Long-finned pilot whale strandings in New Zealand—the past 25 years

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A pilot whale mass stranding of 88 individuals on Stewart Island, December 2000

Long-finned pilot whales, *Globicephala melas,* regularly strand on the coastline of New Zealand. Basic stranding information is collated in the New Zealand Whale Stranding Database, administered by the Department of Conservation. Here we analyse data collected between 1976 and 2000.

Paul Ensor

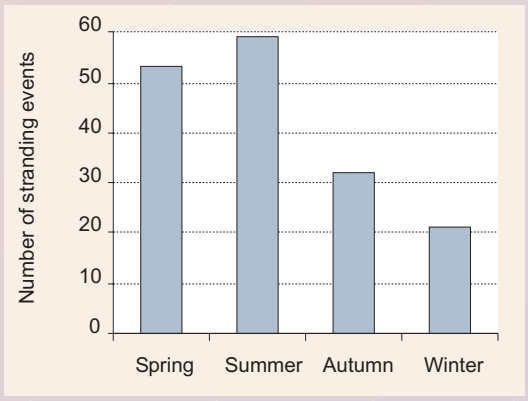
Project Jonah

Stranding season

G. melas strandings were recorded throughout the year, although the majority (68%) occurred in spring and summer: 72% of mass strandings, and 63% of single strandings occurred during these seasons.

There was no significant difference between spring and summer stranding rates.

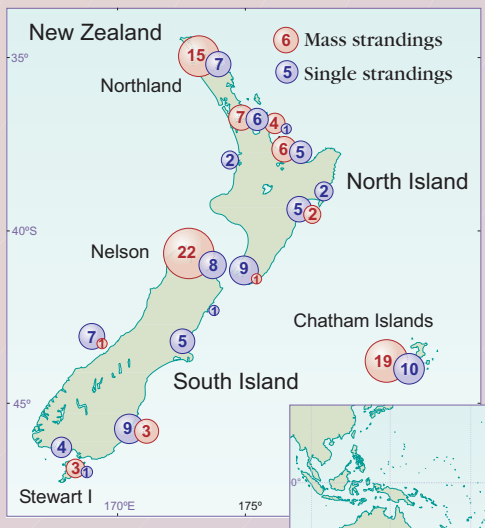
These spring/summer strandings, along with sighting records, may be indicative of migratory movements along the New Zealand coast.



Stranding distribution

Over the 25 years since 1976, 165 *G. melas* stranding events have been recorded. Of these, 83 were mass strandings (two or more individuals) and 82 were single strandings.

Although *G. melas* strandings have been recorded from coastlines throughout New Zealand, 48% were from the Northland, Nelson and Chatham Island regions. These regions all exhibit long, gently sloping beach topography.



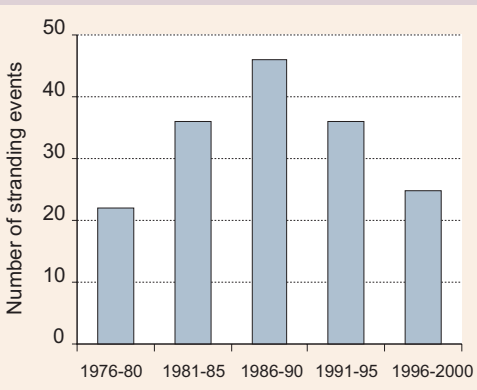
Sheryl Gibney

Wet sheets protect stranded whales from sunlight and over-heating

Sheryl Gibney

Re-floatation of 51 whales (from 97 total) using pontoons at Parengarenga Harbour, Northland

Stranding trends over time



The 25-year recording period was broken down into five-yearly periods to assess trends over time.

Strandings peaked during the 1986–90 period, but not significantly so.

No definitive trends were seen for mass or single stranding events over time.

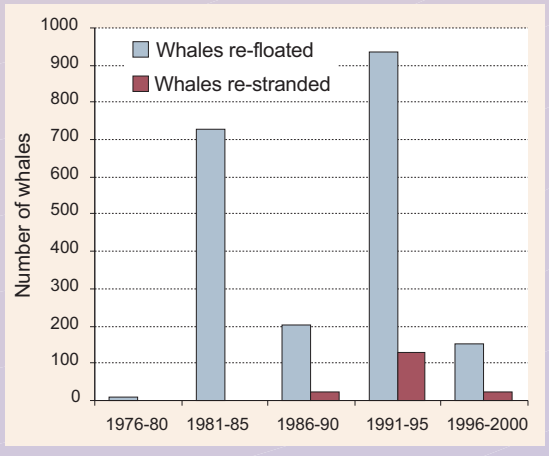
The ratio of mass v. single strandings for each of the 5-yearly periods was approximately 1:1.

Re-floatation effort

Over the 25-year period, 2024 (34%) of a total 5990 *G. melas* were re-floated, mostly using whale rescue pontoons.

The re-strand rate of animals from mass strandings was much lower (8%) than the rate for single strandings (51%).

The actual survival rate of re-floated pilot whales is likely to be considerably lower than 92% and 49%, however: animals that die at sea may not wash ashore, or may wash up on remote coasts.



Long-term research

Long-term research into the survival of re-floated pilot whales in New Zealand will include photo-identification and genetic sampling, tagging and satellite tracking of re-floated individuals. This research will provide data on population size and distribution, and survival rates of whales following a re-floatation effort.

Whale rescue pontoons have greatly enhanced the ability to return stranded whales to the sea quickly, which is important as New Zealand does not have land-based whale rehabilitation facilities.

One aim of the long-term research project is to provide information that will assist management decisions on whether stranded whales are likely to survive re-floatation attempts. Results from this research will be important in evaluating the effectiveness, cost and humane treatment aspects of rescuing stranded whales.

Department of Conservation
Te Papa Atawhai

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