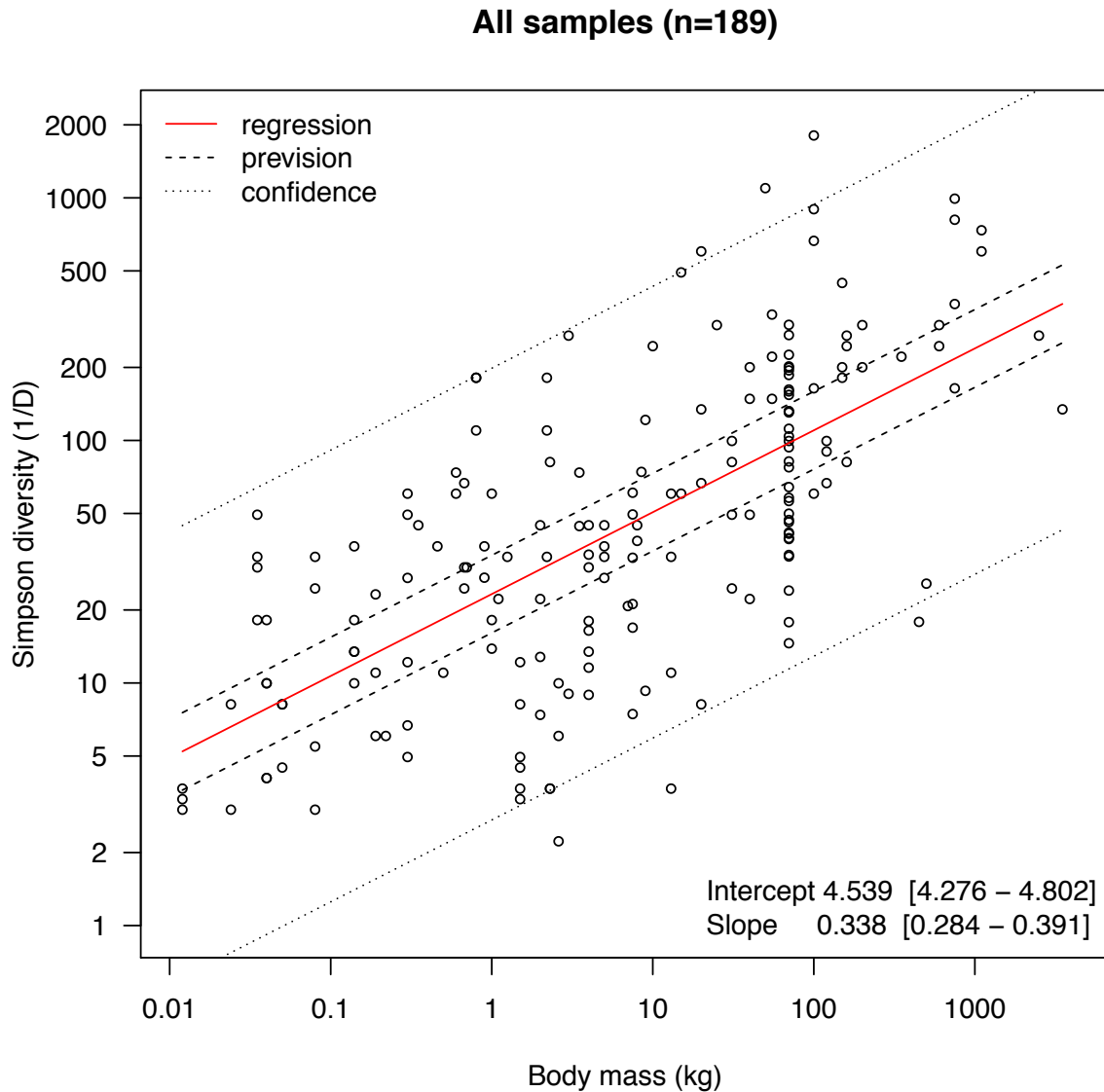


Additional file 3:

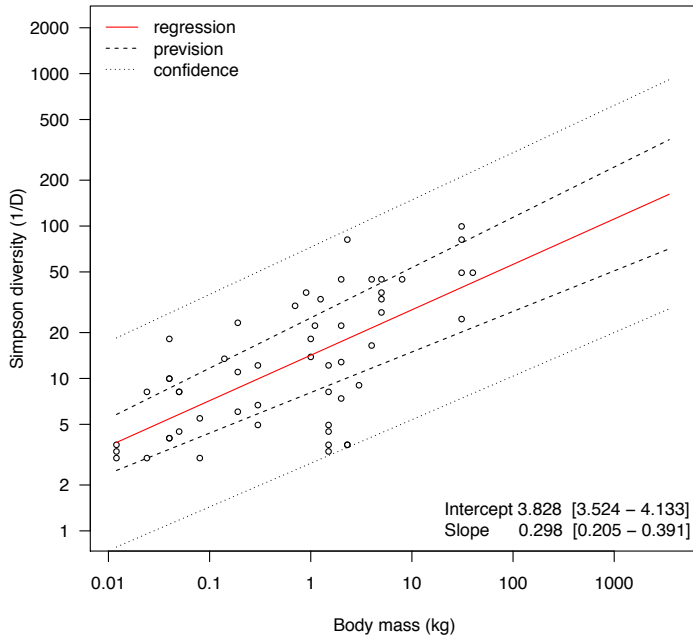
Simpson Diversity Index as a function of animal weight for (A) all the samples and for the sub-categories; (B) diet; (C) phylogeny; (D) gut structure; (E) age and (F) group size. The power law relationship $\log_{\text{diversity}} = c \log_{\text{weight}}^z$ is displayed as a red line. Intercept c and slope z of the regression are indicated at the bottom of each panel, with the range of values (p -value 0.05) in brackets. The prevision and confidence intervals of the linear regression are displayed as dashed and dotted lines respectively.

(A) All the samples

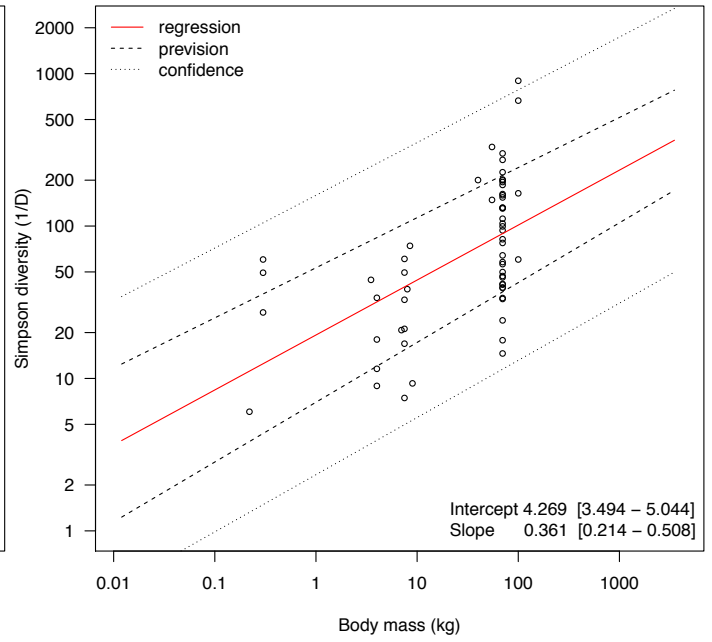


(B) Diet

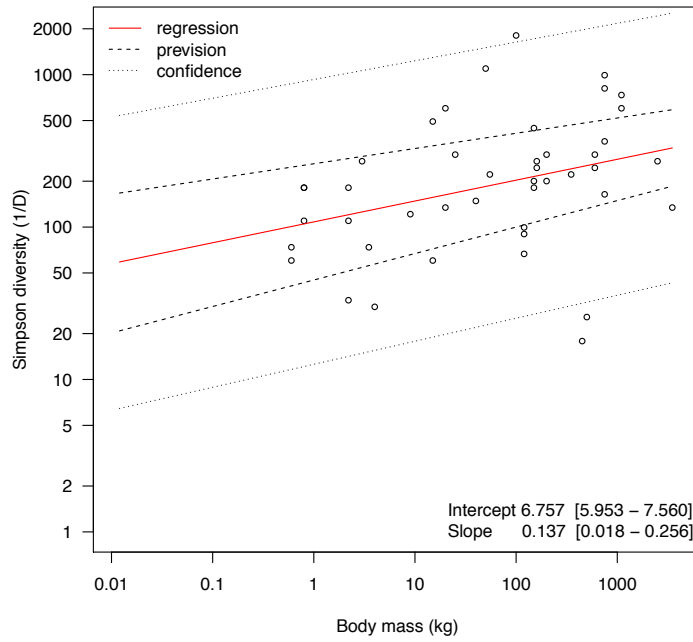
Granivorous (n=54)



Omnivorous (n=60)

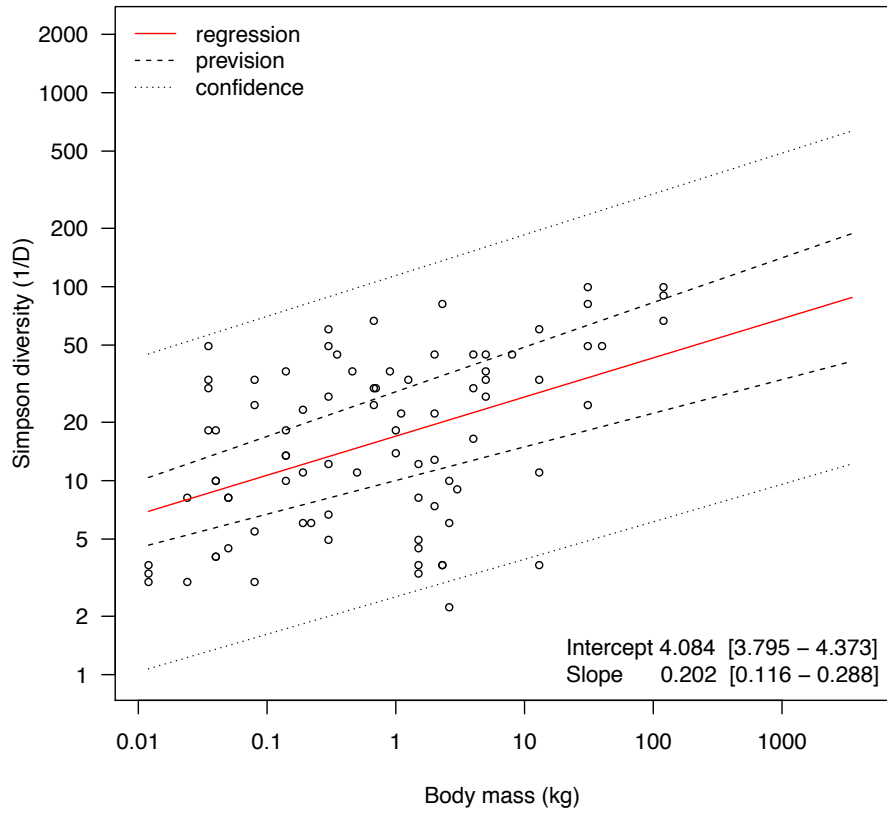


Herbivorous (n=44)

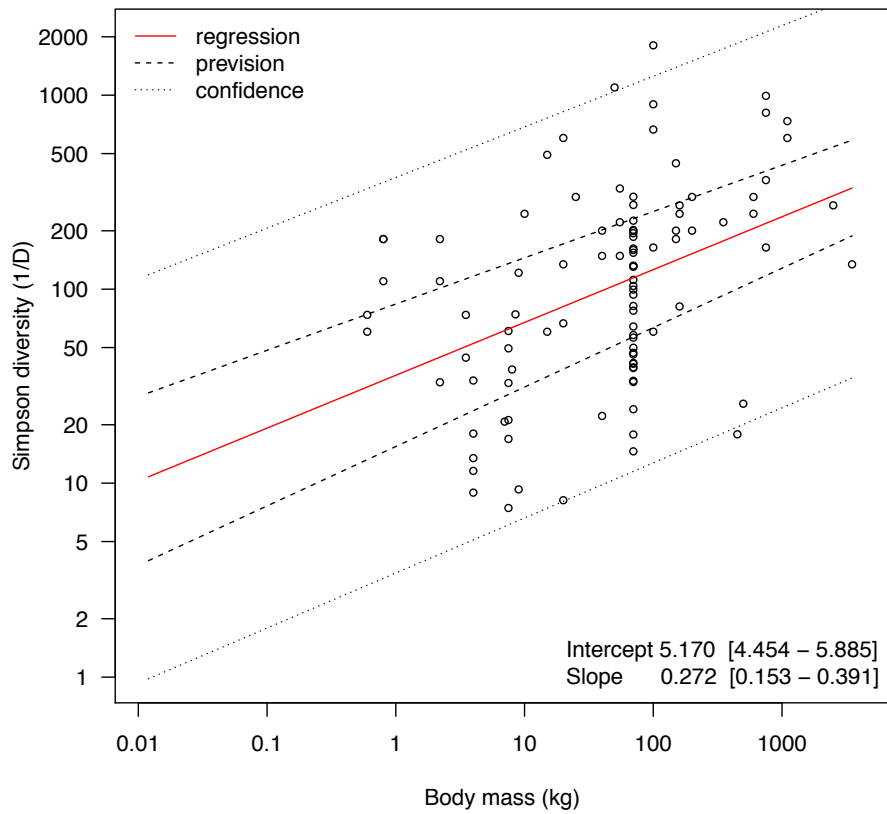


(C) Phylogeny

Birds (n=85)

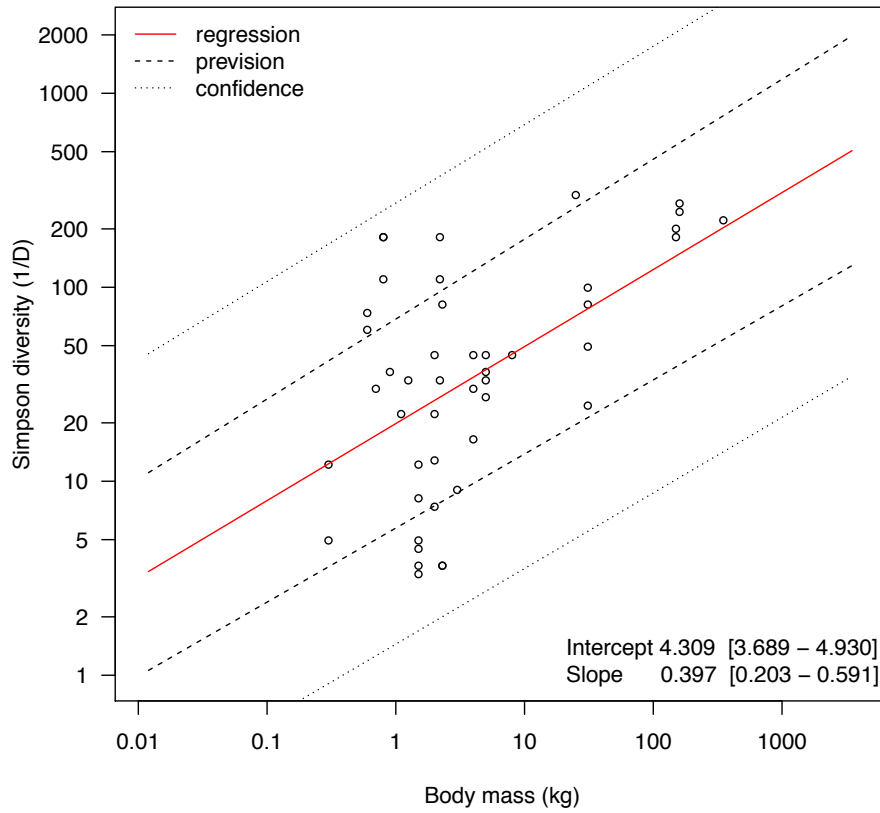


Mammals (n=101)

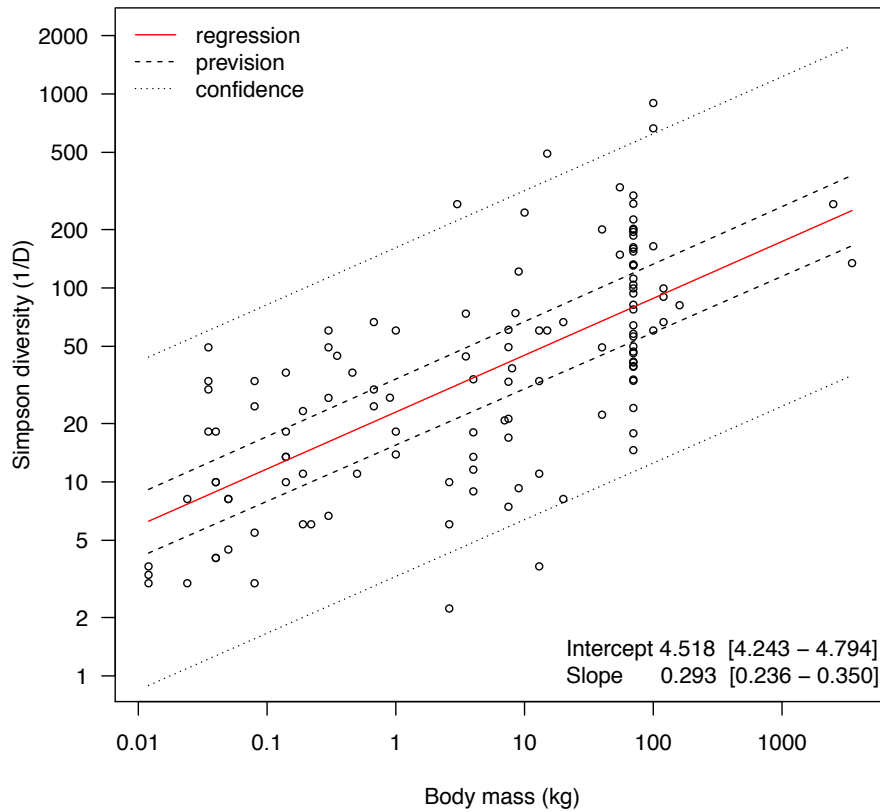


(D) Gut structure

Hindgut caecum (n=46)

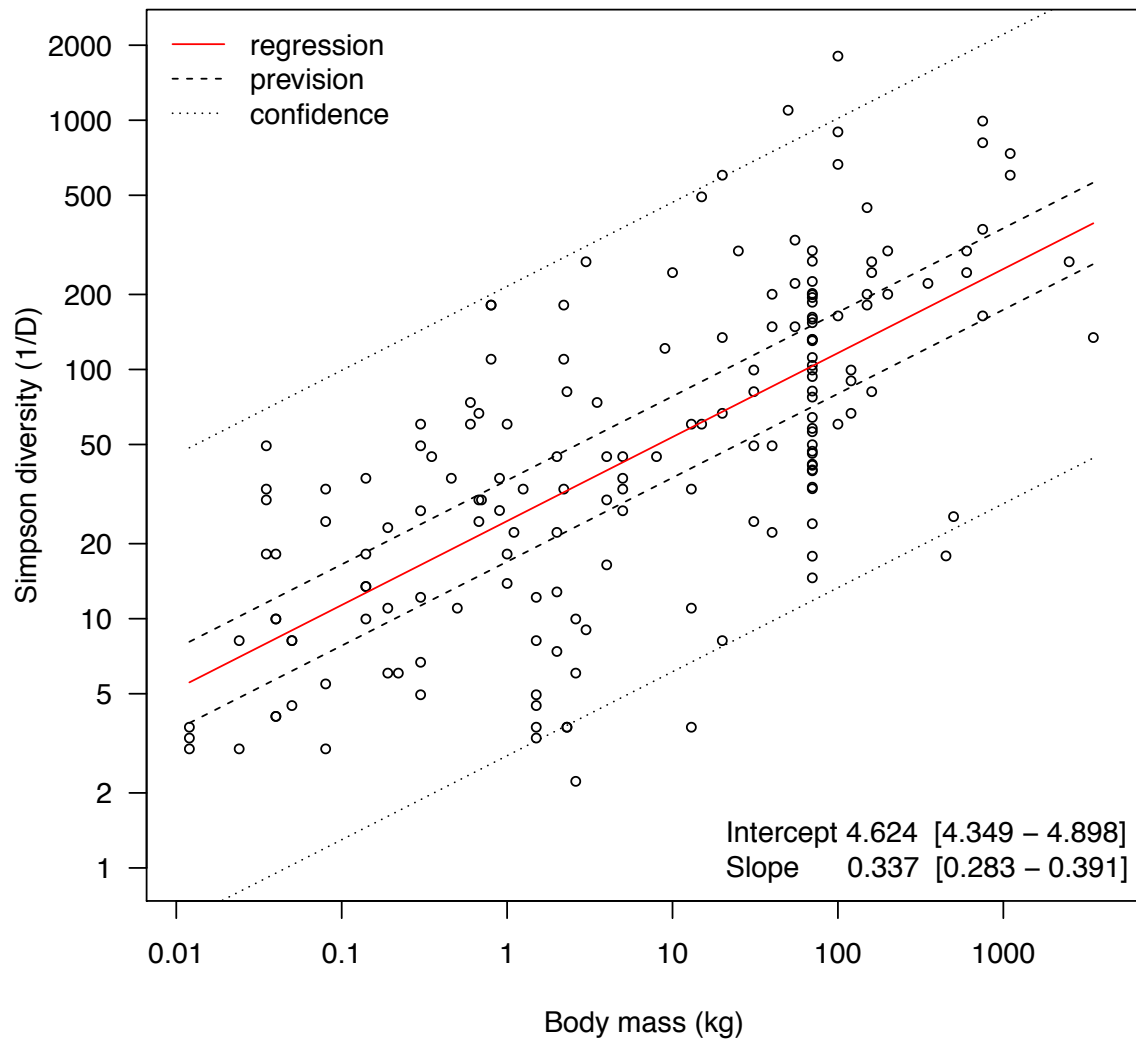


Hindgut colon (n=124)



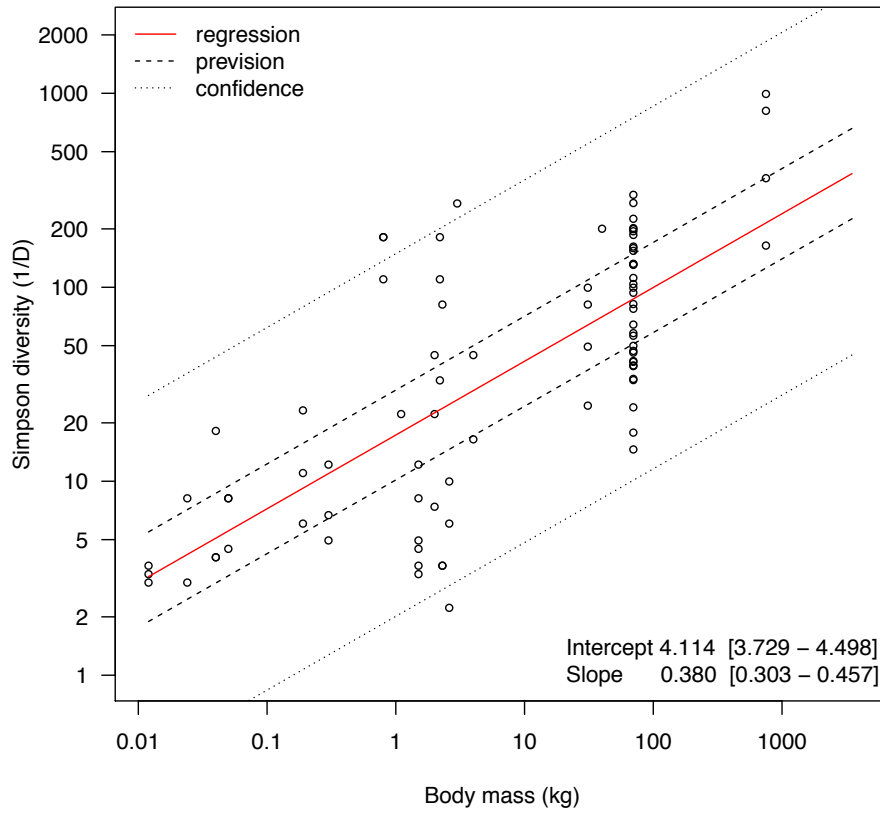
(E) Age

Adults (n=173)



(F) Group size

Large groups (n=85)



Small groups (n=104)

