

## New Zealand's Native Sea Lions Endangered By Fishing

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<http://www.asianscientist.com/in-the-lab/new-zealand-sea-lion-phocarctos-hookeri/>

*AsianScientist* (Aug. 3, 2011) - Marine researchers in New Zealand have identified the direct impact of fishing as the largest known human factor in the decline of the endangered native sea lion population. The team's findings, published in *Mammal Review*, discount non-human factors, such as disease and identifies resource competition and by-catch incidents as the most likely causes.

The New Zealand sea lion *Phocarctos hookeri* is the country's only native pinniped species and is listed as 'nationally critical'. The species breeds in the sub-Antarctic, south of New Zealand's mainland, with 71 percent of the population on the Auckland Islands and the remaining 29 percent on Campbell Island.

Breeding at the Auckland Islands has declined by 40 percent since 1998 with only 1,501 pups being born in 2009. This decline is directly linked to females not returning to breeding areas. However, while the Auckland Island population has declined, the Campbell Island population appears to be slowly increasing.

Potential reasons for the decline in the Auckland Island population, but not in the Campbell Island colony, include non-human factors such as disease, predation, migration, and environmental change. However, possible human factors include population 'overshoot,' the effects of contaminants, resource competition, and by-catch deaths.

Of the nine potential reasons for the decline of the sea lion population the team discounted six by comparing the Auckland island population with the colony on Campbell Island.

"The most plausible hypotheses based on available evidence is that the decline of breeding females in the Auckland Island population is caused by fisheries-induced resource competition and by-catch incidents," said lead author Dr. Bruce Robertson from the University of Otago.

"Resource competition can lead to nutrient stress and decreased reproductive ability in sea lions and this should be a priority area for future research."

The article can be found at: [Robertson BC et al. \(2011\) The population decline of the New Zealand sea lion \*Phocarctos hookeri\*: a review of possible causes.](#)

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Source: [Wiley-Blackwell](#).

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