

■ IMPORTANT SPECIES

Many sites identified in the present report as being significant received their ranking due to the presence of important species^{31,190,269,319,320,392,396}. Many sites provide habitat for important species, while others are feeding and breeding areas or migratory routes. Species were separated into seabirds³¹⁷, marine mammals, fish (including sharks), invertebrates, algae¹ and vascular plants. Within these broad groups the status and a brief comment on each species are provided below. Greater detail about the ecology, distribution, breeding, feeding, threats and status of important species is on the Marlborough District Council's website.

Important species were selected to be included in this report based on the following criteria.

- Ecological status
- Ecosystem role
- Rarity
- Remnant status
- Commercial, cultural or recreational importance
- Representing extremes of geographic distribution

Plant and animal species were also assessed according to the following criteria.

- 1 Nationally critical
- 2 Nationally endangered
- 3 Nationally vulnerable
- 4 Serious decline
- 5 Gradual decline
- 6 Sparse
- 7 Range restricted
- 8 Conservation/scientific importance
- 9 Iconic
- 10 Biogenic habitat-forming species
- 11 Data deficient
- 12 No status

BIRDS



AUSTRALASIAN GANNET (*Morus serrator*)

The Australasian gannet is a large white seabird with a yellow head, black outer wing feathers with some black on the tail. The strong straight bill is distinctive as is its steady direct flight and spectacular diving behaviour to catch fish. The Australasian gannet is seen on inshore waters surrounding New Zealand as well as Norfolk Island and Australia. In New Zealand most breeding colonies are in the northern half of the North Island. In the South Island gannets breed at Farewell Spit, the Sounds, the Nuggets in Otago Peninsula and on Solander Island, Foveaux Strait. Gannets are seen throughout the year in all parts of the Marlborough Sounds, more frequently in the sheltered waters of the outer Sounds. Diet is mainly small fish such as pilchards, anchovy, mackerel and small squid. Fish are caught by near vertical dives from heights up to 30m above the surface. These are then swallowed after the bird surfaces. They are often seen in association with feeding dolphins.



In 1980 the New Zealand population was estimated at 40,000 pairs with an additional 6600 pairs in Australia³⁸⁹.

Gannets bred at several sites in the outer Pelorus Sound in the early 1970s and became established at Waimaru Bay in 1974⁴². This colony increased to 129 pairs in 2001. Approximately 35-40 birds were counted nesting on the adjacent mainland at Waimaru in September 2008. A second colony established at Anatholia Bay, on the western shores of Arapawa Island, in 1999. There were 45 nests at this site in 2002.

Gannets are regarded as a significant species in Marlborough because there are relatively few breeding areas in New Zealand, two of which are located in Marlborough.

Gannet (DOC)



BANDED RAIL (*Gallirallus philippensis assimilis*)

The banded rail is a largely terrestrial bird with mainly brown upperparts, finely banded black and white under-parts, a white eyebrow, chestnut band running from the bill round the nape, with a buff band on the breast. This species comprises several subspecies found throughout much of Australasia and the south-west Pacific region, including the Philippines, New Guinea, Australia, New Zealand and numerous smaller islands, covering a range of latitudes from the tropics to the sub Antarctic. Other subspecies which were endemic to the Chatham Islands and Macquarie Islands are now extinct.





Banded rail (DOC)

They prefer estuarine habitats comprising soft intertidal substrata with scattered rushes merging into dense woody vegetation in the higher tidal reaches. They are usually found in association with a stream or river and sea rushes rather than the jointed wire rush.

Breeding pairs stay on their territory year-round and make cup-shaped nests, well hidden among dense rushes or grasses. Breeding occurs from spring through summer with both parents taking turns to incubate the eggs. After hatching, the young follow the parents to feed on crabs, snails and worms for two months, and are then evicted from the territory.

Banded rail have been reported from several estuaries within Marlborough where suitable

habitat exists. These sites include the Havelock Estuary, Mahakipawa Arm, the head of Kenepuru Sound, Duncan Bay and Shakespeare Bay^{47,125}.

They are regarded as a significant species in Marlborough because of their relatively low abundance and because they are only found at particular locations. They have been adversely impacted by human development around estuarine margins and by predation.

FAIRY PRION (*Pachyptila turtur*)



The fairy prion is a small seabird with blue-grey upperparts and a characteristic black line zig-zagging across the wings and body, while its underparts are pale. It is usually seen in flocks at sea where the flight is erratic and close to the water surface.

The fairy prion is widespread and numerous in sub-tropical and sub-Antarctic waters. It has a circumpolar distribution, breeding on many subantarctic islands including the New Zealand mainland and the Chathams, Snares, Antipodes Islands and possibly on islets off Campbell Island. In Marlborough it breeds on Stephens Island, Jag Rocks, Sentinel, Trios and Brothers Islands during spring and summer months. It is present in outer Sounds and Cook Strait at all times of the year³⁶⁵.



Fairy prion (DOC)

Breeding colonies are all on predator-free islands and may be in open grassland or under coastal forest and shrub-lands. Birds may return to their colonies as early as March but the single egg is not laid until November¹⁸². Most

chicks fledge by late January. On Stephens Island, their burrows are often used by tuatara³⁸². Diet is mainly krill, planktonic crustaceans and invertebrates taken from the sea surface.

The New Zealand region may support 50% of global population of fairy prion with half of these (one million birds) breeding on Stephens Island^{248,318,319}.

They are regarded as a significant species in Marlborough because of the large numbers of birds that breed here.

FLESH-FOOTED SHEARWATER (*Puffinus carneipes*)

Flesh-footed shearwater are a large chocolate brown bird that grows up to 44 cm long and is superficially similar to the more common sooty shearwater except for a pale bill and feet which can be seen during flight. It is more likely to be seen in ones or twos than the sooty shearwater which usually flocks. Cook Strait contains the southern most breeding colonies in New Zealand, but it also breeds in the Indian Ocean and around Australia. The flesh-footed shearwater is a summer breeder, returning to colonies in late September with young birds ready to fledge by late April. After breeding they migrate northward in the Pacific Ocean.

Most food is probably obtained at night including squid which may be on the surface¹⁸². During the day birds will dive deep for prey or scavenge behind fishing vessels.



Flesh-footed shearwater (MDC)

Flesh-footed shearwater are seldom seen within the Sounds and most often observed in Cook Strait. The estimated New Zealand population thought to be less than 50,000 pairs³⁶⁵. Titi Island is the main breeding ground in Marlborough but this may now contain less than 100 pairs. The only other known colony is on middle Trio where historically a few individuals have been known to breed⁴⁸.

They are regarded as a significant species in Marlborough because of their low numbers surviving at the southern limit of their range. This species has a “declining” status within New Zealand.



Flesh-footed shearwater, foreground, and two sooty shearwater, behind. (DOC)

FLUTTERING SHEARWATER (*Puffinus gavia*)



Fluttering shearwater (Kanae Hirabayashi)

The fluttering shearwater is a medium sized shearwater, growing to 33 cm long, with characteristic dark grey upper parts and pale under parts. The under-wings are pale, bordered with grey. It differs from Hutton's shearwater in having smaller and paler under-wings, but is not easily distinguished at sea.

Cook Strait is the southern limit to their breeding. Young birds and some adults spend the autumn and winter in eastern and southern Australia³⁶⁵. Birds will visit burrows throughout the year but activity peaks in August with breeding over the summer months and the single young fledging in late January to early February. In Marlborough they are found on most rodent-free islands with the largest colonies on Trios and Long Island³⁰.

Feeding range is restricted to coastal waters and the continental shelf. Diet is mostly small fish which is taken by shallow plunge dives from a few metres above the surface or krill which is obtained by birds sitting on the water and dipping.

Population estimates range from more than 100,000 birds³⁶⁵ to possibly a million³¹⁹.

They are regarded as a significant species in Marlborough because of their abundance and contribution to the fertility of the island ecosystems where they breed. This species is the most abundant shearwater in Marlborough often seen in large flocks inside and outside the Sounds making it one of the most characteristic seabirds in the area.



KING SHAG (*Leucocarbo carunculatus*)

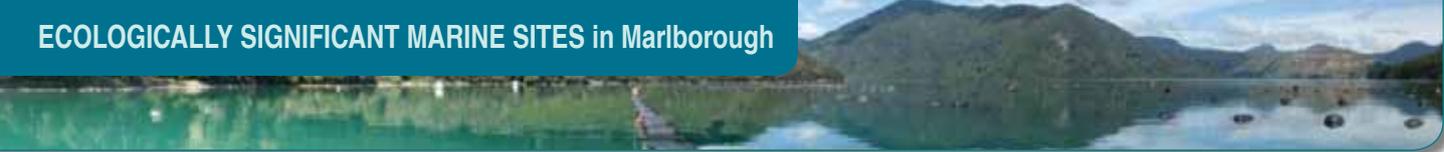


The king shag are a large black and white shag, identified by its pink feet and white wing patches which show clearly as a white bar when the bird is perched. Closer examination is unlikely but would reveal orange caruncles above the bill and a bright blue eye-ring. The king shag is endemic to the outer Marlborough Sounds.

Like most shags, the king shag has a protracted breeding season with egg-laying occurring from March through to June with the last young usually leaving the colonies by late winter.

Studies have shown that in Pelorus Sound the diet was almost exclusively witch flounder and a left-eyed flatfish²¹⁹. Birds from the Trios and Stewart Island colonies were found to forage mostly within 10 km of the colony and at depths up to 50m³⁴⁰.

King shag (DOC)



The king shag breed at four main sites in the outer Sounds (White Rocks, Sentinel, North Trio and Duffer's Reef). A few birds have initiated breeding on Stewart Island to the east of D'Urville and on Rahuinui south of Greville Harbour. A few pairs bred successfully on the southern tip of Blumine Island in 2000 and 2001. In 2006 and 2007, 20-30 birds also attempted to establish on the western stack of the Twins north of Cooper Point in Queen Charlotte Sound. The four main sites are exposed rocky platforms with a southern aspect. Historical accounts and guano deposits indicate these sites have been used for many years^{282,339}.

The population censuses each year between 1992 and 2002 show an average of 645 birds³³⁹. The population is considered to have been stable for at least the past 50 years.

They are regarded as a significant species in Marlborough because they are restricted to the region with breeding occurring at few sites making them vulnerable to catastrophic events.

King shag (DOC)



LITTLE PENGUIN (*Eudyptula minor*)



Little penguins are the smallest of all New Zealand's penguins. Their upper parts are slate blue while their under parts are white. The sexes are not easily distinguished. Little penguins may be seen at sea on a calm day, usually in small loosely associated groups. Most breeding birds in the Sounds are solitary.

Within New Zealand little penguins breed on most islands where they can gain access and along the mainland coast where they have undisturbed shelter for breeding and moulting. On the mainland, birds tend to nest in dense vegetation, rock piles, coastal caves and under built structures close to the shore. On islands, where there is no disturbance some birds will climb a long way to nest sites such as the summit of Maud Island. The densest aggregation of nesting penguins is on Titi Island where they nest with sooty and flesh-footed shearwaters in what could be described as a colony. Little penguins have an extended breeding season with egg-laying occurring from July to August. Incubation takes approximately 35 days and the chicks take

Little penguin (DOC)





Little penguin (DOC)

a further seven weeks before they fledge as independent young birds. Birds come ashore for a full body moult in mid summer. They feed mainly on small shoaling fish such as pilchards and anchovies as well as squid^{182,254}.

In Marlborough they breed throughout coastal areas of the Sounds. They breed throughout the Sounds where there is estimated to be between 5,000 and 10,000 pairs.

They are regarded as a significant species in Marlborough because they are easily seen and have huge public appeal. Their status is “declining” within New Zealand due to a variety of reasons including predation, disturbance and loss of breeding habitat. They are the only penguin in Marlborough.

NORTHERN DIVING PETREL (*Pelecanoides urinatrix urinatrix*)



Diving petrel (DOC)

The northern diving petrel is a small stocky petrel, characterised by its short broad wings and stubby tail. At sea it flies close to the surface with very rapid wing beats and is usually seen against the sea surface rather than in the sky. This species of petrel seldom forms large flocks.

There are four subspecies of the northern diving petrel, which have a circumpolar distribution. The New Zealand subspecies breeds on islands off the east coast of the North Island, the South Island and on the Chathams and most sub-Antarctic islands as well as off Tasmania.

In Marlborough, the diving petrel is frequently encountered in small numbers on open waters, but is seldom seen within the Sounds. They breed on many on the outer islands including Stephens Island, Trios and Brothers Islands. Outside of the breeding season they probably remain within the continental shelf close to breeding colonies. Diving petrels return to colonies in the summer, 1-2 years after fledging and adults may continue to visit the burrows for most of the year³⁷⁰. Diving petrels dive from 1-2 m above the surface and swim well underwater to pursue krill and small crustaceans.

The New Zealand population of this subspecies is 100,000 to 150,000 breeding pairs with possibly 5,000 pairs on the Trio Islands, the largest colony in Marlborough³⁶⁵.

They are regarded as a significant species in Marlborough because of their conservation and scientific value. Breeding is restricted to islands that are rodent-free as they are vulnerable to predation at this time.

RED-BILLED GULL (*Larus novaehollandiae scopulinus*)

The red-billed gull is a medium-sized gull with grey wings and white head and under parts. The tips of the wings are black with white flecks, while the adults have a striking red bill and legs. This subspecies is endemic to New Zealand and is commonly seen in all coastal areas including the sub-Antarctic islands and the Chatham Islands. It is only occasionally seen inland.

During the breeding season, at least, birds feed in flocks at sea, on small marine invertebrates. These are taken by dipping in the surface layer of the water, often without needing to alight.



Red-billed gull (MDC)



Red-billed gull (Rob Davidson)

Upwellings at places like McManaway Reef are popular with birds as the tidal rips and turbulent current bring food to the surface. At other times of the year birds forage along the coastline.

Population estimates^{169,319} range from 40, 000 to 80,000 pairs. Populations have been in a continuing decline since 1965^{169,220,365}. The cause behind this is unclear however a decline in the large colony at Kaikoura has been associated with less abundant krill during the breeding season²⁶⁵.

There are two main breeding colonies in the Marlborough Sounds, one on Stephens Island and the other on Bird Island, Forsyth Bay.



Their status is “nationally vulnerable” due to a recent decline in numbers, probably brought about by loss of food availability at sea. They are the most common gull in coastal Marlborough.

Red-billed gull (DOC)

REEF HERON (*Egretta sacra sacra*)



Reef Heron (DOC)

Reef heron are a uniform slate grey coloured bird with distinctive yellowish bill and legs. They reach up to 66 centimetres in length and have a wingspan of between 90 and 110 centimetres. When stalking prey over coastal reefs or shoreline the bird adopts a hunched posture with its wings stretched forward. The flight is deliberate with slow wing beats, keeping the bird close over the water. They are solitary nesters; in caves, crevices, under overhangs on rock shelves, and amongst cliff-side vegetation from September to December.

The species, which comprises two subspecies, is found through eastern Asia and the Pacific¹²³. In Marlborough they are found throughout the Sounds, but is relatively uncommon. The New Zealand population has been estimated to be approximately 250 birds with 50-60 birds in the Sounds.

They are regarded as a significant species because approximately 22% of New Zealand’s population live in Marlborough. Their status is “nationally vulnerable” within New Zealand due predation, disturbance and loss of breeding habitat.



SOOTY SHEARWATER (*Puffinus griseus*)

Sooty shearwater are a dark coloured bird that grow up to 43 cm with a variable coloured under-wing that ranges from black to light grey. Flight consists of series of rapid wing beats interspersed with long glides. Sooty shearwaters have a circumpolar breeding distribution, preferring islands in the temperate or sub-Antarctic zone. The sooty shearwater feeds on crustaceans (krill and amphipods), fish, squid and salps⁷³. They can dive up to 68 m for food, but more commonly take surface food³⁴³. They will follow fishing boats to take fish scraps thrown overboard.



Sooty shearwater (DOC)

They breed on small islands in the south Pacific and south Atlantic Oceans, mainly around New Zealand, Falkland Islands and Tierra del Fuego. Recent studies have shown that birds breeding in the south of New Zealand spend the non-breeding season migrating to the northern Pacific³⁴³. In Marlborough they are present during the summer breeding season when feeding is confined to open water in the Outer Sounds and beyond. They breed on several islands in the Sounds.

The total population has been estimated at more than 20 million with the largest colony (2.75 million pair) on the Snares and others on Chatham, Antipodes, Auckland, Campbell and Macquarie Islands.

The breeding range of sooty shearwater within New Zealand extends from the Three Kings Islands to Maquarrie Island. Sooty shearwater breed on selected islands in the outer Marlborough Sounds, but little work has been done to accurately assess numbers. The largest colony is on Titi Island where the colonies also include blue penguin and flesh-footed shearwater¹⁵². All of these islands are free of rats and weka that are known predators of eggs and chicks.



Seabirds enrich terrestrial island ecosystems by depositing marine nutrients as faecal material and regurgitations. In addition, the burrowing habit of nesting seabirds aerates the soil and incorporates vegetation with the enriched soil. Some plant and animal communities are dependent on this process.

Sooty shearwater are regarded as a significant species in Marlborough because of their conservation and cultural value. Their status is “declining” within New Zealand due to predation, loss of breeding habitat and probabaly changes in conditions a sea. It is an iconic shearwater in New Zealand due to its traditional food use (i.e. mutton bird)²³⁹.

SPOTTED SHAG (*Stictocarbo punctatus punctatus*)

The Spotted shag is a slender grey bird with upper parts having small dark spots with the tail, rump and thighs being black. A broad white stripe down both sides of the neck and double crests on the head are most conspicuous in breeding adults. Spotted shags are endemic to coastal areas of mainland New Zealand. They are found throughout the Marlborough Sounds with breeding colonies restricted to eroded rocky outcrops on the coast. These colonies range from the Croisilles Harbour in the west throughout the Sounds to Port Underwood in the east. Spotted shags are known to breed throughout the year but in the Sounds most activity is from August to February. Spotted shag feed on small fish taken from deep dives²¹⁷.

Two subspecies exist: one in the North Island and the north and east of the South Island; the other, known as the blue shag, on the west coast of the South Island, Stewart Island and Whenua Hou. The



Spotted shag (Dave Grueber)



Spotted shag (DOC)

total population is thought to be less than 30,000 breeding pairs³⁶⁵. The number of breeding colonies in the Sounds has trebled over the last thirty years⁴⁷. During 2006, Bell (pers. comm.) recorded 1254 breeding pairs in the Marlborough Sounds. Relatively few spotted shags breed in Tasman Bay and Golden Bay (to the west of the Sounds) but numbers increase dramatically there over the winter months.

They are regarded as a significant species in Marlborough because they are often encountered, being widespread and common, especially in winter.

WHITE-FRONTED TERN (*Sterna striata*)



White fronted tern (DOC)



The white-fronted tern is a medium size tern and the most common in New Zealand. They are easily identified by the characteristic swallow shaped tail and relatively narrow wings. They have a black cap and nape, with the narrow white front above the bill only being visible at close range. Their overall plumage is very pale grey or white and they have a long slender black bill and short legs which are black or reddish black.

Breeding of this endemic species is largely restricted to the mainland coast and some outlying islands³⁴¹. During winter young birds and some adults migrate to the south east coast of Australia where limited breeding has occurred in Bass Strait (post 1979). White-fronted tern breed in tight colonies during early summer. They feed almost exclusively on small fish which are taken by shallow diving. Although birds will feed alone it is more common to see flocks feeding on shoals of pilchards that have been herded together by larger predatory fish. These flocks may include gulls, petrels and gannets. During summer terns can be seen returning to colonies with small fish for their young.

MAMMALS

BOTTLENOSE DOLPHIN (*Tursiops truncatus*)

Bottlenose dolphins are a large and robust dolphin (up to 3.5m) with a short to moderate-length beak. They are grey-black on their backs and sides, fading to white on the belly. The dorsal fin is tall and swept back.



Bottlenose dolphin (MDC)

They have a wide distribution globally and are found throughout tropical and temperate waters¹⁹⁶. There are three main centres of population within New Zealand: (1) north-east North Island; (2) Cook Strait; and (3) Fiordland - Stewart Island^{68,233,234,238,264}.

There is no global population estimate for this species, however the New Zealand estimate is in the region of 1000 individuals. The only known population estimate for the Marlborough Sounds is 211 semi-resident animals^{264,265}.

They are found throughout the Marlborough Sounds at all times of the year. This population is thought to be part of a larger population of about 385 animals utilising the northern part of the South Island^{264,265}.



Bottlenose dolphin (DOC)

Breeding tends to be between December and March with new born calves being observed in the Marlborough Sounds during summer and autumn months. Age at maturity is between 5 and 13 years.

Bottlenose dolphins in the Marlborough Sounds are thought to feed mostly on small schooling fishes and squid but there is very little diet information specific to the area. In general, bottlenose dolphins have a diverse repertoire of feeding behaviours and are highly adaptable foragers.

Bottlenose dolphin is a significant species in Marlborough on conservation grounds. Marlborough is one of the three important population centres for this species in New Zealand. This species is classified as “nationally endangered” in New Zealand waters³⁹⁸.

Bottlenose dolphin (Nadine Bott)



DUSKY DOLPHIN (*Lagenorhynchus obscurus*)



Dusky dolphin (DOC)

Dusky dolphins are a medium sized dolphin with a short beak. They grow to a length of 1.80m. They are dark grey above and white below, but with blazes of pale grey on their sides.

They are widely distributed around the South Island and Southern North Island but are rarely seen north of Hawke's Bay. They are found around the Southern Hemisphere including, South America, south-western Africa, and the south coast of Australia^{196,390}.

Dusky dolphins have been observed throughout much of the Marlborough Sounds, including Admiralty Bay, Queen Charlotte Sound and Tory Channel, Pelorus Sound and Croisilles Harbour¹¹⁹. They are most common during winter and early spring months²⁵¹. The population in Kaikoura is estimated about 2000 at any one time, from a total South Island east coast population of over 12,000. In Admiralty Bay, the mean weekly abundance during winter is 220²⁴⁹.

Admiralty Bay is now recognised as an important feeding area for some overwintering dolphins that are found off Kaikoura during the summer³⁷³. Feeding in Admiralty Bay occurs during daylight hours, with primary targets being small schooling fishes e.g. pilchards³⁹⁰. Feeding behaviour is highly coordinated, with dolphins herding fish into bait balls, often during multi-species feeding bouts with other species including fur seals, gannets, and shearwaters^{372,373}.



Dusky dolphin (Jody Weir)



The Admiralty Bay winter population represents a significant portion of the New Zealand dusky dolphin population. This population has been the focus of continued scientific interest regarding the relationship between aquaculture activities and dolphins.

HECTOR'S DOLPHIN (*Cephalorhynchus hectori hectori*)

Hector's dolphins are one of the world's smallest marine dolphins reaching a maximum size of 1.5 m in length and 50 kg, and are only found in the inshore waters of New Zealand. They are a distinctive grey dolphin with black and white markings and are the only species in New Zealand with a round dorsal fin.

Two sub-species of Hector's dolphins exist: Maui's dolphin is only found off the west coast of the North Island; Hector's dolphin is found around the South Island of New Zealand except Fiordland. They have a patchy distribution, especially on the east coast of the South Island^{106,349}. Hector's and Maui's dolphins live for only around 20 years and breed slowly. Females don't have their first calf until they are about seven or eight years old, and have a new calf only every two to four years.





Hector's dolphin
(Sam Du Fresne)

In Marlborough they are known to inhabit an area in the central Queen Charlotte Sound and a second area in Cloudy and Clifford Bays. The number of Hector's Dolphin in the Marlborough Sounds is small with estimates of only 20 individuals in Queen Charlotte Sound. Cloudy and Clifford Bays support much larger numbers with around 900 dolphins recorded in summer³⁹³ (though note that this abundance estimate was derived prior to the Cloudy and Clifford Bay surveys). The total population of South Island Hector's dolphin is estimated at 7,270³⁴⁹.

Hector's dolphins are susceptible to by-catch in set nets (and to a lesser extent trawl nets) throughout their range¹⁰⁵. Other threats to Hector's dolphin include pollution, tourism impacts and potentially aquaculture^{29,200,251,232}.

Hector's dolphin is a significant species on conservation grounds having a "Nationally endangered" status³⁹⁸.

HUMPBACK WHALE (*Megaptera novaeangliae*)

Humpback whales are easily distinguished due to their incredibly long flippers, which can be up to one third of overall body length. The tail flukes have a serrated trailing edge, with distinctive black and white ventral colouring. The dorsal fin is located approximately two thirds of the way back. The upper parts of their body are black to dark grey and they are generally white underneath. Adults grow to approximately 17m and weigh up to 40 tonnes¹⁹⁶.

They are found in all oceans around the world, generally spending spring to autumn months in mid to high latitude feeding grounds. During winter months animals migrate to calving grounds in the tropics. At up to 8,000km, these migrations represent the longest of any mammal^{60,196}.

In Marlborough humpback whales migrate northward from late May to early August, travelling up the east coast of the South Island before dividing into two groups: one moving through Cook Strait and up the west coast of the North Island; the other continuing up the east coast of the North Island¹⁵⁸.

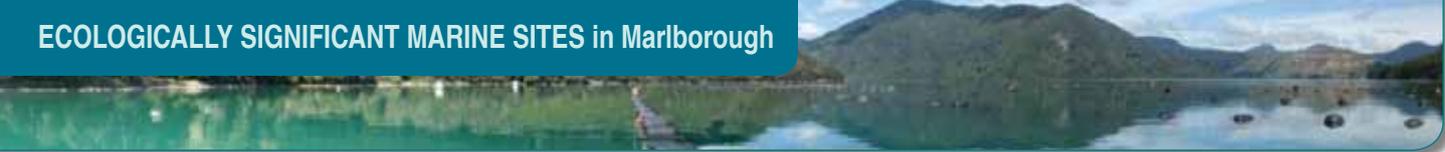
South bound humpbacks mostly pass along the west coasts of both islands, between mid September and early December.

It is not clear where all of the animals migrating past New Zealand calve, but there have been some photo ID matches to whales on the east coast of Australia, New Caledonia and Tonga¹⁵⁰.

Humpback whales were heavily hunted throughout the 20th century. In the mid-1990s it was revealed that official Soviet whaling records had substantially



Humpback (Wikipedia)



under reported actual catches, with well over 40,000 humpbacks taken illegally between 1947 and 1972⁴⁴. While some stocks are still depleted, most are now showing a recovery¹⁹⁶.

Humpback whales are a significant species in Marlborough on conservation and scientific grounds. As the migrating whales pass through Cook Strait they provide the opportunity for scientific study of the population as it recovers from the heavy hunting pressure.

Humpback (Wikipedia left, DOC above)

KILLER WHALE, ORCA (*Orcinus orca*)

Killer whales grow up to 9.8m long. Adult males have a dorsal fin that can reach up to 1.8m tall. They have a very distinctive black and white colouration with a white eye patch, and grey saddle patch just behind the dorsal fin.

Orca (DOC)



They are the most cosmopolitan of all marine mammals, being found in all waters from tropics to polar regions¹⁹⁶. Within New Zealand there appear to be three main populations: (1) North Island, (2) South Island and (3) a population that appears to move between the both islands³⁷⁸. Killer whales have been recorded from throughout much of Marlborough and may be encountered at any time of the year³⁵⁰.

There are no global estimates of killer whale abundance, however, within New Zealand there are probably about 200 individuals³⁶². Females reach sexual





maturity at 11-16 years and reach reproductive senescence at about 40 years. Males reach sexual maturity at around 15 years. Gestation is 15 to 18 months, weaning at around 1 to 2 years and calving at about 5 year intervals^{134,196}.

Most killer whales in New Zealand are generalist feeders (rays, fish, sharks, cetaceans). South Island killer whales have been observed feeding on seals³⁷⁸. Benthic foraging on rays appears to be unique to New Zealand killer whales³⁷⁷.

Killer whales are a significant species in Marlborough on conservation grounds having a “nationally critical” status due to their small population size.

Orca (DOC)

SHORT-BEAKED COMMON DOLPHIN (*Delphinus delphis*)

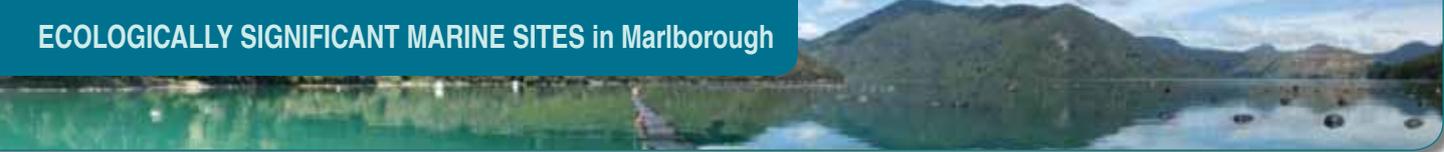
Common dolphins are a medium-sized dolphin with a prominent beak. They grow to a length of 2.3m and can weigh up to 200kg. They are strikingly marked, with a brown-grey back, white underbelly and tan patch on the side of their body. They breed every 1 to 3 years. They feed on a variety of fish and squid species^{196,286}.

The New Zealand distribution is not well documented, however common dolphins are known from as far south as Fiordland²³⁸, through to Kaikoura, the eastern coast of the North Island²⁸⁶ and the Hauraki Gulf³⁶⁰. Common dolphins are also present off the west coast of the North Island, from Northland through to the South Taranaki Bight and Cook Strait^{120,400}.

In Marlborough common dolphins are known from Queen Charlotte Sound and Cook Strait; French Pass and Admiralty Bay area and also Cloudy and Clifford Bays¹¹⁹. These areas provide the opportunity to study these animals in relatively sheltered waters. While the common dolphin may be relatively abundant in New Zealand waters, there is an unquantified by-catch issue that exists largely in the jack mackerel trawl fishery through Cook Strait and off the west coast of the North Island¹²⁰.

Common dolphin (Nadine Bott)





SOUTHERN RIGHT WHALE (*Eubalaena australis*)

Southern right whales are a large, stocky baleen whale with a strongly bowed mouth-line. They do not have a dorsal fin or ridge. These whales have large fan-shaped flippers that reach up to 1.7m and have distinctive pale callosities on the head and jaw. They can reach up to 17m length and 80 tonnes¹⁹⁶.

They have a circumpolar distribution between 20 and 55 degrees south. Southern right whales are occasionally seen in the Marlborough region during winter and spring. Sightings are primarily in Cloudy and Clifford Bay, Tory Channel and Queen Charlotte Sound²⁹⁴, however sightings have occurred in other areas and seasons.

Breeding and mating occurs during the winter, when whales move from Antarctic to warmer waters. Females calve about once every 3 years²¹¹. Historically, New Zealand was considered to have two of the seven recognised southern right whale breeding grounds in the South Pacific to Indian Ocean Basin:

- (1) mainland New Zealand; and
- (2) Auckland Islands²⁹⁴.

However, recent genetic studies (with additional support from satellite tagging) indicate that there is currently a single New Zealand breeding stock, and that mainland New Zealand is slowly being re-colonised by whales from the sub-Antarctic Islands

Southern right whales are a significant species in Marlborough on conservation grounds having a “nationally endangered” status in New Zealand.



Southern right whale (Nyla Strachan)



NEW ZEALAND FUR SEAL (*Arctocephalus forsteri*)



Fur seals (MDC above, DOC below)

Male New Zealand fur seals grow up to approximately 2m length and weigh up to 200 kg. Females are shorter (1.5m) and much lighter at 30 to 50 kg. They have moderately long muzzles with pointed noses and prominent ears. Adult males have a mane of longer hair around their neck and larger, thicker teeth than females. Adults are dark brown or grey brown above and paler below. Adult females tend to have lighter colouring on their undersides, while pups are mostly black¹⁹⁶.

They are widely distributed around mainland New Zealand as well as offshore islands and sub-Antarctic islands and can be found as far north as Three Kings Islands. They are widely distributed in the Marlborough Sounds and east coast region. Additionally, there is a separate population found in the coastal waters of southern and western Australia.

In Marlborough breeding colonies exist at Stephens Island^{1366,367} and Trio Islands. There are numerous haulouts throughout the Marlborough Sounds region. In at least some parts of the region (e.g. Admiralty Bay, French Pass, Current Basin), the haulout sites can vary through-out the year. Fur seals are regularly seen near salmon farms.



Fur seals frequently feed on pelagic schooling fishes such as hoki, jack mackerel, and barracouta, as well as arrow squid^{218,388}. They also occasionally feed on penguins and shearwaters¹⁹⁶. Adult females tend to forage at night, in depths ranging from 15m to 163m^{16,196}. Males are capable of foraging deeper due to their larger body size. Fur seals in Admiralty Bay have been observed foraging in multi-species aggregations together with dusky dolphins, sharks and seabirds³⁷⁴.

Fur seals are a significant species in Marlborough on scientific and conservation grounds. They were hunted to near extinction and although numbers have since recovered, the total population is still likely to be lower than pre-exploitation abundance estimates of 1.5 - 2 million²¹⁸. The most serious threat to fur seals is now thought to be bycatch, particularly in the hoki and southern blue whiting trawl fisheries. Of these two, the most serious in terms of numbers of fur seals caught is thought to be the hoki trawl fishery²⁵⁵.

