

Eastern Rockhopper Penguin

Eudyptes filholi Hutton, 1879

Population crash



Eastern rockhopper penguin pair. DOC

Quickfacts

One of New Zealand's most numerous endangered species, but number of birds is falling fast

Numbers falling fast

The eastern rockhopper penguin *Eudyptes filholi* is one of the most numerous of New Zealand's endangered species, numbering approximately 100,000 pairs on the Subantarctic Antipodes, Campbell, Auckland and Macquarie Islands. However, rising sea temperatures may be affecting food supply and the Campbell Island population crashed from the 800,000 pairs counted in 1942 to the current 51,500 pairs, the number of nests of eastern rockhopper penguins on the Antipodes Islands declined from 1,242 in 1995 to 885 in 2011, a 29% decrease, and on Marion Island, over a similar time period, the number of breeding pairs decreased from 173,000 to 67,000, a 61% decrease.

Though this massive decline appears to have slowed since the mid-1990s, possibly as a result of a more favourable climate for the birds, the decline continues within some colonies. An increase in natural predation by skua, giant petrel and New Zealand sea lions because of the parents being absent for longer than normal during foraging trips (which is also likely causing weight loss and reduced attendance by parents of eggs and chicks) may be the causes of the current decline in numbers in smaller colonies. While there is no evidence of competition for food with the fishing industry, this is an



ever-present threat, particularly when new fish stocks are harvested.

The eastern rockhopper penguin was until recently considered a subspecies of rockhopper penguin, but a recent analysis of its genes has shown that it deserves recognition as its own species, though closely related to both the western rockhopper penguin *Eudyptes chrysocome* which breeds on islands around South America including the Falkland Islands, and Moseley's rockhopper penguin *Eudyptes moseleyi*, which breeds on a few temperate islands in the southern Atlantic and Indian Oceans. The numbers of both these species are also having dramatic decreases. All three species are crested penguins, with a tuft of long yellow feathers above each eye, and are colonial nesters, nesting together in groups numbering tens of thousands of birds at densities of up to 2.4 nests per square metre. They are thought to forage for small fish, krill and squid at distances further than ten kilometres offshore.

What next?

It seems that the numbers of eastern rockhopper penguins strongly reflect oceanic conditions, which are forecast to become more variable as a result of the changing global climate. Once penguin numbers become low, neighbours are further apart and the pairs are less able to defend each other against their natural predators, and this predation may be preventing some colonies from recovering. Large changes in the populations of other Subantarctic-dwelling penguin and albatross species indicate that changing food supply is a problem for a number of seabirds. Further research is needed on the Subantarctic food web, and the role of penguins within this.

More information

Website: New Zealand birds online - eastern rockhopper penguin. [Link](#)

Scientific paper: Predation by New Zealand sea lions and brown skuas is causing the continued decline of an eastern rockhopper penguin colony on Campbell Island. By Kyle W. Morrison, Doug P. Armstrong, Phil F. Battley, Sarah E. Jamieson, David R. Thompson. *Polar Biology*, 2016. doi:10.1007/s00300-016-1996-9

Scientific paper: Declining eastern rockhopper (*Eudyptes filholi*) and erect-crested (*E. sclateri*) penguins on the Antipodes Islands, New Zealand. By Johanna A. Hiscock and B. Louise Chilvers. *New Zealand Journal of Ecology*, Vol. 38, pages 124-131, 2014. [PDF](#)



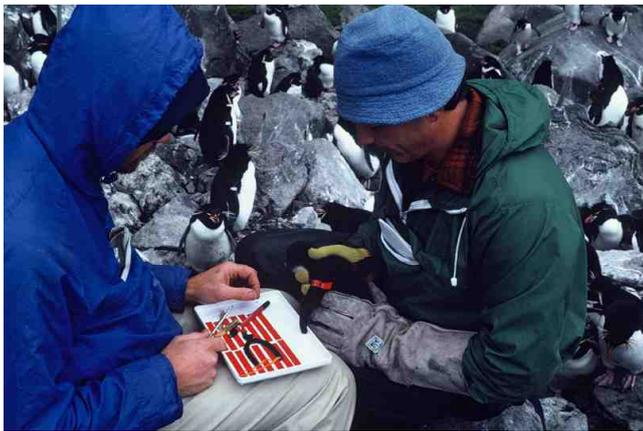
Photos



Eastern rockhopper penguin nesting colony. DOC



Sampling eastern rockhopper penguin blood. DOC



Attaching coloured flipper band for identifying individual eastern rockhopper penguins. DOC



Capturing eastern rockhopper penguin chick for weighing. DOC

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