**Supplementary information**

Figure S1. Net displacement curve of dispersing meerkats

Characteristic dispersal curve of a dispersing coalition of female meerkats quantified by net displacement (distance to natal site). The post-eviction phase starts after the eviction event and is characterized by typical territorial movement patterns, where coalitions remain in the natal territory and distances covered per day resemble those of the natal group. Emigration marks the beginning of transience, where coalitions cover farther distances per day and move away from the natal site. The time of settlement can clearly be identified by a change to territorial movement patterns.
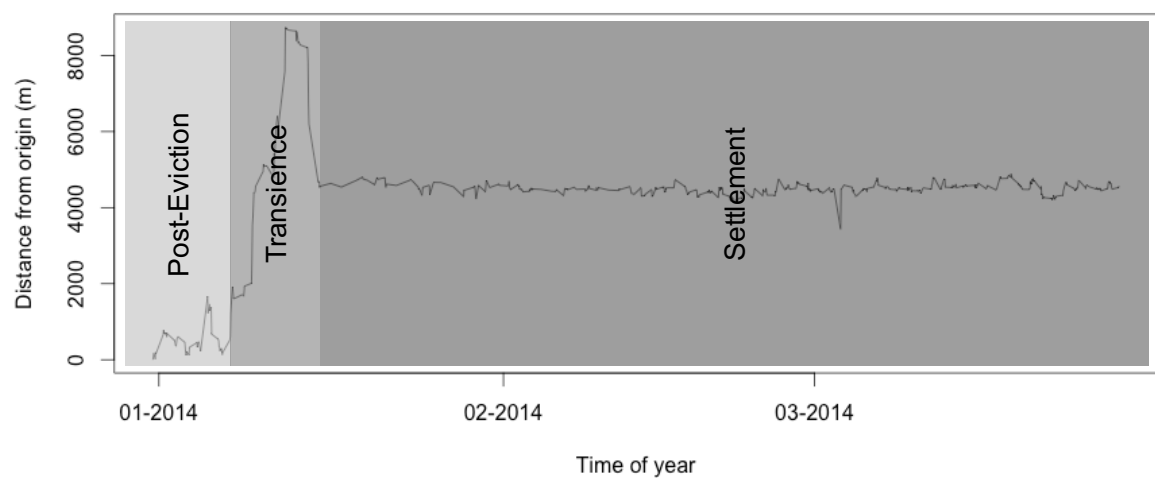

Variations in NSD over time can be used to characterize transitions from one dispersal stage to the next. For each dispersing coalition, we calculated the NSD as the square of the Euclidean distance from the place of eviction to any given GPS location along the entire dispersal path. We then visually investigated the resulting NSD plots for inflection points (Cozzi et al. 2016)[1], which corresponded to time of emigration and time of settlement. We used field observations to validate results from the NSD approach. Successful emigration was typically characterized by unidirectional exploratory movements and lack of attempts to reunite with the natal group. Successful settlement coincided with the use of the same sleeping burrow for extended periods (>1 week) accompanied by normal foraging behaviour resembling territorial behaviour.

[1] Cozzi, G., M. Chynoweth, J. Kusak, E. Çoban, A. Çoban, A. Ozgul, and Ç. H. Şekercioğlu. 2016. Anthropogenic food resources foster the coexistence of distinct life history strategies: year-round sedentary and migratory brown bears. Journal of Zoology 300:142–150.

Figure S2. Residuals diagnostics for statistical models
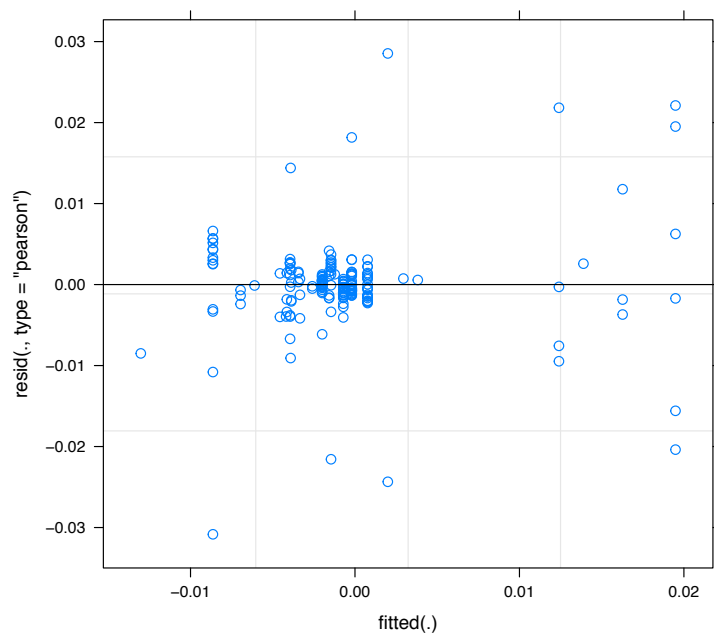
Linear mixed effects **model *1a***: Comparison of net proportional daily mass change among emigrants, returners, and residents.
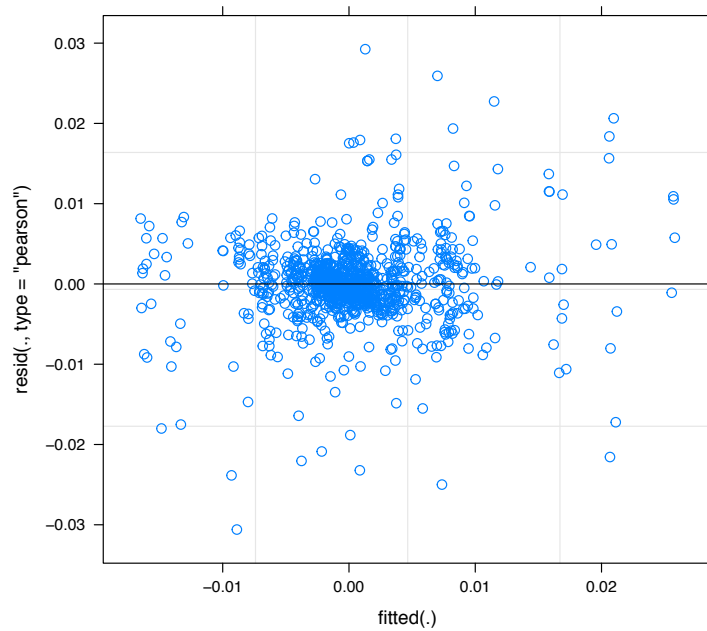
Linear mixed effects **model *1b***: Comparison of faecal glucocorticoid metabolite (fGCM) concentrations among emigrants, returners, and residents.
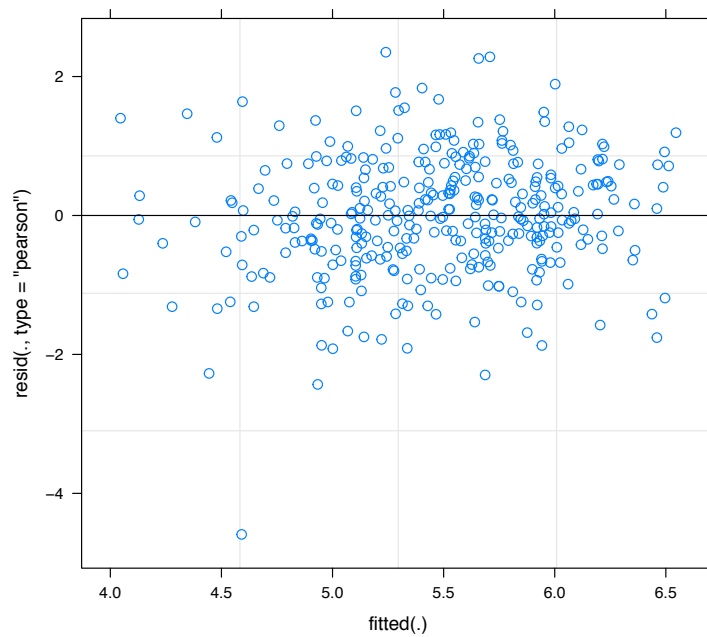
Linear mixed effects **model *2a***: Variation in net proportional daily mass change between post-eviction and transience stages in emigrants.

Linear mixed effects **model *2b***: Variation in faecal glucocorticoid metabolite (fGCM) concentrations between post-eviction and transience stages in emigrants.
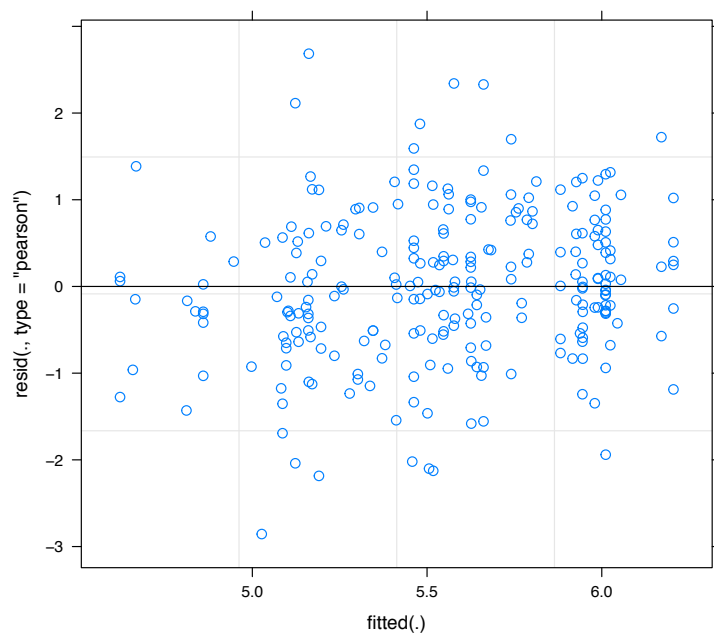
Table S1. Linear mixed effects model *1a*: Comparison of net proportional daily mass change among emigrants, returners, and residents.

Upper table: Description of full statistical model. **Lower table:** Results from model selection based on Akaike's information criterion (subset of models with ΔAICc<2 and Null model); DF = degrees of freedom; AICc = AIC for small sample sizes; ΔAICc = difference to best statistical model based on AICc; W = Akaike weights across models with ΔAICc<2.

Response	Fixed	Variable description	Random
$(m_t-m_0)/(m_0*\Delta_t)$	m_0	Body mass at day of eviction	*indID*
	Δt	Days since eviction	nested in
	age	Age in months	*coalID*
	$age^{1/2}$	Account for non-linear growth of individuals <2 years	
	rain	Rain sum of previous 3 months	
	temp	Maximum daily temperature	
	#pup	Number of dependent offspring <3 months age	
	strategy	Female strategy; Factor: Resident, Returner, Emigrant	
	#female	Average number of females in group, dispersing coalition, respectively	
	strategy:#female		
	strategy:m₀		

Variable	DF	AICc	ΔAICc	W
m_0+*temp*+$age^{1/2}$+*#female*+*strategy*+*strategy:m₀*	12	-7519.55	0.00	0.11
m_0+*temp*+*age*+*#female*+*strategy*+*strategy:m₀*	12	-7519.31	0.24	0.09
m_0+*temp*+*rain*+$age^{1/2}$+*#female*+*strategy*+*strategy:m₀*	13	-7518.77	0.78	0.07
m_0+*temp*+*rain*+*age*+*#female*+*strategy*+*strategy:m₀*	13	-7518.53	1.02	0.06
m_0+*Δt*+*temp*+$age^{1/2}$+*#female*+*strategy*+*strategy:m₀*	13	-7518.49	1.06	0.06
m_0+*Δt*+*temp*+*age*+*#female*+*strategy*+*strategy:m₀*	13	-7518.42	1.13	0.06
m_0+*temp*+$age^{1/2}$+*#female*	8	-7518.42	1.14	0.06
m_0+*temp*+*age*+*#female*	8	-7518.27	1.28	0.06
m_0+*temp*+*age*+*#female*+*strategy*+*strategy:m₀*+ *strategy:#female*	14	-7518.20	1.35	0.05
m_0+*Δt*+*temp*+*rain*+$age^{1/2}$+*#female*+*strategy*+ *strategy:m₀*	14	-7518.15	1.40	0.05
m_0+*temp*+*rain*+$age^{1/2}$+*#female*	9	-7518.1	1.42	0.05
m_0+*Δt*+*temp*+*rain*+*age*+*#female*+*strategy*+*strategy:m₀*	14	-7518.1	1.43	0.05
m_0+*temp*+$age^{1/2}$+*#female*+*strategy*+*strategy:m₀*+ *strategy:#female*	14	-7518	1.52	0.05
m_0+*temp*+*rain*+*age*+*#female*	9	-7518	1.56	0.05
m_0+*Δt*+*temp*+*rain*+*age*+*#female*	10	-7517.7	1.83	0.04
m_0+*temp*++$age^{1/2}$+*#female*+*#pup*+*strategy*+*strategy:m0*	13	-7517.7	1.85	0.04
m_0+*Δt*+*temp*+*rain*+$age^{1/2}$+*#female*	10	-7517.7	1.87	0.04
Null	4	-7473.41	46.14	-

Table S2. Linear mixed effects model *1b*: Comparison of faecal glucocorticoid metabolite (fGCM) concentrations among emigrants, returners, and residents.

Upper table: Description of full statistical model. **Lower table:** Results from model selection based on Akaike's information criterion (subset of models with ΔAICc<2 and Null model); DF = degrees of freedom; AICc = AIC for small sample sizes; ΔAICc = difference to best statistical model based on AICc; W = Akaike weights across models with ΔAICc<2.

Response	Fixed	Variable description	Random
log(fGCM)	*collect*	Collection time; Factor: Morning, Afternoon	*indID*
	preg	Pregnancy; Factor: 1 = Pregnant, 0 = Not pregnant	nested in
	Δt	Days since eviction	*coalID*
	age	Age in months	
	rain	Rain sum of previous 3 months	
	temp	Maximum daily temperature	
	strategy	Female strategy; Factor: Resident, Returner, Emigrant	
	#female	Average number of females in group, dispersing coalition, respectively	
	strategy:#female		

Variable	DF	AICc	ΔAICc	W
collect+preg+Δt+temp+#female+strategy	11	974.23	0.00	0.47
collect+preg+Δt+temp+age+#female+strategy	12	975.28	1.05	0.28
collect+preg+Δt+temp+strategy	10	975.53	1.30	0.25
Null	4	1005.93	31.70	-

Table S3. Linear mixed effects model *2a*: Variation in net proportional daily mass change between post-eviction and transience stages in emigrants.

Upper table: Description of full statistical model. **Lower table:** Results from model selection based on Akaike's information criterion (subset of models with ΔAICc<2 and Null model); DF = degrees of freedom; AICc = AIC for small sample sizes; ΔAICc = difference to best statistical model based on AICc; W = Akaike weights across models with ΔAICc<2.

Response	Fixed	Variable description	Random
$(m_t-m_0)/(m_0*\Delta_t)$	m_0	Body mass at day of eviction	*indID*
	Δt	Days since start of stage (Post-eviction, Transience)	nested in
	age	Age in months	*coalID*
	age$^{1/2}$	Account for non-linear growth of individuals <2 years	
	rain	Rain sum of previous 3 months	
	temp	Maximum daily temperature	
	stage	Dispersal stage; Factor: Post-Eviction, Transience	
	#female	Average number of females in dispersing coalitions	
	male	Male presence; Factor: Male present, Male absent	
	status:#female		

Variable	DF	AICc	ΔAICc	W
m$_0$	5	-1369.66	0.00	0.3
m$_0$+stage	6	-1368.63	1.03	0.18
m$_0$+temp	6	-1368.21	1.45	0.15
m$_0$+rain	6	-1367.87	1.78	0.12
Null	4	-1367.86	1.80	0.12
m$_0$+#female	6	-1367.82	1.84	0.12

Table S4. Linear mixed effects model *2b*: Variation in faecal glucocorticoid metabolite (fGCM) concentrations between post-eviction and transience stages in emigrants.

Upper table: Description of full statistical model. **Lower table:** Results from model selection based on Akaike's information criterion (subset of models with ΔAICc<2 and Null model); DF = degrees of freedom; AICc = AIC for small sample sizes; ΔAICc = difference to best statistical model based on AICc; W = Akaike weights across models with ΔAICc<2.

Response	Fixed	Variable description	Random
log(fGCM)	*collect*	Collection time; Factor: Morning, Afternoon	*indID*
	preg	Pregnancy; Factor: 1 = Pregnant, 0 = Not pregnant	nested in
	Δt	Days since start of stage (Post-eviction, Transience)	*coalID*
	age	Age in months	
	rain	Rain sum of previous 3 months	
	temp	Maximum daily temperature	
	stage	Dispersal stage; Factor: Post-Eviction, Transience	
	#female	Average number of females in dispersing coalition	
	male	Male presence; Factor: Male present, Male absent	
	stage:#female		

Variable	DF	AICc	ΔAICc	W
collect+preg+stage	7	698.82	0.00	0.26
collect+preg+temp+rain+stage	9	699.16	0.34	0.22
collect+preg+rain+stage	8	699.19	0.37	0.22
collect+preg+temp+stage	8	699.49	0.67	0.19
collect+preg+age+stage	8	700.57	1.75	0.11
Null	4	714.89	16.07	-