

Sea level rise may drive coastal nesting birds to extinction

June 1 2017



Eurasian oystercatcher. Credit: Andreas Trepte, www.photo-natur.net

Rising sea levels and more frequent flooding events may drive coastal nesting birds around the world to extinction, a team of international researchers say following their 20-year study of Eurasian oystercatchers.

Lead researcher Dr Liam Bailey from The Australian National University (ANU) said one of the main reasons for the strong decline in

birds that used coastal habitats was because they had shown no response to tidal floods, which are predicted to become more frequent and severe due to climate change.

He said this view was corroborated by other international research.

"Sea level rise and more frequent flooding are major drivers of this steep decline in coastal birds," said Dr Bailey, a PhD graduate from the ANU Research School of Biology.

"Our study [species](#), the Eurasian oystercatcher, lives in an area where flooding is becoming more common, posing a threat to the survival of the population.

"Our study found no evidence that Eurasian oystercatchers have increased the elevation of their nests, even among birds that lost a nest during a flood. Factors including the presence of predators or unsuitable vegetation might discourage birds from nesting higher."

The team will investigate other possible strategies that birds may use to avoid flooding, such as encouraging birds to lay their nests earlier in the year when floods are less common.

A recent study using thousands of bird surveys along the east coast of the United States found consistent declines in coastal marsh [birds](#).

"Researchers predict that rising sea levels and increased flooding events may drive the saltmarsh sparrow, a coastal species in the US, to extinction, possibly even within the next 20 years," Dr Bailey said.

"Like the Eurasian oystercatcher, this species does not appear to be adapting to the changing tidal conditions."

A similar study in Europe showed strong declines in coastal bird species along the coast of Northern Europe.

"Our work is part of a growing amount of research that shows the vulnerability of coastal bird species. These species may need additional conservation focus in the future," he said.

The research is published in the *Philosophical Transactions of the Royal Society B*.

Provided by Australian National University

Citation: Sea level rise may drive coastal nesting birds to extinction (2017, June 1) retrieved 30 April 2024 from <https://phys.org/news/2017-06-sea-coastal-birds-extinction.html>

<p>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.</p>
--