10.1071/WR24163

Wildlife Research

Supplementary Material

Determining the impacts of conservation fencing on woma pythons (Aspidites ramsayi)

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Fig. S1. Python variograms for telemetered individuals with \geq 10 relocations. (a) Cranky Pants, (b) Galileo, (c) Nick of Time, (d) Nyctophilus, (e) Ozimops, (f) Wriggly One. Many individual ranges appear to be unstable given some show constant peaks and unresolved semi-variance (peak did not return to equilibrium levels) and therefore did not meet the AKDE range residency assumption.



Fig. S2 Camera trap layout at a woma shelter-site. Swift Enduro trail cameras were positioned within 1 m of the largest burrow and were aimed down at angle of 60° , producing a 1 m² field of view (credit: Josh Magro).

Table S1. Tracking and movement summary

Snake ID	Tracking duration (days)	Tracking date range		Data- points	Re- locations	Mean tracking time lag (hrs)	Mean residency time (days)	Mean distance (m)	Re- visits
		Start	End						
Cranky Pants	351	16/03/2023	01/03/2024	62	11(10)	138.11 ± 28.11	38.78± 32.44	492.88 ± 52.89	2
Figure 8	255	17/03/2023	27/11/2023	43	5(2)	145.73 ± 41.97	107.37 ± 107.37	1064.98	0
Galileo	317	16/03/2023	27/01/2024	58	10(8)	133.48 ± 25.85	35.12 ± 28.67	441.43 ± 31.37	2
Nick of Time	349	18/03/2023	01/03/2024	60	18(15)	141.96 ± 29.06	16.65 ± 13.99	389.96 ± 26.14	1
Nyctophilus	320	17/03/2023	31/01/2024	63	15(10)	123.69 ± 24.79	22.37 ± 14.03	251.62 ± 23.89	1
Ozimops	321	16/03/2023	31/01/2024	62	14(11)	126.25 ± 24.67	47.78 ± 28.94	807.69 ± 61.42	4
T-Bone	317	18/03/2023	29/01/2024	61	6(6)	126.62 ± 24.51	43.93 ± 42.02	534.41 ± 31.08	0
Tough Nut	350	17/03/2023	01/03/2024	57	4(4)	149.98 ± 32.79	104.52 ± 51.76	527.98 ± 33.06	1
Wriggly One	145	17/03/2023	10/08/2023	32	13(6)	112.99 ± 36.09	12.73 ± 7.78	1007.78 ± 289.26	0

Tracking duration Number of days between commencement and termination of tracking for an individual, *Tracking date range* Date range for tracking duration, *Datapoints* Number of occasions each individual was located during the study (also referred to as locations or fixes), *Relocations* Number of unique locations occupied by an individual during the study, with number of unique shelter-sites in brackets, *Mean tracking time lag* Mean (± SE) time between consecutive datapoints, *Mean residency time* Mean (± SE) time recorded stationary at a shelter-site, *Mean distance* Mean (± SE) straight line distance between consecutive shelter-sites, *Revisits* Number of occasions an individual returned to a shelter-site after being located at one or more other shelter-sites.



Fig. S3. Photograph of an alive entangled woma. Notice overlapping 30- and 50-mm aperture foot netting (credit: David Damschke).



Fig. S4. Distribution of telemetered woma relocations post-release.



Fig. S5. Mean monthly maximum and minimum temperature (black and light grey squares, respectively) and mean humidity (dark grey circles) over the duration for which intensive tracking occurred in late March, April and September (16/03/2023 – 24/09/2023). Notice similarity in temperatures between April and September. Data were recorded every 30 minutes (Unidata Neon Sturt-N7 Sn#15193).

Month	Snake ID	Mean daily movement	Mean body	n
		distance (m)	temperature (°C)	
late	Cranky Pants	33.41 ± 18.43	31.03 ± 0.42	29
March/April	Figure 8	53.64 ± 38.02	30.69 ± 0.48	21
	Galileo	15.86 ± 9.94	30.22 ± 0.59	26
	Nick of Time	96.90 ± 45.37	29.97 ± 0.68	27
	Nyctophilus	71.92 ± 20.21	29.64 ± 0.67	29
	Ozimops	112.17 ± 40.41	29.33 ± 0.47	28
	T-Bone	0	30.89 ± 0.50	27
	Tough Nut	0	29.93 ± 0.61	23
	Wriggly One	133.71 ± 51.36	29.93 ± 0.59	28
September	Cranky Pants	0	23.01 ± 0.26	17
-	Figure 8	0	25.72 ± 0.54	16
	Galileo	0	23.29 ± 0.32	17
	Nick of Time	0	23.65 ± 0.47	17
	Nyctophilus	0	24.17 ± 0.62	17
	Ozimops	12.69 ± 12.31	24.68 ± 0.90	17
	T-Bone	0	22.35 ± 0.19	17
	Tough Nut	0	24.58 ± 0.46	17
	Wriggly One	NA	NA	NA

Table S2. Seasonal differences in woma activity metrics. Means provided ± SE.



Fig. S6. Mean (\pm SE) python body temperature over different times of day for different seasons and shelter and non-shelter-site (aboveground) fixes. Observations between 0000 – 0300 and 0300 – 0600 were combined due to low sample size.



Fig. S7. Camera trap observation rates for species observed at woma burrow entrances for both inside and outside the exclosures. Due to low sample size, both bird and small lizard species were grouped together, respectively. Bird species included Australian pipit, cinnamon quail-thrush, and white-backed swallow. Small lizard species included *Ctenotus* sp. and *Ctenophorus pictus*.