Supplementary Table 1: Results from the sample subset including strongylid fecal egg counts, with n = 446 samples from 37 elephants. The dotted line separates the first (top) and second (bottom) level of the model. The first level estimated individual-level intercepts, determining the correlation of unchanging variables with mean glucocorticoid concentrations. The second level used the estimated intercepts of the first level to determine the correlation of variables that changed with time according to when a sample was collected. Coefficients and covariates are ordered according to estimated effect size, from negative to positive, within each level and asterisks denote those for which the estimated 95% confidence interval did not overlap zero. NDVI stands for "normalized difference vegetation index," a measure of primary productivity.

Coefficient	Covariate	Estimate	95% CI lower	95% CI upper
β_5	with non-natal group	-0.34	-0.74	0.07
$*\beta_2$	*age mates	-0.25	-0.37	-0.13
$*\beta_3$	*number of samples	-0.12	-0.23	-0.01
β_1	adult caregivers	-0.09	-0.20	0.02
β_4	orphan status	0.07	-0.23	0.38
$*\gamma_5$	*mean NDVI	-0.85	-1.40	-0.30
γ_2	lactating	-0.11	-0.37	0.16
γ_1	age	-0.05	-0.23	0.13
γ_4	time of day	0.01	-0.08	0.10
γ_9	strongylid fecal egg counts	0.06	-0.04	0.16
γ_8	years without mom	0.08	-0.07	0.22
γ_6	pregnancy	0.08	-0.13	0.30
$*\gamma_3$	*time sample sat on ground	0.10	+0.00	0.19
$*\gamma_7$	*NDVI standard deviation	0.89	0.37	1.42