

Text A:

The ongoing sixth mass species extinction is the result of the destruction of component populations leading to eventual extirpation of entire species. Populations and species extinctions have severe implications for society through the degradation of ecosystem services. Here we assess the extinction crisis from a different perspective. We examine 29,400 species of terrestrial vertebrates, and determine which are on the brink of extinction because they have fewer than 1,000 individuals. There are 515 species on the brink (1.7% of the evaluated vertebrates). Around 94% of the populations of 77 mammal and bird species on the brink have been lost in the last century. Assuming all species on the brink have similar trends, more than 237,000 populations of those species have vanished since 1900. We conclude the human-caused sixth mass extinction is likely accelerating for several reasons. First, many of the species that have been driven to the brink will likely become extinct soon. Second, the distribution of those species highly coincides with hundreds of other endangered species, surviving in regions with high human impacts, suggesting ongoing regional biodiversity collapses. Third, close ecological interactions of species on the brink tend to move other species toward annihilation when they disappear—extinction breeds extinctions. Finally, human pressures on the biosphere are growing rapidly, and a recent example is the current coronavirus disease 2019 (Covid-19) pandemic, linked to wildlife trade. Our results reemphasize the extreme urgency of taking much-expanded worldwide actions to save wild species and humanity’s crucial life-support systems from this existential threat.

“Vertebrates on the brink of biological annihilation and the sixth mass extinction”, Gerardo Ceballos, Paul R. Ehrlich, Peter H. Raven, PNAS [Proceedings of the National Academy of Sciences, USA], 1 June 2020

Text B:

Imagine, for instance, that the last dodo didn’t perish. Imagine a single survivor, a lonely fugitive at large on mainland Mauritius at the end of the seventeenth century. Imagine this fugitive as a female. She would have been bulky and flightless and befuddled – but resourceful enough to have escaped and endured when the other birds didn’t. Or else she was lucky.

Maybe she has spent all her years in the Bambous Mountains along the southeastern coast, where the various forms of human-brought menace were slow to penetrate. Or she might have lurked in a creek drainage of the Black River Gorges. Time and trouble had finally caught up with her. Imagine that her last hatchling had been snarfed by a feral pig. That her last fertile egg had been eaten by a monkey. That her mate was dead, clubbed by a hungry Dutch sailor, and that she had no hope of finding another. During the past half-dozen years, longer than a bird could remember, she had not even set eyes on a member of her own species.

*Raphus cucullatus* had become rare unto death. But his one flesh-and-blood individual still lived. Imagine she was thirty years old, or thirty-five, an ancient age for most sorts of bird but not impossible for a member of such a large-bodied species. She no longer ran, she waddled. Lately she was going blind. Her digestive system was balky. In the dark of an early morning in 1667, say, during a rainstorm, she took cover beneath a cold stone ledge at the base of one of the Black River cliffs. She drew her head down against her body, fluffed her feathers for warmth, squinted in patient misery. She waited. She didn’t know it, nor did anyone else, but she was the only dodo on Earth. When the storm passed, she never opened her eyes. This is extinction.

*The Song of the Dodo: Island Biogeography in an Age of Extinction*, by David Quammen, 1996