

Avoid south-facing birdhouses—for the nestlings' sake

April 5 2018



Baby birds in next box. Credit: Fredrik Andreasson

Ten-day-old baby birds are able to maintain their regular body



temperature despite nest box temperatures of 50 degrees C or above. Researchers at Lund University in Sweden now report that nestlings pay a high price for regulating their body temperature—they grow less. Therefore, the recommendation when putting up a nest box should be to avoid hot, south-facing locations and choosing a spot in the shade.

The study examined how baby blue tits are affected by higher temperatures in the <u>nest</u>. The results show that growth suffers when they are forced to expend a large amount of their energy on maintaining a normal <u>body</u> temperature in a hot <u>nest box</u>.

"We have studied baby blue tits, but our results are likely to apply to other small hole-nesting birds in similar environments and climates," explains Fredrik Andreasson, biologist at Lund University.

He has some practical advice for those putting up a nest box: "Don't place it in a south-facing position, as that is where it will be hottest. If possible, you should choose a place in the shade."

The results are also relevant in the context of rising temperatures due to climate change. Birds, and probably other animals as well, must actively rid themselves of heat, so there is less energy remaining for growth, finding food and other expenditures.

According to the researchers, it is the first time a study of this type has been conducted. They warmed up the nest environment inside the box for a week by placing regular hand warmers under the nesting material. During that time, they continuously measured the temperature in the nest box, the nestlings' body temperature and their weight.

Fredrik Andreasson and his colleagues are surprised that a 10-day-old baby bird is so good at removing excess heat from its body. "It's remarkable, and indicates that natural selection has favoured birds with



this ability. Quite simply, it's dangerous to get too hot."

More information: Fredrik Andreasson et al. Experimentally increased nest temperature affects body temperature, growth and apparent survival in blue tit nestlings, *Journal of Avian Biology* (2018). DOI: 10.1111/jav.01620

Provided by Lund University

Citation: Avoid south-facing birdhouses—for the nestlings' sake (2018, April 5) retrieved 3 May 2024 from https://phys.org/news/2018-04-south-facing-birdhousesfor-nestlings-sake.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.