

# Reducing harm to New Zealand sea lions

## The risks

The foraging ranges of sea lions overlap with the fishing grounds for seasonal trawl fisheries for squid, southern blue whiting, and scampi, in the Southern Ocean. Foraging sea lions have learned that fish in our trawl nets provide an easy source of food, putting them at risk of getting caught in the fishing gear. Underwater footage shows sea lions in attendance with our nets, often pulling fish from them, or swarming around nets when these are at the surface being retrieved full of fish.

New Zealand industry has gone to great expense to reduce our interactions with sea lions, including the successful development of Sea Lion Exclusion Devices (SLEDs) deployed in our trawl nets.

## Managing the risks

New Zealand sea lions are endemic and mostly live in sub-Antarctic waters, although their range is slowly expanding northwards. The largest breeding colonies are on the Auckland and Campbell Islands. Colonies at Stewart Island and in the south of the South Island are growing in size.

In 2014 following the third lowest pup count on record, Fisheries New Zealand and DOC developed a New Zealand sea lion Threat Management Plan (TMP), the first of which was released in 2017.

The TMP recognises the multiple risks faced by New Zealand sea lions. Disease in breeding colonies on the Auckland Islands is assessed to be the single greatest threat. Other identified threats include incidental capture by fishing, unsuitable breeding habitats (e.g. pups drowning in mud holes), concerns that climate change may be affecting food abundance, and land-based human interference in South Island colonies.

Deepwater Group's focus has been on mitigating interactions in fisheries with the highest risk of interaction with sea lions – the trawl fisheries for squid and southern blue whiting in the Southern Ocean. Industry has developed and tested SLEDs, which allow sea lions to escape alive and unharmed from trawl nets. All trawl nets in these two fisheries are fitted with approved and certified SLEDs. Both fisheries have fishery specific management plans to further minimise risks to sea lions. The ELO briefs vessel operators before each season on the risk factors<sup>ix,xx</sup> (area, depth, time of day) relating to incidental captures of New Zealand sea lions. We stay in regular contact with the operators throughout the season to ensure the fleet remains vigilant.

To verify our recording of all interactions with sea lions, between 90 - 100% of the fishing effort in the Auckland Islands squid fishery and the Campbell Island southern blue whiting fishery is monitored by Fisheries New Zealand and DOC observers.

Since 2005 the estimated number of sea lions (from observer records) captured annually by deepwater trawlers has been reduced by around

50 –  
45 –  
30 –  
20 –  
10 –

**80%**

45

9



New Zealand sea lions on Enderby Island.  
© Tamzin Henderson.

## The outcomes

Since 2005, the estimated number of sea lions (from observer records) captured annually by deepwater trawlers has been reduced by around 80% (from 45 to 9 sea lions or fewer in recent years). Work is ongoing to further reduce these interactions.

The New Zealand sea lion threat status has reduced from "Nationally Critical" to "Nationally Vulnerable" as their breeding populations are now considered to be stable or to be increasing in size at most of the main breeding locations<sup>xxi</sup>.

Fisheries interactions are no longer considered to be the primary impact on New Zealand sea lion population survival<sup>xxii, xxiii</sup>.

**"...Fishers are keen to do the right thing and avoid catching sea lions so the population can continue to flourish and that's why they use SLEDs in key fisheries that overlap with sea lion foraging"**

**Nathan Guy**

Minister for Primary Industries  
(2013–17) on funding for sea lion  
Threat Management Plan (May 2017)

## Sea Lion Exclusion Device - SLED

