

alone [25]. The authors' interpretation, that microevolution may have compensated for imperfect temperature sensitivity, accords with our findings [25]. Our full-annual cycle data from captive flycatchers identify the putative mechanism of these advancements as accelerated circannual timing during winter, before birds prepare for reproduction [3, 8, 9].

It is promising to observe season-specific change in a species whose ability to keep pace with a shifting climate may depend on its capacity for evolutionary change [8, 10, 39]. Long-distance migrants are in decline and face a myriad of anthropogenic threats. As the earth's climate continues to change, the consequences of failing to keep pace with the seasons have been well demonstrated; flycatchers are declining most strongly where they are the most mistimed relative to the spring peak in food abundance [12]. However, whether evolutionary change will suffice for flycatchers to keep pace with climate change remains to be determined. Further common garden studies over time could shed light on the evolutionary potential of phenology in a changing world.

STAR★METHODS

Detailed methods are provided in the online version of this paper and include the following:

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SUPPLEMENTAL INFORMATION

Supplemental Information can be found online at <https://doi.org/10.1016/j.cub.2019.08.072>.

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AUTHOR CONTRIBUTIONS

B.H. helped the late Ebo Gwinner with the design and execution of the captive study. U.H. and D.H. collected the field data. B.M.V.D. carried out all analyses, with help from B.H., and B.H. and B.M.V.D. wrote the paper.

DECLARATION OF INTERESTS

The authors declare no competing interests.

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