

Table S1: From Wittemyer and Getz (2007), the dominance strengths of 20 family group matriarchs calculated from a dominance matrix in which 37% of pair-wise relationships had been observed (i.e.  $N = 20$ , 37% of possible relationships). Asterisks next to identification numbers indicate the matriarchs of groups in which a non-matriarchal female was collared (\*M52 is the matriarch of collared individual M54, M2 is the matriarch of collared individual M5, R27 is the matriarch of collared individual R28, and M45 is the matriarch of collared individual M46).

ID	Rank
M52*	0.832
M2*	0.801
M33	0.777
R27*	0.737
R17	0.654
M8	0.608
M3	0.563
M24	0.554
R10	0.527
M31	0.527
R22	0.479
S30	0.456
R37	0.423
M63	0.423
M65	0.381
M45*	0.350
R1	0.281
M73	0.264
R25	0.193
M30	0.170

Table S2: The average time spent within 1 km of permanent water and within protected areas among the 7 focal groups during both the wet and dry season. Significant  $p$  values, post Bonferroni correction for multiple comparisons, are in boldface type.

Area category	Proportion Study Area	Avg Dry Fix Obs	Avg Dry Fix Exp	$\chi^2$ $p$ value	Avg Wet Fix Obs	Avg Wet Fix Exp	$\chi^2$ $p$ value
< 1km	26.22%	1244	523	<b>&lt; 0.001</b>	108	121	> 0.20
Protected	21.36%	1253	426	<b>&lt; 0.001</b>	151	80	<b>&lt; 0.001</b>

Table S3: Home Range Size (defined using MCP – Minimum Convex Polygon, fixed number of points LoCoH – Local Convex Hull, and Kernel Home Range estimation method) and Core Areas (defined using 50% Kernel home ranges) for each of the seven studied groups during the dry season varied across groups.

ID Number	MCP km <sup>2</sup>	LoCoH km <sup>2</sup>	95% Kernel km <sup>2</sup>	50% Kernel km <sup>2</sup>	Number of Core Areas	Core Areas in SNR km <sup>2</sup>
M54	179.59	128.26	82.77	8.23	1	8.23
M5	327.46	97.32	114.87	25.68	1	11.31
R28	107.99	72.03	72.07	15.94	1	15.94
M31	953.82	376.57	372.23	21.54	4	8.28
R22	195.29	112.33	109.94	17.24	2	17.24
M46	722.73	280.48	261.01	15.61	4	5.07
R37	1439.27	548.90	117.80	9.31	3	0.00

Table S4:

a) Three hour movement distances in the wet and dry season.

ID Number	Dry Median (Inter-Quartile Range)	Wet Median (Inter-Quartile Range)	Wilcoxon Z (p)
M54	0.47 (0.22-0.97)	1.01 (0.47-2.09)	<b>11.00 (&lt; 0.001)</b>
M5	0.40 (0.18-0.71)	0.64 (0.33-1.29)	<b>8.37 (&lt; 0.001)</b>
R28	0.50 (0.24-0.90)	1.05 (0.46-1.91)	<b>10.35 (&lt; 0.001)</b>
M31	0.92 (0.39-1.84)	1.19 (0.53-2.31)	<b>3.82 (&lt; 0.01)</b>
R22	0.58 (0.25-1.28)	1.20 (0.47-2.22)	<b>9.54 (&lt; 0.001)</b>
M46	0.81 (0.34-1.71)	1.07 (0.46-2.18)	<b>3.97 (&lt; 0.01)</b>
R37	0.81 (0.32-2.06)	0.98 (0.38-1.93)	1.06 (= 0.289)

b) Daily movement distances in the wet and dry season.

ID Number	Dry Median (Inter-Quartile Range)	Wet Median (Inter-Quartile Range)	Wilcoxon Z (p)
M54	5.46 (4.21-6.66)	11.22 (7.79-15.95)	<b>7.85 (&lt; 0.001)</b>
M5	3.79 (3.12-5.16)	6.53 (5.12-8.14)	<b>6.70 (&lt; 0.001)</b>
R28	5.31 (4.61-6.00)	10.01 (8.05-11.73)	<b>8.25 (&lt; 0.001)</b>
M31	9.92 (8.01-11.91)	12.15 (10.31-15.06)	<b>3.42 (&lt; 0.01)</b>
R22	6.99 (5.30-8.41)	11.70 (9.18-15.59)	<b>7.49 (&lt; 0.001)</b>
M46	9.40 (7.55-11.99)	11.87 (9.23-14.61)	<b>3.13 (&lt; 0.01)</b>
R37	9.31 (7.19-13.71)	9.95 (7.79-13.54)	0.72 (= 0.471)

Table S5: Pairwise comparison of hourly movements. Wilcoxon rank sum test  $\chi^2$  (Bonferroni correction for 21 multiple comparisons imply significance at 0.05 level when  $\alpha < 0.00238$ ) are presented for each pair, with significantly different pairs in boldface type.

	M54	M5	R28	M31	R22	M46	R37	Dry Season
M54	*	<b>12.025</b>	2.176	<b>171.691</b>	7.119	<b>100.128</b>	<b>114.715</b>	
M5	<b>37.064</b>	*	4.282	<b>276.765</b>	<b>36.357</b>	<b>180.529</b>	<b>192.192</b>	
R28	0.051	<b>31.322</b>	*	<b>207.985</b>	<b>17.255</b>	<b>128.528</b>	<b>145.055</b>	
M31	2.947	<b>61.18</b>	3.722	*	<b>99.674</b>	7.239	1.985	
R22	1.718	<b>55.534</b>	2.578	0.139	*	<b>49.941</b>	<b>63.988</b>	
M46	0.253	<b>41.509</b>	0.635	1.424	0.628	*	1.413	
R37	2.267	<b>21.078</b>	1.19	<b>10.395</b>	8.606	3.907	*	
Wet Season								

Figure S6. Dominance rank category in relation to the seasonal ratio of LoCoH Home Range estimates and median daily distances. High ranked groups (black circles) tend to demonstrate greater differentiation in seasonal range and movements than mid (gray triangles) and mid-low (white diamond) ranked groups.

