



# Seabird ecology

## The big OE –New Zealand seabird migrations



There are over 8600 identified bird species in the world and only 359 of them are considered manu moana/seabirds. That's a pretty small number of seabirds when you consider that the ocean covers 72 per cent of the Earth's surface and contains 97 per cent of the Earth's water. But life at sea for birds is a challenge and seabirds have had to specially adapt to travel and hunt in a salt-water environment.

New Zealand has 85 species of seabirds that nest on the mainland and offshore islands. Some of these seabirds stay in New Zealand waters year-round, others heke/migrate and only return to New Zealand to breed.

Animals usually migrate seasonally following food sources and weather patterns.

## A wrong turn

Hutton's shearwaters only breed in two places in the Kaikoura Seaward Mountains, not too far from the town of Kaikoura.

In 2006 there were a series of bad storms right when the Hutton's shearwater fledglings were about to take their first flight all the way to Australia. The wet and misty conditions meant that many of the young, inexperienced flyers became disoriented by Kaikoura's lights and ended up in backyards and on streets all over town.



A tracking tag on the leg of a white-capped albatross, photo courtesy David Thompson, NMWA

### Key words

moult

heke – migrate

### Manu moana – Seabird

Hutton's shearwater

tītī – sooty shearwater and  
Cook's petrel

### Tag...you're it

There are some seabird species that we know very little about. But electronic tracking tags are helping scientists learn more about some seabirds and other migrating animals.

By attaching tracking tags to certain species of seabirds, scientists have confirmed that many seabirds spend up to 90 per cent of their lives at sea.

A dedicated group of volunteers and Department of Conservation staff were able to collect 160 of the fledglings and nurse them back to health. The young seabirds were taken to a safe location where they were fed and allowed to rest before starting off on their journey again.

## The longest migration



Sooty shearwaters follow an 'endless summer' around the Pacific Ocean in search of food

Scientists recently used tracking tags to track 19 tītī from two different breeding colonies in New Zealand. What the scientists discovered is that the migration routes of the tītī represent the longest recorded migration of any animal ever tracked.

“We know that many species of albatross, along with Arctic terns and Cory’s shearwaters travel great distances too, so the record may be broken in the future, but what we found after tracking the sooty shearwaters is that they each travelled on average 64,000 kilometres in less than a year’s time,” says Department of Conservation scientist Graeme Taylor.

The tracked sooty shearwaters flew across the entire Pacific Ocean, from Antarctic waters to the Bering Sea and from Japan to Chile. The sooty shearwaters fly in a figure-of-eight migration pattern and seem to use global wind patterns to increase their flight speeds and reduce the amount of energy they use.

Although sooty shearwaters number in the millions, their numbers are dropping. Scientists hope that the information gained by studying sooty shearwaters at sea might also help us understand why there aren’t as many sooty shearwaters as there used to be.