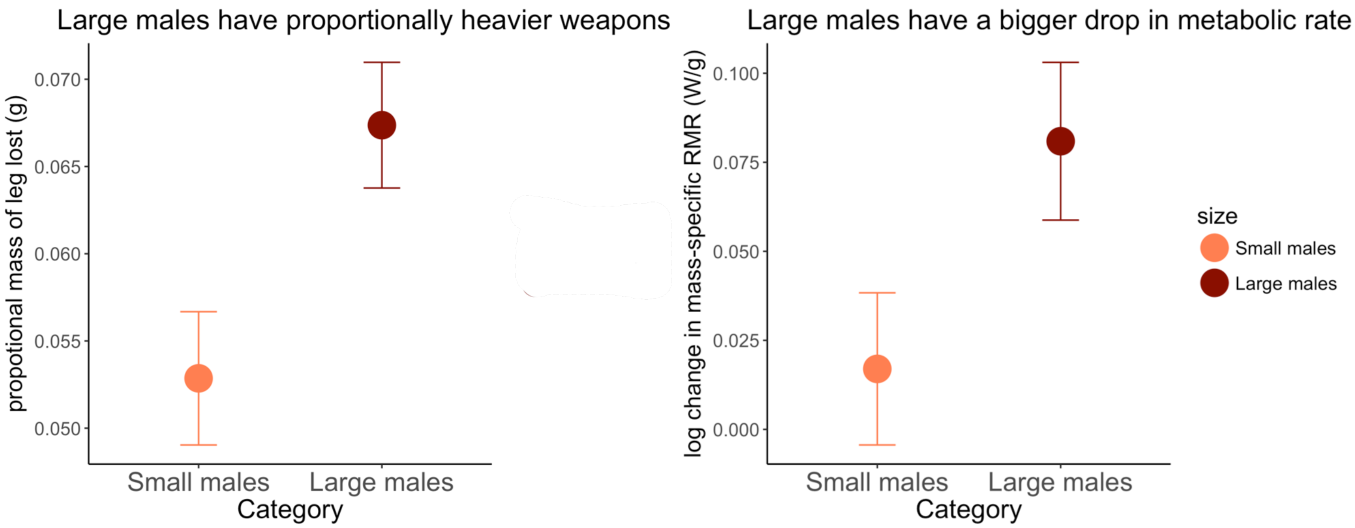
Supplementary Figures

Figure S1



FigureS1

a) We took the upper and lower quartile of males based on total body mass, and categorized these as males as 'large' or 'small' respectively. The largest quartile of males (average leg mass is 6.8% of body mass, n=13) and the smallest quartile of males (average leg mass is 5.3% of body mass, n=12) differed in relative leg mass (GLM: Walds $\chi^2 = 4.73$, df = 1, 21, p=0.04; Figure S1, Note: error bars display standard errors). b) The largest males had the largest drop in mass-specific RMR after leg loss compared to small males (GLM: Walds $\chi^2 = 4.29$, df = 1, 23, p=0.03) but still not as large as predicted based on the relatively larger size of the leg (see Figure 3).

Methods S1

To further examine the effect of leg loss on the most extreme size of males, we identified the largest and smallest quartiles of males. Relative hind leg mass differed significantly between the two categories. Mass of the dropped leg accounted for a mean of 6.9% of body mass in the largest males and 5.4% of body mass in the smallest males. We constructed a GLM with $\log_{10}$ change in resting metabolic rate per gram as the response variable and size (large or small) as the explanatory variable. We found a significant effect of size on $\log_{10}$ change in metabolic rate, where large males had a larger drop in mass-specific metabolic rate compared to small males (Figure 3 & S1; Walds $\chi^2 = 17.25$, df = 1,23, p=0.009).