

Research provides insights on lethal blindness in a Scottish bird of conservation concern

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The Scottish bird population of red-billed choughs, which currently totals less than 60 breeding pairs and is of major conservation concern, is being affected by lethal blindness that is passed on by non-blind individuals that carry a mutant gene.

That's the conclusion of a recent study that also found that non-blind [individuals](#) carrying the mutant gene are likely to be widely distributed within the population, making eradication of the mutation difficult. Non-blind individuals carrying the mutation were also found to have more offspring per year than individuals that don't carry the mutation, so that the [mutant gene](#) is likely to persist in the population in the future.

"Despite being lethal, blindness only affects a few chough chicks each year and should probably not be the priority concern for Scottish chough conservation, compared with managing habitat for choughs," said Amanda Trask, lead author of the *Journal of Animal Ecology* study. "However, the blindness may be a symptom of the poor 'genetic health' of the population, so strategies to manage these genetic concerns will need to be considered in the future."

More information: Amanda E. Trask et al. Evidence of the phenotypic expression of a lethal recessive allele under inbreeding in a wild population of conservation concern, *Journal of Animal Ecology* (2016). [DOI: 10.1111/1365-2656.12503](https://doi.org/10.1111/1365-2656.12503)

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