**Figure Legends**

**Figure 1** RTL in relation to **(A)** age and **(B)** Age in Seychelles warblers. Lines and shaded areas are fitted values and 95% confidence limits from linear regressions.

**Figure 2** Cohort effects on early-life RTL in Seychelles warblers. **A** temporal variation RTL in major and minor cohorts, **B** temporal variation in adult population size, and **C** early-life RTL in relation to cohort-level variation in adult population size. Lines and shaded areas in **C** are fitted values and 95% confidence limits from general linear models.

**Figure 3** Factors affecting early-life RTL in Seychelles warblers. **A** Model averaged estimates and 95% confidence intervals for explanatory terms used in a linear mixed model with RTL as the response variable (see main text for details; TQ = territory quality). **B,C** Early-life RTL and age in relation to tarsus length (**B**) and sex (**C**). Lines and shaded areas in **B** are fitted values and 95% confidence limits from a general linear model.

**Figure** Longitudinal telomere dynamics in juvenile Seychelles warblers. **A** Juvenile telomere length in relation to adult telomere length measured in the same individual. **B** RTL in relation to the time between sampling events. Lines and shaded areas represent fitted values and 95% confidence limits from general linear models. Raw data have been ommited from **B** for the sake of clarity, but are plotted in Figure S1.

**Figure 5** Factors affecting RTL in juvenile Seychelles warblers. **A** Model averaged estimates and 95% confidence intervals for explanatory terms used in a linear mixed model with RTL as the response variable (see main text for details; TQ = territory quality). **B** RTL in relation to tarsus length and sex.