

Appendix S1 - Full model results

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```
##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##   filter, lag

## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union

##
## Attaching package: 'nlme'

## The following object is masked from 'package:dplyr':
##
##   collapse

## Loading in data version 3.25.0

## Joining, by = "plot"

## Loading in data version 3.25.0

## Joining, by = "plot"

## Joining, by = "period"
## Joining, by = "period"
```

Compensation & total energy use

Compensation

```
## [1] 19
```

```
## Joining, by = "oera"
```

Table S1. Coefficients from GLS for compensation

##		Value	Std.Error	t-value	p-value
##	(Intercept)	0.34503129	0.02949958	11.696141	8.903067e-27
##	oera.L	0.06479327	0.05241035	1.236269	2.172146e-01
##	oera.Q	-0.28335529	0.04773594	-5.935890	7.228121e-09

Table S2. Estimates from GLS for compensation

##		oera	emmean	SE	df	lower.CL	upper.CL
##	1	a_pre_pb	0.1835362	0.05203782	43.00020	0.07859198	0.2884805
##	2	b_pre_reorg	0.5763899	0.04626406	46.19839	0.48327599	0.6695038
##	3	c_post_reorg	0.2751677	0.05280098	45.59188	0.16885920	0.3814763

Table S3. Contrasts from GLS for compensation

##		contrast	estimate	SE	df	t.ratio
##	1	a_pre_pb - b_pre_reorg	-0.39285369	0.06894132	46.70328	-5.698378
##	2	a_pre_pb - c_post_reorg	-0.09163152	0.07411943	44.37665	-1.236269
##	3	b_pre_reorg - c_post_reorg	0.30122217	0.06949891	48.30465	4.334200
##		p.value				
##	1		2.319161e-06			
##	2		4.384824e-01			
##	3		2.149599e-04			

Total energy use

Table S4. Coefficients from GLS on total energy ratio

##		Value	Std.Error	t-value	p-value
##	(Intercept)	0.5016731	0.02711764	18.499880	2.562257e-53
##	oera.L	0.1413504	0.04776457	2.959316	3.300140e-03
##	oera.Q	-0.2503659	0.04293122	-5.831790	1.279286e-08

Table S5. Estimates from GLS on total energy ratio

##		oera	emmean	SE	df	lower.CL	upper.CL
##	1	a_pre_pb	0.2995118	0.04758060	36.07948	0.2030213	0.3960023
##	2	b_pre_reorg	0.7060960	0.04197730	38.39277	0.6211459	0.7910460
##	3	c_post_reorg	0.4994115	0.04800663	37.50364	0.4021849	0.5966381

Table S6. Contrasts from GLS on total energy ratio

```
##               contrast      estimate      SE      df      t.ratio
## 1      a_pre_pb - b_pre_reorg -0.4065842 0.06233984 40.38396 -6.522060
## 2      a_pre_pb - c_post_reorg -0.1998997 0.06754930 37.00046 -2.959316
## 3 b_pre_reorg - c_post_reorg  0.2066845 0.06264557 41.31271  3.299267
##           p.value
## 1 2.486739e-07
## 2 1.445901e-02
## 3 5.564041e-03
```

Community composition

Kangaroo rat proportional energy use

```
## Warning in eval(family$initialize): non-integer #successes in a binomial glm!
```

Table S7. Coefficients from GLM on Dipodomys energy use.

```
##           Estimate Std. Error  z value    Pr(>|z|)
## (Intercept)  1.4032480  0.1503201  9.335068 1.009263e-20
## oera.L       -1.1000833  0.2871738 -3.830723 1.277674e-04
## oera.Q        0.5855493  0.2304516  2.540878 1.105745e-02
```

Table S8. Estimates from GLM on Dipodomys energy use.

```
##           oera      prob      SE df asymp.LCL asymp.UCL
## 1      a_pre_pb 0.9183528 0.02564615 Inf 0.8680872 0.9686183
## 2      b_pre_reorg 0.7160901 0.03985374 Inf 0.6379782 0.7942020
## 3      c_post_reorg 0.7035835 0.04566769 Inf 0.6140765 0.7930905
```

Table S9. Contrasts from GLM on Dipodomys energy use.

```
##               contrast      estimate      SE df      z.ratio      p.value
## 1      a_pre_pb - b_pre_reorg 0.20226269 0.04739247 Inf 4.2678236 5.861775e-05
## 2      a_pre_pb - c_post_reorg 0.21476925 0.05237616 Inf 4.1005151 1.220401e-04
## 3 b_pre_reorg - c_post_reorg 0.01250656 0.06061236 Inf 0.2063368 9.768027e-01
```

C. baileyi proportional energy use

```
## Warning in eval(family$initialize): non-integer #successes in a binomial glm!
```

```
## Warning in eval(family$initialize): non-integer #successes in a binomial glm!
```

```
## Warning in eval(family$initialize): non-integer #successes in a binomial glm!
```

Note that a model fit as `pb_proportional_energy_use ~ era + treatment + era:treatment` does not outperform a model fit without the interaction term, or `pb_proportional_energy_use ~ era + treatment` (AIC for the no interaction model = 231 compared to 237 for the interaction model; p-value for an anova Chi-squared comparison of the two models = 0.15). We therefore use the model without the interaction term.

Table S10. Coefficients from GLM on *C. baileyi* energy use

##		Estimate	Std. Error	z value	Pr(> z)
##	(Intercept)	-1.574028	0.1670168	-9.424367	4.327058e-21
##	oera.L	-1.409273	0.2010398	-7.009921	2.384524e-12
##	oplottype.L	2.184896	0.2267112	9.637355	5.560233e-22

Table S11. Estimates from GLM on *C. baileyi* energy use

##		oera	prob	SE	df	asympt.LCL	asympt.UCL
##	1	b_pre_reorg	0.3595031	0.03966444	Inf	0.28176221	0.4372440
##	2	c_post_reorg	0.0710590	0.01702653	Inf	0.03768761	0.1044304

Table S12. Contrasts from GLM on *C. baileyi* energy use.

##		contrast	estimate	SE	df	z.ratio	p.value
##	1	b_pre_reorg - c_post_reorg	0.2884441	0.04036733	Inf	7.145484	8.96796e-13