

Table S1. Summary of step lengths by individual. Values are in m/day

<b>ID</b>	<b>STEP LENGTHS PER DAY – MEDIAN</b>
<b>F1</b>	1811
<b>F2</b>	1210
<b>F3</b>	1737
<b>F4</b>	2581
<b>F5</b>	861
<b>F6</b>	1853
<b>F7</b>	1699
<b>M1</b>	3061
<b>M2</b>	2911
<b>M3</b>	2594
<b>M4</b>	2596
<b>M5</b>	1337
<b>M6</b>	2784
<b>M7</b>	869
<b>MEAN</b>	1993 ± 203
<b>MALE MEAN</b>	2307 ± 321
<b>FEMALE MEAN</b>	1678 ± 204

Table S2. Model comparison for different nested models of log-transformed movement distance

<b>Model Formula</b>	<b>npar</b>	<b>AIC</b>	<b>BIC</b>	<b>R<sup>2</sup> (cond.)</b>	<b>R<sup>2</sup> (marg.)</b>	<b>ICC</b>	<b>RMSE</b>	<b>Sigma</b>
(1   id)	3	17893.5	17913.6	0.069	0	0.069	1.072	1.073
daytime + (1   id)	4	15801.4	15828.2	0.348	0.274	0.102	0.899	0.9
daytime + sex + (1   id)	5	15798.1	15831.6	0.348	0.294	0.077	0.899	0.9
daytime + sex + month + (1   id)	16	15719.5	15826.6	0.359	0.305	0.077	0.892	0.894
sex * daytime + month + (1   id)	17	15704.1	15817.8	0.36	0.306	0.077	0.89	0.892
sex * daytime + month * daytime + (1   id)	28	15536.3	15723.5	0.38	0.327	0.08	0.876	0.879
sex * daytime + month * daytime + sex * month + (1   id)	39	15463.2	15723.9	0.395	0.331	0.096	0.869	0.873

Table S3. Model comparison for different nested models of log-transformed range sizes

<b>Model Formula</b>	<b>npar</b>	<b>AIC</b>	<b>BIC</b>	<b>R<sup>2</sup> (cond.)</b>	<b>R<sup>2</sup> (marg.)</b>	<b>ICC</b>	<b>RMSE</b>	<b>Sigma</b>
(1   id)	3	699.5	709.3	0.133	0	0.133	1.325	1.354
daytime + (1   id)	4	584.2	597.3	0.55	0.381	0.273	0.956	0.984
daytime + sex + (1   id)	5	581.1	597.5	0.555	0.439	0.207	0.955	0.98
daytime + sex + month + (1   id)	16	573.6	626.2	0.625	0.505	0.243	0.881	0.905
daytime + sex * month + (1   id)	27	575.3	663.9	0.657	0.542	0.251	0.835	0.858

Table S4. Summary of diel movements. Values in km/3h.

	<b>Mean daily distance</b>	<b>Mean nightly distance</b>	<b>Median daily distance</b>	<b>Median nightly distance</b>
<b>F1</b>	315.5	950.6	40.7	732.8
<b>F2</b>	220.2	550.4	77	317.4
<b>F3</b>	215.3	688.2	81.1	435.2
<b>F4</b>	270.3	651.8	84.7	537.6
<b>F5</b>	143.1	331	48.2	228.6
<b>F6</b>	229.1	855.1	45.6	591.2
<b>F7</b>	322.9	808.7	122.9	361.5
<b>M1</b>	234.8	1644.4	29.4	1489.1
<b>M2</b>	561.3	1251.7	94	656
<b>M3</b>	281.2	1052.2	59.8	713
<b>M4</b>	416.9	974.6	117.1	711
<b>M5</b>	290.8	760.3	47	402.2

	Mean daily distance	Mean nightly distance	Median daily distance	Median nightly distance
<b>M6</b>	329.2	720.5	87.2	571.7
<b>M7</b>	276.1	550.7	49.9	691.9
<b>Mean</b>	293.3 ± 27	882.4 ± 87.7	70.3 ± 7.7	602.8 ± 80.9
<b>Mean for females</b>	245.2 ± 23.8	690.8 ± 78.5	71.5 ± 11	457.8 ± 65.8
<b>Mean for males</b>	341.5 ± 42.5	1074 ± 139.7	69.2 ± 11.7	747.8 ± 130.4

Table S5. Summary of median daily movements by month and sex. Values presented in km/day

Months	females							female median	males							male median	Monthly median
	F1	F2	F3	F4	F5	F6	F7		M1	M2	M3	M4	M5	M6	M7		
January			1.23	2.58		1.85		1.89	5.47	1.5	3.55	0.8	2.92	0.41	2.44	2.26 ± 0.53	
February			1.21			1.91	0.7	1.27	3.58	3.18	3.97	2.26	3.3	0.88	2.86	2.33 ± 0.41	
March	0.23		3.47			1.79	3.93	2.36	2.83	4.84	4.59	1.72	2.1	2.36	3.07	2.79 ± 0.45	
April	0.42	1.01	3.11			1.37	3.54	1.89	3.51	1.86	2.24		1.52	1.41	2.11	2 ± 0.34	
May	3.28	0.53	0.71			2.14		1.67	2.12	2.42	1.86	2.56	1.48	1.42	1.98	1.85 ± 0.27	
June	5.26	0.71	1.47	0.37		2.32		2.03	3.15		1.8	4.72	2.55	1.25	2.69	2.36 ± 0.51	
July	7.81	1.92	1.49	2.71		1.88		3.16	3.54		2.31	5.95	3.25	1.05	3.22	3.19 ± 0.67	
August		1.61	2.93	2.1		1.62		2.07	4.35		2.41	3.97	2.62	0.97	2.86	2.51 ± 0.37	
September		2.3	2.61	2.82		3.4		2.78	2.83		3.64	0.83	3.29	0.8	2.28	2.5 ± 0.35	
October			1.6	3.31	0.86			1.92	2.72		2.96	1.77	3.17	0.94	2.31	2.17 ± 0.35	
November			2.4	2.64		0.97		2		0.07	0.53	2.07	2.23	1.91	1.36	1.6 ± 0.34	
December			1.52	2.91		1.56		2		1.25	1.73	1.83	0.68	3.54	1.57	1.71 ± 0.33	
<b>Total</b>								<b>2.09</b>							<b>2.4</b>		

Table S6. Summary of effects for the movement model

	Est.	S.E.	t val.	d.f.	p
(Intercept)	4.6573	0.1338	34.7987	23.5985	0
sexmale	0.1935	0.1754	1.1031	17.5879	0.2849
daytimenight	1.4677	0.0826	17.7684	5943.7923	0
monthAug	0.3405	0.102	3.3382	5953.9995	0.0008
monthDec	0.4745	0.1137	4.1718	5951.5987	0
monthFeb	0.0239	0.116	0.2061	5952.6252	0.8367

	Est.	S.E.	t val.	d.f.	p
monthJan	0.6942	0.1128	6.1543	5953.0397	0
monthJul	0.6863	0.0984	6.9773	5952.2476	0
monthJun	0.3954	0.0986	4.011	5948.1123	0.0001
monthMar	0.1674	0.1074	1.5587	5951.0381	0.1191
monthMay	0.1761	0.1042	1.6906	5949.7041	0.091
monthNov	0.293	0.1159	2.5293	5951.7978	0.0115
monthOct	0.436	0.1197	3.6422	4380.7897	0.0003
monthSep	0.548	0.1083	5.0589	5953.6084	0
sexmale:daytimenight	0.2167	0.0467	4.6382	5946.8837	0
daytimenight:monthAug	-0.226	0.108	-2.0935	5941.5708	0.0363
daytimenight:monthDec	-0.9118	0.1136	-8.0289	5941.453	0
daytimenight:monthFeb	-0.5869	0.1122	-5.2317	5942.7071	0
daytimenight:monthJan	-1.1003	0.1105	-9.9591	5941.4262	0
daytimenight:monthJul	-0.6542	0.106	-6.1697	5941.6528	0
daytimenight:monthJun	-0.4496	0.1058	-4.2515	5941.6223	0
daytimenight:monthMar	-0.16	0.1088	-1.4707	5944.6443	0.1414
daytimenight:monthMay	-0.1368	0.1074	-1.2737	5941.3913	0.2028
daytimenight:monthNov	-0.4591	0.1224	-3.7508	5941.4816	0.0002
daytimenight:monthOct	-0.3247	0.1147	-2.831	5941.4901	0.0047
daytimenight:monthSep	-0.2429	0.1116	-2.1767	5941.485	0.0295
sexmale:monthAug	-0.0728	0.1118	-0.6505	5953.0165	0.5154
sexmale:monthDec	-0.0361	0.1201	-0.3008	5951.8127	0.7636
sexmale:monthFeb	0.6254	0.1216	5.1424	5949.2645	0
sexmale:monthJan	0.0315	0.1189	0.2649	5951.2333	0.7911
sexmale:monthJul	-0.0132	0.1089	-0.121	5953.9729	0.9037
sexmale:monthJun	0.1621	0.1082	1.498	5952.3884	0.1342
sexmale:monthMar	0.2849	0.1138	2.5029	5953.7387	0.0123
sexmale:monthMay	0.1231	0.1115	1.1038	5951.0009	0.2697
sexmale:monthNov	-0.21	0.1273	-1.6495	5952.193	0.0991
sexmale:monthOct	-0.2139	0.1276	-1.6773	4619.6885	0.0936
sexmale:monthSep	-0.447	0.1172	-3.815	5952.0011	0.0001

Table S7. Predicted values of distance travelled per Linear mixed model. Values in m/3h

sex	daytime	month	Predicted values	5% quantile	95% quantile
male	day	Jan	245.76	221.33	271.77
male	day	Feb	229.42	206.15	255.97
male	day	Mar	202.65	182.36	223.83
male	day	Apr	173.35	155.46	192.59
male	day	May	172.10	155.70	190.12

<b>male</b>	day	Jun	221.30	199.49	244.71
<b>male</b>	day	Jul	248.77	224.26	274.80
<b>male</b>	day	Aug	220.81	198.67	245.74
<b>male</b>	day	Sep	140.76	126.92	155.63
<b>male</b>	day	Oct	131.24	117.45	147.27
<b>male</b>	day	Nov	138.51	120.13	158.55
<b>male</b>	day	Dec	200.26	180.07	223.95
<b>female</b>	day	Jan	193.41	171.71	226.64
<b>female</b>	day	Feb	101.98	89.51	121.84
<b>female</b>	day	Mar	122.45	109.89	143.58
<b>female</b>	day	Apr	136.47	122.39	158.45
<b>female</b>	day	May	124.46	112.19	144.77
<b>female</b>	day	Jun	155.01	140.85	177.02
<b>female</b>	day	Jul	207.61	189.57	236.58
<b>female</b>	day	Aug	194.63	174.72	220.78
<b>female</b>	day	Sep	180.77	159.20	209.22
<b>female</b>	day	Oct	133.14	110.61	149.99
<b>female</b>	day	Nov	140.00	121.70	164.47
<b>female</b>	day	Dec	166.13	145.12	195.13
<b>male</b>	night	Jan	485.21	438.64	535.94
<b>male</b>	night	Feb	726.13	653.42	808.76
<b>male</b>	night	Mar	942.01	858.15	1037.02
<b>male</b>	night	Apr	719.27	643.91	807.69
<b>male</b>	night	May	807.51	734.85	886.15
<b>male</b>	night	Jun	762.08	688.95	847.42
<b>male</b>	night	Jul	698.23	626.91	771.49
<b>male</b>	night	Aug	751.69	673.99	835.56
<b>male</b>	night	Sep	600.61	538.14	669.34
<b>male</b>	night	Oct	609.10	545.47	683.24
<b>male</b>	night	Nov	472.62	409.76	541.80
<b>male</b>	night	Dec	442.48	397.77	489.27
<b>female</b>	night	Jan	306.22	272.57	361.42
<b>female</b>	night	Feb	239.13	216.32	271.43
<b>female</b>	night	Mar	413.39	379.60	470.34
<b>female</b>	night	Apr	422.29	388.96	473.29
<b>female</b>	night	May	419.52	379.69	474.30
<b>female</b>	night	Jun	402.81	369.63	451.83
<b>female</b>	night	Jul	417.91	383.81	462.57
<b>female</b>	night	Aug	456.57	419.36	505.34
<b>female</b>	night	Sep	548.97	498.97	613.52
<b>female</b>	night	Oct	487.39	431.09	534.98

<b>female</b>	night	Nov	354.11	321.62	400.42
<b>female</b>	night	Dec	287.22	262.33	319.11

Table S8. Summary of day and night home ranges per individuals. Values are in km<sup>2</sup>

<b>ID</b>	<b>dBBMM day</b>	<b>dBBMM night</b>
<b>F1</b>	3.93	9.53
<b>F2</b>	6.79	19.06
<b>F3</b>	1.48	5.39
<b>F4</b>	1.02	2.89
<b>F5</b>	0.15	1.10
<b>F6</b>	4.56	10.80
<b>F7</b>	1.22	5.97
<b>M1</b>	2.99	14.25
<b>M2</b>	12.64	47.44
<b>M3</b>	5.93	18.96
<b>M4</b>	9.03	12.53
<b>M5</b>	5.12	12.15
<b>M6</b>	1.38	3.21
<b>M7</b>	8.56	30.82
<b>AVERAGE</b>	4.63	13.86
<b>AVERAGE</b>	2.74	7.82
<b>FEMALES</b>		
<b>AVERAGE</b>	6.52	19.91
<b>MALES</b>		

Table S9. Summary of effects for the home range areas model

	<b>Est.</b>	<b>S.E.</b>	<b>t val.</b>	<b>d.f.</b>	<b>p</b>
<b>(Intercept)</b>	-0.752	0.3795	-1.9817	80.7339	0.0509
<b>monthAug</b>	1.2406	0.4397	2.8214	189.9746	0.0053
<b>monthDec</b>	-0.5353	0.4619	-1.159	192.0588	0.2479
<b>monthFeb</b>	-0.7718	0.5067	-1.5232	193.9932	0.1293
<b>monthJan</b>	-0.2725	0.5511	-0.4945	192.4245	0.6215
<b>monthJul</b>	0.7919	0.4397	1.8009	189.9746	0.0733
<b>monthJun</b>	0.4276	0.4291	0.9965	184.1652	0.3203
<b>monthMar</b>	0.0922	0.4524	0.2037	190.374	0.8388
<b>monthMay</b>	0.4008	0.4673	0.8576	185.5521	0.3922
<b>monthNov</b>	-0.1304	0.5098	-0.2557	192.3021	0.7985
<b>monthOct</b>	0.0636	0.5213	0.122	196.9913	0.903
<b>monthSep</b>	0.9907	0.5078	1.9507	191.3668	0.0525
<b>sexmale</b>	0.9368	0.488	1.9196	69.3562	0.059
<b>daytimenight</b>	1.8218	0.123	14.8088	185.5499	0
<b>monthAug:sexmale</b>	-1.1916	0.5748	-2.0732	188.2975	0.0395
<b>monthDec:sexmale</b>	0.2257	0.5885	0.3835	190.8507	0.7018
<b>monthFeb:sexmale</b>	1.2108	0.6192	1.9553	192.3779	0.052
<b>monthJan:sexmale</b>	-0.3858	0.6786	-0.5686	190.4557	0.5703
<b>monthJul:sexmale</b>	-0.5139	0.5748	-0.8941	188.2975	0.3724
<b>monthJun:sexmale</b>	0.1496	0.5667	0.264	184.818	0.7921
<b>monthMar:sexmale</b>	0.2852	0.5663	0.5037	189.1161	0.6151
<b>monthMay:sexmale</b>	-0.0681	0.5962	-0.1142	185.5994	0.9092
<b>monthNov:sexmale</b>	-0.1927	0.6711	-0.2872	190.1056	0.7743
<b>monthOct:sexmale</b>	-0.847	0.655	-1.2932	195.3207	0.1975
<b>monthSep:sexmale</b>	-0.9985	0.6284	-1.5889	189.5887	0.1138

Table S10. Predicted values of home range area size per Linear mixed model. Values are in m<sup>2</sup>/h

<b>sex</b>	<b>daytime</b>	<b>month</b>	<b>Predicted values</b>	<b>5% quantile</b>	<b>95% quantile</b>
<b>female</b>	day	Jan	0.62	0.37	1.05
<b>female</b>	day	Feb	1.87	1.24	2.78
<b>female</b>	day	Mar	1.75	1.18	2.59
<b>female</b>	day	Apr	1.20	0.78	1.86
<b>female</b>	day	May	1.68	1.00	2.47
<b>female</b>	day	Jun	2.14	1.26	3.18
<b>female</b>	day	Jul	1.59	0.95	2.31
<b>female</b>	day	Aug	1.26	0.76	1.90

<b>sex</b>	<b>daytime</b>	<b>month</b>	<b>Predicted values</b>	<b>5% quantile</b>	<b>95% quantile</b>
<b>female</b>	day	Sep	1.19	0.72	1.78
<b>female</b>	day	Oct	0.55	0.31	0.88
<b>female</b>	day	Nov	0.87	0.47	1.53
<b>female</b>	day	Dec	0.88	0.57	1.37
<b>male</b>	day	Jan	0.36	0.17	0.75
<b>male</b>	day	Feb	0.22	0.12	0.44
<b>male</b>	day	Mar	0.52	0.31	0.94
<b>male</b>	day	Apr	0.47	0.28	0.86
<b>male</b>	day	May	0.70	0.42	1.38
<b>male</b>	day	Jun	0.72	0.45	1.26
<b>male</b>	day	Jul	1.04	0.59	1.78
<b>male</b>	day	Aug	1.63	0.95	2.72
<b>male</b>	day	Sep	1.27	0.68	2.41
<b>male</b>	day	Oct	0.50	0.24	0.93
<b>male</b>	day	Nov	0.41	0.22	0.77
<b>male</b>	day	Dec	0.28	0.16	0.49
<b>female</b>	night	Jan	3.85	2.30	6.55
<b>female</b>	night	Feb	11.54	7.75	17.90
<b>female</b>	night	Mar	10.85	7.38	15.88
<b>female</b>	night	Apr	7.44	4.86	11.46
<b>female</b>	night	May	10.37	6.11	15.76
<b>female</b>	night	Jun	13.25	8.01	19.75
<b>female</b>	night	Jul	9.82	5.89	14.79
<b>female</b>	night	Aug	7.81	4.63	11.78
<b>female</b>	night	Sep	7.38	4.46	11.00
<b>female</b>	night	Oct	3.40	1.90	5.53
<b>female</b>	night	Nov	5.38	2.80	9.26
<b>female</b>	night	Dec	5.46	3.48	8.41
<b>male</b>	night	Jan	2.22	1.07	4.74
<b>male</b>	night	Feb	1.35	0.73	2.68
<b>male</b>	night	Mar	3.20	1.92	5.65
<b>male</b>	night	Apr	2.91	1.80	5.20
<b>male</b>	night	May	4.35	2.56	8.52
<b>male</b>	night	Jun	4.47	2.78	7.67
<b>male</b>	night	Jul	6.43	3.75	10.80
<b>male</b>	night	Aug	10.08	5.94	16.66
<b>male</b>	night	Sep	10.37	4.09	15.12
<b>male</b>	night	Oct	5.38	1.47	5.60
<b>male</b>	night	Nov	3.40	1.32	4.70
<b>male</b>	night	Dec	7.38	0.97	2.99

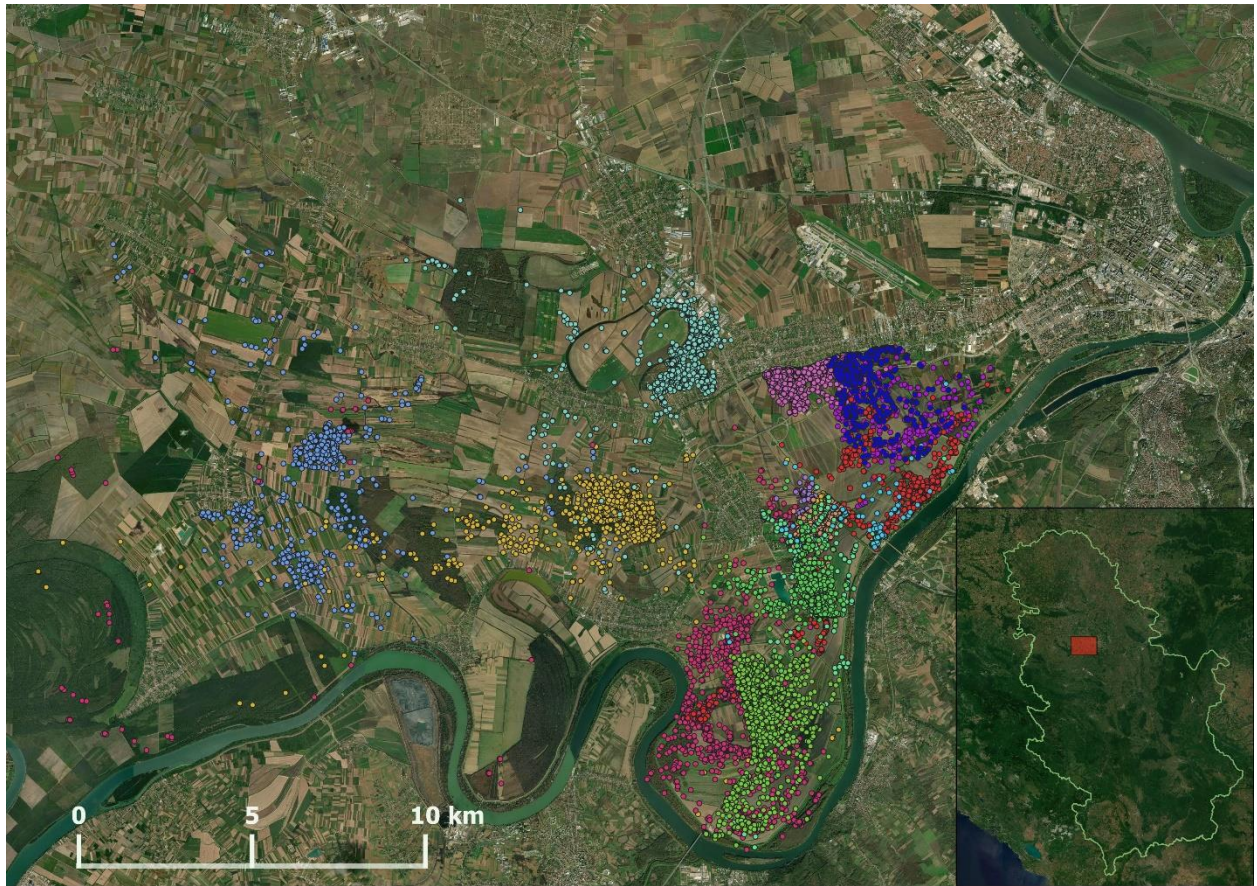


Figure S1. Map of study area with jackal fixes captured between 2017-2022. Each color indicates a different animal.