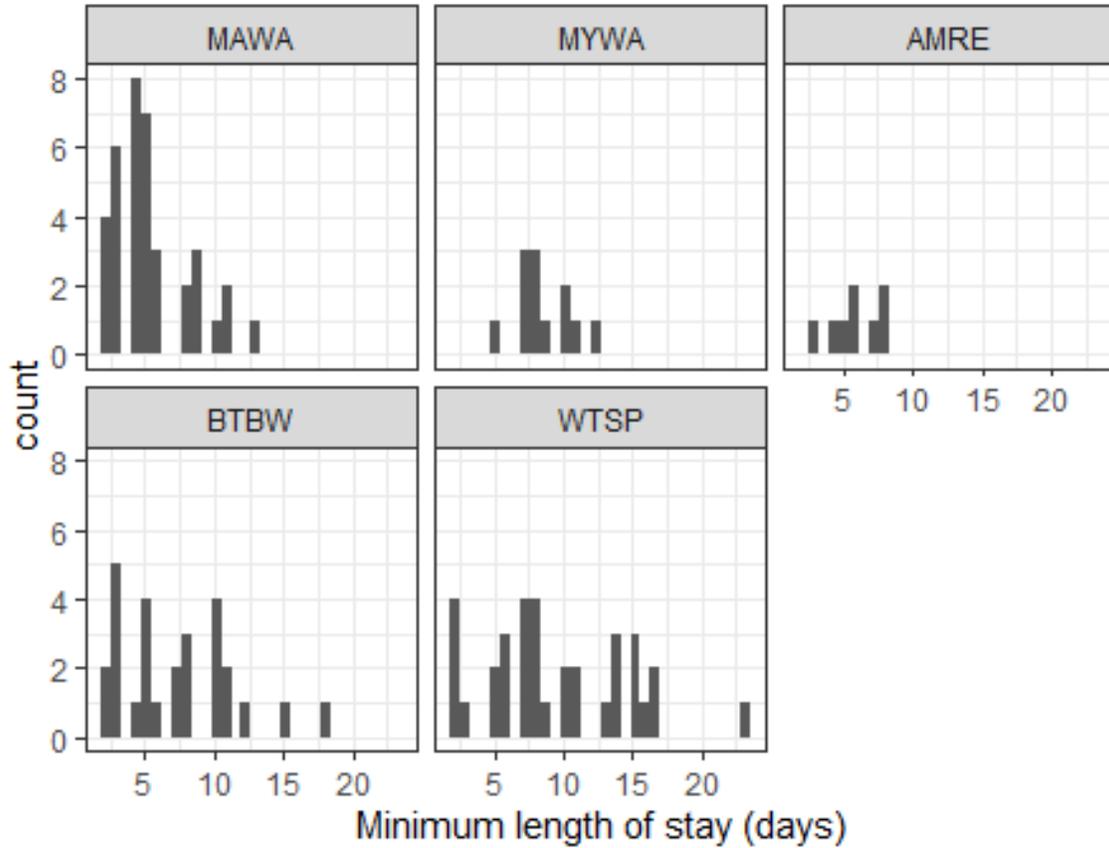**Supplementary material**

Figure S1. Frequency histograms of minimum length of stay (days) for the five species tracked with automated radio-telemetry at a stopover site in southern Ontario, Canada. MAWA = magnolia warbler; MYWA = myrtle warbler; AMRE = American redstart; BTBW = black-throated blue warbler; WTSP = white-throated sparrow.

Figure S2. Boxplots of departure time relative to sunset (h) for the five species tracked with automated radio-telemetry at a stopover site in southern Ontario, Canada. MAWA = magnolia warbler; MYWA = myrtle warbler; AMRE = American redstart; BTBW =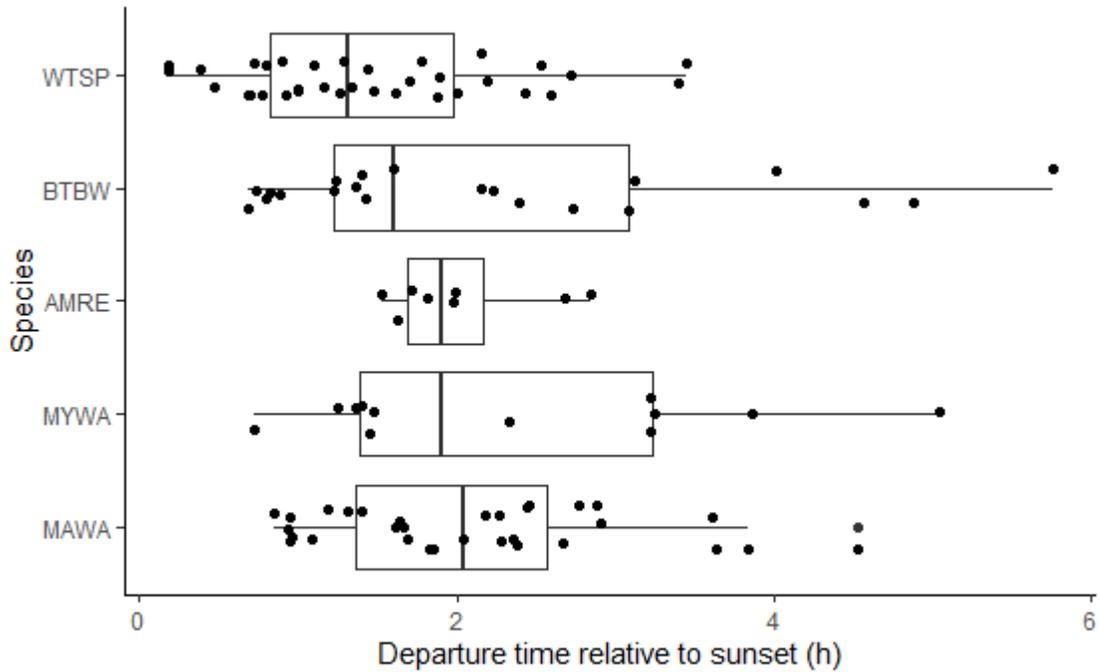 black-throated blue warbler; WTSP = white-throated sparrow. The points represent individual observations and are jittered to facilitate visualization.
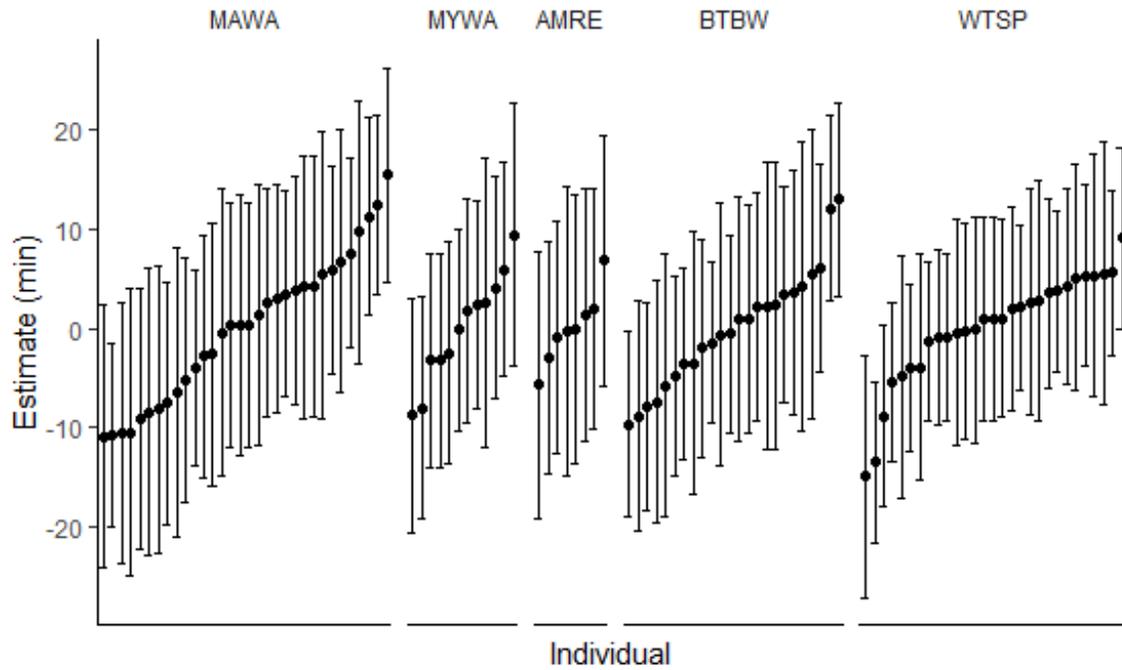
Figure S3. Random intercept estimates with 95% confidence limits for the five species tracked with automated radio-telemetry at a stopover site in southern Ontario, Canada. MAWA = magnolia warbler; MYWA = myrtle warbler; AMRE = American redstart; BTBW = black-throated blue warbler; WTSP = white-throated sparrow. Estimates are sorted within each species.

Table S1. Results of a linear mixed model to compare cpt_{ss} values on day T versus all earlier days but the capture day, when outliers were not excluded. The model included an effect of cloud cover ($F_{1,503}$ = 35.1, p < 0.0001), species ($F_{4,503}$ = 11.7, p < 0.0001), day ($F_{1,503}$ = 10.1, p = 0.0017), and a species × day interaction ($F_{1,503}$ = 11.0, p < 0.0001). Shown are the pairwise differences in least square means for each species.

Species	Estimate ± SE	t
American redstart	-20.0 ± 7.5	t_{503} = -2.67, p = 0.0077
black-throated blue warbler	-16.4 ± 4.2	t_{503} = -3.94, p < 0.0001
magnolia warbler	-11.9 ± 3.5	t_{503} = -3.39, p = 0.0007
myrtle warbler	-7.6 ± 7.6	t_{503} = -0.99, p = 0.3222
white-throated sparrow	15.7 ± 3.9	t_{503} = 4.03, p < 0.0001