

Supplementary Material

Feral pig (*Sus scrofa*) activity and landscape feature revisitation across four sites in eastern Australia

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Supplementary Information

Supplementary Table 1: Details of pigs collared across all sites with mean daily distance travelled.

Pig ID	Site	Sex	Weight (kg)	Capture Date	Days collared	Raw GPS fixes	Successful GPS fixes	Mean daily distance (km)
Arcadia_Pig03	Arcadia	Female	67.2	01-Jul-19	325	14549	13625	3.58
Arcadia_Pig10	Arcadia	Male	82.8	15-May-17	193	9272	8769	5.48
Arcadia_Pig18	Arcadia	Male	86.6	18-May-17	230	11289	10692	7.15
Arcadia_Pig19	Arcadia	Female	67.8	19-May-17	607	28874	27076	3.85
Arcadia_Pig20	Arcadia	Female	68	22-May-17	1241	59937	56823	4.06
Arcadia_Pig21	Arcadia	Male	70.2	22-May-17	45	2183	2073	4.75
Arcadia_Pig23	Arcadia	Male	85	23-May-17	126	6033	5649	6.35
Arcadia_Pig24	Arcadia	Male	55.4	10-Oct-17	30	1449	1363	4.64
Arcadia_Pig25	Arcadia	Female	42	10-Oct-17	482	23149	21866	3.72
Arcadia_Pig28	Arcadia	Male	46	11-Oct-17	269	13025	12150	4.60
Arcadia_Pig29	Arcadia	Female	70.6	12-Oct-17	189	9191	8585	4.57
Arcadia_Pig30	Arcadia	Female	45.2	13-Oct-17	81	3943	3687	0.75
Arcadia_Pig32	Arcadia	Female	65.8	08-Mar-18	626	30080	28543	4.39
Arcadia_Pig33	Arcadia	Male	58.8	08-Mar-18	471	22833	21580	5.65
Arcadia_Pig34	Arcadia	Male	71.4	08-Mar-18	542	26059	24191	5.43
Arcadia_Pig35	Arcadia	Male	70.6	08-Mar-18	57	2770	2589	5.24
Arcadia_Pig36	Arcadia	Female	72.2	09-Mar-18	134	6423	6174	4.33
Arcadia_Pig37	Arcadia	Female	58	09-Mar-18	315	15197	14468	3.26
Arcadia_Pig38	Arcadia	Female	82.8	25-Nov-18	184	8886	8300	4.55
Arcadia_Pig39	Arcadia	Male	50.6	28-Nov-18	134	6479	6044	8.66
Arcadia_Pig41	Arcadia	Female	46.2	25-Nov-18	782	35032	32742	2.17
Arcadia_Pig42	Arcadia	Male	79	30-Nov-18	161	7757	7297	5.77

Supplementary Table 1 (continued): Details of pigs collared across all sites with mean daily distance travelled.

Pig ID	Site	Sex	Weight (kg)	Capture Date	Days collared	Raw GPS	Successful	Mean daily distance (km)
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					fixes	GPS fixes	
Arcadia_Pig49	Arcadia	Male	101	02-Jul-19	85	4099	5.57
Arcadia_Pig69	Arcadia	Female	72.2	04-Jul-19	504	24370	3.22
Arcadia_Pig72	Arcadia	Female	70	06-Nov-20	72	3476	6.40
Arcadia_Pig73_1	Arcadia	Male	65	11-Nov-19	374	17886	4.74
Arcadia_Pig73_2	Arcadia	Male	89.4	03-Nov-20	75	3328	3.55
Arcadia_Pig74	Arcadia	Female	44	12-Nov-19	88	4190	4.32
Arcadia_Pig75	Arcadia	Male	53	12-Nov-19	55	2629	4.84
Arcadia_Pig76	Arcadia	Male	100	15-Nov-19	127	6112	5.09
Arcadia_Pig77	Arcadia	Male	107.8	16-Nov-19	379	18270	5.96
Downfall_Pig73	Downfall	Female	51.1	18-Jan-18	714	34478	3.46
Downfall_Pig74	Downfall	Male	52.4	18-Jan-18	843	37849	3.52
Downfall_Pig75	Downfall	Male	78	22-Dec-17	303	15047	3.25
Downfall_Pig79	Downfall	Male	43.8	13-Dec-17	639	26564	6.60
Downfall_Pig83	Downfall	Male	54.6	29-Jun-17	593	27531	6.56
Downfall_Pig85	Downfall	Female	49	28-Jun-17	1055	51633	3.40
Downfall_Pig91	Downfall	Female	61.2	27-Jun-17	884	42251	6.52
Downfall_Pig92	Downfall	Male	90.8	27-Jun-17	40	1835	10.25
Downfall_Pig93	Downfall	Male	80.6	26-Jun-17	651	31098	6.69
Downfall_Pig94	Downfall	Female	65.4	26-Jun-17	818	30011	4.70
Downfall_Pig95	Downfall	Female	46.2	22-Jun-17	397	19387	3.86
Gebar_Pig01	Gebar	Male	27	25-Oct-17	669	14775	0.70
Gebar_Pig02	Gebar	Female	30	25-Oct-17	641	19482	1.10
Gebar_Pig03	Gebar	Male	28.6	26-Oct-17	296	4259	0.53
Gebar_Pig04	Gebar	Male	30	26-Oct-17	670	13882	1.03
Palerang_Pig01	Palerang	Male	75.6	19-May-20	392	18850	5.11
Palerang_Pig03	Palerang	Male	35.4	19-May-20	396	19863	4.26

Supplementary Table 1 (continued): Details of pigs collared across all sites with mean daily distance travelled.

Pig ID	Site	Sex	Weight (kg)	Capture Date	Days collared	Raw GPS fixes	Successful GPS fixes	Mean daily distance (km)
Palerang_Pig04	Palerang	Female	55.6	20-May-20	501	24410	21980	1.93
Palerang_Pig05	Palerang	Male	71	20-May-20	221	10681	9717	3.13
Palerang_Pig06	Palerang	Male	81.6	21-May-20	391	18866	17093	6.48
Palerang_Pig07	Palerang	Female	39.8	21-May-20	394	19847	18210	3.66
Palerang_Pig08	Palerang	Male	80.2	21-May-20	46	2313	2122	2.96
Palerang_Pig09	Palerang	Male	100.2	22-May-20	61	2951	2680	2.99
Palerang_Pig10	Palerang	Female	41	22-May-20	392	19566	17899	2.35
Palerang_Pig11	Palerang	Female	63.2	22-Jul-20	454	21894	20059	2.33
Palerang_Pig12	Palerang	Male	69	22-Jul-20	323	15529	14084	5.41
Palerang_Pig24	Palerang	Female	50	13-Sep-20	278	13898	12667	2.64
Palerang_Pig25	Palerang	Male	75.8	13-Sep-20	126	6029	5457	3.12

Supplementary Table 2: Description of vegetative layers used in this study as established by the Earth Observation Data for Ecosystem Monitoring (Lucas et al., 2019). Vegetative layers were quantified by the analysis of environmental variables (e.g. water, canopy cover, vegetation height, above ground biomass) following the United States Food and Agriculture Organisation Land Cover Classification System. Data source: The Commonwealth of Australia (Geoscience Australia) (2021). Note: raster pixel resolution of 25m.

Vegetative layer description	Dominant vegetation type and Foliage Projective Cover (FPC)	Proportion of pixel dominant vegetation type
Very sparse	Bare ground <20% FPC	20 – 100%
Sparse herbaceous	Herbaceous <20% FPC	1 – 15%
Open herbaceous	Herbaceous <20% FPC	15 – 40%
Sparse woody	Woody >20% FPC	1 – 15%
Open woody	Woody >20% FPC	15 – 40%
Medium woody	Woody >20% FPC	40 – 65%
Closed woody	Woody >20% FPC	>65%

Supplementary Table 3: Conditional logistic regression statistics for all habitat variables across all sites combined. Significant values indicated by an asterisk (*).

Habitat variable	Coefficient	Odds ratio	SE	Z	p
Watercourse	-1.20E-03	0.9988	0.0002	-5.70	<0.001*
Waterbody	-1.79E-04	0.9998	0.0001	-2.10	0.04*
Road and track	4.22E-05	1.0000	0.0001	0.42	0.68
Cultivation	-3.24E-04	0.9997	0.0001	-2.71	0.01*
Open herbaceous veg	-4.17E-03	0.9958	0.001	-4.14	<0.001*
Sparse herbaceous veg	2.31E-06	1.0000	0.0001	0.02	0.99
Closed woody veg	4.45E-05	1.0000	0.0001	0.78	0.44
Medium woody veg	-4.92E-04	0.9995	0.0002	-1.99	0.047*
Open woody veg	-3.22E-07	1.0000	0.0003	0.00	1.00
Sparse woody veg	4.80E-05	1.0000	0.0001	0.64	0.52
Very sparse veg	1.54E-04	1.0000	0.0001	1.18	0.24
Human residence	-2.90E-05	1.0000	0.0001	-0.47	0.64

Supplementary Table 4: Conditional logistic regression statistics for all habitat variables at Arcadia. Significant values indicated by an asterisk (*).

Habitat variable	Coefficient	Odds ratio	SE	Z	p
Watercourse	-6.90E-04	0.9993	0.0003	-2.72	0.01*
Waterbody	-2.75E-04	0.9997	0.0001	-2.06	0.04*
Road and track	-9.12E-05	0.9999	0.0001	-0.66	0.51
Cultivation	-4.36E-04	0.9996	0.0002	-2.38	0.02*
Open herbaceous veg	-8.35E-03	0.9917	0.0026	-3.18	0.002*
Sparse herbaceous veg	6.88E-05	1.0000	0.0003	0.26	0.80
Closed woody veg	-1.62E-05	1.0000	0.0001	-0.19	0.85
Medium woody veg	-3.27E-04	0.9997	0.0003	-1.21	0.22
Open woody veg	-6.62E-05	0.9999	0.0003	-0.22	0.83
Sparse woody veg	3.32E-05	1.0000	0.0001	0.31	0.76
Very sparse veg	2.47E-04	1.0000	0.0002	1.26	0.21
Human residence	-1.93E-04	0.9998	0.0001	-2.03	0.04*

Supplementary Table 5: Conditional logistic regression statistics for all habitat variables at Downfall. Significant values indicated by an asterisk (*).

Habitat variable	Coefficient	Odds ratio	SE	Z	p
Watercourse	-2.23E-03	0.9978	0.0004	-5.05	<0.001*
Waterbody	-1.79E-05	1.0000	0.0001	-0.12	0.90
Road and track	3.76E-04	1.0000	0.0002	2.00	0.047*
Cultivation	-1.83E-04	0.9998	0.0002	-0.89	0.37
Open herbaceous veg	-5.67E-03	0.9943	0.0024	-2.36	0.02*
Sparse herbaceous veg	-4.39E-04	0.9996	0.0003	-1.35	0.18
Closed woody veg	-4.08E-05	1.0000	0.0001	-0.38	0.71
Medium woody veg	-2.14E-03	0.9979	0.0011	-1.87	0.06
Open woody veg	-2.64E-03	0.9974	0.0016	-1.63	0.10
Sparse woody veg	1.31E-04	1.0000	0.0002	0.79	0.43
Very sparse veg	5.19E-05	1.0000	0.0002	0.21	0.83
Human residence	1.49E-04	1.0000	0.0001	1.48	0.14

Supplementary Table 6: Conditional logistic regression statistics for all habitat variables at Palerang. Significant values indicated by an asterisk ().*

Habitat variable	Coefficient	Odds ratio	SE	Z	p
Watercourse	-7.88E-03	0.9921	0.0024	-3.34	0.001*
Waterbody	1.65E-04	1.0000	0.0006	0.29	0.77
Road and track	5.33E-04	1.0010	0.0005	1.09	0.28
Cultivation	-3.36E-03	0.9966	0.0017	-2.02	0.04*
Open herbaceous veg	2.53E-03	1.0030	0.0018	1.43	0.15
Sparse herbaceous veg	2.79E-06	1.0000	0.0002	0.01	0.99
Closed woody veg	-1.17E-03	0.9988	0.0012	-0.96	0.34
Medium woody veg	-1.16E-02	0.9885	0.0048	-2.40	0.02*
Open woody veg	-7.36E-05	0.9999	0.0006	-0.12	0.91
Sparse woody veg	1.18E-04	1.0000	0.0002	0.56	0.57
Very sparse veg	1.20E-04	1.0000	0.0004	0.32	0.75
Human residence	1.91E-04	1.0000	0.0003	0.71	0.48

References

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