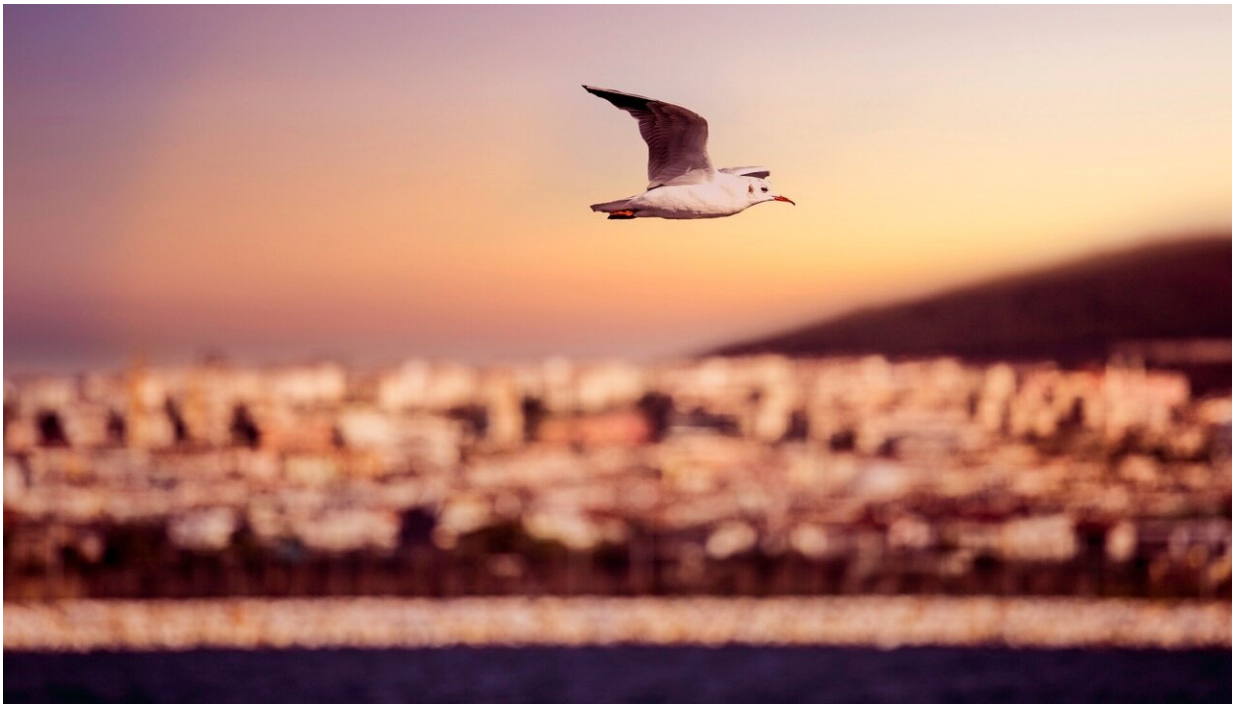


Darker-winged birds have better flight performance

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Many seabirds evolved dark wings, independent from each other. New research shows that these darker wings heat up more and that this heating up increases the efficiency of flight in birds. Furthermore, the study confirmed that darker wings are mostly present in seabirds that are already efficient at flight.

In a publication in the *Journal of the Royal Society Interface*, researchers from UGent, The von Karman Institute for [fluid dynamics](#) (VKI), KULeuven, the Royal Belgian Institute for Natural Sciences and Northwestern University, show for the first time that the color of feathers can have an influence on the evolution of flight performance. Using the wind tunnels at the VKI, they found that stronger heating of darker bird wings resulted in an increase of flight efficiency, sometimes up to 20%.

Furthermore, using [evolutionary analyses](#), they showed that the quantity of dark pigment, melanin, follows an evolutionary trajectory that is similar to other variables that contribute to flight efficiency. Birds that are efficient fliers, such as the albatross, thus tend to have dark wings. As such it seems that dark wings are yet another adaptation to minimize the cost of flight.

More information: Svana Rogalla et al, The evolution of darker wings in seabirds in relation to temperature-dependent flight efficiency, *Journal of The Royal Society Interface* (2021). [DOI: 10.1098/rsif.2021.0236](#)

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