### Supplementary information for Spurgin *et al.* "Telomeres reveal silver spoon effects in a wild population"

**Table S1** Model selection table for analysis of factors affecting early life telomere length in juvenile Seychelles warblers. Only models that remained in the top model set for model averaging (AICc 6 compared to the top model) are included here. TQ = territory quality.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | df | AICc | Delta AICc | Weight |
| Sex + Age + Tarsus + TQ + Age x tarsus | 10 | 634.92 | 0.00 | 0.06 |
| Sex + Age + Tarsus + Age x tarsus | 9 | 635.52 | 0.60 | 0.04 |
| Sex + Age + Tarsus + TQ + Age x sex + Age x tarsus | 11 | 636.31 | 1.39 | 0.03 |
| Sex + Age + Tarsus + TQ + Age x sex | 10 | 636.42 | 1.50 | 0.03 |
| Age + Tarsus + TQ + Age x tarsus | 9 | 636.42 | 1.50 | 0.03 |
| Sex + Age + Body mass + Tarsus + TQ + Age x tarsus | 11 | 636.61 | 1.69 | 0.02 |
| Sex + Age + Tarsus + TQ + Age x tarsus + Age x TQ | 11 | 636.79 | 1.87 | 0.02 |
| Helpers + Sex + Age + Tarsus + TQ + Age x tarsus | 11 | 636.82 | 1.90 | 0.02 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x tarsus | 11 | 636.95 | 2.03 | 0.02 |
| Sex + Age + Body mass + Tarsus + Age x tarsus | 10 | 637.01 | 2.10 | 0.02 |
| Sex + Age + Tarsus + Age x sex + Age x tarsus | 10 | 637.04 | 2.13 | 0.02 |
| Age + Tarsus + Age x tarsus | 8 | 637.06 | 2.14 | 0.02 |
| Sex + Age + Tarsus + Age x sex | 9 | 637.37 | 2.45 | 0.02 |
| Helpers + Sex + Age + Tarsus + Age x tarsus | 10 | 637.42 | 2.51 | 0.02 |
| Sex + Age + Non helpers + Tarsus + Age x tarsus | 10 | 637.56 | 2.64 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ + Age x sex | 11 | 637.57 | 2.65 | 0.01 |
| Helpers + Sex + Age + Tarsus + TQ + Age x helpers + Age x tarsus | 12 | 637.57 | 2.66 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ + Age x sex + Age x tarsus | 12 | 637.83 | 2.91 | 0.01 |
| Sex + Age + Tarsus + TQ | 9 | 638.13 | 3.21 | 0.01 |
| Helpers + Sex + Age + Tarsus + Age x helpers + Age x tarsus | 11 | 638.14 | 3.23 | 0.01 |
| Sex + Age + Tarsus + TQ + Age x sex + Age x tarsus + Age x TQ | 12 | 638.21 | 3.30 | 0.01 |
| Sex + Age + Body mass + Tarsus + Age x sex | 10 | 638.22 | 3.30 | 0.01 |
| Helpers + Sex + Age + Tarsus + TQ + Age x sex + Age x tarsus | 12 | 638.23 | 3.32 | 0.01 |
| Helpers + Age + Tarsus + TQ + Age x tarsus | 10 | 638.30 | 3.38 | 0.01 |
| Age + Tarsus + TQ + Age x tarsus + Age x TQ | 10 | 638.30 | 3.38 | 0.01 |
| Sex + Age + Body mass + Tarsus + Age x sex + Age x tarsus | 11 | 638.34 | 3.43 | 0.01 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x sex + Age x tarsus | 12 | 638.35 | 3.44 | 0.01 |
| Helpers + Sex + Age + Tarsus + TQ + Age x sex | 11 | 638.37 | 3.46 | 0.01 |
| Age + Body mass + Tarsus + TQ + Age x tarsus | 10 | 638.40 | 3.49 | 0.01 |
| Sex + Age + Tarsus + TQ + Age x sex + Age x TQ | 11 | 638.43 | 3.51 | 0.01 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x sex | 11 | 638.45 | 3.53 | 0.01 |
| Age + Non helpers + Tarsus + TQ + Age x tarsus | 10 | 638.45 | 3.54 | 0.01 |
| Helpers + Sex + Age + Body mass + Tarsus + TQ + Age x tarsus | 12 | 638.48 | 3.56 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ + Age x tarsus + Age x TQ | 12 | 638.50 | 3.58 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ + Age x mass + Age x tarsus | 12 | 638.65 | 3.73 | 0.01 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x non helpers + Age x tarsus | 12 | 638.65 | 3.74 | 0.01 |
| Sex + Age + Body mass + Non helpers + Tarsus + TQ + Age x tarsus | 12 | 638.65 | 3.74 | 0.01 |
| Helpers + Sex + Age + Tarsus + TQ + Age x tarsus + Age x TQ | 12 | 638.69 | 3.78 | 0.01 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x tarsus + Age x TQ | 12 | 638.82 | 3.91 | 0.01 |
| Helpers + Age + Tarsus + TQ + Age x helpers + Age x tarsus | 11 | 638.83 | 3.92 | 0.01 |
| Helpers + Sex + Age + Non helpers + Tarsus + TQ + Age x tarsus | 12 | 638.85 | 3.94 | 0.01 |
| Sex + Age + Tarsus | 8 | 638.86 | 3.94 | 0.01 |
| Helpers + Sex + Age + Body mass + Tarsus + Age x tarsus | 11 | 638.88 | 3.96 | 0.01 |
| Helpers + Age + Tarsus + Age x tarsus | 9 | 638.93 | 4.02 | 0.01 |
| Age + Body mass + Tarsus + Age x tarsus | 9 | 638.94 | 4.03 | 0.01 |
| Helpers + Sex + Age + Tarsus + Age x sex + Age x tarsus | 11 | 638.97 | 4.05 | 0.01 |
| Sex + Age + Body mass + Non helpers + Tarsus + Age x tarsus | 11 | 639.06 | 4.14 | 0.01 |
| Sex + Age + Body mass + Tarsus + Age x mass + Age x tarsus | 11 | 639.06 | 4.14 | 0.01 |
| Sex + Age + Non helpers + Tarsus + Age x sex + Age x tarsus | 11 | 639.09 | 4.17 | 0.01 |
| Helpers + Sex + Age + Tarsus + TQ + Age x helpers + Age x sex + Age x tarsus | 13 | 639.09 | 4.18 | 0.01 |
| Age + Non helpers + Tarsus + Age x tarsus | 9 | 639.10 | 4.18 | 0.01 |
| Helpers + Sex + Age + Body mass + Tarsus + TQ + Age x helpers + Age x tarsus | 13 | 639.16 | 4.24 | 0.01 |
| Sex + Age + Non helpers + Tarsus + Age x non helpers + Age x tarsus | 11 | 639.25 | 4.34 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ + Age x sex + Age x mass | 12 | 639.31 | 4.40 | 0.01 |
| Helpers + Sex + Age + Tarsus + Age x sex | 10 | 639.33 | 4.42 | 0.01 |
| Helpers + Sex + Age + Tarsus + TQ + Age x helpers + Age x sex | 12 | 639.39 | 4.47 | 0.01 |
| Sex + Age + Non helpers + Tarsus + Age x sex | 10 | 639.41 | 4.49 | 0.01 |
| Helpers + Age + Tarsus + Age x helpers + Age x tarsus | 10 | 639.43 | 4.51 | 0.01 |
| Helpers + Sex + Age + Tarsus + TQ + Age x helpers + Age x tarsus + Age x TQ | 13 | 639.45 | 4.54 | 0.01 |
| Helpers + Sex + Age + Non helpers + Tarsus + Age x tarsus | 11 | 639.47 | 4.56 | 0.01 |
| Helpers + Sex + Age + Body mass + Tarsus + TQ + Age x sex | 12 | 639.48 | 4.56 | 0.01 |
| Helpers + Sex + Age + Body mass + Tarsus + Age x helpers + Age x tarsus | 12 | 639.51 | 4.59 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ | 10 | 639.56 | 4.65 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ + Age x sex + Age x TQ | 12 | 639.59 | 4.67 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ + Age x mass | 11 | 639.59 | 4.67 | 0.01 |
| Helpers + Sex + Age + Non helpers + Tarsus + TQ + Age x helpers + Age x tarsus | 13 | 639.61 | 4.69 | 0.01 |
| Sex + Age + Body mass + Non helpers + Tarsus + TQ + Age x sex | 12 | 639.62 | 4.70 | 0.01 |
| Helpers + Sex + Age + Body mass + Tarsus + TQ + Age x sex + Age x tarsus | 13 | 639.71 | 4.80 | 0.01 |
| Sex + Age + Body mass + Tarsus + TQ + Age x sex + Age x tarsus + Age x TQ | 13 | 639.75 | 4.84 | 0.00 |
| Helpers + Sex + Age + Tarsus + Age x helpers + Age x sex + Age x tarsus | 12 | 639.78 | 4.87 | 0.00 |
| Sex + Age + Body mass + Tarsus + TQ + Age x sex + Age x mass + Age x tarsus | 13 | 639.88 | 4.96 | 0.00 |
| Sex + Age + Body mass + Non helpers + Tarsus + TQ + Age x sex + Age x tarsus | 13 | 639.88 | 4.97 | 0.00 |
| Sex + Age + Body mass + Tarsus + Age x sex + Age x mass | 11 | 640.01 | 5.10 | 0.00 |
| Sex + Age + Body mass + Tarsus | 9 | 640.04 | 5.13 | 0.00 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x sex + Age x non helpers | 12 | 640.05 | 5.13 | 0.00 |
| Helpers + Sex + Age + Tarsus + TQ | 10 | 640.07 | 5.16 | 0.00 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x sex + Age x non helpers + Age x tarsus | 13 | 640.07 | 5.16 | 0.00 |
| Sex + Age + Non helpers + Tarsus + TQ | 10 | 640.12 | 5.21 | 0.00 |
| Helpers + Sex + Age + Body mass + Tarsus + Age x sex | 11 | 640.13 | 5.22 | 0.00 |
| Helpers + Sex + Age + Tarsus + TQ + Age x sex + Age x tarsus + Age x TQ | 13 | 640.14 | 5.22 | 0.00 |
| Sex + Age + Tarsus + TQ + Age x TQ | 10 | 640.15 | 5.24 | 0.00 |
| Helpers + Age + Tarsus + TQ + Age x tarsus + Age x TQ | 11 | 640.17 | 5.26 | 0.00 |
| Helpers + Sex + Age + Non helpers + Tarsus + Age x helpers + Age x tarsus | 12 | 640.19 | 5.28 | 0.00 |
| Helpers + Sex + Age + Body mass + Tarsus + Age x sex + Age x tarsus | 12 | 640.22 | 5.31 | 0.00 |
| Sex + Age + Body mass + Tarsus + Age x mass | 10 | 640.24 | 5.33 | 0.00 |
| Age + Non helpers + Tarsus + TQ + Age x non helpers + Age x tarsus | 11 | 640.25 | 5.34 | 0.00 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x sex + Age x tarsus + Age x TQ | 13 | 640.26 | 5.34 | 0.00 |
| Sex + Age + Body mass + Non helpers + Tarsus + Age x sex | 11 | 640.26 | 5.35 | 0.00 |
| Helpers + Age + Body mass + Tarsus + TQ + Age x tarsus | 11 | 640.26 | 5.35 | 0.00 |
| Helpers + Sex + Age + Non helpers + Tarsus + TQ + Age x sex + Age x tarsus | 13 | 640.28 | 5.36 | 0.00 |
| Age + Body mass + Tarsus + TQ + Age x tarsus + Age x TQ | 11 | 640.29 | 5.38 | 0.00 |
| Helpers + Sex + Age + Tarsus + Age x helpers + Age x sex | 11 | 640.31 | 5.39 | 0.00 |
| Age + Body mass + Tarsus + TQ + Age x mass + Age x tarsus | 11 | 640.32 | 5.40 | 0.00 |
| Helpers + Age + Non helpers + Tarsus + TQ + Age x tarsus | 11 | 640.33 | 5.42 | 0.00 |
| Age + Non helpers + Tarsus + TQ + Age x tarsus + Age x TQ | 11 | 640.34 | 5.42 | 0.00 |
| Sex + Age + Body mass + Tarsus + Age x sex + Age x mass + Age x tarsus | 12 | 640.37 | 5.45 | 0.00 |
| Helpers + Sex + Age + Body mass + Tarsus + TQ + Age x tarsus + Age x TQ | 13 | 640.37 | 5.45 | 0.00 |
| Helpers + Sex + Age + Tarsus + TQ + Age x sex + Age x TQ | 12 | 640.39 | 5.47 | 0.00 |
| Sex + Age + Body mass + Non helpers + Tarsus + Age x sex + Age x tarsus | 12 | 640.39 | 5.47 | 0.00 |
| Helpers + Sex + Age + Body mass + Tarsus + TQ + Age x helpers + Age x sex | 13 | 640.39 | 5.47 | 0.00 |
| Sex + Age + Body mass + Non helpers + Tarsus + TQ + Age x non helpers + Age x tarsus | 13 | 640.40 | 5.48 | 0.00 |
| Helpers + Sex + Age + Non helpers + Tarsus + TQ + Age x sex | 12 | 640.41 | 5.49 | 0.00 |
| Age + Body mass + Non helpers + Tarsus + TQ + Age x tarsus | 11 | 640.44 | 5.53 | 0.00 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x sex + Age x TQ | 12 | 640.46 | 5.55 | 0.00 |
| Helpers + Sex + Age + Body mass + Tarsus + TQ + Age x helpers + Age x sex + Age x tarsus | 14 | 640.50 | 5.58 | 0.00 |
| Sex + Age + Non helpers + Tarsus + TQ + Age x non helpers + Age x tarsus + Age x TQ | 13 | 640.50 | 5.59 | 0.00 |
| Helpers + Sex + Age + Body mass + Tarsus + TQ + Age x mass + Age x tarsus | 13 | 640.53 | 5.61 | 0.00 |
| Helpers + Sex + Age + Body mass + Non helpers + Tarsus + TQ + Age x tarsus | 13 | 640.53 | 5.61 | 0.00 |
| Sex + Age + Body mass + Tarsus + TQ + Age x mass + Age x tarsus + Age x TQ | 13 | 640.54 | 5.63 | 0.00 |
| Sex + Age + Body mass + Non helpers + Tarsus + TQ + Age x tarsus + Age x TQ | 13 | 640.55 | 5.63 | 0.00 |
| Helpers + Sex + Age + Non helpers + Tarsus + TQ + Age x non helpers + Age x tarsus | 13 | 640.57 | 5.65 | 0.00 |
| Sex + Age + Body mass + Non helpers + Tarsus + TQ + Age x mass + Age x tarsus | 13 | 640.70 | 5.79 | 0.00 |
| Helpers + Age + Tarsus + TQ + Age x helpers + Age x tarsus + Age x TQ | 12 | 640.71 | 5.80 | 0.00 |
| Helpers + Sex + Age + Non helpers + Tarsus + TQ + Age x tarsus + Age x TQ | 13 | 640.73 | 5.81 | 0.00 |
| Helpers + Age + Body mass + Tarsus + TQ + Age x helpers + Age x tarsus | 12 | 640.76 | 5.84 | 0.00 |
| Helpers + Age + Body mass + Tarsus + Age x tarsus | 10 | 640.79 | 5.88 | 0.00 |
| Sex + Age + Non helpers + Tarsus + Age x sex + Age x non helpers + Age x tarsus | 12 | 640.80 | 5.89 | 0.00 |
| Sex + Age + Body mass + Non helpers + Tarsus + Age x non helpers + Age x tarsus | 12 | 640.80 | 5.89 | 0.00 |
| Helpers + Sex + Age + Tarsus | 9 | 640.81 | 5.90 | 0.00 |
| Helpers + Age + Non helpers + Tarsus + TQ + Age x helpers + Age x tarsus | 12 | 640.87 | 5.95 | 0.00 |
| Sex + Age + Non helpers + Tarsus | 9 | 640.88 | 5.96 | 0.00 |
| Age + Non helpers + Tarsus + Age x non helpers + Age x tarsus | 10 | 640.89 | 5.97 | 0.00 |
| Age + Body mass + Tarsus + Age x mass + Age x tarsus | 10 | 640.91 | 6.00 | 0.00 |

**Table S2** Model selection table for analysis of factors affecting early life telomere loss in Seychelles warbler chicks, using longitudinal data. Only models that remained in the top model set for model averaging (AICc 6 compared to the top model) are included here. TQ = territory quality.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | df | AICc | Delta AICc | Weight |
| Null model | 3 | 79.03 | 0.00 | 0.14 |
| Non helpers | 4 | 79.94 | 0.92 | 0.09 |
| Sex | 4 | 80.82 | 1.80 | 0.06 |
| Tarsus | 4 | 80.94 | 1.91 | 0.05 |
| TQ | 4 | 80.95 | 1.93 | 0.05 |
| Body mass | 4 | 81.21 | 2.18 | 0.05 |
| Helpers | 4 | 81.23 | 2.20 | 0.05 |
| Non helpers + TQ | 5 | 81.78 | 2.76 | 0.04 |
| Non helpers + Tarsus | 5 | 81.81 | 2.79 | 0.04 |
| Sex + Non helpers | 5 | 82.10 | 3.07 | 0.03 |
| Sex + Tarsus | 5 | 82.13 | 3.11 | 0.03 |
| Body mass + Non helpers | 5 | 82.15 | 3.12 | 0.03 |
| Helpers + Non helpers | 5 | 82.20 | 3.17 | 0.03 |
| Sex + TQ | 5 | 82.76 | 3.73 | 0.02 |
| Sex + Body mass | 5 | 82.78 | 3.75 | 0.02 |
| Tarsus + TQ | 5 | 82.96 | 3.93 | 0.02 |
| Body mass + Tarsus | 5 | 82.99 | 3.96 | 0.02 |
| Helpers + Sex | 5 | 83.07 | 4.05 | 0.02 |
| Body mass + TQ | 5 | 83.19 | 4.17 | 0.02 |
| Helpers + Tarsus | 5 | 83.19 | 4.17 | 0.02 |
| Helpers + TQ | 5 | 83.21 | 4.18 | 0.02 |
| Helpers + Body mass | 5 | 83.46 | 4.44 | 0.02 |
| Sex + Non helpers + Tarsus | 6 | 83.61 | 4.58 | 0.01 |
| Non helpers + Tarsus + TQ | 6 | 83.75 | 4.72 | 0.01 |
| Body mass + Non helpers + Tarsus | 6 | 83.94 | 4.91 | 0.01 |
| Sex + Non helpers + TQ | 6 | 83.98 | 4.95 | 0.01 |
| Body mass + Non helpers + TQ | 6 | 84.05 | 5.02 | 0.01 |
| Helpers + Non helpers + TQ | 6 | 84.09 | 5.07 | 0.01 |
| Helpers + Non helpers + Tarsus | 6 | 84.13 | 5.10 | 0.01 |
| Sex + Tarsus + TQ | 6 | 84.17 | 5.14 | 0.01 |
| Sex + Body mass + Non helpers | 6 | 84.20 | 5.18 | 0.01 |
| Sex + Body mass + Tarsus | 6 | 84.40 | 5.37 | 0.01 |
| Helpers + Sex + Non helpers | 6 | 84.41 | 5.39 | 0.01 |
| Helpers + Sex + Tarsus | 6 | 84.43 | 5.40 | 0.01 |
| Helpers + Body mass + Non helpers | 6 | 84.46 | 5.44 | 0.01 |
| Sex + Body mass + TQ | 6 | 84.76 | 5.74 | 0.01 |