

FigS4. Results of all analyses from the main text performed using separate principal component analyses for each population. This approach masks differences among populations but may increase power to detect within-population correlations (Du 2019). (A) There was no relationship between aquatic and terrestrial performance ($F_{1,38} = 0.07$, $P = 0.79$, lmg-partitioned $R^2 = 0.002$). (B) There was a significant positive relationship between white muscle score and aquatic performance ($F_{1,38} = 6.96$, $P = 0.012$, lmg-partitioned $R^2 = 0.15$). (C) There was no significant relationship between red muscle score and aquatic performance ($F_{1,38} = 0.45$, $P = 0.50$, lmg-partitioned $R^2 = 0.012$). (D) There was no significant relationship between white muscle score and terrestrial performance ($F_{1,38} = 0.13$, $P = 0.72$, lmg-partitioned $R^2 = 0.003$). (E) There was a significant positive relationship between red muscle score and terrestrial performance only in fish captured from burrows ($F_{1,37} = 4.33$, $P = 0.044$, lmg-partitioned $R^2 = 0.046$). (F) There was no significant relationship between body condition and aquatic performance ($F_{1,38} = 0.14$, $P = 0.71$, lmg-partitioned $R^2 = 0.004$). (G) There was a significant positive relationship between body condition and terrestrial performance only in fish captured from burrows ($F_{1,37} = 5.27$, $P = 0.027$, lmg-partitioned $R^2 = 0.068$). (H) There was no significant relationship between body condition and white muscle score ($F_{1,38} = 0.40$, $P = 0.53$, lmg-partitioned $R^2 = 0.011$). (I) There was a significant positive relationship between body condition and red muscle score ($F_{1,38} = 4.78$, $P = 0.035$, lmg-partitioned $R^2 = 0.11$). (J) There was no significant relationship red muscle score and white muscle score ($F_{1,38} = 0.55$, $P = 0.46$, lmg-partitioned $R^2 = 0.014$). Shaded grey regions are 95% confidence intervals.