

1 **Supplementary information**

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3 High carnivore population density highlights the conservation value of industrialised sites

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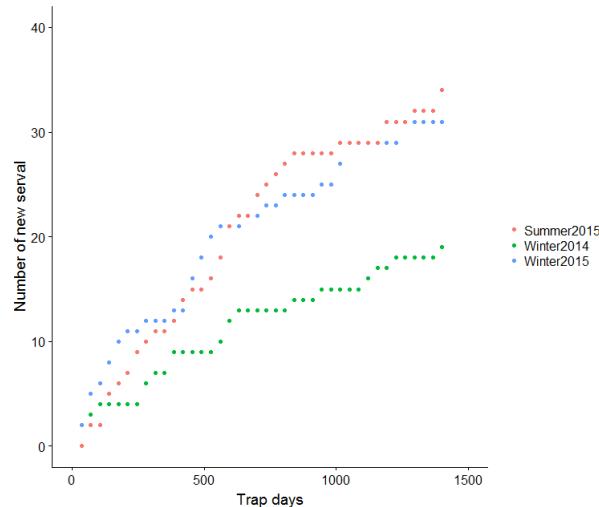
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25 Fig. S1. Cumulative frequency curve showing the relationship between the cumulative
 26 number of individual serval identified on the camera traps at Secunda in South Africa.



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29 Table S2. Modelling results showing: a) (Mhab.sec) the effect of habitat type on detection
 30 probability (g_0); b) (Mdens.habitat) the effect of session on density and habitat on
 31 detection probability; c) as model b, but allows the scale parameter (σ) to vary with
 32 session; d) (Mb.sec) the effect of behavioural response on detection probability; e)
 33 (Mseason) the effect of density affected by season and year; and f) (m0.sec) the null model.

	model	detectf	npar	logLik	AIC	AICc	dAICc	AICcw
		n			t			
Mhab.sec	D~1	hazard	7	-	2044.	2046.	0.00	0.47
	g0~Habitat	rate		1015.42	85	33		
				6872				

			sigma~1							
			z~1							
Mdens.habi	D~session	hazard	9	-	2043.	2046.	0.10	0.45		
tat	g0~Habitat	rate		1012.99	99	43				
		sigma~1		6398						
		z~1								
Mdens.habi	D~session	hazard	11	-	2046.	2049.	3.59	0.08		
tat.ses	g0~Habitat	rate		1012.12	25	92				
		sigma~ses		4715						
		sion z~1								
Mb.sec	D~1 g0~b	hazard	5	-	2067.	2067.	21.47	0.00		
	sigma~1	rate		1028.51	03	80				
		z~1		4939						
Mseason	D~session	hazard	6	-	2072.	2073.	26.94	0.00		
	g0~1	rate		1030.08	18	27				
		sigma~1		9274						
		z~1								
M0.sec	D~1 g0~1	hazard	4	-	2075.	2075.	29.37	0.00		
	sigma~1	rate		1033.59	19	69				
		z~1		2632						
