ch4\_table2

Scott Jennings

2/8/2021

Table 2 for chapter 4 of S. Jennings thesis.

| Model Structure | K | Δ AICc | AICc Wt. | -2\*log(Likelihood) |
| --- | --- | --- | --- | --- |
| **Creche age** |  |  |  |  |
| Step 1 |  |  |  |  |
| sex | 4 | 0 | 0.37 | 506.45 |
| sex + year | 5 | 0.3 | 0.32 | 504.48 |
| sex.year | 6 | 0.74 | 0.26 | 502.58 |
| year | 4 | 4.16 | 0.05 | 510.62 |
| Step 2 |  |  |  |  |
| mass growth rate + hatch date + year | 6 | 0 | 0.37 | 479.68 |
| hatch date + year | 5 | 0.2 | 0.34 | 482.22 |
| tibiotarsus growth rate + hatch date + year | 6 | 1.79 | 0.15 | 481.47 |
| flipper growth rate + hatch date + year | 6 | 2.03 | 0.14 | 481.71 |
| mass growth rate + year | 5 | 18.16 | 0 | 500.17 |
| flipper growth rate + year | 5 | 25.88 | 0 | 507.9 |
| intercept only | 3 | 25.99 | 0 | 512.49 |
| **year** | **4** | **26.33** | **0** | **510.62** |
| tibiotarsus growth rate + year | 5 | 28.49 | 0 | 510.5 |
| Creche mass |  |  |  |  |
| Step 1 |  |  |  |  |
| mass.sex\_year | 5 | 0 | 0.76 | 1238.98 |
| mass.sex.year | 6 | 2.32 | 0.24 | 1238.97 |
| mass.year | 4 | 15.33 | 0 | 1256.6 |
| mass.sex | 4 | 19.88 | 0 | 1261.14 |
| Step 2 |  |  |  |  |
| **creche age + mass growth rate + sex + year** | **7** | **0** | **1** | **1138.06** |
| creche age + sex + year | 6 | 43.56 | 0 | 1184.02 |
| mass growth rate + hatch date + sex + year | 7 | 45.02 | 0 | 1183.08 |
| mass growth rate + sex + year | 6 | 49.95 | 0 | 1190.41 |
| hatch date + sex + year | 6 | 81.04 | 0 | 1221.49 |
| sex + year | 5 | 96.19 | 0 | 1238.98 |
| intercept only | 3 | 130.25 | 0 | 1277.53 |
| **Creche flipper length** |  |  |  |  |
| Step 1 |  |  |  |  |
| flip.sex\_year | 5 | 0 | 0.67 | 802.28 |
| flip.sex.year | 6 | 1.48 | 0.32 | 801.43 |
| flip.year | 4 | 9 | 0.01 | 813.55 |
| flip.sex | 4 | 13.6 | 0 | 818.14 |
| Step 2 |  |  |  |  |
| creche age + flipper growth rate + sex + year | 7 | 0 | 0.92 | 680.91 |
| creche age + sex + year | 6 | 4.83 | 0.08 | 688.13 |
| flipper growth rate + hatch date + sex + year | 7 | 91.24 | 0 | 772.15 |
| hatch date + sex + year | 6 | 92.95 | 0 | 776.24 |
| flipper growth rate + sex + year | 6 | 109.87 | 0 | 793.16 |
| sex + year | 5 | 116.66 | 0 | 802.28 |
| intercept only | 3 | 138.73 | 0 | 828.82 |
| Creche tibiotarsus length |  |  |  |  |
| Step 1 |  |  |  |  |
| tib.sex\_year | 5 | 0 | 0.62 | 742.01 |
| tib.sex.year | 6 | 1.17 | 0.35 | 740.85 |
| tib.sex | 4 | 6.27 | 0.03 | 750.54 |
| tib.year | 4 | 8.66 | 0.01 | 752.94 |
| Step 2 |  |  |  |  |
| creche age + sex + year | 6 | 0 | 0.77 | 613.1 |
| creche age + tibiotarsus growth rate + sex + year | 7 | 2.37 | 0.23 | 613.09 |
| hatch date + sex + year | 6 | 107.32 | 0 | 720.42 |
| tibiotarsus growth rate + hatch date + sex + year | 7 | 109.48 | 0 | 720.2 |
| sex + year | 5 | 126.58 | 0 | 742.01 |
| tibiotarsus growth rate + sex + year | 6 | 128.86 | 0 | 741.96 |
| intercept only | 3 | 140.88 | 0 | 760.78 |

Table 2b for chapter 4 of S. Jennings thesis. This may end up being the main text table (table 2 might be appendix)

| Model Structure | creching age | growth rate | hatch date | year | K | Δ AICc | AICc Wt. | -2\*log(Likelihood) | % variance explained |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Creche age** |  |  |  |  |  |  |  |  |  |
| mass growth rate + hatch date + year |  | 0.03 (-0.01 to 0.07) | -0.66 (-0.92 to -0.4) | 0.55 (-1.78 to 2.69) | 6 | 0 | 0.37 | 479.682 | 14.7 |
| hatch date + year |  |  | -0.73 (-1.01 to -0.47) | -0.11 (-2.31 to 2.06) | 5 | 0.2 | 0.34 | 482.215 | 13.4 |
| tibiotarsus growth rate + hatch date + year |  | -0.8 (-2.6 to 0.94) | -0.74 (-0.99 to -0.49) | -0.23 (-2.22 to 1.81) | 6 | 1.79 | 0.15 | 481.471 | 13.8 |
| flipper growth rate + hatch date + year |  | 0.42 (-0.9 to 1.69) | -0.71 (-0.97 to -0.45) | 0.09 (-1.98 to 2.09) | 6 | 2.03 | 0.14 | 481.711 | 13.7 |
| **Creche mass** |  |  |  |  |  |  |  |  |  |
| creche age + mass growth rate + sex + year | 50.29 (38.6 to 63.54) | 9.42 (6.93 to 11.83) |  | -234.76 (-377.59 to -97.22) | 7 | 0 | 0.75 | 1138.058 | 51.5 |
| **Creche flipper length** |  |  |  |  |  |  |  |  |  |
| creche age + flipper growth rate + sex + year | 4.19 (3.69 to 4.79) | 4.74 (1.02 to 8.76) |  | -14.91 (-21.68 to -8.45) | 7 | 0 | 0.92 | 680.912 | 55.3 |
| **Creche tibiotarsus length** |  |  |  |  |  |  |  |  |  |
| creche age + sex + year | 3.13 (2.76 to 3.47) |  |  | -6.88 (-11.73 to -2.62) | 6 | 0 | 0.77 | 613.103 | 58.8 |