

Extinct Canary Island bird was not a unique species after all, DNA tests prove

September 16 2019, by Euan Wemyss



Credit: University of Aberdeen

DNA tests have proven an extinct bird species unique to the Canary Islands—whose loss was considered a sizeable blow for genetic diversity—is actually almost identical to types commonly found in the



UK and throughout Europe.

The last known specimen of the now extinct Canary Islands Oystercatcher was shot in its native habitat of the Spanish <u>islands</u> in 1913 by British ornithologist David Bannerman and only eight specimens exist in <u>museum collections</u>.

Canary Islands Oystercatchers were crow-sized wading <u>birds</u> which foraged on beaches hunting for <u>marine invertebrates</u>.

Whilst the familiar beach-dwelling Eurasian Oystercatcher is black and white, the Canary Islands Oystercatcher was almost entirely black earning it the local name of 'sea raven' on the island of Fuerteventura. This black plumage lead to suggestions it was more closely linked to the African Oystercatcher, which is also all black.

However, DNA sequencing of the extinct bird has revealed it is far more closely linked to the Eurasian Oystercatcher—so close that it could be considered to be the same <u>species</u>.

The similarity of the DNA means that the loss of the unique Canary Island Oystercatcher will have resulted in the loss of less genetic biodiversity than previously thought.





Credit: University of Aberdeen

An international team of scientists led by the University of Aberdeen isolated and sequenced DNA from two museum specimens held in Manchester Museum and the World Museum, Liverpool and then compared it to fresh samples from African Black and Eurasian Oystercatchers. The results are published in the scientific journal Ibis.

There was little evidence to suggest the Canary Island Oystercatcher warrants status as a species in its own right, and should be better treated as a subspecies of the Eurasian Oystercatcher.

Professor Martin Collinson from the University of Aberdeen said: "The



black and white Eurasian Oystercatcher is a common sight in the UK and across the continent.

"Being almost entirely black, it was suspected the Canary Islands Oystercatcher might have been a variant of the almost identical African Black Oystercatcher.

"However, our study shows that despite its appearance, the Canary Islands Oystercatcher is genetically much more similar to the Eurasian Oystercatcher and in fact is so close a match, that it is more than likely a subspecies of Eurasian, rather than a species in its own right.

"Unlike the specimen that Bannerman shot in 1913, it appears in this instance that we have dodged a bullet as no significant <u>genetic diversity</u> has been lost with the extinction of the Canary Islands Oystercatcher."

The reasons for the Canary Islands Oystercatcher's extinction are not fully understood but the introduction of cats and rats, and potentially human hunting are thought to have had an impact, as was the case with the loss of man island species. The impact of humans on the marine ecosystem is also thought to have played a role with people competing with the oystercatchers for shellfish.

Scientific bird naming committees like the International Ornithological Congress and Birdlife International will now have to decide whether to downgrade the species.

Dr. Alexander Lees, Senior Lecturer in Conservation Biology at Manchester Metropolitan University, and co-author of the paper added: "Although the Canary Island Oystercatcher is less distinct than we thought, it was still a unique population and its loss a reminder of how vulnerable to extinction island bird communities are. Oystercatchers weren't the first bird species to disappear from the Canaries but we can



fight to make sure they are among the last."

Provided by University of Aberdeen

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