Post earthquake distribution, abundance and health indicators in kekeno/New Zealand fur seal in Kaikōura



The pre-earthquake picture

- Fur seal numbers were increasing rapidly around Kaikōura.
- Estimate of nearly 600 pups produced at Ōhau Point in 2005.
- Estimate of 2,471 pups produced at Ōhau Point in 2016.
- Exposure to consistently high numbers of tourists.



- Colony growth at Ōhau correlated with increasing road mortality.
- No censusing since the earthquake where are we now?

Why is this work needed?

Management concerns

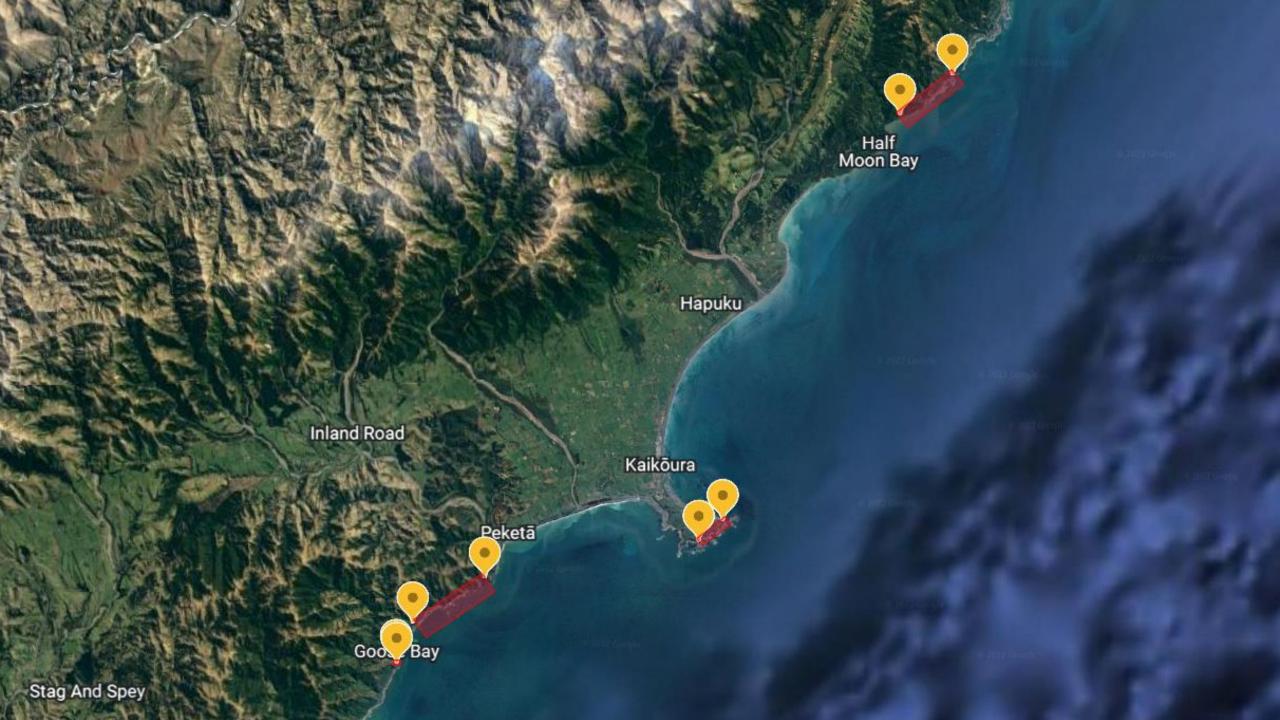
 No benchmark to measure the suitability of current management strategies.

 Scheduled 2024 review of the Kaikōura Marine Management Area Act (2014) – implications for the Ōhau Point fur seal sanctuary.



Academic opportunity

 Opportunity to study the effects of a natural disaster on a recolonizing pinniped population.



Methodology

Distribution, abundance and condition

Direct counts started in November, will provide relative colony sizes + spatial use.

Mark – recapture protocols to estimate annual pup production and population size (February 2023).

During capture, pups will be weighed and measured to assess their body condition.



Habitat mapping

Use of aerial imagery + ground-truthing to assess change in suitable breeding habitat since the earthquake.

Monthly count data so far

- Monthly pup counts ongoing since Nov 2021.
- In the most recent (April) count, we recorded*:
 - 1,567 pups on the north coast.
 - 324 pups on the peninsula.
 - 723 pups on the south coast.

Direct counts of NZ fur seal pups along the Kaikōura coast



*Raw data.

