

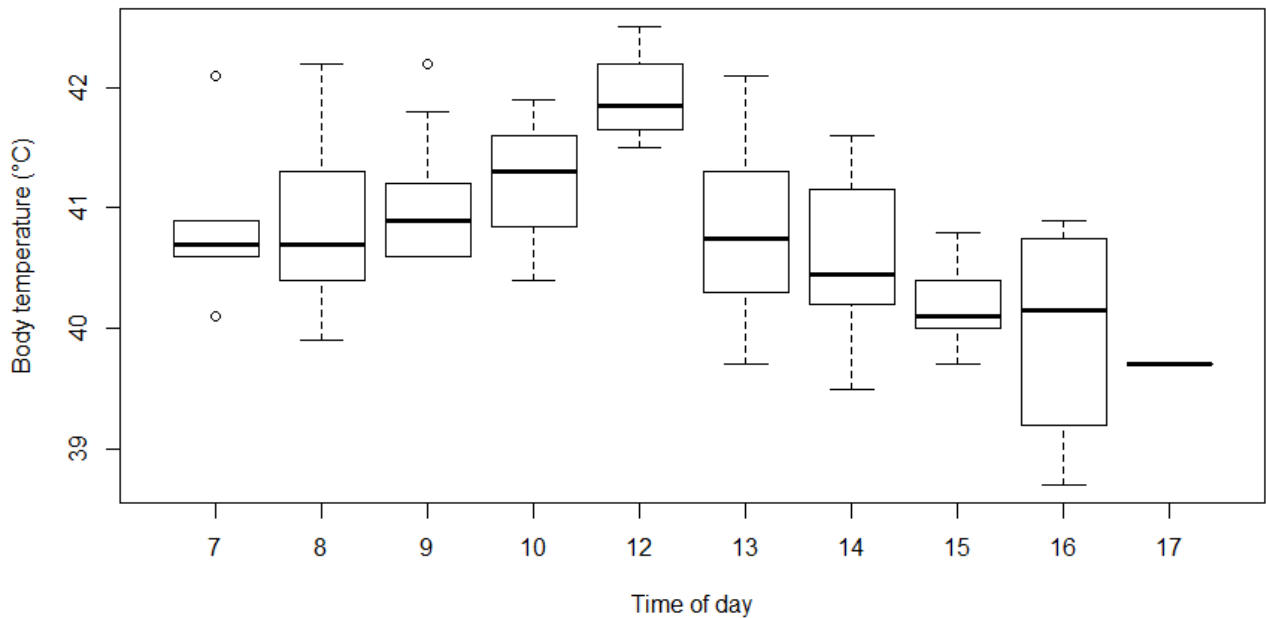
### Frequency distribution of fat and muscle scores

Fat class	Swallow	Whinchat	Garden warbler
0	7	5	29
1	2	2	22
2	0	3	8
3	0	2	4
4	2	0	0

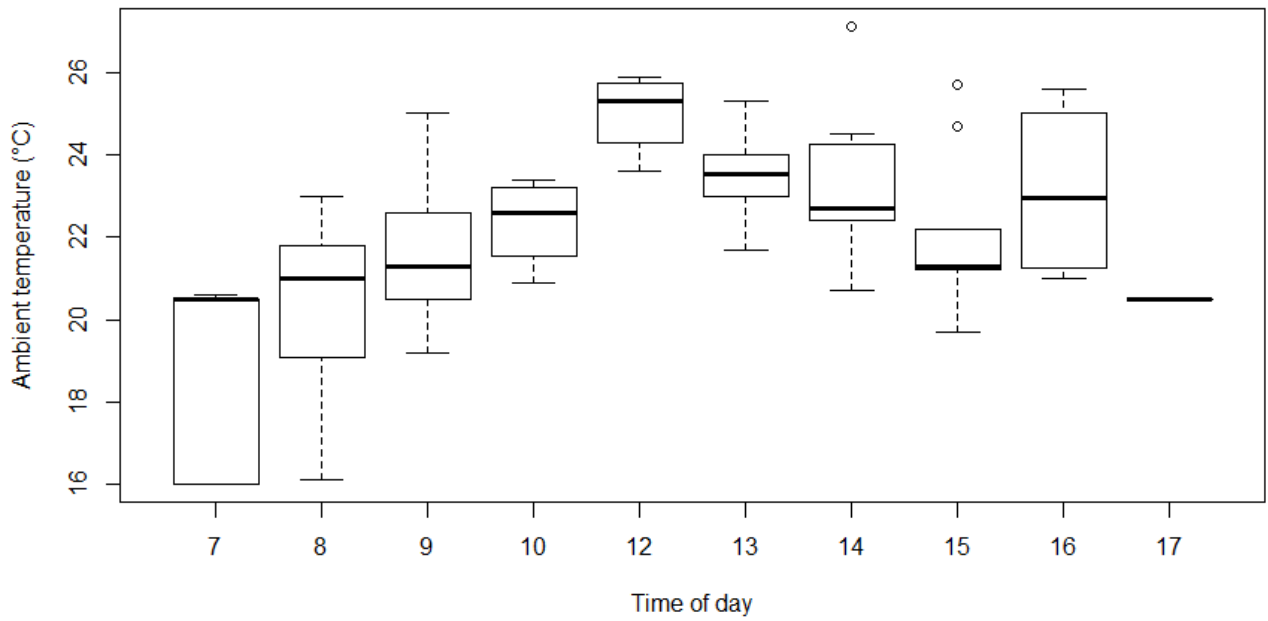
Muscle class	Swallow	Whinchat	Garden warbler
0	0	0	2
1	8	4	22
2	3	8	35
3	0	0	4

**Table S1.** Total sample sizes for every fat and muscle score class in the three species.

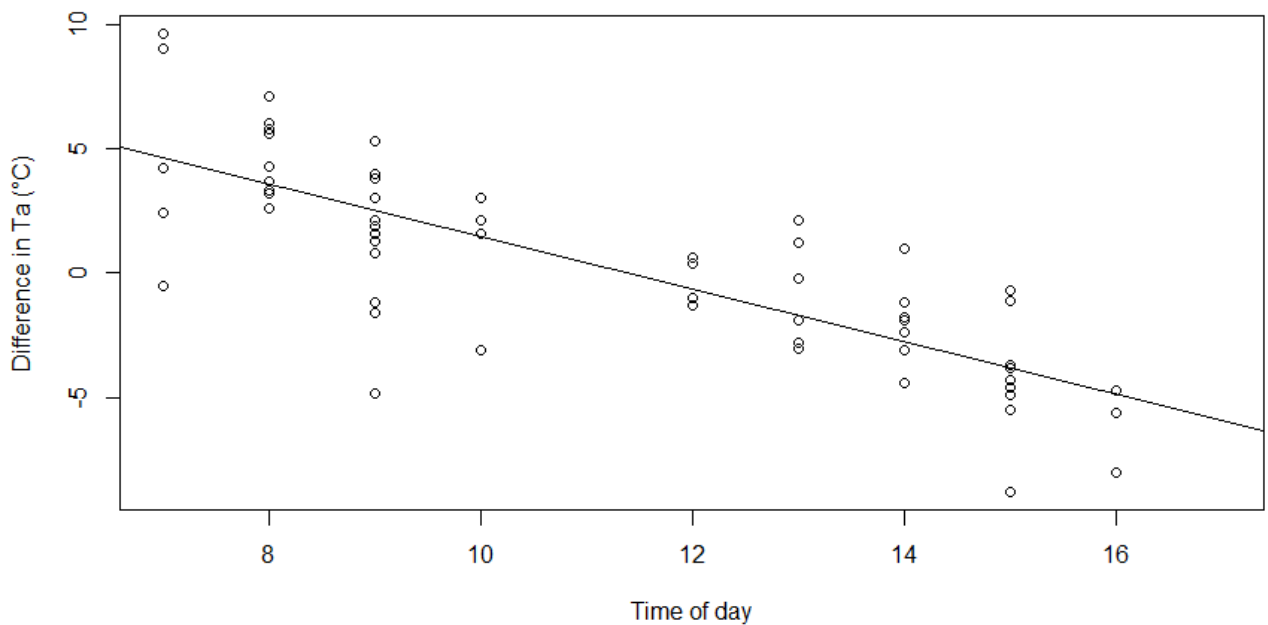
### Daily variation of body temperature and ambient temperature



**Figure S1.** Diurnal profile of Tb in garden warblers. Horizontal lines show the median value, and the bottom and top of the boxes indicate the 25% and 75% percentiles. Whiskers show either the maximum value or 1.5 times the interquartile range, whichever is smaller.



**Figure S2.** Diurnal profile of Ta. The measurements were taken simultaneously to the Tb sampling of garden warblers (see methods). Whiskers show either the maximum value or 1.5 times the interquartile range, whichever is smaller.



**Figure S3.** The change in Ta is correlated with time of day ( $r = 0.63$ )