

Researchers say 40% of UK seabird species are in trouble—bird flu, climate change, overfishing to blame

September 3 2024, by Richard Gregory



Credit: Kindel Media from Pexels



A visit to a seabird colony in summer is an assault on the senses. First there's the noise, then the overwhelming ammonia smell that stains the memory, and then the swirl of color and activity on the white-washed cliffs.

When you're standing hundreds of meters above the crashing sea, there can be hundreds or thousands of breeding seabirds in the air or on the sea below, or precariously perched on poorly made nests or ridiculously narrow ledges.

In these seabird cities you can spot tender moments, like an auk delicately turning its single egg for incubation while another feeds its oversized youngster. Brutality is never far either: a chick snatched to feed a bigger brood, an incoming parent robbed of its hard-won fish supper by a piratical gull, a dead bird bobbing face down on the sea.

All life is here in the seabird colony, and the British Isles is particularly rich.

This string of islands in the North Atlantic is home to nearly 30 species of seabird and hosts large portions of their total populations. Most of the world's Manx shearwaters (90%), northern gannets (70%) and great skuas (60%) nest here, as do more than 20% of the European population of nine <u>seabird species</u>.

British people have a special responsibility to protect these birds that are a harbinger of ocean health, sitting as they do at the top of a delicate food chain.

Sadly, <u>a new scientific assessment</u> has reported alarming declines over the last 25 years in the UK's seabird populations. Five new species have joined the "<u>red list</u>," which denotes the highest category of conservation concern: Leach's storm-petrels, common gulls, great black-backed gulls,



Arctic terns and great skuas. These join the already listed kittiwakes, herring gulls, roseate terns, Arctic skuas and puffins, which are all highly threatened.

On the upside, if there is an upside, two seabirds were judged to be less threatened based on new data. Shags and black guillemots moved to the amber and green list respectively, though both are gradually declining. Nearly 40% of breeding seabirds are now red-listed in the UK—and 73 bird species overall (30% of the UK total).

Looking down

Seabirds face many threats. Among the gravest are changes to their food supply linked to overfishing and climate change.

Ocean warming disrupts and shifts the life cycles of seabird prey, such as sandeels, and the resulting scarcity can cause populations to collapse. Increasingly severe winter storms and summer heat waves also kill seabirds.

The broader effects of climate change and the warming of the ocean are difficult to predict, but the associated increase in acidification and lower oxygen levels are certain to upset food webs.

Entanglement in fishing gear, invasive predators and collisions with offshore turbines present yet more challenges.

On top of all this came the highly pathogenic HPAI H5N1, a new strain of the avian influenza virus that was first detected in the UK in 2021 and has resulted in the deaths of tens of thousands of seabirds and affected almost every seabird species.

HPAI H5N1 was first identified in domestic waterfowl in southern



China in 1996 and rapidly spread into their wild relatives. Migratory species carried the virus around the world, and still do. Thankfully, human deaths remain extremely rare. The jump into seabirds was unexpected as, until then, it was found mostly in wild waterfowl and domestic poultry.

Seabirds such as terns, gulls, auks and northern gannets were hit hard but the impact on great skuas was most striking. Their numbers are down by over 70% from the last census, which was taken between 2015 and 2021.

Seabird lifestyles predispose them to infectious diseases and make it hard for them to recover. Seabirds typically produce just a few young (often only one) in a single brood each year. At least these birds are longlived and can continue to breed throughout their lives. But living in dense, crowded colonies at a few sites that they can fly between means diseases can easily spread and take hold.

Looking up

The story is not all doom and gloom—much is happening to aid their recovery.

The UK and Scottish governments decided to <u>close sandeel fisheries</u> in the English North Sea and all Scottish waters from 2024. Many seabirds, including kittiwakes and puffins, depend on sandeels to feed their chicks, and so the moratorium is a positive move that should be sustained.

Far-sighted projects to remove invasive predators, especially rats, from seabird islands across the UK are also showing great results. The removal of brown and black rats from Lundy Island, Devon, led to the immediate return of breeding Manx shearwaters and puffins after an absence of many years.



Marine protected areas such as Lyme Bay on the south coast of England are proof that sustainable fishing and conservation can go hand in hand (even if these sites are typically tiny). Trawlers were excluded from Lyme Bay in 2008 and the area has been managed by the local fishing industry and conservationists. A decade on from the ban, bottom-living seafans, rare corals, shellfish and fishes have all bounced back wonderfully.

More is needed to reverse the fortunes of seabirds. Well-resourced national seabird conservation strategies should protect colonies from invasive predators, extend and improve the country's patchwork of marine protected areas, encourage more nature-friendly marine development (including for renewables) and better manage fisheries to ensure there is enough for seabirds to eat and less accidental bycatch in <u>fishing gear</u>, which kills thousands of seabirds in UK waters each year.

Our seabirds are special in many ways. I'd recommend a visit to a seabird colony, to drink in the spectacle and reflect on the lives of these birds and our responsibilities to them.

This article is republished from <u>The Conversation</u> under a Creative Commons license. Read the <u>original article</u>.

Provided by The Conversation

Citation: Researchers say 40% of UK seabird species are in trouble—bird flu, climate change, overfishing to blame (2024, September 3) retrieved 5 September 2024 from <u>https://phys.org/news/2024-09-uk-seabird-species-bird-flu.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.