

City birds adapt to their new predators

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This is a blackbird in a city park. Credit: J.D. Ibáñez-Álamo

Faced with the same threat, city and country birds do not react in the same way despite being from the same species. According to a new study, urban birds have changed their anti-predator behaviour in new environments.

When a bird is faced with a <u>predator</u>, its only objective is to escape. However, city birds do not react in the same way as their <u>countryside</u> counterparts, despite being from the same species. Urbanisation plays an influential role in their <u>survival strategies</u>.

To study this phenomenon, Juan Diego Ibáñez-Álamo, researcher at the University of Granada (UGR) and Anders Pape Møller from Paris-Sud University (France) analysed the escape techniques of 1,132 birds



belonging to 15 species in different rural and urban areas.

Published in the *Animal Behaviour* journal, the results show that city birds have changed their behaviour to adapt to new threats like cats (their main predator in the city) instead of their more traditional enemies in the countryside, such as the sparrow hawk.

"When they are captured, city birds are less aggressive, they produce alarm calls more frequently, they remain more paralysed when attacked by their predator and they loose more <u>feathers</u> than their countryside counterparts," as explained to SINC by Juan Diego Ibáñez-Álamo.

The surprising thing is that urbanisation is directly linked with these differences, which become more acute the earlier the former has taken place. This suggests that escape strategies evolve alongside the expansion of cities; a concept that is on the increase worldwide.

Adapt or die in the territory of man

Like the habitat of many animals and plants, the habitat of birds changes and fragments. Discovering how they adapt to transformations in their habitat is "crucial" for understanding how to lessen their effects. "Predation change caused by city growth is serious," outlines Ibáñez-Álamo.

As the scientist indicates, tactics against their hunters are "crucial" so that birds can adapt to their new environment: "Birds should modify their behaviour to be able to survive in cities because if not, they will become extinct at the mercy of urban growth."

More information: Møller, A. P.; Ibáñez-Álamo, J. D. "Escape behaviour of birds provides evidence of predation being involved in urbanization" *Animal Behaviour* 84(2): 341-348 <u>DOI</u>:



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