

Table S1. Summary result of the univariable logistic analysis of risk factors with dependent genus *Anaplasma* and *Theileria* species infection in cattle in the wildlife–livestock interface in Lambwe valley, Western Kenya.

Risk factor	Category level	n	<i>Anaplasma</i>				<i>Theileria</i>			
			Prevalence (95% CI)	Univariable LR analysis			Prevalence (95% CI)	Univariable LR analysis		
				P- value	OR	95% CI		P-value	OR	95% CI
Village	Nyadenda	120	13.3 (7.3, 19.4)	-	1.0	-	54.2 (45.3, 63.1)	-	1.0	-
	Ogendo	65	21.5 (11.5, 31.5)	0.178	1.8	0.8, 4.1	84.6 (75.8, 93.4)	0.000	5.1	2.3, 11.4
	Nyaburo	115	28.7 (20.4, 36.9)	0.126	2.4	0.8, 7.3	83.5 (76.7, 90.3)	0.023	3.4	1.2, 9.7
	Ruma Pap	122	55.7 (46.9, 64.6)	0.000	8.3	4.3, 15.8	39.3 (30.7, 48.0)	0.033	0.6	0.3, 0.9
	Odelo	68	55.9 (44.1, 67.7)	0.000	7.5	3.5, 15.9	79.4 (69.8, 89.0)	0.007	2.7	1.3, 5.6
	Kamato	190	74.7 (68.6, 80.9)	0.000	19.5	10.3, 37	60 (53.0, 66.7)	0.243	1.34	0.8, 2.2
Herd size	Small	307	43.3 (37.8, 48.9)	-	1.0	-	58 (52.5, 63.5)	-	1.0	-
	Medium	373	47.7 (42.7, 52.8)	0.169	0.8	0.5, 1.1	68.1 (63.4, 72.8)	0.21	1.3	0.9, 1.8
Sex	Female	370	46.5 (41.5, 51.6)	-	1.0	-	60.3 (55.3, 65.3)	-	1.0	-
	Male	310	44.8 (39.4, 50.4)	0.62	1.1	0.8, 1.6	67.4 (62.2, 72.6)	0.157	1.3	0.9, 1.8
Age	Calve/weaners	123	56.9 (48.2, 65.7)	-	1.0	-	62.6 (54.1, 71.2)	-	1.0	-
	Adults	556	43.4 (39.2, 47.5)	0.12	0.6	0.4, 0.9	63.9 (59.9, 67.8)	0.713	0.92	0.6, 1.4
Distance from park	< 1 km	377	46.7 (41.7, 51.7)	-	1.0	-	60.2 (55.3, 65.2)	-	1.0	-
	> 1 km	303	44.6 (39.1, 50.2)	0.655	0.9	0.4, 1.7	67.7 (62.4, 72.9)	0.253	0.7	0.4, 1.3

OR-Odds Ratio, LR-Logistic Regression, CI-Confidence Interval

Table S2. Result from univariate standard logistic analysis of risk factors with dependent *Anaplasma platys*, *A. sp.* clone 'Lawmbwe-1' and *A. bovis* infection in cattle in Lambwe valley, Western Kenya.

Risk factor	Label	n	<i>A. sp.</i> clone 'Lambwe-1'				<i>A. platys</i>				<i>A. bovis</i>			
			Prevalence (95% CI)	Univariable LR analysis			Prevalence (95% CI)	Univariable LR analysis			Prevalence (95% CI)	Univariable LR analysis		
				P-value	OR	95% CI		P-value	OR	95% CI		P-value	OR	95% CI
Village	Nyadenda	120	8.3 (3.4, 13.3)	-	1.0	-	2.5 (0, 5.3)	-	1.0	-	2.5 (0, 5.3)	-	1.0	-
	Ogendo	65	3.1 (0, 7.3)	0.115	0.28	0.1, 1.4	4.6 (0, 9.7)	0.513	1.7	0.03, 9	13.8 (5.5, 22.2)	0.003	7.8	2, 30.9
	Nyaburo	115	7.0 (2.3, 11.6)	0.010	0.13	0.03, 0.6	8.7 (3.6, 13.9)	0.133	3.7	0.67, 20.4	13 (6.9, 19.2)	0.001	16.4	3.1, 84.5
	Ruma Pap	122	13.9 (7.8, 20.1)	0.383	1.5	0.6, 3.4	11.5 (5.8, 17.1)	0.018	4.7	1.3, 17	29.5 (21.4, 37.6)	0.000	20	5.9, 67.7
	Odelo	68	14.7 (6.3, 23.1)	0.536	1.4	0.5, 3.7	23.5 (13.5, 33.6)	0.001	10	2.7, 37.3	23.5 (13.5, 33.6)	0.000	15.8	4.2, 59
	Kamato	190	16.3 (11.1, 21.6)	0.22	1.6	0.7, 3.6	34.2 (27.5, 41.0)	0.000	19.4	5.9, 64.4	20.5 (14.8, 26.3)	0.000	12.2	3.6, 41.1
Herd size	Small	307	9.4 (6.2, 12.7)	-	1.0	-	13.7 (9.8, 17.5)	-	1.0	-	19.2 (14.8, 23.6)	-	1.0	-
	Medium	373	13.1 (9.7, 16.6)	0.67	0.6	0.4, 1.0	18.5 (14.6, 22.4)	0.71	0.64	0.4, 1	15.8 (12.1, 19.5)	0.09	1.5	0.9, 2.3
Sex	Female	370	12.7 (9.3, 16.1)	-	1.0	-	17.3 (13.4, 21.2)	-	1.0	-	16.2 (12.5, 20)	-	1.0	-
	Male	310	10.0 (6.7, 13.3)	0.29	0.8	0.5, 1.3	15.2 (11.2, 19.2)	0.767	0.94	0.6, 1.5	18.7 (14.4, 23.1)	0.197	1.3	0.9, 2
Age	Calves/Weaners	123	12.2 (6.4, 18.0)	-	1.0	-	22 (14.6, 29.3)	-	1.0	-	22 (14.6, 29.3)	-	1.0	-
	Adults	556	11.3 (8.7, 14.0)	0.76	0.9	0.5, 1.7	15.1 (12.1, 18.1)	0.092	0.63	0.4, 1.1	16.4 (13.3, 19.4)	0.201	0.71	0.4, 1.2
Distance from park	< 1 Km	377	10.6 (7.5, 13.7)	-	1.0	-	16.4 (12.7, 20.2)	-	1.0	-	19.4 (15.4, 23.4)	-	1.0	-
	>1 km	303	12.5 (8.8, 16.3)	0.56	0.8	0.3, 1.8	16.2 (12.0, 20.3)	0.971	0.99	0.5, 2.2	14.9 (10.9, 18.9)	0.812	0.9	0.4, 1.98

Table S3. Result from univariate standard logistic analysis of risk factors with dependent *Theileria velifera* and *T. mutans* in cattle in Lambwe valley, Western Kenya.

Risk factor	Category level	n	<i>T. velifera</i>				<i>T. mutans</i>			
			Prevalence	Univariable LR analysis			Prevalence	Univariable LR analysis		
				P-value	OR	95% CI		P-value	OR	95% CI
Village	Nyadenda	120	35 (26.5, 43.5)	-	1.0	-	20 (12.8, 27.2)	0.005	1.0	-
	Ogendo	65	66.2 (54.7, 77.7)	0.000	3.8	1.9, 7.5	18.5 (9, 27.8)	0.97	0.99	0.4, 2.2
	Nyaburo	115	57.4 (48.4, 66.4)	0.16	2.0	0.8, 5.4	29.6 (21.2, 37.9)	0.21	1.99	0.7, 5.8
	Ruma Pap	122	22.9 (15.5, 30.4)	0.04	0.5	0.3, 0.98	16.4 (9.8, 22.9)	0.61	0.8	0.4, 1.6
	Odelo	68	52.9 (41.1, 64.8)	0.09	1.8	0.9, 3.4	29.4 (18.6, 40.2)	0.19	1.6	0.8, 3.4
	Kamato	190	30 (23.5, 36.5)	0.43	0.8	0.5, 1.36	34.2 (27.5, 40.9)	0.005	2.2	1.8, 4
Herd size	Small	307	34.2 (28.9, 39.5)	-	1.0	-	25.4 (20.5, 30.3)	-	1.0	-
	Medium	373	44.8 (39.7, 49.8)	0.18	0.8	0.6, 1.1	26 (21.6, 30.5)	0.7	0.9	0.6, 1.3
Sex	Female	370	38.4 (33.4, 43.3)	-	1.0	-	22.4 (18.2, 26.7)	-	1.0	-
	Male	310	41.9 (36.4, 47.4)	0.65	1.1	0.8, 1.5	29.7 (24.6, 34.8)	0.03	1.5	1, 2.1
Age	Calves/Weaners	123	28.5 (20.5, 36.4)	-	1.0	-	35.8 (27.3, 44.2)	-	1.0	-
	Adults	556	42.6 (38.5, 46.7)	0.014	1.8	1.1, 2.8	23.6 (20, 27.1)	0.005	0.5	0.3, 0.8
Distance from park	< 1 Km	377	36.6 (31.7, 41.5)	-	1.0	-	25.7 (21.3, 30.1)	-	1.0	-
	>1 km	303	44.2 (38.6, 49.8)	0.69	0.9	0.5, 1.6	25.7 (20.8, 30.7)	0.48	0.8	0.4, 1.5