



# Seabird ecology

## Fishing for food

Searching for food at sea takes a lot of energy and skill. To find food at sea, different seabird species have adapted to feed on the moana/ocean's surface, to ruku/dive, to scavenge, or to prey on the eggs and chicks of other seabirds.

### Surface deep

Marine currents can push krill, fish and squid up to the ocean's surface. Keen eyesight, great sense of smell and the ability to travel great distances are three adaptations that help seabirds find these marine smorgasbords. Sometimes seabirds will follow dolphins and whales to catch small ika/fish that have been disturbed.

### Key words

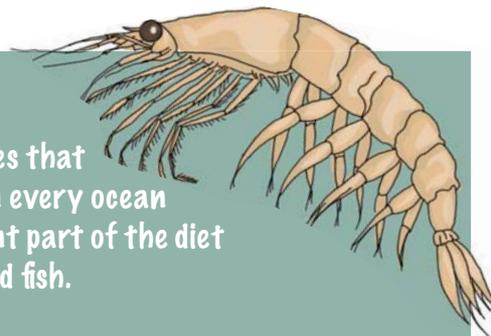
- adaptation
- ika – fish
- heke – migrate
- moana – ocean, sea
- ruku – dive

### Manu moana – Seabird

- hākoakoa – brown skua
- masked booby
- pāngurunguru – northern giant petrel
- tākāpu – Australasian gannet
- tītī – sooty shearwater

### What are krill?

Krill are small marine invertebrates that look like shrimp. They are found in every ocean in the world. Krill are an important part of the diet of many whales, seabirds, squid and fish.



### Plastic food

Sometimes seabirds mistake small pieces of plastic floating in the water for food. Not only is plastic bad for them, if their stomachs are full of plastic they can starve to death.

It has been reported that more than one million seabirds die globally each year from being tangled up in or eating plastic.



Plastic is a major threat to seabirds and other marine life, photo courtesy DOC

The Southern hemisphere has less plastic in its oceans than the Northern hemisphere, but because many seabirds heke/migrate it's a global issue. Where do you think the plastic comes from? What can we do to stop our oceans from being polluted?



Black-backed gull, photo courtesy Rod Morris



Green Teens Sophie Turner, Brittany Packer and Abby Ward earned YHA Young Conservationist Awards in 2006 for their work to reduce the number of plastic shopping bags people in Nelson use, photo courtesy of YHA, Mardi Neumann

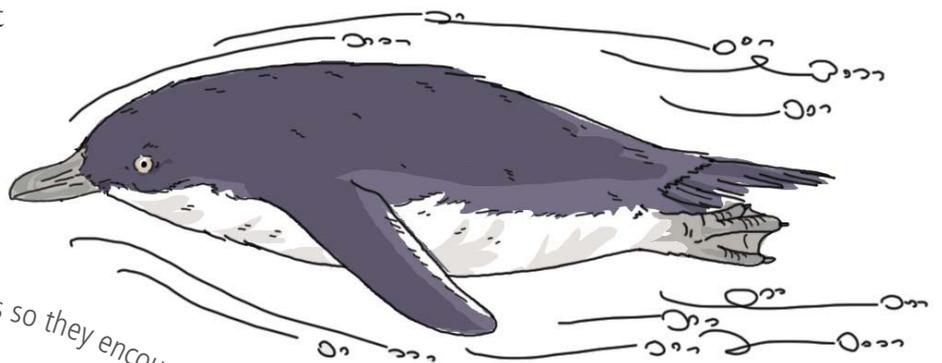
### Plastic bag free

The Golden Bay community of Collingwood was the first New Zealand town to become plastic shopping bag free. Even though it's a small community, it's estimated that they were using one million plastic shopping bags each year before they went plastic bag free.

New Zealand-wide, we use more than 800 million bags each year.

## Hot pursuit

Seabirds often fish for food by diving. Some dive while they're in the water. This is called pursuit diving. Penguins can't fly in the sky, but they can fly underwater as some of the greatest pursuit divers in the world. Many pursuit divers are better adapted to being in the water than to being on land or in the air.



Penguin bodies are tapered at both ends so they encounter little resistance as they push through the dense medium of water.

# Taking the plunge

Plunge diving is diving into the water from high above the sea. In New Zealand only tākapu/Australasian gannets, masked boobies and some terns are true plunge divers.



Gannets can dive at speeds of up to 145km per hour!

At Te Matau a Māui (Māui's fish hook)/Cape Kidnappers gannet colonies people can watch as tākapu/Australasian gannets plunge dive into the ocean for their food.

When a hunting gannet sights a fish it will plummet into the water at speeds up to 145 kilometres an hour. Gannets can dive to depths of more than 15 metres in pursuit of their prey.

Gannets are specially built for plunge diving. Their skull is super strong to withstand the shock of hitting water at high speeds. They also have special air sacs that cushion the impact.

# Opportunity knocks

Gulls, skuas and giant petrels will eat the eggs and young of other seabirds. Brown skuas patrol seabird colonies in search of untended eggs and chicks to eat. They also catch many adult petrels. These birds are known as opportunists.

# Dangerous meals

Many seabirds also scavenge for food. Seabirds that scavenge are at great risk when they forage around fishing vessels.

In the trawl fishery seabirds sometimes get injured or killed by the steel cables that tow the trawl net and other seabirds get caught in the net itself and drown.

In fisheries that use hooks instead of nets seabirds try and take the bait off the hook and sometimes get hooked themselves and drown.

In New Zealand, many fishing vessels use devices that scare away the seabirds so the birds are less likely to get hurt. Southern Seabird Solutions, fishermen, government officials, scientists, conservationists and others are working to find other solutions to stop seabirds from being killed by fishing equipment.

Brown skua dining on the remains of a Chatham Island little blue penguin, photo courtesy of DOC, Don Merton



Seabirds follow fishing vessel, photo courtesy Southern Seabird Solutions Fishers Photograph Competition

