

# How wind might impact birds' migration routes

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For centuries, scientists have been working to unravel the many mysteries of bird migration, studying where birds go, how they find their way, and how much of the information they need is inherited and how much is learned.

In some of the latest research, investigators examined whether wind might impact birds' choice of route during migration. They found that following the optimal route, calculated using 21 years of empirical global wind data, reduced median travel time by 26.5% compared with the spatially shortest route. They also determined that following a wind-optimized route would usually lead to a higher survival rate of [birds](#) compared with the shortest route. Over time, this might have an evolutionary advantage, which suggests that migratory routes are likely under strong natural selection.

A map of various observed aerial flyways is available online.

"With this model we provide simple explanations for some iconic migrations and offer a tool to further explore and better understand the emergence of migratory routes at global scale," said Dr. Bart Kranstauber, lead author of the *Ecology Letters* article.

**More information:** B. Kranstauber et al. Global aerial flyways allow efficient travelling, *Ecology Letters* (2015). [DOI: 10.1111/ele.12528](https://doi.org/10.1111/ele.12528)

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