Journal of Avian Biology

JAV-02319

Sofaer, H. R., Nagle, L., Sillett, T. S., Yoon, J. and Ghalambor, C. K. 2020. The importance of nighttime length to latitudinal variation in avian incubation attentiveness. – J. Avian Biol. 2020: e02319

Supplementary material

Supplementary material Appendix 1 for JAV-02319.

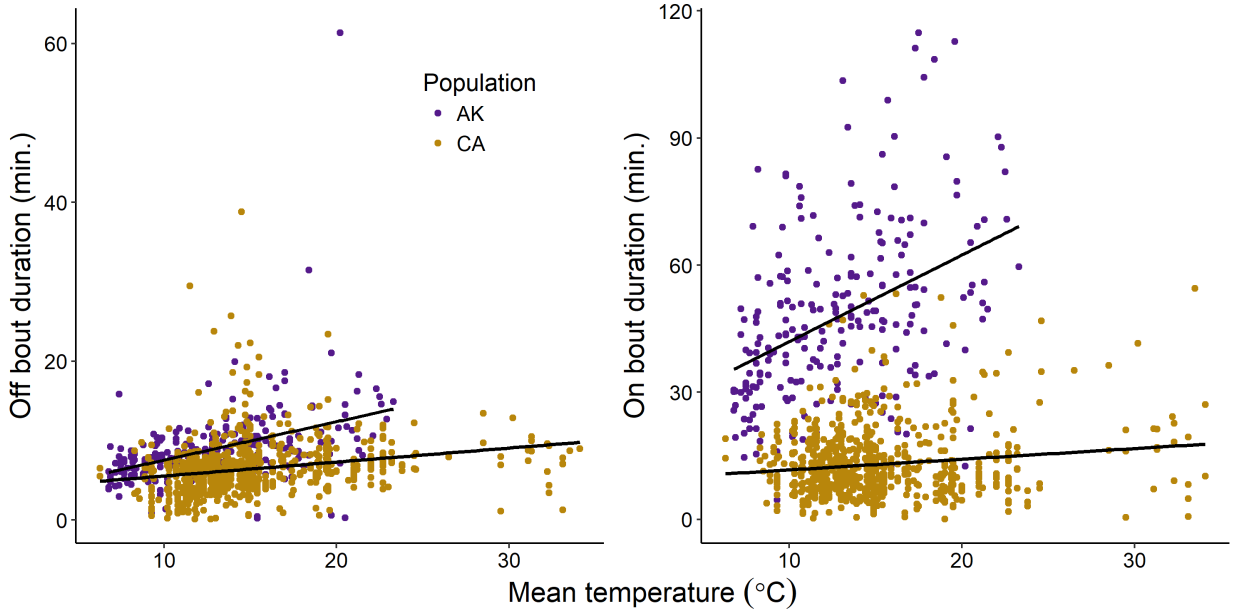

Figure A1. The length of off-bouts and on-bouts generally increased with mean temperatures in both populations, with a steeper increase seen in Alaska. Although populations responded differently to temperature in their off- and on-bouts, effects on attentiveness were less striking because longer off-bouts counteracted longer on-bouts. In addition, attentiveness (the proportion of each hour on the nest) had a maximum value of 1, while on-bouts in Alaska could be over one hour long. We focused on attentiveness because it integrates bout lengths while being less sensitive to other ecological differences between populations (e.g. effects of visually oriented predators on nest visitation rates). Lines represent fits from simple linear regression. Note different scales on y-axes.

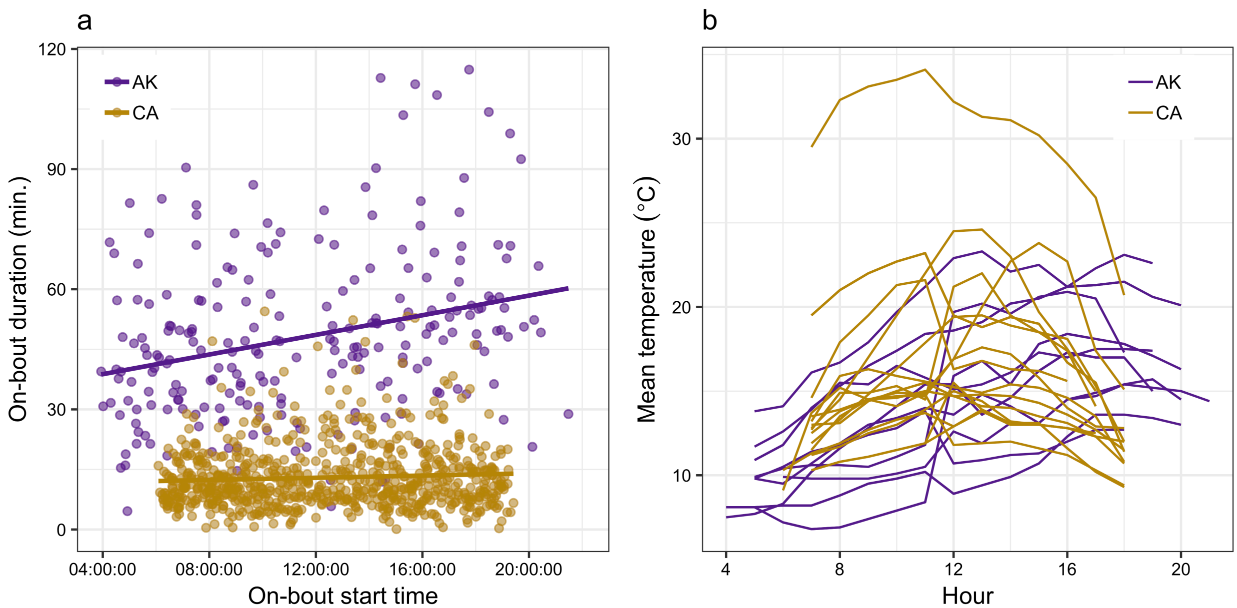

Figure A2. Longer on-bouts occurred during the afternoon in Alaska, when temperatures were warmer than in the morning. In California, on-bout durations did not vary linearly with time of day. A) On-bout duration versus the start time of that bout. Lines represent fits from simple linear regression (AK: $\beta = 0.0003 \pm 0.00008$, $t_{229} = 4.41$, $p < 0.0001$; CA: $\beta = 0.00004 \pm 0.00002$, $t_{722} = 1.74$, $p = 0.08$). B) Mean temperature across the day, shown for hours in which the female was active during the entire hour. For example, if the first nest departure was at 4:30 am, data are shown beginning at 5am; this corresponds to the data included in the analysis of daytime attentiveness. Lines represent individual nests, and so show the change in temperature across a 24-h period (although note that data were collected from noon to noon, leading to artificially sharp changes in temperature between 11 am and 12 pm).