

Carpet Python *Morelia spilota* (Lacépède, 1804)

Size

Averages 2.0 m total length, though individuals have been reported to 4.0 m in length.

Weight

M. s. imbricata

Up to 1.1 kg in males

Up to 4.5 kg in females

Subspecies

Three subspecies are currently recognised:

Morelia spilota imbricata (southern Western

Australia)

- *M. s. spilota* (coastal NSW)
- *M. s. variegata* (remainder of range, see below)



Photo: Babs & Bert Wells/the Department of Conservation and Land Management

Description

Colour patterns vary across their geographic range. In Western Australia, the colour varies from pale to dark brown, with blackish blotches or variegations, which may form cross bands. Belly is white, cream or yellow, unmarked or with bold black blotches. Head tends to be pale.

Other common names

None recognised.

Distribution



Key To Map: Dark grey = Present distribution

M. s. imbricata

This subspecies inhabits temperate climatic areas with good winter rains and dry summers. Occurs in south-west Western Australia, from Northampton, south to Albany and eastwards to Kalgoorlie, and including undisturbed remnant bushland near Perth and the Darling Ranges, Yanchep National Park, and Garden Island. A population also occurs on St Francis Island (South Australia), and islands of the Archipelago of the Recherche (Western Australia).

M. s. variegata

Distributed across South Australia, Victoria, inland NSW, Queensland, Northern Territory, and the Kimberley region of Western Australia.

Habitat

M. s. variegata

Occurs in mesic to semi-arid habitats from Kimberley region to northern Victoria.

M. s. imbricata

This subspecies has been recorded from semi-arid coastal and inland habitats, *Banksia* woodland, eucalypt woodlands, and grasslands.

Behaviour

In summer months, the carpet python is active either at night, or at dawn and dusk. In cooler months it may be active during the daytime and occasionally has been seen to bask in the sun on cool days. It is arboreal, terrestrial, and rock-dwelling. In some areas it shelters in burrows made by other animals, hollow tree limbs, or rock crevices. Favoured logs are often 150 millimetres in diameter, with a hollow section that usually extends for at least one metre. Both sexes have a well-developed spur to stimulate mating. On Garden Island, *M. s. imbricata* is active throughout the year, although larger females are sedentary in winter. At Dryandra, pythons remained inactive for several months during winter, where they may shelter in tree hollows for up to five months.

In spring, the home ranges of males increase as they search for females. In eastern Australia, males will often fight with each other to gain mating rights over a particular female. A female will usually lay her eggs inside a log, and coil around her eggs for up to 60 days. If the temperature of the eggs drops too low, the female python will shiver to generate heat to elevate the temperature of the clutch. Radio tracking indicates that pythons have a preferred home range.

Diet

Pythons strangle their food, and swallow it whole. The diet includes a variety of terrestrial vertebrates (mammals, birds and lizards). In captivity, this species readily consumes mice, rats and chickens. On Garden Island (Western Australia), *M. s. imbricata* has been observed feeding on geckos, house mice, doves, and small tammar wallabies. At Dryandra, dietary items include woylies, numbats, and purple-crowned lorikeets.

Breeding

Little information is known about the breeding of this species. Females have a single ovulation in late spring or early summer. Limited data indicates that between 14 and 35 eggs are deposited in a sheltered site. A clutch of eggs can weigh up to 25 per cent of the female body weight. Hatching occurs between 63 and 71 days after laying. Young are independent as soon as they hatch, and disperse away from their nest in search of food and establish their own home range.

Threatening processes

The loss of bushland habitat for land developments and agriculture, and changed fire regimes, have all impacted upon populations. Habitat destruction has been implicated in the decline of *M. s. imbricata* populations in the Esperance area. The role of direct predation by exotic predators (foxes, feral cats) in the decline of python populations in Australia remains unknown. Circumstantial evidence shows that densities of python are higher in areas where exotic predator control occurs.

Conservation status

• <i>Morelia spilota imbricata</i>	
2000 IUCN Red List of Threatened Species	Lower Risk (near threatened)
Western Australian Wildlife Conservation Act	Schedule 4 (Specially Protected Fauna)
Environment Protection and Biodiversity Conservation Act	Not Listed
• <i>M. s. spilota</i> and <i>M. s. variegata</i>	
2000 IUCN Red List of Threatened Species	Not Listed
Western Australian Wildlife Conservation Act	N/A
Environment Protection and Biodiversity Conservation Act	Not Listed

Management in Western Australia

- Survey of known and potential habitat of the subspecies within and outside reserves.

- Develop and promote guidelines and provide incentives for landowners and users to reduce the impact of current land use practices on this subspecies.
- Study the ecology of populations in Western Australia

Other interesting facts

- Female carpet pythons in south-west Western Australia grow up to four-times larger than males at maturity. This is believed to occur because females need to store large amounts of fat to reproduce.
- In a reproductive year, females may not eat for up to eight months.

Selected references

Cogger H.G. (1992). Reptiles and amphibians of Australia. Reed Books Australia.

Pearson, D. (1994-95). Pythons - Masters of the waiting game. *LANDSCOPE* 10(2): 17.

Bush, B., Maryan, B., Browne-Cooper, R., and Robinson, D. (1995). A guide to the reptiles and frogs of the Perth region. University of Western Australia Press, Nedlands, Western Australia.

Website links

http://www.naturebase.net/projects/west_shield.html