**Figure Legends**

**Figure 1** Telomere length and age Seychelles warblers, based on cross-sectional **(A)** and longitudinal **(B)** data. Points and error bars represent mean and 95% confidence intervals, respectively. In **B**, telomere loss is a standardised and corrected rate (see methods for details) based on differences in telomere length between the sampling event of birds as a juvnile, and the first available sampling as an adult. Values above zero indicate telomere shortening in early life.

**Figure 2** Temporal variation in early-life telomere length in the Seychelles warbler based on cross-sectional **(A,B)** and longitudinal **(C,D)** data (see Figure 1 and main text for details). Points and error bars represent mean and standard error telomere length for each summer (blue) or winter (red) field season. In **A** and **C** points are ordered temporally, while in **B** and **D** telomerelength/loss per season is plotted against island wide food availability.

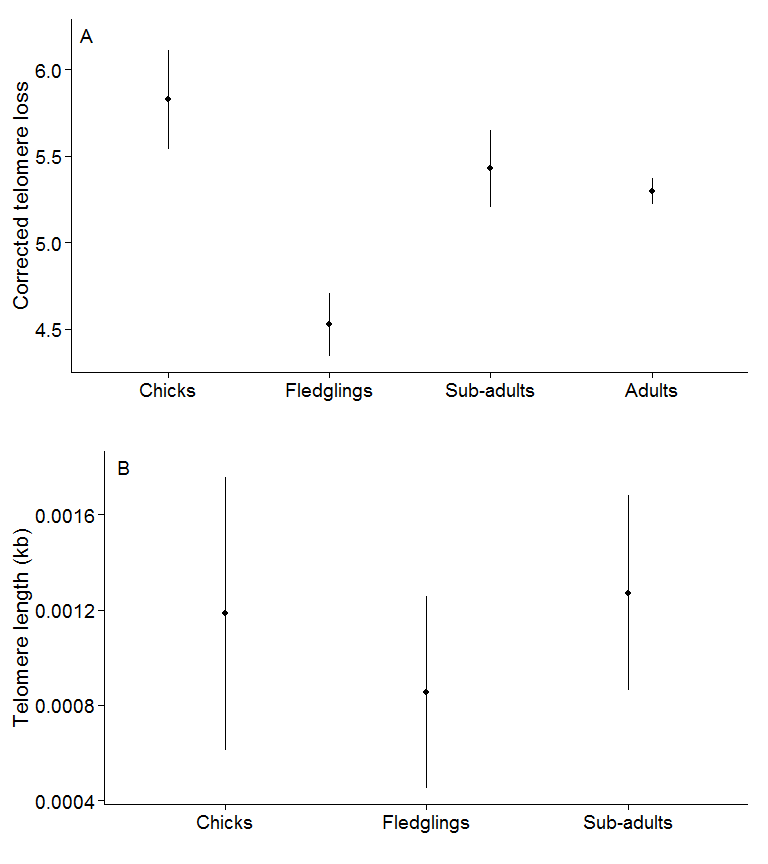
**Figure 3** Factors affecting telomere length in Seychelles warbler chicks. **A** Model averaged estimates and 95% confidence intervals (points and error bars, respectively) for all explanatory terms used in a linear model with juvenile telomere length as the response variable. Numbers in brackets are the relative importance of each term in the top model set (see main text for details; Food av. = annual food availability, TQ = territory quality). **B** Presence/absence of helpers, **C** sex and **D** tarsus length in relation to raw telomere length. Points and error bars in **B and C** are mean standard error telomere lengths for each group, and the line and shaded areas from **D** represent fitted values and 95% confidence limits from a linear regression.

**Figure 4** Factors affecting telomere length in juvenile Seychelles warblers. **A** Model averaged estimates and 95% confidence intervals (points and error bars, respectively) for all explanatory terms used in a linear model with juvenile telomere length as the response variable. Numbers in brackets are the relative importance of each term in the top model set (see main text for details; Food av. = annual food availability, TQ = territory quality).

**Figure 5** Kaplan-Meier curves showing the relationship between telomere length and survival in chick (**A**) and juvenile (**B**) Seychelles warblers. Telomere length is binned into groups here for visualisation purposes only (long and short = greater than or less than median telomere length, repectively).

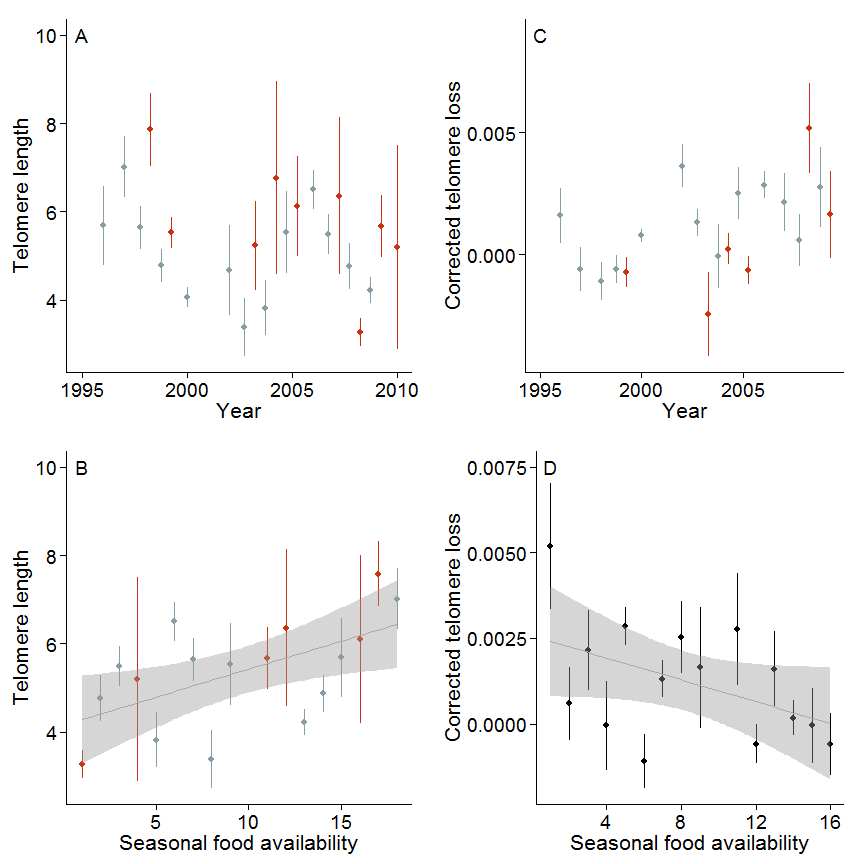
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**Figure 1**



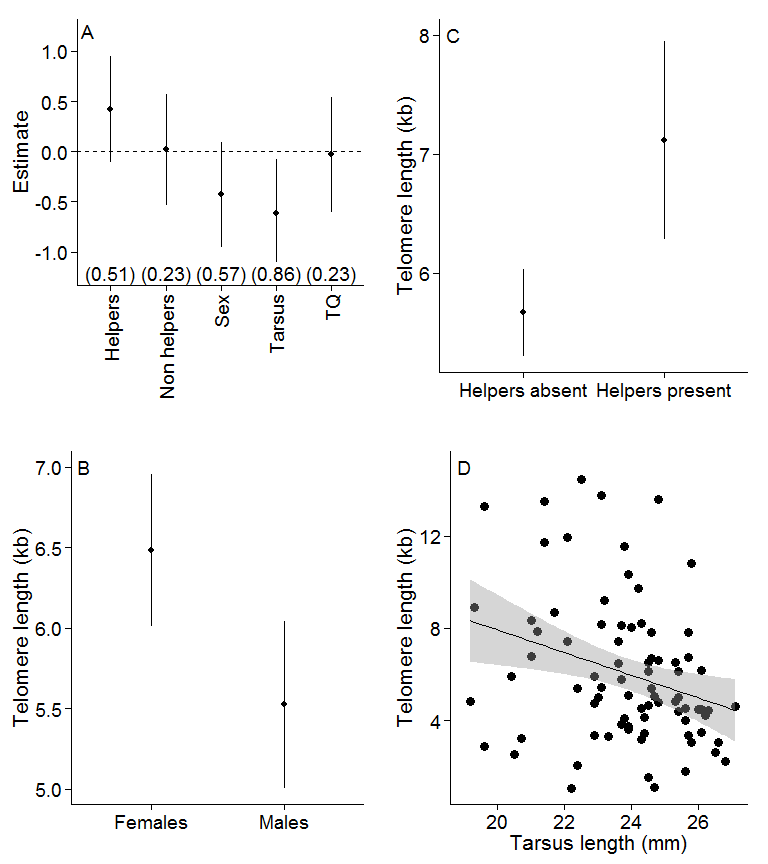
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**Figure 2**



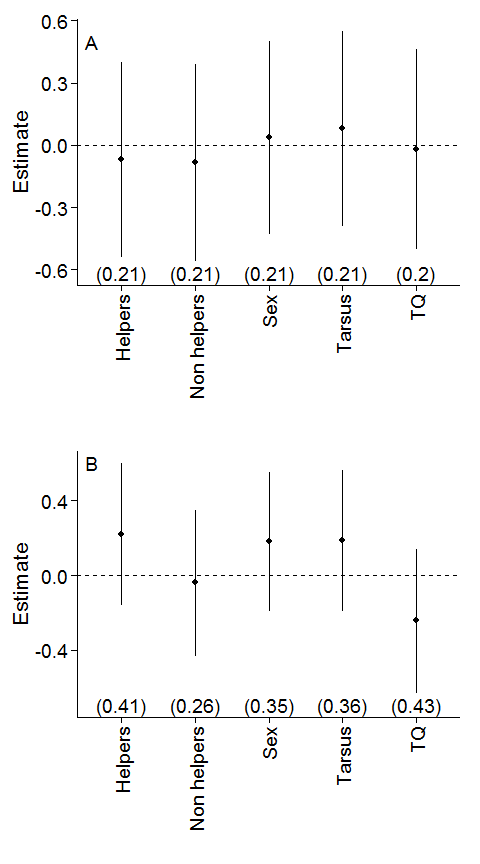
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**Figure 3**



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**Figure 4**



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**Figure 5**

