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

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

# Compensation & total energy use

## Compensation

## Joining, by = "oera"

### Table S1. Coefficients from GLS for compensation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Value | Std.Error | t-value | p-value |
| (Intercept) | 0.3185409 | 0.0274749 | 11.5938657 | 0.0000000 |
| oera.L | 0.0209564 | 0.0488961 | 0.4285901 | 0.6684937 |
| oera.Q | -0.2815324 | 0.0446748 | -6.3018205 | 0.0000000 |

### Table S2. Estimates from GLS for compensation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| oera | emmean | SE | df | lower.CL | upper.CL |
| a\_pre\_pb | 0.1887873 | 0.0484923 | 65.54814 | 0.0919569 | 0.2856178 |
| b\_pre\_reorg | 0.5484112 | 0.0432238 | 70.42672 | 0.4622133 | 0.6346090 |
| c\_post\_reorg | 0.2184241 | 0.0493101 | 69.66681 | 0.1200700 | 0.3167783 |

### Table S3. Contrasts from GLS for compensation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| contrast | estimate | SE | df | t.ratio | p.value |
| a\_pre\_pb - b\_pre\_reorg | -0.3596238 | 0.0644233 | 70.46124 | -5.5822045 | 0.0000012 |
| a\_pre\_pb - c\_post\_reorg | -0.0296368 | 0.0691495 | 67.68957 | -0.4285901 | 0.9038589 |
| b\_pre\_reorg - c\_post\_reorg | 0.3299870 | 0.0650229 | 72.95450 | 5.0749352 | 0.0000085 |

## Total energy use

### Table S4. Coefficients from GLS on total energy ratio

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Value | Std.Error | t-value | p-value |
| (Intercept) | 0.4804768 | 0.0263030 | 18.267021 | 0.0000000 |
| oera.L | 0.1178169 | 0.0463516 | 2.541812 | 0.0114727 |
| oera.Q | -0.2488846 | 0.0416891 | -5.970013 | 0.0000000 |

### Table S5. Estimates from GLS on total energy ratio

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| oera | emmean | SE | df | lower.CL | upper.CL |
| a\_pre\_pb | 0.2955610 | 0.0461672 | 36.61089 | 0.2019837 | 0.3891382 |
| b\_pre\_reorg | 0.6836903 | 0.0407429 | 38.96128 | 0.6012774 | 0.7661031 |
| c\_post\_reorg | 0.4621793 | 0.0465896 | 38.08195 | 0.3678702 | 0.5564884 |

### Table S6. Contrasts from GLS on total energy ratio

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| contrast | estimate | SE | df | t.ratio | p.value |
| a\_pre\_pb - b\_pre\_reorg | -0.3881293 | 0.0605211 | 40.90187 | -6.413128 | 0.0000003 |
| a\_pre\_pb - c\_post\_reorg | -0.1666183 | 0.0655510 | 37.54898 | -2.541812 | 0.0396340 |
| b\_pre\_reorg - c\_post\_reorg | 0.2215110 | 0.0608245 | 41.85824 | 3.641807 | 0.0020937 |

# Community composition

## Kangaroo rat proportional energy use

### Table S7. Coefficients from GLM on Dipodomys energy use.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| (Intercept) | 1.4032480 | 0.0594085 | 23.620308 | 0 |
| oera.L | -1.1000833 | 0.1134950 | -9.692789 | 0 |
| oera.Q | 0.5855493 | 0.0910776 | 6.429125 | 0 |

### Table S8. Estimates from GLM on Dipodomys energy use.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| oera | prob | SE | df | asymp.LCL | asymp.UCL |
| a\_pre\_pb | 0.9183528 | 0.0101357 | Inf | 0.8984872 | 0.9382184 |
| b\_pre\_reorg | 0.7160901 | 0.0157507 | Inf | 0.6852192 | 0.7469610 |
| c\_post\_reorg | 0.7035835 | 0.0180485 | Inf | 0.6682091 | 0.7389579 |

### Table S9. Contrasts from GLM on Dipodomys energy use.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| contrast | estimate | SE | df | z.ratio | p.value |
| a\_pre\_pb - b\_pre\_reorg | 0.2022627 | 0.0187302 | Inf | 10.7987757 | 0.0000000 |
| a\_pre\_pb - c\_post\_reorg | 0.2147693 | 0.0206998 | Inf | 10.3754389 | 0.0000000 |
| b\_pre\_reorg - c\_post\_reorg | 0.0125066 | 0.0239548 | Inf | 0.5220892 | 0.8605416 |

## C. baileyi proportional energy use

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| (Intercept) | -2.0044026 | 0.1600536 | -12.523322 | 0.0000000 |
| oera.L | -2.0922433 | 0.2263500 | -9.243401 | 0.0000000 |
| oplottype.L | 2.7474318 | 0.2263500 | 12.137983 | 0.0000000 |
| oera.L:oplottype.L | 0.8986645 | 0.3201072 | 2.807386 | 0.0052111 |

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| oera | oplottype | prob | SE | df | asymp.LCL | asymp.UCL |
| b\_pre\_reorg | CC | 0.1172888 | 0.0094009 | Inf | 0.0988634 | 0.1357142 |
| c\_post\_reorg | CC | 0.0027984 | 0.0017460 | Inf | -0.0006237 | 0.0062206 |
| b\_pre\_reorg | EE | 0.7248069 | 0.0130485 | Inf | 0.6992323 | 0.7503815 |
| c\_post\_reorg | EE | 0.2512829 | 0.0144098 | Inf | 0.2230401 | 0.2795256 |

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| contrast | oplottype | estimate | SE | df | z.ratio | p.value |
| b\_pre\_reorg - c\_post\_reorg | CC | 0.1144904 | 0.0095617 | Inf | 11.97390 | 0 |
| b\_pre\_reorg - c\_post\_reorg | EE | 0.4735241 | 0.0194398 | Inf | 24.35843 | 0 |