**Electronic Supplementary Material**

Flea infestation, social contact, and stress in a gregarious rodent species: minimizing the potential parasitic costs of group-living

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Table S1. Mean score of aggressive behaviors for female *Acomys cahirinus* housed in pairs used to determine if individuals should be considered the dominant or submissive member of the pair. Standard error of the mean (SEM) is included.

|  |  |  |
| --- | --- | --- |
| Individual | Mean Score | SEM |
| Dominant | 33.83 | 10.82 |
| Submissive | 9.33 | 6.05 |

Table S2. Number of female *Acomys cahirinus* in each group that did and did not give birth.

|  |  |  |
| --- | --- | --- |
| Group | Number that gave birth | Number that did not give birth |
| C0 | 10 | 2 |
| C1 | 7 | 5 |
| C2 | 6 | 6 |
| I0 | 10 | 2 |
| I1 | 7 | 5 |
| I2 | 7 | 5 |

Table S3. Mean baseline (T0) fecal glucocorticoid metabolite (FGMC) concentrations at for females that gave birth and females that did not give birth. Standard error of the mean (SEM) is included.

|  |  |  |
| --- | --- | --- |
| Group | FGMC at T0 | SEM |
| Females that gave birth | 111.97 | 9.40 |
| Females that did not give birth | 107.99 | 11.85 |



Fig. S1. A conceptual diagram outlining steps during the experimental period before parturition takes place. After baseline measurements, females are placed into paired (P) or solitary (S) treatments. Fleas are then added to infested (I) treatment groups while control (C) groups remain flea-free. A male is added to each cage for two weeks to allow for successful copulation and then separated from females. Finally, females in paired treatments are isolated into separate cages denoting whether they are dominant (1) or submissive (2) shortly before they give birth. Females in solitary treatment groups have no dominance ranking (0).