

Leo, V., Reading, R. P., Gordon, C. and Letnic, M. 2018. Apex predator suppression is linked to restructuring of ecosystems via multiple ecological pathways. – Oikos doi: 10.1111/oik.05546

Appendix 1



Figure A1.

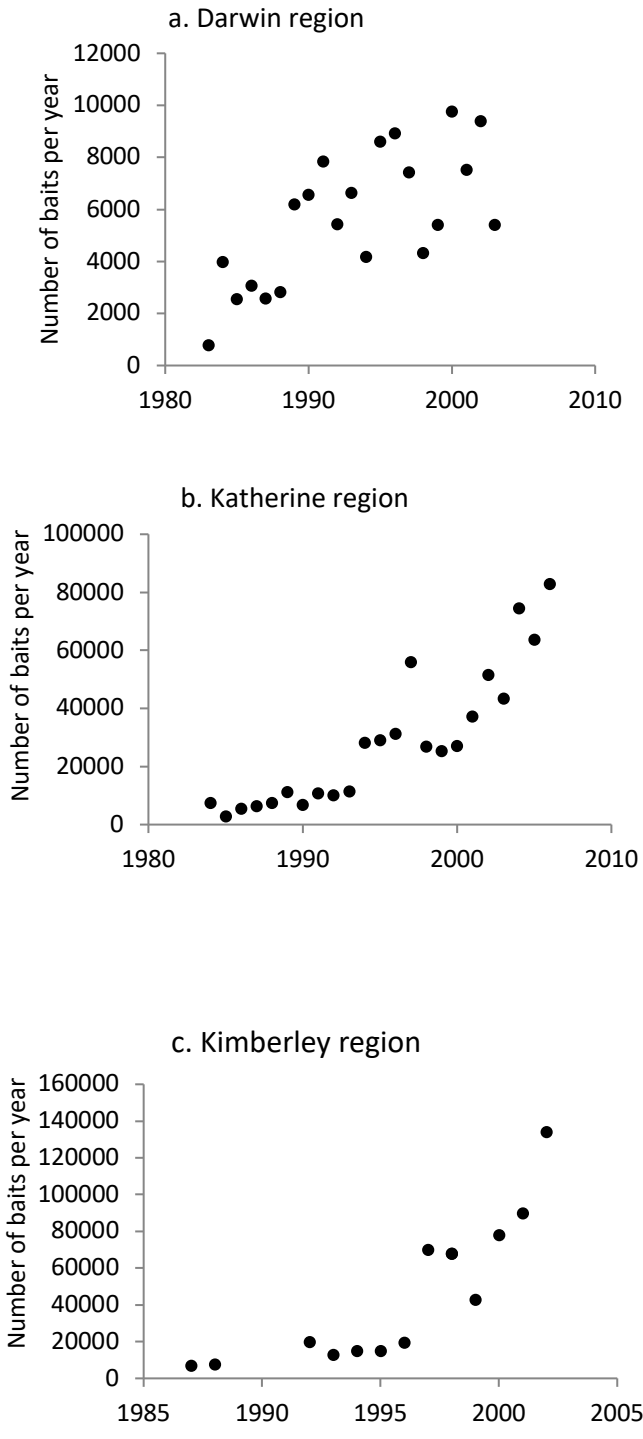


Figure A2.

Table A1. General site information and meta-analysis data.

Location	Dungowan - May 2013					
Season of survey	Autumn					
Baiting treatment	baited			unbaited		
Land-use	pastoral			pastoral		
Poison application type	nil			aerial + ground + shooting		
Years of baiting	3 + years					
Vegetation community	<i>Eucalyptus savannah</i>			<i>Eucalyptus savannah</i>		
Presence of fire within 12 month period	12 + months			12 + months		
Annual rainfall mm (12 months prior to survey)	545			545		
Mean long term rainfall mm	1010			720		
Response variable	Mean	SD	n	Mean	SD	n
Dingo (plots disturbed/night)	0.15	0.14	24	0.22	0.23	24
Cat (plots disturbed/night)	0.06	0.11	24	0.06	0.13	24
Rodent (per trap night)	0.00	0.00	8	0.04	0.12	8
Macropus (sighted/km)	0.63	0.51	3	0.03	0.06	3
Nailtail wallaby (sighted/km)	0.63	0.45	3	0.03	0.06	3
Cattle dung (index/grid)	0.00	0.00	8	0.00	0.00	8
Vegetation cover low 0 - 100cm (index/grid)	11.38	4.51	8	14.48	2.40	8
Vegetation cover high 100 - 200cm (index/grid)	1.25	1.67	8	4.91	2.42	8

Table A1 (cont): general site information and meta-analysis data

Location	Mary River - Sep 2013					
Season of survey	Spring					
Baiting treatment	baited			unbaited		
Land-use	National Park			private property		
Poison application type	nil			aerial + ground + shooting		
Years of baiting	3 + years					
Vegetation community	<i>Eucalyptus savannah</i>			<i>Eucalyptus savannah</i>		
Average years since fire	< 12 months			< 12 months		
Annual rainfall mm	1337			1337		
Mean long term rainfall mm	1315			1335		
Response variable	Mean	SD	n	Mean	SD	n
Dingo (plots disturbed/night)	0.13	0.22	24	0.18	0.22	24
Cat (plots disturbed/night)	0.03	0.09	24	0.00	0.00	24
Rodent (per trap night)	0.08	0.15	8	0.04	0.12	8
Macropus (sighted/km)	2.27	2.25	3	0.03	0.06	3
Nailtail wallaby (sighted/km)	0.17	0.15	3	0.03	0.06	3
Cattle dung (index/grid)	0.00	0.00	8	0.00	0.00	8
Vegetation cover low 0 - 100cm (index/grid)	15.01	8.38	8	17.20	3.81	8
Vegetation cover high 100 - 200cm (index/grid)	3.15	3.27	8	0.80	0.60	8

Table A1 (cont): general site information and meta-analysis data

Location	Fish River - June 2014					
Season of survey	Winter					
Baiting treatment	baited			unbaited		
Land-use	National Park			National Park		
Poison application type	nil			aerial + ground + shooting		
Years of baiting				3 + years		
Vegetation community	<i>Eucalyptus savannah</i>			<i>Eucalyptus savannah</i>		
Average years since fire	< 12 months			< 12 months		
Annual rainfall mm	1369			1369		
Mean long term rainfall mm	1459			1208		
Response variable	Mean	SD	n	Mean	SD	n
Dingo (plots disturbed/night)	0.00	0.00	10	0.03	0.11	10
Cat (plots disturbed/night)	0.00	0.00	10	0.00	0.00	10
Rodent (per trap night)	0.06	0.18	8	2.88	1.06	8
Macropus (sighted/km)	0.67	0.76	3	0.10	0.10	3
Nailtail wallaby (sighted/km)	0.00	0.00	3	0.00	0.00	3
Cattle dung (index/grid)	0.00	0.00	8	0.13	0.35	8
Vegetation cover low 0 - 100cm (index/grid)	19.77	6.89	8	20.46	1.75	8
Vegetation cover high 100 - 200cm (index/grid)	12.46	4.01	8	13.88	1.18	8

Table A1 (cont): General site information and meta-analysis data

Location	Carlton Hill - July 2014					
Season of survey	Winter					
Baiting treatment	baited			unbaited		
Land-use	pastoral			pastoral		
Poison application type	nil			aerial + ground + shooting		
Years of baiting				3 + years		
Vegetation community	<i>Eucalyptus savannah</i>			<i>Eucalyptus savannah</i>		
Average years since fire	12 + months			12 + months		
Annual rainfall mm	660			660		
Mean long term rainfall mm	835			878		
Response variable	Mean	SD	n	Mean	SD	n
Dingo (plots disturbed/night)	0.00	0.00	22	0.59	0.34	13
Cat (plots disturbed/night)	0.08	0.18	22	0.00	0.00	13
Rodent (per trap night)	0.00	0.00	8	0.04	0.12	8
Macropus (sighted/km)	0.93	0.32	3	0.00	0.00	3
Nailtail wallaby (sighted/km)	0.40	0.26	3	0.00	0.00	3
Cattle dung (index/grid)	0.50	1.41	8	1.25	3.54	8
Vegetation cover low 0 - 100cm (index/grid)	9.48	2.95	8	14.37	4.24	8
Vegetation cover high 100 - 200cm (index/grid)	2.06	2.56	8	0.70	0.95	8

Table A1 (cont): general site information and meta-analysis data

Location	El Questro - July 2014					
Season of survey	Winter					
Baiting treatment	baited			unbaited		
Land-use	pastoral			pastoral		
Poison application type	nil			aerial + ground + shooting		
Years of baiting				3 + years		
Vegetation community	<i>Eucalyptus savannah</i>			<i>Eucalyptus savannah</i>		
Average years since fire	< 12 months			12 + months		
Annual rainfall mm	1056			1056		
Mean long term rainfall mm	785			934		
Response variable	Mean	SD	n	Mean	SD	n
Dingo (plots disturbed/night)	0.24	0.25	18	0.41	0.37	18
Cat (plots disturbed/night)	0.09	0.15	18	0.00	0.00	18
Rodent (per trap night)	0.08	0.15	8	0.38	0.55	8
Macropus (sighted/km)	0.07	0.06	3	0.23	0.15	3
Nailtail wallaby (sighted/km)	0.03	0.06	3	0.00	0.00	3
Cattle dung (index/grid)	1.00	2.45	8	1.25	1.58	8
Vegetation cover low 0 - 100cm (index/grid)	18.47	8.16	8	14.63	4.56	8
Vegetation cover high 100 - 200cm (index/grid)	5.97	4.47	8	2.18	2.42	8

Table A1 (cont): general site information and meta-analysis data

Location	Lake Argyle - Sep 2014					
Season of survey	Spring					
Baiting treatment	baited			unbaited		
Land-use	pastoral			pastoral		
Poison application type	nil			aerial + ground + shooting		
Years of baiting				3 + years		
Vegetation community	<i>Eucalyptus savannah</i>			<i>Eucalyptus savannah</i>		
Average years since fire	12 + months			< 12 months		
Annual rainfall mm	904			871		
Mean long term rainfall mm	641			708		
Response variable	Mean	SD	n	Mean	SD	n
Dingo (plots disturbed/night)	0.17	0.23	20	0.57	0.36	18
Cat (plots disturbed/night)	0.02	0.07	20	0.04	0.11	18
Rodent (per trap night)	0.00	0.00	8	0.00	0.00	8
Macropus (sighted/km)	1.77	0.95	3	0.00	0.00	3
Nailtail wallaby (sighted/km)	0.30	0.10	3	0.00	0.00	3
Cattle dung (index/grid)	0.50	1.07	8	0.00	0.00	8
Vegetation cover low 0 - 100cm (index/grid)	10.69	3.14	8	21.50	5.15	8
Vegetation cover high 100 - 200cm (index/grid)	0.52	0.70	8	0.83	0.54	8

Table A1 (cont): general site information and meta-analysis data

Location	Gulf - May 2015					
Season of survey	Autumn					
Baiting treatment	baited			unbaited		
Land-use	pastoral			pastoral		
Poison application type	nil			aerial + ground + shooting		
Years of baiting				3 + years		
Vegetation community	<i>Eucalyptus savannah</i>			<i>Eucalyptus savannah</i>		
Average years since fire	12 + months			12 + months		
Annual rainfall mm	683			677		
Mean long term rainfall mm	1010			720		
Response variable	Mean	SD	n	Mean	SD	n
Dingo (plots disturbed/night)	0.21	0.32	19	0.43	0.31	20
Cat (plots disturbed/night)	0.09	0.19	19	0.00	0.00	20
Rodent (per trap night)	0.00	0.00	8	0.00	0.00	8
Macropus (sighted/km)	0.37	0.55	3	0.03	0.06	3
Nailtail wallaby (sighted/km)	0.20	0.10	3	0.03	0.06	3
Cattle dung (index/grid)	4.13	4.61	8	0.00	0.00	8
Vegetation cover low 0 - 100cm (index/grid)	13.85	3.46	8	17.87	2.54	8
Vegetation cover high 100 - 200cm (index/grid)	5.23	2.87	8	1.48	2.10	8

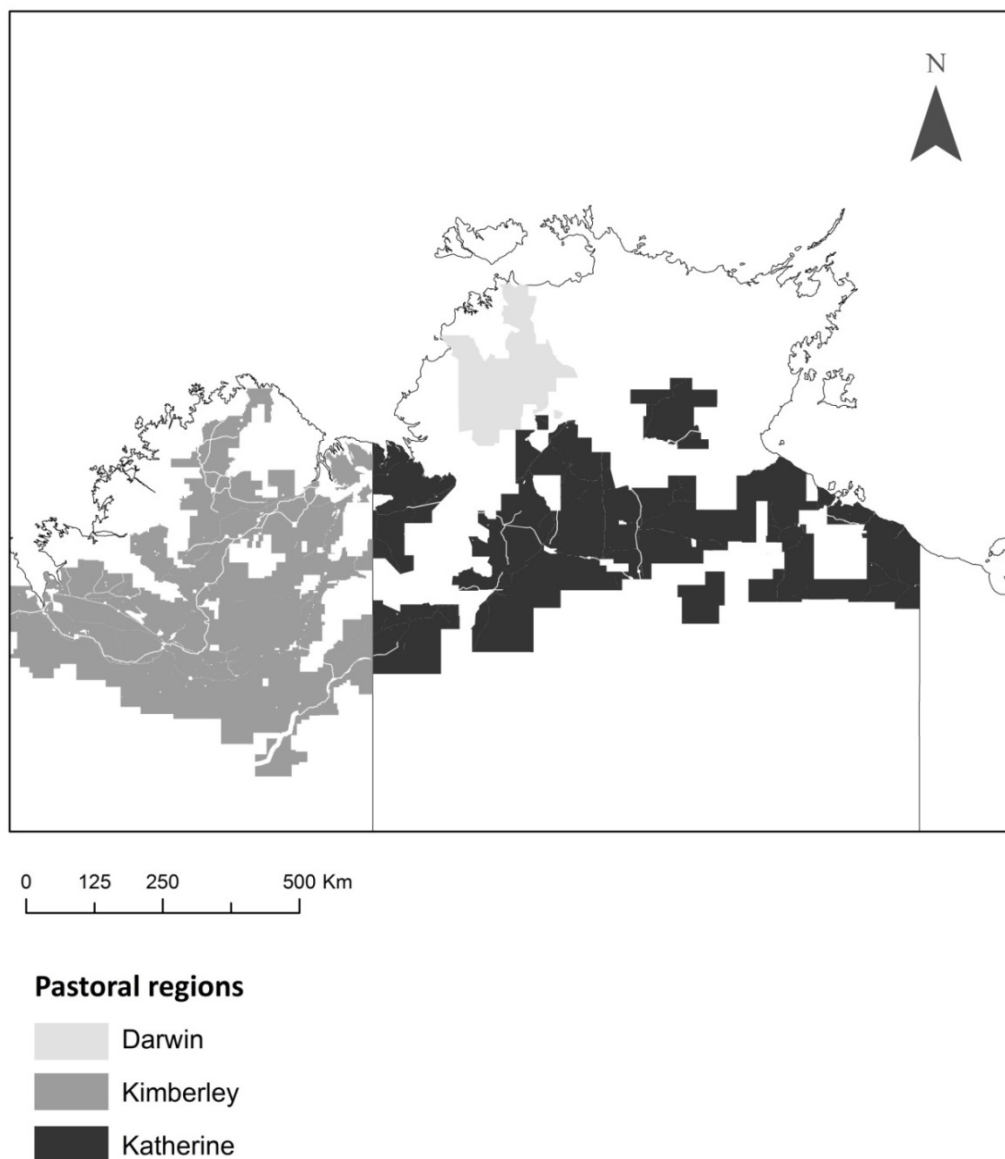


Figure A3. Pastoral regions within the wet-dry tropics of Western Australia and Northern Territory. Different shades depict Darwin, Kimberley and Katherine pastoral regions and boundaries. Pastoral region is classified as a property that is utilised for commercial livestock grazing and production.