Plate 3

ALBATROSSES

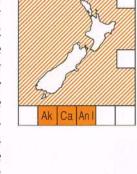
Huge ('albatrosses') or very large ('mollymawks') seabirds with long narrow wings and short tail. Long heavy hooked bill covered with horny plates, nostrils in small tubes on the sides near the base. Most are dark above and mainly white below. Pattern of upperwing, underwing, head and bill are distinctive. In flight, soar gracefully on stiffly held wings, and only rarely flap. Clumsy on ground; legs and webbed feet set well back. Generally oceanic; occasionally seen near land. Many follow ships or gather around fishing boats. Silent at sea except when fighting over food. Loud bleats, croaks, whines and cackles at breeding colonies, and elaborate displays accompanied by bill-clapping and calls. Lay 1 large white egg in shallow bowl or on top of pedestal constructed of vegetation and mud. Long incubation period and extremely long fledging period (7-11 months for full breeding cycle). Sexes alike but males larger. Juveniles generally distinctive for several years.

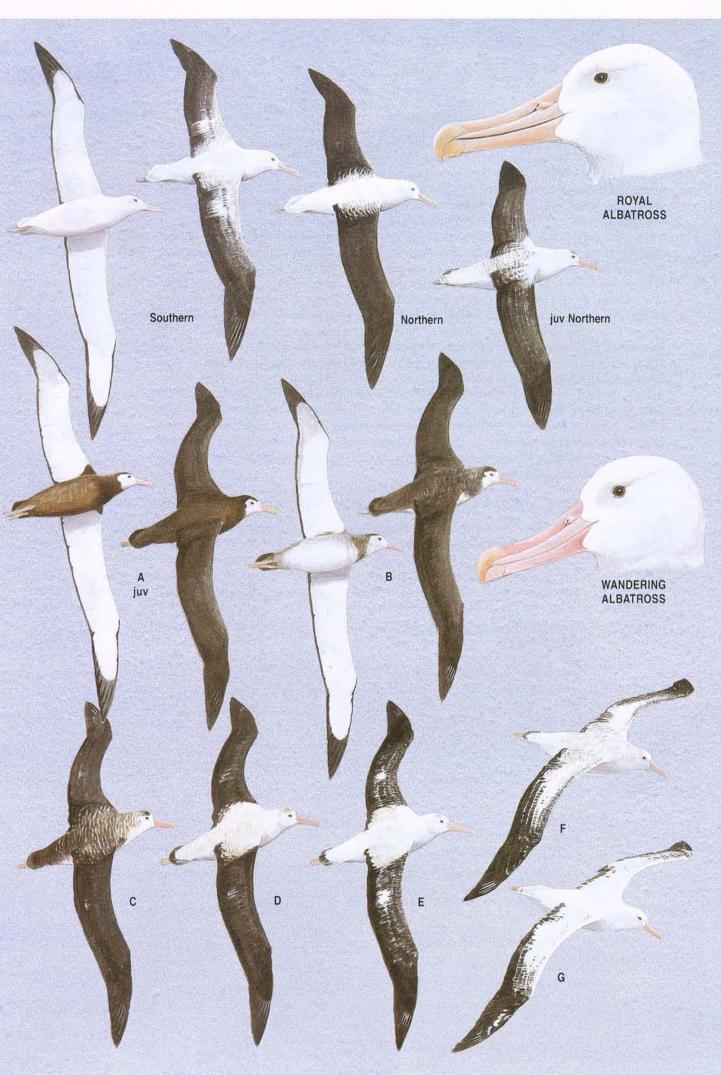
115 cm, 6.5 kg. Variable plumages, according to age and race. Some pale adults are

WANDERING ALBATROSS Diomedea exulans

Uncommon native

like Royal Albatross, but all have a huge bill (160 x 55 mm), light pink with creamy tip and with no black on cutting edges; leading edge of inner upperwing usually black or mottled black in all but the whitest birds (which have much more extensive white on upperwings than the whitest Royal); tail usually black-tipped. Juvenile initially uniformly dark brown, except for white face and dark-tipped white underwings (A). Over the next 10-15 years, the plumage whitens, initially on the belly (B), then from the back onto the upperwings, and outwards from a central patch on the upperwing, following the progression from C to F in the whitest NZ breeding birds; however, birds breed in the NZ region in all forms from C through to F. Those birds in phase G, with white leading edge to upperwing, are of the larger race chionoptera (Snowy Albatross), which breeds outside the NZ region. Underwings white with black tip and thin black trailing edge. Legs and feet pinkish to brownish grey. Habitat: Breeds circumpolar subantarctic; in NZ region, breeds at Antipodes, Campbell and Auckland Is. Ranges widely through the southern oceans and most often seen in NZ coastal waters in winter. Breeding: All year; eggs laid Jan-Mar, young fledge c. 11 months later.





Albatrosses and mollymawks (the common name in New Zealand for smaller albatrosses)

species and 5 other breeding species.

ALBATROSSES

14 species, 11 with breeding restricted to the

Southern Hemisphere and 3 in the North

Pacific.* In the New Zealand region, 10 species

have been recorded including 2 endemic

are a clearly defined group of very large

seabirds belonging to the tube-nosed petrel order (Procellariiformes). Although they are among the largest of all flying birds, albatrosses are noted for their perfection of soaring flight behind boats and among the tempestuous seas of the southern oceans. In strong

winds, they wheel effortlessly on very long,

narrow and stiffly held wings for hours, but in almost calm conditions they have a flapping flight and more usually rest on the surface until the wind picks up. Their webbed feet are used for swimming and as rudders in flight, especially when coming in to land. Albatrosses have long bills with a strongly hooked tip and small, raised tubular nostrils on either side near the base. The shape and colour of the bill plates can be useful in

taking baited fish-hooks on tuna long-lines.

Research is under way to develop new

methods to reduce seabird by-catch problems.

Reading: Harrison, P. 1987. Seabirds of the World:

a photographic guide. London: Christopher Helm.

Harrison, P. 1988. Seabirds: an identification guide.

Other names: Toroa, Wanderer, Snowy

Geographical variation: Recent taxonomic

research suggests that the four subspecies

should be reclassified as full species, two of

8.

Size: 115 cm, 6.5 kg

WANDERING ALBATROSS

uninhabited and often inaccessible islands of the southern oceans. At their breeding grounds they have an elaborate series of displays

Diomedeidae

croaks, cackles, and bill-snapping and clappering. All species lay 1 white egg, usually in a shallow depression on top of a pedestal ('chimney pot') made of vegetation and mud.

accompanied by neighs, groans, baahs, wails,

Incubation takes 66–83 days. Nestlings are

identifying beach-wrecked specimens, but at

sea the head colour and pattern of black on

They nest in loose colonies, mainly on

the wings is also important to note.

downy and take many months to reach flying age. With this long breeding cycle, some species can nest only every second year if they have bred successfully. Albatrosses feed mainly on various squids, fish and offal, on or close to the surface. Some species are readily attracted to boats and follow them for hours, occasionally alighting to pick up scraps cast overboard or food disturbed in the wake. Some are especially attracted to fishing boats, and in recent years several species have suffered high mortality from being drowned in trawl nets or after

London: Christopher Helm. Murphy, R.C. 1936.

Handbook of Australian Sea-birds. Sydney: Reed.

hooked on tuna long-lines (14% of seabird

deaths recorded in 1988–97). Females are

apparently more likely to be accidentally

killed than males. Deaths of breeding adults

are particularly worrying in such a long-lived

Plate 3

Warham, J. 1990. The Petrels: their ecology and

breeding systems. London: Academic Press.

Diomedea exulans

Oceanic Birds of South America. New York:

MacMillan. Serventy, D.L. et al. 1971. The

which breed in the New Zealand region: antipodensis on the Antipodes and Campbell Islands, and *gibsoni* on the Auckland Islands. The Snowy Albatross *chionoptera* regularly visits New Zealand waters, whereas dabbenena of Tristan da Cuhna and Gough Island in the South Atlantic is not definitely known from New Zealand.

Distribution: Circumpolar, breeding on

islands between 37 and 55°S in the South

Atlantic and South Indian Oceans, Macquarie

Island and, in the New Zealand region, at the

Antipodes, Auckland and Campbell Islands. They wander widely in southern oceans between the pack ice off Antarctica and the subtropics. Birds breeding in the New Zealand subantarctic remain in the Tasman Sea and South Pacific Ocean, but *chionoptera* regularly reach New Zealand waters, judging by records of banded birds found dead on the coast.

Wandering Albatrosses are seen in all months,

but mainly in winter, off the coast, especially

around Stewart Island and in Cook Strait.

Population: c. 15,000 breeding pairs in New Zealand out of a world population of about 30,000 pairs, estimated on the basis that c. 60% of the breeding birds are at their colony each year. antipodensis: the Antipodes c. 5500 pairs or 33,000 birds in 1995–6; Campbell Island <10 pairs; *gibsoni*: Auckland Islands c. 6000 pairs or 40,000 birds, mostly on Adams Island, but 200–300 pairs nest on Disappointment Island and a few are still on the main Auckland Island. **Conservation:** Protected threatened native. Wandering Albatrosses are attracted to feed on offal behind fishing boats and are often

in the breeding cycle, most pairs breed in successive years. Pair bonds are life-long, but if a bird loses its mate it can re-pair with another bird. Pairs return to the same nest

their natal colony at 3-14 years old, but usually do not start breeding until 7–16 years old. The oldest New Zealand bird recorded was over 24 years old, but some probably live to over 40 years. Behaviour: Gregarious at breeding colonies and form flocks around fishing boats, but

location year after year, and young return to

usually wander the oceans alone or in small groups. At sea, they are generally silent except for a hoarse croak, made when they are fighting for scraps. Feeding: Diet is mainly squid, with occasional fish, octopuses and crustacea, mostly caught at night on the surface or by plunging down a metre or two. During the day, food is scavenged from around whales and dolphins,

and recently from behind boats, which has

made them vulnerable to accidental capture

on baited fish-hooks.

species. Repetition in 1997 of a 1973 transect count on one ridge on Adams Island indicated a 63% decline in the intervening 24 years; however, as Wandering Albatrosses are biennial breeders, the numbers vary from year to year, depending on breeding success the previous year. Similar declines have been noted at other colonies in the southern ocean.

Banding studies are under way on Adams

Island and at the Antipodes, and accurate

censuses are now under way in most years

in major colonies to determine population trends in the New Zealand races of Wandering Albatross. **Breeding:** Detailed studies have not been carried out in New Zealand. At the Auckland Islands, eggs are laid from mid-January to February, but on the Antipodes and at Campbell Island they do not usually start laying until late January. They lay 1 white egg (126 x 78 mm, 425 g) in a shallow depression on top of a 20-50 cm tall mound of grass and soil. The mound is built on flat ground close to a ridge, where adults can easily catch enough wind for takeoff. Incubation is by both sexes in alternating shifts of 6–10 days during the incubation period of 75–83 days. Chicks are initially covered in very pale grey down and are brooded by both adults for the first month, but are then left unguarded except during feeding visits and occasional longer visits until the chick

In the hand: The various subspecies are difficult to identify because of the wide variety of immature

fledges at c. 9 months old in late December-

March and is immediately independent of

before breeding again; but if they fail early

If breeding is successful, adults miss a year

its parents.

plumages and the incomplete knowledge of the rate of aquisition of a mature adult plumage. Adult females of antipodensis retain dark brown plumage similar to the immature plumage of other subspecies, males often have a prominent dark patch on their crown and an oily smudge across the breast, and both male and female have very little white on their upperwings. Overall, gibsoni is paler than antipodensis at all ages, and usually shows prominent white patches on the inner upperwing. As the common name Snowy Albatross suggests, adults of the subspecies *chionoptera* are very pale on their head, back and inner upperwings; they also have longer bills than New Zealand birds (males 160–180 mm cf. 145–160 mm; females 155– 170 mm cf. 135–150 mm). Reading: Bailey, A.M. & Sorensen, J.H. 1950. Subantarctic Campbell Island. Denver: Denver

Mus Nat Hist. Croxall, J.P. et al. 1990. J Anim Ecol 59: 775–796. Murray, T.E. et al. 1993. Bird Cons Int 3: 181–210. Robertson, C.J.R. & Warham, J. 1992. Bull BOC. 112: 74-81. Robertson, C.J.R. &

Warham, J. 1994. Bull BOC. 114: 132–134. Walker,

K. et al. 1991. DoC Sci & Res Int Rep No. 109.

Weimerskirch, H. et al. 1987. Oikos 49: 315-322.