually pale brown ***S. spectabilis***
 Mallee Hooded Snake

*Suta gouldii*

5a. Pale bar across the snout interrupted by black; upper postocular scale (blue outline) black

*Suta spectabilis*

5b. Pale bar across the snout uninterrupted; upper postocular scale (blue outline) brown to cream