

## **Supplementary Material**

### **Mandible shape reflects ecotypic divergence and population dynamics in an Arctic carnivore: the case of the Icelandic Arctic fox.**

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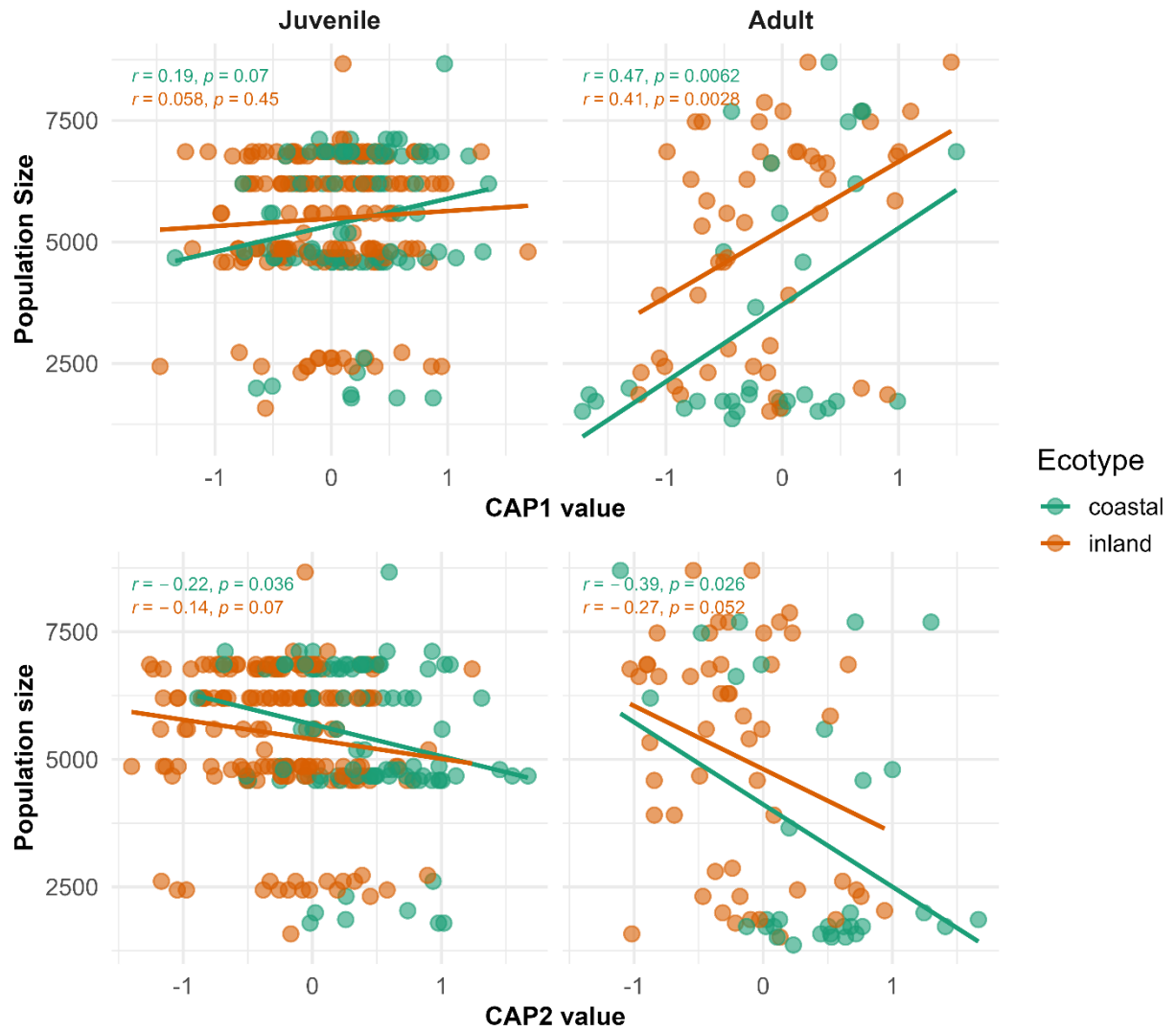
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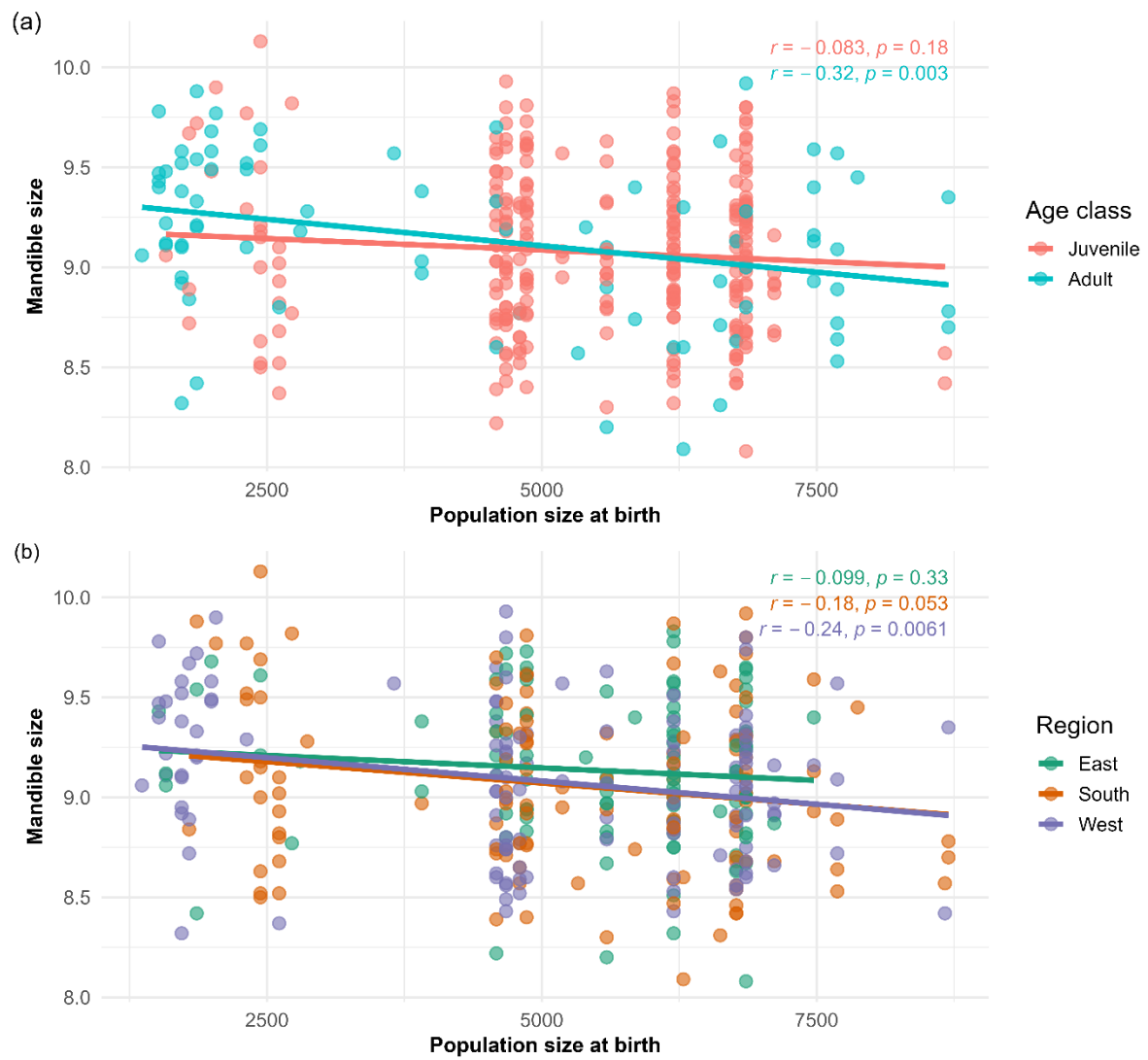
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**Table S1** The average canonical analysis of principal coordinates (CAP) values for each population, with both the standard deviation (SD) and the standard error (SE) to the mean.

| <b>Region</b>     | <b>Mean CAP1</b> | <b>SD CAP1</b> | <b>SE CAP1</b> | <b>Mean CAP2</b> | <b>SD CAP2</b> | <b>SE CAP2</b> |
|-------------------|------------------|----------------|----------------|------------------|----------------|----------------|
| <i>East</i>       | -0.028           | 0.522          | 0.052          | -0.248           | 0.472          | 0.047          |
| <i>South</i>      | -0.087           | 0.575          | 0.052          | -0.192           | 0.517          | 0.047          |
| <i>Westfjords</i> | 0.107            | 0.588          | 0.052          | 0.382            | 0.531          | 0.047          |



**Fig. S1** The association between CAP values and population size at birth by age classes in the two ecotypes. The effect is most pronounced in adult foxes of both ecotypes, while only a weak association is observed in juveniles.



**Fig. S2** The relationship between mandible size and population size at birth for each (a) age class, and (b) region, of Arctic foxes in Iceland. Mandible size reduces with higher population size for adults, and Westfjords and South foxes.