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# RECENT RECORDS OF THE WOMA PYTHON (*ASPIDITES RAMSAYI*) IN SOUTH AUSTRALIA, WITH AN EVALUATION OF DISTRIBUTION, HABITAT AND STATUS

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## ABSTRACT

The Woma Python (*Aspidites ramsayi*) is a large and iconic arid zone python that has declined in many parts of its range across Australia. Although anecdotally regarded as relatively common in some parts of inland South Australia, there is little detailed information regarding its status, distribution, habitat preferences or the significance of potential threats. This study aimed to gain current information on these aspects of Woma Python ecology by utilising the high level of public appreciation for the species and its readily identifiable characteristics. Information was gained primarily through a two-year publicity campaign which invited submission of photographic records from local land managers, fieldworkers and visitors to the study area. A total of 32 photo records were contributed, significantly adding to the small number of confirmed records in state databases, along with 47 records not accompanied by photographic evidence but deemed credible. A number of photo records were received from areas where the species had been sparsely or not previously recorded, as well as stony or range habitats previously considered to be non-optimal habitat. The north-eastern bioregions of South Australia accounted for the majority of recent records, where the Woma Python appears to remain a common inhabitant, yet the species appears absent or very sparsely distributed in other seemingly suitable or historic parts of its range.

## INTRODUCTION

The Woma Python (*Aspidites ramsayi*) is a distinctive Australian endemic python which was

formerly widespread within the arid sandy regions of inland Australia (Pearson, 1993; Maryan, 2002). This species is among the larger python species found in Australia and may reach up to 2.7 m in length and significant girth (Cogger, 1992). Within their range, the distribution of Womas appears to be relatively patchy and fragmented, with declines in some areas since European settlement. In the south-west of Western Australia the species has severely declined and now appears to be absent from most of its former range (Cogger *et al.*, 1993; Pearson, 1993; Maryan, 2002); in New South Wales it is rated as Vulnerable and considered to be in serious decline (Sadlier & Pressey, 1994; New South Wales Department for Environment and Conservation, 2010); and in Queensland its distribution appears to now be fragmented into at least two distinct populations, one of which is listed as Endangered (Covacevich & Couper, 1996). Suggested causes for these declines have included broad scale land clearing, changes in grazing pressure from rabbits and domestic stock and competition for food resources and predation of young individuals by cats and foxes; however there has been little or no targeted research to investigate or test these theories (Pearson, 1993; Covacevich & Couper, 1996; Maryan, 2002).

Within South Australia, Woma Pythons appear to have declined in some areas, particularly in the far northwest of the state (Robinson *et al.*, 2003), however their status and distribution in other arid areas is less clear and the species appears to be patchily distributed, although potentially locally common in some areas (Ehmann, 2005).

The study of pythons in the field is logistically constrained by their occurrence at low densities, patchy distribution and cryptic and nocturnal behaviour (Pearson, 1993). However, the Woma Python is a distinctive and readily identifiable snake species due to its characteristic banded patterning and the large size that mature individuals can reach. These features, combined with their docile nature make them a species that attracts considerable public interest within the Australian rangelands (Ehmann, 2005).

This study aimed to gain information regarding the current and historical distribution, status, significance of potential threats and habitat preferences of Woma Pythons by utilizing the public appreciation for this species and its readily identifiable characteristics to collect sightings and anecdotal accounts from across the South Australian rangelands.

## METHODS

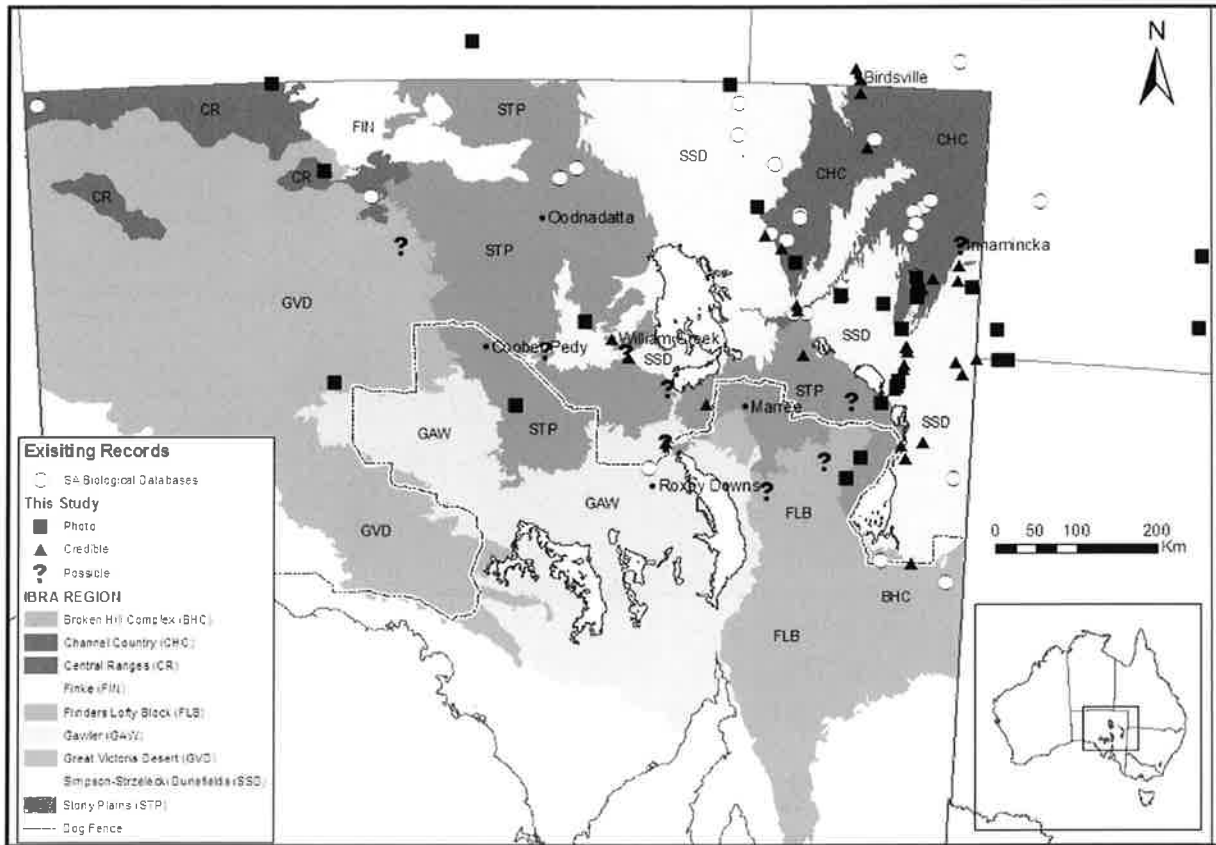
Information on the status and distribution of Woma Pythons was gathered through several means, including; a mail-out survey to pastoralists in the region, a publicity scheme involving incentives for submissions of verifiable sightings, gathering of anecdotal evidence by speaking to knowledgeable or longtime residents, land managers, workers or visitors about their perceptions of Woma distribution and status and a review of records in the South Australian Biological Databases and other published sources.

A mail-out survey containing an information sheet with photos and survey form was sent to 41 pastoral properties in the South Australian Arid Lands Natural Resources Management region in September 2007. The survey requested information on Woma Pythons from the property or surrounding regions and details about the date, location and basic habitat characteristics of sightings. Properties were selected within the known range of the species. Completed surveys were returned by 17 properties, ten of which reported sightings.

A publicity and reward for sightings scheme was initiated in mid 2009, through regional South Australian media. Posters and survey forms were displayed at regional pubs, roadhouses, mining and petroleum industry field stations and tourist visitor centres. Articles were placed in local newspapers and newsletters and a number of interviews received extended airplay on regional radio stations. The scheme requested any recent or past sightings of Woma Pythons to be submitted. Incentives to submit sightings were provided by issuing each verified sighting with a ticket in a draw to win one of five \$100 fuel vouchers. To be eligible for the draw, sightings needed to be accompanied by a photo which verified the identity as a Woma Python along with detailed location and date details. Responses were received from over 100 people, many of whom had multiple sightings or anecdotes. A total of 34 verified records were gathered through this means, with a further 47 sightings believed to be Woma Pythons based on the description given including size (girth or thickness in particular), colour, behavior, the reliability and experience of the observer and the area and habitat of the sighting. A further nine sightings were deemed to be possible Woma records, while 20+ sightings were believed (or confirmed by photo) to be other snake species including Brown Snakes (*Pseudonaja* spp.), Mulga Snakes (*Pseudechis australis*), Carpet Pythons (*Morelia spilota*) and Stimson's Pythons (*Antaresia stimsoni*).

A range of other anecdotal accounts were gathered between 2007 – 2010 by speaking to pastoralists, long-time residents and workers in outback regions about their sightings and perceptions of the species over time. Database and published records were collated from a range of sources. Sightings and records were considered within the various IBRA Regions (Interim Biogeographic Regionalisations of Australia) of the state (Figure 1).

**Figure 1. Woma Python records from northern South Australia and neighbouring areas of Queensland and Northern Territory, showing existing database records (from South Australian Biological Survey Database) and those compiled through this study.**



**RESULTS**

**Channel Country**

A total of 28 sightings was received during this study from the Channel Country bioregion, mainly from around the Moomba and Innamincka areas where observers associated with oil and gas extraction from the Cooper Basin were numerous (Figure 2). Respondents living or working in those areas were very familiar with Woma Pythons and reported seeing them regularly, particularly during the warmer months of the year. Many of the sightings were made late at night or during the early hours of the morning by shift workers and individuals of a range of sizes were reported. Many respondents described regularly observing large individuals, sometimes with distinctive scars or markings over extended periods and believed them to be resident near the sighting locations. Records held in the South Australian Biological Survey

Database included several Womas captured in excavated trenches as part of construction of oil and gas pipelines in the Cooper Basin (Owens, 1998). Historic accounts also describe the species from these areas (Vogelsang, 1938).

A number of sightings were contributed from along the Birdsville Track, including around Mungerannie and the Naterannie Sandhills to the north of Cooper Creek. Recent database records exist of the species on Cowarie Station and several sightings were reported in the far north of the Birdsville Track from Clifton Hills and Pandie Pandie Stations and near Birdsville.

Perceptions of the status of Woma Pythons in the area were variable, with most residents or field workers interviewed regarding them as common around the upper Strzelecki Track and perhaps less so along the Birdsville Track. One long-time resident of Birdsville com-

**Figure 2. A large Woma from the Strzelecki Desert Dunefields near Moomba, March 2010 showing indistinct banded patterning typical of the species in this area (sighting CHC15). Photo: Paul Waring.**



**Figure 3. A Woma Python found in cracking clay stony plain habitat near the Beverley Uranium Mine, to the north-east of the Flinders Ranges in May 2010 (sighting STP05) Photo: David Hunt.**



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**Figure 4. A dark and distinctly banded Woma Python near IGY Corner, Mobella Station (near the south-west corner of Tallaringa Conservation Park), May 2009 (sighting GVD02). This photo represents the only confirmed record in the Great Victoria Desert Bioregion from this study. Photo: Andy Searle.**



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**Figure 5. A Woma Python encountered on the Stuart Highway 90 km S of Coober Pedy at night in March 2004. The very dark colouration of the snake and the rocky habitat, including quartzite boulders, are of note (sighting STP06). Photo: Dave Harnett.**



mented that he remembered there being a lot more Woma Pythons around when he was younger, particularly before the huge floods of 1974 when he suspected that many had been drowned. Other anecdotes suggested that the species had become isolated on islands during major floods of large inland rivers, particularly in the 1970s and a contemporary observation during the study involved a dead Woma deposited in flood debris high in a tree overhanging the Warburton River channel in May 2010 (CHC26).

### **Simpson/Strzelecki Dunefields Bioregion**

A total of 35 observations was received from sandy habitats of the Simpson/Strzelecki Dunefields Bioregion. The majority from this bioregion came from along the Strzelecki Track, particularly the Cobbler Sandhills area around Montecollina Bore and areas to the immediate north. Residents and regular travellers and visitors to this area regarded Womas as a common inhabitant. One long time resident from between Merty Merty and Moomba reported knowing the breeding location of the species and remembered seeing small Woma Pythons in most years. Another from east of Lake Frome also reputedly knew the breeding locations of Womas in sand dune areas.

In the dune field areas of the south east of the bioregion near Cameron Corner and areas to the south, pastoralists who were interviewed regarded Woma Pythons as a common inhabitant which they saw regularly and sometimes near sheds and station buildings. Historic accounts from the 1930s also support that the species was a reasonably common inhabitant in the dunefields to the east of Lake Frome (White, 1962).

At the far south-western extreme of the bioregion, near Lake Eyre South and between William Creek and Coober Pedy, there are a few confirmed records of Woma Pythons and the species is regarded with fabled status amongst life-long locals, many of whom have never observed them despite decades spent outdoors during station activities. A museum

specimen collected in 2002 as road-kill in dune fields 30 km south-east of William Creek, and a further three credible sightings (SSD31, SSD34, SSD35) and one possible sighting (SSD14) were contributed through this study and support the presence of the species at this location. These sightings described extremely large faintly banded pythons and all were within five kilometres of the 2002 roadkill specimen in an area of isolated large sand dunes.

### **Flinders-Lofty Block Bioregion**

Several possible sightings were reported from the Northern Flinders Ranges, which is an area not necessarily regarded as Woma habitat due to the primarily hilly and stony terrain. An informant who was very familiar with the species from the sandhills of the Strzelecki Desert knew of Woma Pythons from the vastly different range country around Umberatana Station and reported seeing a large one there as recently as mid 2009 on a slaty hill (FLB03). He was also familiar with the species from other locations in the Flinders Ranges around Yerelina and Angepena Stations. Other anecdotal reports from the Flinders Ranges of a large snakes that resembled Womas included a large, thick python seen in a backyard on the outskirts of Leigh Creek in 1989 (FLB02).

Woma Pythons were not recorded during the biological surveys of the North West Flinders Ranges in the 1990s (Brandle 1998a), however anecdotal reports were received of a small road-killed python resembling a Stimson's Python (*A. stimsoni*) and separate reports of large pythons inhabiting red gum creek lines came from landholders at Burr Well and Puttapa Stations, which were considered by the authors to be Carpet Pythons (*M. spilota*) (Brandle, 1998a). There is a strong possibility that the pythons reported from the area during this study were in fact Carpet Pythons, especially given other anecdotal reports gathered through this study of a large Carpet Python which was run over on the Copley to Balcanoona road near the

Depot Springs homestead in the 1990s. However, it is possible that Woma Pythons also may be found in some areas of the Northern Flinders Ranges.

A record confirmed by photos from the eastern edge of the bioregion at Wooltana Station Homestead in March 2008 included a 2.5 m Woma Python which was found moving across the verandah of the homestead after a shower of rain on a hot day (FLB01). Discussions with this observer and other long-time local residents suggest that this species was not well known from the local area, but that Stimson's and Carpet Pythons were known from rocky hills nearby.

### **Stony Plains Bioregion**

Nine sightings were gathered from this bioregion, including four verified with photos. These included a large Woma Python from the Beverley Uranium Mine in April 2010 (STP05) (Figure 3). The habitat in this area consists of open gibber country and is quite unlike the adjacent areas in the Simpson-Strzelecki Dunefields on the eastern side of Lake Callabonna and Lake Frome which are known to support the species. Other verified records included a dark-coloured Woma photographed at night, 90 km south of Coober Pedy on the Stuart Highway in stony plains country in 2004 (Figure 4), a ~3 m individual photographed on the Oodnadatta Track in late 2011 on gibber flats approximately 45 km north-west of William Creek (STP08) and a credible sighting of a large Woma in vast stony plains habitat at Alberrie Creek, halfway between William Creek and Marree (STP09).

Perceptions of residents in this bioregion suggest that Woma Pythons are rarely encountered in these areas, despite many knowing the species from sandy habitats. Some museum specimens from the northern parts of the bioregion near Oodnadatta from the late 1990s (Figure 1) come from the Ool-ganna Sandhills on Macumba Station which fringe the extensive dunefields of the Simpson Desert and thus are not truly stony habitats.

### **Broken Hill Complex**

Only one credible Woma observation was contributed from this fringe of this bioregion, on the southern edge of the extensive Simpson-Strzelecki dunefields on the Dog Fence (BHC01), but some database and museum records exist from this area. These include a 2 m specimen held in the South Australian Museum which was found dead in the Dog Fence on the Erudina/Frome Downs boundary and another enormous >3 m specimen found dead and photographed on the road in sand plain country in central southern Mulyungarie Station.

### **Gawler**

Although there are very few confirmed records of the species from this area, some potential sightings were gathered through the study. A suspected Woma Python was seen by a station worker who was familiar with the species from the Simpson-Strzelecki Bioregion in the early morning in November 2003 as it crossed the Borefield Road approximately 60 km north of Roxby Downs in the dunefields of the locality known as Canegrass (GAW01). Another observer also recounted being present during the capture of a large Woma from a rabbit warren in the dunefields at Canegrass during the early 1980s (GAW02).

A large Woma Python was also found dead on the roadside at Olympic Dam township in 1990. Aside from some historical accounts from station workers of the species inhabiting the Roxby Downs region during the 1930s (Read, 2003), this is the only contemporary specimen collected from the bioregion. The paucity of records from the area, especially given the extensive faunal surveys and monitoring associated with the Olympic Dam mine over the last 25 years (Brandle, 1998b; Read & Owens, 1999), led those who discovered the road-kill specimen to suspect that it possibly was collected elsewhere and then left there for some unknown reason; however the chance of it being a local animal cannot be ruled out.



## Great Victoria Desert

Just two sightings were received from this region, including a photo of a dark and well banded Woma from the far north-western corner of Mobella Station in the southern Great Victoria Desert (GVD02) (Figure 4). A possible sighting included an observation of a huge snake in sandhill country near the Wintinna Station/Tallaringa Conservation Park boundary in the far east of the bioregion in the late 1980s (GVD01). Other anecdotal accounts included descriptions of Woma Pythons being hunted and regarded as a delicacy around Oak Valley, however these credible anecdotes from the area not accompanied by any published or database records.

## Finke

One Woma Python record was obtained from this region during the study and consisted of photos of aboriginal people (Anangu) from Ernabella holding a mature Woma which had reportedly been captured near Finke in 1991 (FIN01).

## Central Ranges

Three confirmed records were submitted from this bioregion in the northern Anangu-Pitjantjatjara-Yankunytjatjara (APY) Lands, including photographs of a large, dark banded individual captured near Mimili in November 2010 (CR01) and photographs of two other individuals from near Eagle Bore north of Ernabella on the Northern Territory Border taken in 1995 and 1999 (CR02, CR03). A specimen held in the Western Australian Museum was collected in the 1950s from Pipalyatjara (Mt Davies) in the far north-western corner of South Australia (Pearson, 1993).

The biological surveys of the APY Lands did not result in any confirmed records of the species, although tracks of one were reported from around Lake Wilson at the western end of the Mann Ranges and an account of one being caught at Fregon and given to a liaison officer in mid 1990s was provided (Robinson *et al.*, 2003). Anecdotal information collected from Anangu as part of the surveys suggested perceptions were that the species was once common around Amata and Ernabella within living memory but was no longer seen there

(Robinson *et al.*, 2003). Discussions with Anangu and others who visit or work in these areas during this study suggest that Womas are an uncommonly observed animal in these areas and are a prized delicacy when encountered.

## DISCUSSION

### Status and distribution

Confirmed records, anecdotes and observations of Woma Pythons collected through this study suggest that the species is a common inhabitant of parts of the arid north-east of South Australia, but less common or even absent from large expanses of apparently suitable habitat. A large number of recent records of mature Womas as well as some medium sized and juvenile individuals were reported from the Channel Country and Simpson-Strzelecki Dunefield Bioregions and these areas appear to be the stronghold of the species within South Australia. Presumably populations in these areas are continuous with those in neighbouring states, although there are very few records from New South Wales and the species is considered to be found only in the north-western extremity of that state (Sadler & Pressey, 1994).

The large number of recent sightings from the Channel Country and Simpson-Strzelecki Dunefield Bioregions, particularly in the Cooper Basin petroleum fields, are likely to partly reflect the comparatively large number of observers who frequent the area through this industry. However, the presence of the species in these areas, yet apparent absence in other areas of seemingly similar suitable habitat where there are also many observers is somewhat puzzling. Areas such as the dunefields of the northern Gawler Bioregion, which have undergone significant faunal survey works and have large numbers of field workers associated with the Olympic Dam Mine, as well as parts of the Finke Bioregion such as the Pedirka Desert in the central far north of the state appear to provide suitable habitat, yet there are very few records from these areas. The species distribution prior to European settlement in these regions is not

well understood and it is possible that there has been some decline due to changes in land management and the introduction of feral species.

### **Declines and possible threats**

Despite the suggestion that various factors including habitat modification from land clearing and grazing (Covacevich & Couper, 1996; Maryan, 2002) and predation and competition from cats and foxes (Pearson, 1993; Read *et al.*, 2011) may be responsible for the decline of Womas in other parts of Australia, there is very little detailed information on the relative importance of these factors.

The paucity of Woma Python records from areas south of the dog fence in South Australia is also of interest, especially in light of accounts that suggest the species was historically present in at least some of these areas (Read, 2003). The apparent absence and probable decline of Womas inside the dog fence may indeed be related to factors such as those which are thought to have affected the species in other parts of Australia. Foxes and cats are generally more common inside the dog fence in the absence of dingoes (Newsome *et al.*, 2001; Letnic *et al.*, 2009) and may be important predators of young Womas and also potential competitors through their predation of other small mammal and reptile species (Read & Bowen, 2001). Areas inside the dog fence have also possibly suffered greater habitat modification through historically higher grazing impacts from sheep versus cattle in many areas outside (Newsome *et al.*, 2001).

The reasons for the apparent declines in the species in the western parts of the state, particularly in the APY lands are not known. There is a possibility that these may be related to changes in hunting pressure from Anangu as a result of visitation to known Woma collection sites being made more accessible or regular by the use of motor vehicles. The relatively low number of sightings reported during this study from the APY lands is likely to be related to the methods used in collect-

ing sightings rather than the absence of the species. Publicity and survey effort focused mainly on areas to the east of the APY lands due to logistical constraints and the nature of communication mediums and publicity opportunities was generally better tailored to the residents and visitors to these areas.

Several of the observations of Womas reported in this study were of those that had been killed on the road (CHC07, CHC16, SSD05 and SSD10) and in some areas of high traffic, this may be an important threat especially if populations are already fragmented or recruitment is being affected by other factors. The influence of catastrophic flooding events was also raised by several observers and one observation supports that flooding kills some Womas (CHC26). The impact of man-made barriers such as the dog fence and electrified sections in particular were also raised as a possible cause of Woma mortality (SSD04). Some recent data from trial reintroductions of captive-bred Womas into the Arid Recovery reserve at Roxby Downs have also highlighted Mulga Snakes (*P. australis*) as potential predators of wild Woma Pythons (Read *et al.*, 2011). All nine Womas released into this feral free reserve were killed within four months, with Mulga Snake predation confirmed or implied in all cases. Although these predation events may be an artifact of the captive-bred individuals and their introduction into established elapid territories, it raises the possibility that Mulga Snakes may have a role in regulating Woma populations under some circumstances (Read *et al.*, 2011).

### **Habitat**

Many sources describe sand plains and sand dunes as the primary habitat for Woma Pythons (Cogger, 1992, 1993; Covacevich & Couper, 1996; Ehmann, 2005). Yet several confirmed records collected through this study were from non-sandy areas. These include the two recent records from the Beverley Mine (STP05) and Wooltana Station (FLB01) on the western side of Lake Frome. These sites support cracking clay gibber plains and abut dune fields of the Simpson-Strzelecki Biore-

gion to the east and the Flinders Ranges to the west. Both records were from mid autumn, around the time when Womas have been recorded mating in captivity (Stone, 2010; Read *et al.*, 2011) and could possibly be males wandering from their normal territories in search of a mate. Additional confirmed records from stony plains habitat include a Woma Python photographed at night south of Coober Pedy (STP06) near rocky outcrop areas surrounded by stony plains and another north of William Creek in gibber habitat (STP08). In the case of both of these sightings, the nearest sand dune areas are many kilometres distant.

In other parts of Australia Woma Pythons also occur in some non-sandy habitat. In Western Australia the species is known to occur primarily in sandy habitats, but can't be precluded from occurring in rocky areas (Maryan, 2002). Records and aboriginal knowledge of the species from around Uluru, Northern Territory suggest that the species prefers *Spinifex* sandplain, but not rocky areas (Reid *et al.*, 1993; Baker *et al.*, 1993). In Queensland Woma Pythons occur in sandy as well as non-sandy habitats, including the desert and semi desert grasslands and chenopod woodlands on red sandy soils and stony downs of the Channel Country Complex and the black soils and ridge country in the Brigalow woodland and grasslands of the Brigalow Biogeographic region to the east (Covacevich & Couper, 1996).

It has been suggested that Woma habitat preferences may be more complex than sandy versus non sandy habitats *per se* and may actually correlate with food and shelter resources (Covacevich & Couper, 1996). Woma Pythons are known in parts of Queensland as the 'Bilby Snake' and are thought to have utilised Bilbies as food items and their burrows as shelter sites (Covacevich & Couper, 1996). Greater Bilbies (*Macrotis lagotis*), Burrowing Bettongs (*Bettongia lesueur*) and other medium-sized mammals in the so called Critical Weight Range (Burbidge & McKenzie, 1989) once dominated many

parts of arid South Australia but suffered widespread extinction, with rabbits replacing them as the only similar sized mammal (Johnson, 2006). Burrowing Bettongs were known to occupy sandy as well as non-sandy habitats (Short & Turner, 1993; Finlayson & Moseby, 2004) and their large warren complexes can still be seen in a range of harder soil types where they are now inhabited by rabbits (Noble *et al.*, 2007). These warrens are still effectively functioning as good Woma shelter sites, with rabbits replacing bettongs as a similar sized mammalian food item. As Covacevich and Couper (1996) suggest, Woma distribution may not comprise just sandy country, but rather areas suitable for small burrowing mammals such as the Bilby. In arid South Australia this theory would also extend to species such as the Burrowing Bettong and following the major mammalian extinctions of Australia's rangelands, which have eliminated these species, this also includes rabbits. The stony plains and range country where records or anecdotes of Woma Pythons were reported during this study all include areas suitable for rabbits and rabbit warrens.

## CONCLUSIONS

The large number of sightings and anecdotes collected through this survey have added significantly to the distributional information held within published literature and databases for this species in South Australia and suggest that Woma Pythons remains a relatively common inhabitant of the arid rangelands of the state, particularly the sandy regions of the Simpson-Strzelecki Dunefields and the Channel Country Bioregions. Records from the fringes of these regions, areas of stony or range country and western bioregions such as the Great Victoria Desert and Central Ranges Bioregions are much less common and observations gathered through this study provide a basis for further, more detailed investigations in these areas. The methods used during this study to collect information on this iconic, yet poorly understood species highlight the value of harnessing community knowledge and opportunities

for observation in biological research, particularly for species which are difficult to survey through conventional scientific methods.

Despite this increase in the distributional data for Woma Pythons, detailed information on important aspects of the life ecology of this species are still lacking. The absence of suitable information on diet, breeding behaviour, survivorship of young and the importance of predation by introduced species such as cats and foxes needs to be addressed in order to better determine the species status and threats.

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**APPENDIX**

Sighting number refers to IBRA region labels shown in Figure 1. Sighting reliability: **Verified** - sightings verified with photographic evidence; **Credible** - confirmed based on the experience and reliability of the observer and the accompanying evidence and description given; **Possible** - not attributable as womas with confidence based on the location of the sighting or the evidence and description provided.

**Verified Sightings**

<b>Sighting #</b>	<b>Date</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Location</b>	<b>Comments</b>
CR01	24 Nov 2010	-27.0089	132.7111	Mimili, SA	
CR02	1999	-26.0114	132.0936	near Eagle Bore Homeland, APY Lands (near SA/NT border approx. 30 km NNW of Ernabella)	
CR03	1995	-26.0114	132.0936	near Eagle Bore Homeland, APY Lands (near SA/NT border approx. 30 km NNW of Ernabella)	
CHC01	26 Mar 2009	-28.7059	140.0461	approx. 50 km S of Moomba on Moomba- Adelaide Gas Pipeline - Compressor Station 1	Approx 2.5 m long. Under trans- portable building for three days.
CHC08	2 Feb 2007	-28.3442	140.2217	30 km S of Moomba on Strzelecki Track	Midnight. ~1.8 m long and in good condition.
CHC09	30 Apr 2009	-28.7059	140.0461	approx. 50 km S of Moomba on Moomba- Adelaide Gas Pipeline - Compressor Station 1	~2.5 m. Lay in same spot for a week under building.
CHC10	3 Feb 2010	-28.7059	140.0461	approx. 50 km S of Moomba on Moomba- Adelaide Gas Pipeline - Compressor Station 1	~ 1.5 m. Had black flecked scales - maybe injury. 100 mm rain fell in 24 hours prior to sighting.
CHC11	29 Jan 2010	-28.1161	140.2067	Moomba Operations - Process Plant	In very poor condition, incomplete slough, heavily scarred & large tick infestation. - 2.2 m long.

CHC15	20 Mar 2010	-28.1161	140.2067	Moomba Operations - Process Plant	1.8 m long. Had heavy tick infestation.
CHC22	31 Jan 2010	-28.2413	140.273	Mungerannie Roadhouse, Birdsville Track	~2.1 m. Behind roadhouse, sheltering under house. Very placid.
CHC28	Dec 2010	-28.0081	138.6575	Mungerannie Roadhouse, Birdsville Track	
FIN01	1991	-25.5757	134.5883	near Finke, NT	Captured near Finke. Photos taken at Ernabella.
FLB01	Mar 2008	-30.4144	139.4244	Wooltana Station Homestead	Big snake - released in ranges nearby unharmed.
GVD02	1 May 2009	-29.3894	132.7963	near IGY Corner, Mobella Station (near SW corner of Tallaringa CP)	Large distinctly banded python.
QLD01	29 May 2008	-28.4878	143.8243	Dingo Barrier Fence, Zenonie Station, Qld	~2.1 m long and very fat and placid. In sandy mulga country. Only one seen in 30 years of residency.
QLD02	18 Nov 2008	-27.6843	143.7789	South of Glenmorgan, Qld	Only one ever seen at property.
QLD04	18 May 2010	-28.6585	141.2577	10 km N of Ormicron on road to Epsilon (north-east of Cameron's Corner)	~2.2 m long. Very large and fat. Basking on road mid-morning in sunny conditions.
SSD02	3 Oct 1997	-26.0243	137.7654	~20 km W of Poeppel Corner, on French Line, Simpson Desert CP	Almost 2 m. Conditions cool with early morning showers.
SSD07	20 Oct 2009	-29.2981	140.0371	10 km N of Montecollina Bore on Strzelecki Track	Basking on road - slow to move when chased off on foot. Weather cool.
SSD09	13 May 2010	-27.3886	138.1483	Just north of Kallakoopah Creek in sandhill country on northern side of Cowarie/Simpson Desert NP boundary	Observed from helicopter when flying very low (80 ft) in early morning. Could see tracks where it had emerged from rabbit warren and was sunning itself. Very dark colour, approx. 2 m long.

SSD11	23 May 2010	-28.1980	140.9136	Near Dilchee Gas Field, south of Dullingari	Seen in middle of road at approx. 11am.
SSD18	10 Jul 2010	-28.2615	140.2317	100 km S of Innamincka on Strzelecki Track	Observed on road.
SSD20	1 Mar 2010	-29.3546	140.0227	5 km N of Montecollina, Strzelecki Track	Captured on road.
SSD21	1 Mar 2010	-29.3047	140.0365	10 km N of Montecollina, Strzelecki Track	~1.3 m long.
SSD22	1 Jan 2000	-28.3513	139.2478	Lake Hope area, Cooper Creek	
SSD29	8 Jun 2010	-29.0013	141.4224	~50 km E of Cameron's Corner on Qld/ NSW border	
SSD30	4 Apr 2011	-29.0017	141.2932	28 km E of Cameron's Corner on Qld/NSW border	
SSD32	1 Apr 2006	-28.4277	139.8020	~10 km from Worrier Oilfield (~70 km SW of Moomba)	Observed crossing road during day.
STP05	15 Apr 2010	-30.1718	139.5877	Beverley Uranium Mine	Found crossing road in late afternoon ~5:30 pm. > 2m long.
STP06	1 Apr 2004	-29.6700	135.1353	90 km S of Coober Pedy on Stuart Highway	Seen crossing road at night near rocky outcrop. Dark colour with distinct bands.
STP07	5 Apr 2011	-29.5477	139.8344	Strzelecki Track, approx. 10 km N of Mt Hopeless turnoff	
STP08	Dec 2011	-28.7235	136.0105	Oodnadatta Track near Anna Creek/Nilpinna Station boundary, approx. 45 km N of William Creek	>2.5 m long. In gibber country a long way from sand dunes.



## Credible sightings

Sighting #	Date	Latitude	Longitude	Location	Comments
BHC01	2009	-31.337	140.3158	Dog Fence, on boundary of Billeroo West/ Quinyambie Leases	~1 m long with distinct brown and yellow bands. Went through fence when approached.
CHC02	26 Oct 2009	-28.103	140.1995	Moomba Airport	1.1 m. Seen on road at 1:00 am. 25° C, no wind.
CHC03	26 Nov 2009	-28.1161	140.2067	Moomba Operations - Camp Facility	1 m. Had scar midway along left hand side.
CHC04	30 Oct 2009	-28.1161	140.2067	Moomba Operations - Process Plant	0.5 m, 3:00 am. In good health and very lively - a few small scars. Calm, warm night, no wind.
CHC05	26 Nov 2009	-28.1161	140.2067	Moomba Operations - Process Plant	Humid - approx 31° C
CHC06	23 Nov 2009	-28.1161	140.2067	Moomba Operations - Camp Facility	1.1 m long. Sheltering under temporary cool rooms. Hot and windy conditions - 5:00 am.
CHC07	1 Feb 2006	-28.0185	138.6603	Big Lake Oilfield, Moomba	Under building.
CHC12	16 Jan 2010	-28.1584	140.2109	6 km S of Moomba	~1 m long with central spine stripe and rib stripes. Was crossing road 6:20 am in predawn, approx 28° C.
CHC13	1 Jan 2008	-28.1074	140.2068	Moomba Operations - Camp Facility	~ 2.4 m. Approx 5 am on very warm morning ~30° C.
CHC14	17 Mar 2010	-28.103	140.1995	Moomba Airstrip	~ 2 m long. Moving across tarmac on airstrip at night - warm night, clear skies.

CHC16	22 May 2010	-27.9669	140.7286	25 km S of Innamincka on Strzelecki Track	Crossing road at about 11 am. Wound the size of 10c piece behind head.
CHC17	2 May 2010	-28.1836	140.2151	10 km S of Moomba on Strzelecki Track	~1.8 m long.
CHC18	22 Apr 2010	-28.1363	140.7222	Dullingari Road, 2 km E of Innamincka turnoff	~2.3 m. Heavy tick infestation. Observed on road.
CHC19	12 Dec 1989	-26.6887	139.5074	Koonchera Waterhole, Goyder's Lagoon	~1.5 m. Seen at dusk moving between bushes on sand near water. Rabbit warrens nearby. ~42° C
CHC20	1 Mar 2007	-28.2413	140.273	Mungerannie Roadhouse, Birdsville Track	Seen at roadhouse in evening.
CHC21	2006	-27.8526	138.477	Cowarie Station boundary on Cowarie/ Mungerannie Road	
CHC23	1995	-28.3857	139.2435	Lake Hope area, Mulka Station	Seen disappearing into a rabbit burrow.
CHC24	Jan 2000	-26.0764	139.3956	5 km N of turnoff to Pandie Pandie Station Homestead, Birdsville Track	
CHC25	Dec 2007	-29.0541	140.7593	Innamincka Station	
CHC26	May 2010	-27.7089	138.2591	Warburton River, near Kalamurina Homestead	Observed hanging dead in a tree with other debris following flooding in early 2010.
CHC27	11 May 2011	-25.9179	139.3939	6 km E of Birdsville on road to Betoota	
GAW02	~1984	-30.0715	137.0583	55 km N of Roxby Downs on Borefield Road near Canegrass Dam	
QLD03	1 Jan 2005	-25.7944	139.3275	10 km N of Birdsville	On gibber flat.
SSD01	12 May 2009	-29.2981	140.0371	10 km N of Montecollina Bore on Strzelecki Track	Moving across road.

SSD03	2005	-29.1541	140.0949	Bob's Bore, Strzelecki Track	Hatchling womas around camp in Aug/Sept each year - last time in 2005.
SSD04	1 May 2009	-30.0232	140.1084	Dog Fence, on Moolawatana/Lake Frome boundary	~2.7 m. Found dead next to electric section of Dog Fence - presumably electrocuted.
SSD05	3 May 1987	-28.8978	140.1132	North side of Cobbler Sandhills, Strzelecki Track	2.5 m. Freshly dead roadkill.
SSD06	4 Mar 1991	-29.9735	140.3844	Yandama Bore, Frome Downs Station	2.75 m long and 10 cm diameter. Near water pooling from bore in Yandama Creek. Went down rabbit burrow. ~11pm, 30° C.
SSD08	1 Dec 2009	-29.3534	140.0229	8 km N of Montecollina Bore, Strzelecki Track	Found eating rabbit in a burrow.
SSD10	15 Apr 2010	-28.9658	140.1295	approx. 3 km S of Strzelecki Crossing, Strzelecki Track	1.8 m long and 10 cm diameter. Found dead on road. Mustard yellow under belly and dark bands.
SSD12	2002	-28.543	138.71	Mulka/Etadunna Station boundary at grid on Birdsville Track	
SSD13	1995	-28.4855	138.6903	Birdsville Track - in Naterannie Sandhills	
SSD15	1 Jun 2008	-29.1868	140.8496	Lindon Station Homestead	Young animal.
SSD17	25 Apr 1991	-29.1085	140.105	Strzelecki Track, 18 km S of Strzelecki Crossing	2.5 m. Observed basking on pale canegrass dune at midday. Adult male. Ambient temp; ~ 20° C.
SSD19	Jan 1982	-30.1711	140.1684	approx. 10 km E of Lake Frome (5 km S of track from Hawker Gate to Moolawatana), Frome Downs Station	
SSD23	23 Sep 2010	-29.0048	141.0131	approx. 1 km E of Cameron's Corner	
SSD24	4 Oct 2010	-29.401	139.9867	near Montecollina Bore, Strzelecki Track	

SSD25	29 Mar 2011	-29.3682	140.0165	~5 km N of Montecollina Bore on Strzelecki Track	
SSD26	29 Mar 2011	-28.9108	140.1143	~5 km N of Strzelecki Crossing on Strzelecki Track	
SSD27	29 Mar 2011	-28.1235	140.4148	~20 km E of Moomba on Innamincka Road	
SSD31	20 Apr 2011	-20.0199	136.4860	~20 km SE of William Creek on Oodnadatta Track	
SSD33	21 Mar 2011	-28.1161	140.206	Moomba Operations - Camp Facility	
SSD34	15 May 2009	-29.0653	136.522	~30 km SE of William Creek on Oodnadatta Track	
SSD35	11 May 2011	-29.1229	136.5554	~5 km W of Warriner Creek (~33 km E of William Creek) on Oodnadatta Track	
STP02	~1975	-28.9082	136.3416	William Creek township	Big snake crossing road on summer evening.
STP04	~1995	-29.0441	138.7886	Cooryinna Creek, NE of Dulkaninna Station Homestead	
STP09	24 Oct 2011	-29.6274	137.5604	Alberrie Creek on Oodnadatta Track	Big pale banded python on thundery day.

### Possible sightings

Sighting #	Date	Latitude	Longitude	Location	Comments
FLB02	1989	-30.5949	138.3922	Leigh Creek township	2.4 m and thicker than arm. Hilly habitat.
FLB03	Jun 2008	-30.2478	139.1265	Umberatana Station	Has frequently seen womas at this location.
GAW01	13 Oct 2003	-30.0785	137.0537	near Canegrass Dam, Borefield Road, approx. 60 km N of Roxby Downs	Seen crossing road 7:30 am. Observer familiar with womas from elsewhere.

GVD01	1987	-27.8711	133.6789	Manya Bore, near boundary of Tallaringa Conservation Park and Wintinna Station	Huge snake crossing track. Mulga scrub on sand dunes.
SSD14	2005	-29.0653	136.522	30 km S of William Creek	In sandhill country.
SSD16	1975	-29.0533	135.5092	Balta Baltana Creek, between Coober Pedy and William Creek	Found huge sloughed snake skin in rabbit warren - could not attribute this to any other species.
SSD28	3 Apr 2011	-27.7433	140.7485	Innamincka Airstrip	
STP01	17 Mar 2010	-29.5587	139.4465	150 km N of Lyndhurst on Strzelecki Track (near Blanchewater)	<1 m. ID not certain.
STP03	~1977	-29.4635	137.0749	Curdimurka Railway Bridge	Seen crossing tracks while driving train at night. Large enough to be mistaken for a sleeper obstructing tracks (hit emergency brake).