

# Migrating birds speed up in spring

September 7 2016

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Migrating songbirds like Baltimore orioles travel faster in spring to reach their breeding grounds on time. Credit: K. Horton

It turns out being the early bird really does have its advantages. A new

study in *The Auk: Ornithological Advances* shows that migrating birds fly faster and put more effort into staying on course in spring than in fall, racing to arrive to their breeding grounds as soon as possible to get an edge in raising the next generation.

Migrating birds travel faster in [spring](#) than in fall because arriving late to their [breeding grounds](#) can affect their reproductive success. Past studies have shown that migrants take shorter breaks in spring, but it's harder to tell whether they also move faster in the air. When they used high-tech weather surveillance radars operated by NOAA and the Department of Defense on [migrating birds](#), Kyle Horton of the University of Oklahoma and his colleagues found that birds did indeed fly faster in spring and compensated more for crosswinds that could blow them off course.

"Many migration studies look at a few individuals, maybe on the scale of hundreds, but with radar, we're now documenting the behaviors of millions of individuals on a given night. That's a lot of data, and when you do see flight behavior results that are regionally or seasonally different, it's quite compelling," says Horton. He hopes birds' ability to adjust their migratory behavior for different conditions will buffer them against the effects climate change, which may cause large-scale shifts in wind intensity.

This study made use of recent upgrades to government radar stations. "In 2013 an additional plane of polarization was added to the radars, giving us another dimension to look at [migratory birds](#), among other things," explains Horton. "This allowed us to measure the orientation of birds directly for the first time."

"Horton et al. have tapped the great potential of large-scale surveillance radars to advance our understanding of migration ecology," adds the University of Delaware's Jeff Buler, a radar ecology expert who was not involved in the study. "Their novel analysis reveals macroscale patterns

in the aggregate behaviors of migrating [birds](#) that support existing literature on flight strategies of migrants. In addition, their analysis makes new discoveries about greater overall wind compensation during spring and new hypotheses about the processes underlying these patterns."

**More information:** "Seasonal differences in landbird migration strategies" *The Auk: Ornithological Advances*, September 7, 2016, [www.aoucospubs.org/doi/abs/10.1642/AUK-16-105.1](http://www.aoucospubs.org/doi/abs/10.1642/AUK-16-105.1)

Provided by The Auk

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