

herald of the approaching storm. It may have been only coincidence, but on the ensuing day the *Astrolabe* encountered a terrific gale, the worst experienced during the whole of the voyage, and escaped disaster only by the narrowest margin.

During the nesting season the storm petrels may sometimes be seen close inshore, if feeding conditions are favourable in these situations. Unlike the shearwaters, the white faced storm petrel does not normally alight on the water, but takes its food from the surface while on the wing. The natural food consists largely of small shrimplike creatures that are often present in immense quantities though not readily discernable to the observer.

In utilising the available nesting sites, the storm petrel appears able to accommodate itself to whatever conditions prevail in the areas to which it resorts. Off our own coast the breeding places are mostly well covered with a shrubby or herbaceous growth, the soil loamy, and often interspersed with rocks. The nesting burrows are narrow and extend a yard or more underground, sometimes with one or more passages branching off from the main tunnel, each having a slightly enlarged terminal cavity. The bottom of this chamber is carefully spread with leaves or grass according to the material available. One egg only is laid, and here incubation takes place and the young bird is fed until it is old enough to fare forth and provide for itself. In its young state the nestling is clad in a downy covering of a uniform slatey grey colour. The egg, which is laid toward the end of October, is about the size of that of a quail, which is large in relation to the petrel itself. Its colour is white with faint red markings at one end, and its outline is almost perfectly elliptic. The shrubby growths on many of our offshore islets consists of the interlocking branches of the *Coprosma* scrub (*C. retusa*), whose shining green leaves litter the ground and are used as nesting material by the several species of petrel that occupy these places as communal nesting grounds. Specially adapted for its own peculiar mode of life at sea the storm petrel seems strangely out of harmony with its surroundings on these wooded islets, whose tangled growth would perplex even the forest bred birds of the mainland. One wonders,

too, why this immaculate little bird should choose to nest in the dark recesses of an earthy burrow of its own making, where parent bird and young, for the time being exist in mole-like seclusion. In the nesting season one parent bird remains in the burrow during the day while its mate wanders forth in quest of food returning again after darkness has set in. To the observer, equipped with a torch, it is a most entertaining sight to watch these scraps of feathered animation as they flutter to earth through the canopy of leaf and twig. It is no easy matter to safely negotiate this intervening barrier, and here and there, mummified remains may be seen, suspended from the branches where some unhappy victim has been hopelessly trapped. With wings working like a flail, the birds try to maintain an uneasy balance on limb or trunk that has impeded their progress to the ground, or caught by the wings, they struggle vigorously to extricate themselves from the clutching twigs. Their progress along the ground is by a series of skipping movements with wings outspread. The erect statuesque pose with folded wings in which the storm petrel is sometimes depicted is not characteristic nor does it appear possible of attainment.

In the New Zealand area the White Faced Storm Petrel has its natural enemies, among them being the harrier hawk, the black backed gull, and possibly the tuatara. A natural enemy, however, is probably essential to the well-being of any bird community, and it is rather what might be termed the unnatural enemy, man included, which has to be guarded against. Sea-birds of a gregarious nature have suffered much at the hands of ruthless men in times gone by, fishermen having taken them in thousands as bait for their hooks, and vile means have been employed to capture even the diminutive storm petrel for that unholy purpose.

Until recent years our offshore islets were sanctuaries by virtue of their inaccessibility, needing no man-made laws for the protection of their bird colonies, but the advent of petrol driven small craft has altered all this, and herein lies a very real danger. Apart from his own destructive proclivities, wherever man sets foot there will inevitably follow in his train the host of evils that have already wrought havoc with indigenous life on the mainland.