



Fowlers Gap Biodiversity Checklist Reptiles

Modern reptiles are at the most diverse in the tropics and the drylands of the world. The Australian arid zone has some of the most diverse reptile communities found anywhere. In and around a single tussock of spinifex in the western deserts you could find 18 species of lizards. Fowlers Gap does not have any spinifex but even so you do not have to go far to see reptiles in the warmer weather. The diversity here is as astonishing as anywhere. Imagine finding six species of geckos ranging from 50-85 mm long, all within the same genus. Or think about a similar diversity of striped skinks from 45-75 mm long! How do all these lizards make a living in such a dry and seemingly unproductive landscape?

Well the short answer is that there are lots of insects including termites and ants to eat. But reptiles have a few more tricks to adapt them to the arid zone. Firstly they are not dependent on free drinking water. They acquire most of their water from their diet and can lick some dew off the vegetation if necessary. Secondly, they do not have a high metabolism like birds and mammals and so can feed sporadically rather than needing to find a large meal every day. Thirdly, they can exploit very narrow niches, say small, medium or large insects, terrestrial or arboreal habitat, sparse or dense vegetation, cooler or warmer temperature zones. For example, amongst the lizards the night tends to belong to Geckos but some are arboreal and others are terrestrial and some can cope with cooler temperatures later at night better than others can. The day belongs to the skinks, the dragon lizards and the goannas. These come in various shapes and sizes with long narrow bodies and heads to forage in cracks and slip through vegetation, to broad heads and fast legs to run down prey, through to adept burrowers, runners and climbers amongst the versatile goannas.

Now if there are so many lizards then they should make tasty meals for someone. Many of the lizard-eaters come from their own kind, especially the snake-like legless lizards and the snakes themselves. The former are completely harmless to people but the latter should be left alone and assumed to be venomous. Even so it is quite safe to watch a snake from a distance but some like the **Mulga Snake** can be curious and this could get a little disconcerting!

The most common lizards that you will encounter are the large and ubiquitous **Shingleback** and **Central Bearded Dragon**. They both have a tendency to use roads for passage, warming up or for display. So please slow your vehicle down and then take evasive action to spare them from becoming a road casualty. The **Shingleback** is often seen alone but actually is monogamous and pairs for life. So in the spring partners are wandering around looking for each other. I am sure you would not like your long-term spouse needlessly squashed by an inattentive driver. Likewise male **Central Bearded Dragons** display on the road during the spring. You may note the black throat and the bobbing head. They are prime targets for Wedge-tailed eagles at this time since they make a good-sized meal for their chicks. So take care, courtship is a difficult enough business without having to dodge the traffic. Around the Station you are likely to encounter one of the several **Striped Skinks**. On the stony rises you may find the **Eastern Wedgesnout Ctenotus** or **Spotted Ctenotus** clambering about. Out in the open ground it is likely to be **Pale-rumped Ctenotus**. Amongst the shrubs and spinifex look out for **Barred Wedgesnout Ctenotus** or **Leonhardi's Ctenotus**. At night you are most likely to encounter the adaptable **Tree Dtella**. This arboreal gecko has found favour in buildings with their nooks and crannies to hide in during the day and the flyscreens to climb on at night with a ready food supply drawn in by insect-attracting lights. You will see them all over the homestead in the buildings, but have a wander around at night with a good torch and you are likely to encounter many more of the ground-dwelling geckos as well. During the day, the **Tree Dtella** often gives

way to the arboreal **Carnaby's Wall Skink** that also likes the climbing surfaces of buildings.

So what about all these ultra-venomous snakes that supposedly lurk in the bushes waiting to strike out at an unwary visitor? Well you will probably be lucky to see a snake as they are not abundant (as a 'top' predator), they are secretive and they tend to be more active at night as the days warm up into summer. However, be careful around areas where there is obviously lots of potential prey, such as dense vegetation near earthen tanks (frogs and birds), burrows and deeply cracked soils (reptiles and mammals), fallen timber (reptiles) and some of the debris of pastoral activities (metal dumps with reptiles and probably house mice). You should be very careful collecting firewood and you should investigate fallen timber before needlessly removing it as this is prime reptile habitat. Look down the list and you will see that many species are dependent on timber debris for shelter and foraging habitat. Spare them a thought next time you throw a log on the campfire, especially as perhaps only 5% of the trees remain after massive consumption in the early pastoral era and subsequent lack of regeneration due to browsing by stock and rabbits.

We hope that those of you who venture out to Fowlers Gap in the spring through to early autumn enjoy the marvellous diversity of reptiles. The following is a checklist to guide your search. You will need a field guide to make a positive identification and we recommend a couple at the end of the list. If you come across something alive or dead that does not fit with the field guides then write a description, take a photograph and/or put a corpse on ice and inform the staff. We know that there are likely to be more species in the region than currently recorded in the Atlas of NSW Wildlife.

Checklist

Lizards



Geckos (Gekkonidae)

- Diplodactylus byrnei* Gibber Gecko (55 mm)
Pale fawn to dark reddish-brown back with 4-5 dark blotches. Terrestrial, forages in open at night, hides in litter, holes and crevices in the day.
- Diplodactylus ciliaris* Spiny-tailed Gecko (85 mm)
Grey back with spines extending from above eyes and down tail. Arboreal and nocturnal, exudes viscous fluid from spines when alarmed.
- Diplodactylus conspicillatus* Fat-tailed Gecko (60 mm)
Pale fawn to dark red-brown back with darker brown marbling. Terrestrial and nocturnal, lives in spider holes and burrows.
- Diplodactylus steindachneri* Box-patterned Gecko (55 mm)
Pale to dark brown back with pale stripes. Terrestrial, foraging in open areas at night.
- Diplodactylus stenodactylus* Crowned Gecko (50 mm)
Brown back with a light stripe continuing through the eyes. Terrestrial, foraging out from spinifex or burrows into the open at night.
- Diplodactylus tessellatus* Tesselated Gecko (50 mm)
Grey to red-brown back with variable pattern of darker markings. Terrestrial, foraging on black soil floodplains at night from shelter in cracks and fallen debris.
- Gehyra variegata* Tree Dtella (45 mm)
Grey or grey-brown back with irregular darker flecks and marbling. Arboreal, foraging at night from crevices or under loose bark of standing or fallen trees.
- Heteronotia binoei* Bynoe's Gecko (50 mm)
Pale grey to bright reddish-brown with scattered light and dark flecks. Terrestrial, foraging in open areas at night from rock crevices or ground litter.
- Lucasium damaeum* Beaded Gecko (50 mm)
Reddish-brown with serrated cream band down back. Terrestrial, foraging in open sandy areas at night from a burrow.
- Nephrurus levis* Smooth Knob-tailed Gecko (80 mm)

Light to dark purplish brown with light bars across head and back. Terrestrial, forages in open areas at night from a burrow.

- ❑ *Rhynchoedura ornata* Beaked Gecko (50 mm)
Reddish brown to red, speckled with darker brown and white, cream or yellow spots. Terrestrial, forages at night in similar areas to the Beaded Gecko.
- ❑ *Underwoodisaurus milii* Thick-tailed Gecko (80 mm)
Deep purple to reddish-brown with transverse rows of white or yellow spots. Terrestrial, foraging at night in open grassy or sanding areas from litter at base of trees.



Legless Lizards (Pygopodidae)

- ❑ *Delma tincta* Excitable Delma (80 mm)
Uniform grey or brown with dark and cream bands on head. Terrestrial, foraging from rocks, logs or other ground debris.
- ❑ *Lialis burtonis* Burtons Snake-lizard (180 mm)
Cream to dark brown back with no patterning. Elongated head and wedge-shaped snout. Both nocturnal and diurnal ambushing prey from grass clumps.
- ❑ *Pygopus nigriceps* Hooded Scaly-foot (180 mm)
Pale grey to rich reddish-brown with two dark bands on head. Terrestrial, foraging at dusk or in the night around rocks, litter or logs.



Dragon lizards (Agamidae)

- ❑ *Ctenophorus nuchalis* Central Netted Dragon (100 mm)
Pale brown to bright orange-brown with net of dark-chocolate brown over head and body. Day active, terrestrial lizard foraging at high temperatures on open sandy or loamy soils.
- ❑ *Pogona vitticeps* Central Bearded Dragon (200 mm)
Brown to reddish-brown with throat pouch (beard) bordered by long spiny scales. Terrestrial to semi-arboreal, day active and seen on roads or perched in dead branches of shrubs and trees.
- ❑ *Tympanocryptis lineata* Lined Earless Dragon (50 mm)
Pale grey to fawn or reddish brown with pale stripe. Day active on sandhills and gibber.
- ❑ *Tympanocryptis tetraporophora* Long-tailed Earless Dragon (50 mm)
Similar to the Lined Earless Dragon but stripes are indistinct. Day active on stony downs amongst shrubs and hummock grasses.



Goannas or Monitor Lizards (Varanidae)

- ❑ *Varanus gouldii* Gould's Goanna (1600 mm)
Light yellow to black with scattered light and dark flecks. Terrestrial, day active foraging widely from shelter in burrow or hollow log.



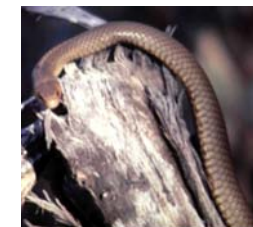
Skinks (Scincidae)

- ❑ *Cryptoblepharus carnabyi* Carnaby's Wall Skink (40 mm)
Grey brown with dark spots and light edge stripe from eye and down tail. Day-active and semi-arboreal on tree trunks, shrubs and rocky screes.
- ❑ *Ctenotus leonhardii* Leonhardi's Ctenotus (70 mm)
Pale brown to rich ochrous-brown with pale edge stripe and dark back stripe. Terrestrial and day-active on sand ridges and on stony downs.
- ❑ *Ctenotus regius* Pale-rumped Ctenotus (70 mm)
Brown with dark white-edged stripes. Terrestrial and day-active on open clay soils.
- ❑ *Ctenotus schomburgkii* Barred Wedgesnout Ctenotus (45 mm)
Rich bronze to coppery brown with narrow black and cream stripes. Terrestrial and day-active amongst spinifex and mallee on sandy soils.
- ❑ *Ctenotus strauchii* Eastern Wedgesnout Ctenotus (50 mm)
Reddish-brown to chocolate with narrow white stripe down sides. Terrestrial and day-active amongst leaf litter and fallen timber.
- ❑ *Ctenotus uber* Spotted Ctenotus (65 mm)
Pale sandy to golden brown with black-brown stripes. Terrestrial and day-active amongst saltbushes, rock outcrops and stony plains.
- ❑ *Egernia inornata* Desert Skink (75 mm)
Pale fawn to bright reddish brown with some dark streaks. Day-active burrowing lizard living in sandy or loamy soils.
- ❑ *Egernia stokesii* Gidgee Skink (180 mm)
Olive brown to reddish brown. Day-active foraging and sheltering amidst rocky outcrops and stony hills.
- ❑ *Eremiascincus fasciolatus* Narrow-banded Sand Swimmer (80 mm)
Cream, orange or dark brown with narrow dark cross bands. Nocturnal, burrowing lizard foraging in sandy or loamy soils.

- ❑ *Eremiascincus richardsonii* Broad-banded Sand Swimmer (100 mm)
Similar to Narrow-banded Sand Swimmer but bands are fewer and wider. Nocturnal, burrowing.
- ❑ *Lerista labialis* Southern Sand-slider (60 mm)
Pale fawn to reddish brown with dark spots. Day-active foraging in sand ridges.
- ❑ *Lerista muelleri* Wood Mulch-slider (45 mm)
Grey, brown or bronze, with four narrow stripes. Day-active foraging on floodplains.
- ❑ *Lerista punctatovittata* (100 mm)
Pale fawn or brown with lines of spots. Burrowing lizard emerging after rain from soil under logs and stones.
- ❑ *Lerista xanthura* Yellow-tailed Plain-slider (45 mm)
Pinkish with bright yellow tail. Day-active on grassed and red sands.
- ❑ *Menetia greyii* Grey's Skink (30 mm)
Bronze or grey brown with narrow broken stripes. Day-active foraging in grass or leaf litter.
- ❑ *Morethia adelaidensis* Saltbush Morethia (40 mm)
Grey to olive-brown with lines of small black spots. Day-active and terrestrial, foraging in litter.
- ❑ *Morethia boulengeri* Boulenger's Skink (45 mm)
Grey or brown with dark and light flecks. Day-active foraging and sheltering among litter and fallen or standing dead trees.
- ❑ *Proablepharus kinghorni* Red-tailed Soil-crevice Skink (45 mm)
Brown with narrow white stripes and orange tail. Day-active foraging in cracked clay soils.
- ❑ *Trachydosaurus rugosus* Shingleback (250 mm)
Dull reddish-brown, dark brown or black with scattered cream or yellow blotches and distinctive large scales. Terrestrial and day-active ranging over all habitats and sheltering in fallen timber, shrubs or tussock grasses.

Snakes

- ☺ = **Non-venomous**
- ☹ = **Venomous but not dangerous**
- ☹ = **Venomous and dangerous**



Blind or worm snakes (Typhlopidae)

- ❑ *Ramphotyphlops bituberculatus* Prong-snouted Blind Snake (0.3 m) ☺
Brown through to black with pointed snout. Burrowing in soil beneath rocks, logs or debris.
- ❑ *Ramphotyphlops australis* (0.5 m) ☺
Brown, grey-brown or purplish-brown, blunt rounded snout. Nocturnal and rarely emerge from shelter, eat termites and ants.

Pythons (Boidae)

- ❑ *Liasis stimsoni* Stimson's Python (0.75 – 1 m) ☺
Light brown with dark blotches and bands. Nocturnal and terrestrial found in rocky outcrops, large isolated trees on watercourses and spinifex clumps
- ❑ *Morelia spilota* Carpet Python (2 – 4 m) ☺
Pale to dark brown with blackish blotches or variegations. Ventral surface cream or yellow. Nocturnal and crepuscular, arboreal or terrestrial burrows. Feeds on a variety of vertebrates.

Elapids (Elapidae)

- ❑ *Demansia psammophis* Yellow-faced Whip Snake (0.8 m) ☹
Steely-grey or olive-green, long and slender like a whip. Swift-moving day-active snake found around or under rocks. Feeds on reptiles and frogs.
- ❑ *Furina diadema* Red-naped Snake (0.4 m) ☹
Reddish-brown with dark-edged scales. Nocturnal sheltering under rocks, logs or litter, or crevices. Feeds on small skinks.
- ❑ *Pseudechis australis* Mulga or King Brown Snake (2 m) ☹
Copper, reddish-brown or dark olive-brown with dark-edged scales. Nocturnal in hot weather and found in all habitats feeding on small mammals, reptiles (including other snakes) and frogs.
- ❑ *Pseudonaja modesta* Ringed Brown Snake (0.5 m) ☹
Various shades of brown with black head and black rings. Nocturnal in warm weather and found in shrublands and hummock grasslands feeding on skinks.
- ❑ *Pseudonaja nuchalis* Western Brown Snake (1.5 m) ☹
Light brown to russet through to almost black, darker head region. Diurnal but nocturnal in hot weather feeding on small mammals and reptiles in dunefields and stony downs.

- ❑ *Pseudonaja textilis* Eastern Brown Snake (1.5 m) ☹
Light tan through dark brown with dark-tipped scales. Day-active in grasslands feeding on small mammals and reptiles.
- ❑ *Simoselaps fasciolatus* Narrow-banded Snake (0.3 m) ☹
Cream to red back with irregular cross bands on the body and tail. Nocturnal foraging in open from a burrow
- ❑ *Suta suta* Curl Snake (0.6 m) ☹
Pale fawn to reddish-brown with dark brown to black head. Nocturnal and terrestrial in Acacia scrubs feeding on small mammals and lizards.

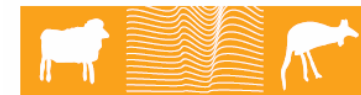
Guides:

Cogger, H.G. 2000. *Reptiles and Amphibians of Australia*. 6th Edition. New Holland Publishers, Sydney.

Swan, G. 1990. *A Field Guide to the Snakes and Lizards of New South Wales*. Three Sisters Publications, Winmalee

This guide is part of a UNSW research project in collaboration with the Cooperative Research Centre for Sustainable Tourism and NSW National Parks and Wildlife Service. The aim of this project is to develop and implement products to support a vibrant wildlife tourism industry in the rangelands of the Outback. Some more information can be found at our web site <http://www.bios.unsw.edu.au/rootourism/>.

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