

Australian rodent species first victim of climate change?

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Extensive searches for the Bramble Cay melomys, a small rat-like animal, have failed to find a single specimen from its only known habitat on a sandy island in far northern Australia

Climate change appears to have driven to extinction an Australian Great Barrier Reef rodent, according to a new study, which suggests the species may be the first mammal lost to the global phenomenon.

Extensive searches for the Bramble Cay melomys, a small rat-like

animal, have failed to find a single specimen from its only known habitat on a sandy island in far northern Australia.

Researchers said the key factor behind the extinction was "almost certainly" ocean inundation of the low-lying cay, likely on several occasions, over the last decade which resulted in dramatic habitat loss.

Available data on sea-level rise and [weather events](#) in the Torres Strait region "point to human-induced [climate change](#) being the root cause of the loss of the Bramble Cay melomys", added the Queensland state government and University of Queensland study.

The *Melomys rubicola*, considered the Great Barrier Reef's only endemic (found nowhere else) mammal species, was first discovered on the cay in 1845 by Europeans who shot the "large rats" for sport.

But the last known sighting, by a professional fisherman, was in 2009.

When a 2014 study found no sign of the species, researchers decided to conduct the most extensive survey possible in the hope of conserving the species.

That survey—using traps, cameras and searches—"produced no records of the species, confirming that the only known population of this rodent is now extinct", said the report.

The 2015 IUCN Red List of Threatened Species implicated climate change in the extinction of another mammal, the Little Swan Island hutia (*Geocapromys thoracatus*), a rodent previously found on a coral atoll in Honduras.

But it found the main driver of its demise was an introduced cat, the report said.

"Consequently, the conclusion here that the extirpation of the Bramble Cay melomys from Bramble Cay occurred because of rising sea levels and an increased incidence of extreme weather events over preceding years is significant in that it probably represents the first documented mammalian extinction due solely (or primarily) to [anthropogenic climate change](#)," it said.

The study added that the main hope for the species was that another population existed in neighbouring Papua New Guinea.

"Consequently, at this stage, it may be premature to declare the Bramble Cay melomys extinct on a global scale," it added.

Environment group WWF-Australia said the fate of the species was a sad reminder of the nation's [extinction](#) crisis.

"Australia officially has the worst rate of [mammal extinction](#) in the world," said spokesperson Darren Grover.

Unless governments commit significant funding towards protecting Australia's threatened [species](#), "we can expect to see more native critters go extinct on our watch", he added.

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