Bird conservation threatened by shifting baseline syndrome

New research shows that populations of dozens of waterbird and seabird species have been declining for much longer than previously thought in Europe. The article "Shifting the baseline for waterbird and seabird conservation in Europe, risk assessment over one century" demonstrates that ignoring population trends over the last century leads to setting under ambitious goals for restoring biodiversity.

In Europe, major bird conservation and monitoring efforts were launched in the 1970s in response to the degradation of their habitats and populations. Monitoring species provides highly accurate information on the current conservation status of their populations. But ignoring what preceded these monitoring efforts potentially leads to underestimating the true extent of the declines.

A study conducted by the Tour du Valat (France) and the University of Turku (Finland), published in Biodiversity and Conservation, analyzed more than a century of data (1900–2018) on 170 species of waterbirds and seabirds. Its conclusions are clear: ignoring historical declines shifts the baseline for at least 40% of the species assessed. The researchers show that using the 1970s as a baseline tends to normalize an already severely degraded state. "Restoring bird populations to their 1970s levels is not enough: their decline began long before that," warns Thomas Galewski (Research Director at the Tour du Valat). Restoration policies should therefore be based on a perspective of at least a century in order to be truly ambitious.

Even more worrying is the fact that some species have been in continuous decline for over a century. This is the case for the Black Tern and the Corncrake. "These species should be placed as a priority for conservation efforts," warns Élie Gaget (Tour du Valat), lead author of the study.

Since the 1970s, international conventions and European directives have been adopted to protect birds and habitats. However, the results remain insufficient: 61 out of 170 species continue to decline. The causes—destruction of wetlands, intensification of agricultural practices, overfishing, pollution, illegal or unsustainable hunting—remain powerful and insufficiently controlled. Climate change is exacerbating existing pressures and disrupting ecological balances.

The Greater Flamingo, which had almost disappeared from Western Europe in the 1960s, has spectacularly recolonized the Mediterranean basin thanks to the protection of its breeding sites, first in the Camargue, then in other wetlands in Spain, Italy, and Turkey. After decades of persecution that had almost wiped it out, the Great Cormorant has once again become a common bird on our coasts and wetlands. But these conservation successes should not obscure the reality: many species have lost a large part of their historical range, and some have never recovered their early 20th-century numbers.

"Long-term monitoring, such as censuses, is our best weapon against the shifting baseline syndrome. Without collective memory, we risk normalizing an already impoverished world," concludes Thomas Galewski.

About the Tour du Valat

The Tour du Valat is a research institute dedicated to the conservation of Mediterranean wetlands, based in the Camargue (France), with the status of a private foundation recognized as being of public utility. Founded in 1954 by Luc Hoffmann, the Tour du Valat

has since developed its research activities with one constant concern: to better understand these environments—wetlands are the most abundant and most threatened ecosystem on the planet—in order to manage them more effectively. Convinced that Mediterranean wetlands can only be preserved if human activities and the protection of natural heritage go hand in hand, the Tour du Valat has for many years been developing research and integrated management programs that encourage exchanges between users and scientists, mobilize a community of stakeholders, and promote the benefits of wetlands to decision-makers.

For more information

Reference:

Gaget, E., Brommer, J.E., Galewski, T. (2025). Shifting the baseline for waterbird and seabird conservation in Europe, risk assessment over one century. https://doi.org/10.1007/s10531-025-03155-1

Press contacts:

Coralie Hermeloup, Tour du Valat – hermeloup@tourduvalat.org

Thomas Galewski, Tour du Valat — galewski@tourduvalat.org

Pictures



The Black Tern has been in continuous decline for over a century © T. Galewski- Tour du Valat



The Greater flamingo, which had almost disappeared from Western Europe in the 1960s, has spectacularly recolonized the Mediterranean basin thanks to the protection of its breeding sites. © T. Galewski- Tour du Valat



After decades of persecution that had almost wiped it out, the Great Cormorant has once again become a common bird on our coasts and wetlands. © T. Galewski- Tour du Valat