SOUTHERN BLACK-BACKED GULLS *LARUS DOMINICANUS* ROOSTING IN TREES IN NEW ZEALAND

LARUS DOMINICANUS ROESTEND IN BOMEN IN NIEUW ZEELAND

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Een waarneming van in bomen roestende Dominicaner Meeuwen Larus dominicanus *in Nieuw Zeeland wordt beschreven. Ongeveer 20 meeuwen betrokken tegen de avond de kale takken van enkele hoge bomen langs open plekken in het regenwoud van het westelijke Zuid-Eiland. Gezien het doelbewuste aanvliegen, de tijd van de dag en het verdere gedrag (rustig staan, poetsen), leek het om gedrag te gaan dat hier normaal was. Van andere grote meeuwen-soorten, of van deze soort in andere delen van de wereld, is roesten in bomen echter allerminst normaal. Enkele waarnemingen van grote meeuwen in bomen zijn wel beschreven, maar in het algemeen zijn het eerder kleinere soorten zoals de Stormmeeuw* Larus canus *of de Ringsnavelmeeuw* L. delawarensis *die in bomen worden gezien. Mogelijk is de relatief recente invoer van grond-roofdieren de reden dat deze meeuwen juist in Nieuw Zeeland bomen als roestplaats gebruiken.*

Many gulls are coastal birds, finding their food in inshore waters during daylight hours and spending the nights roosting in flocks in open, relatively safe places, such as deserted beaches or small islands. Being opportunistic, gulls have also colonized human settlements, and several species, including the Kelp or Southern Black-backed Gull *Larus dominicanus*, may roost or even nest on our rooftops (Turbott 1969). Rooftops may be seen as islands in an otherwise dangerous habitat, offering safety from ground predators and a good view, allowing approaching aerial predators to be easily spotted. Lack of visibility probably explains why forests are among the few habitats that gulls rarely utilize.

We were therefore surprised to find a flock of six Southern Black-backed Gulls, all in adult plumage, sitting in a tree in the middle of a stretch of coastal rain forest on the west coast of South Island, New Zealand. The gulls were observed at dusk in March 1985, about 1 km from the coast, near the township of Haast. They stood on the bare uppermost branches of a large, circa 30 m tall Rimu tree *Dacrydium dacrydioides*, that towered above the canopy of the surrounding forest (figure 1). As we watched a seventh bird arrived, taking up a perch on a vacant branch. More gulls were observed flying further inland, and were seen to join a group of 10 birds already perched on the bare branches of two trees situated in a clearing several hundred metres away. All the trees used for perching had a clear view in all directions. The timing of their arrival, and their subsequent behaviour (they

Figure 1. Roosting Southern Black-backed Gulls on the bare uppermost branches of a large Rimu tree Dacrydium dacrydioides, *in the coastal rainforest on the west coast of South Island, New Zealand (Photo M.F. Leopold).*

Figuur 1. Roestende Dominicaner Meeuwen op de kale takken van een grote boom (Rimu Tree) in het regenwoud langs de westkust van Zuid Eiland, Nieuw Zeeland (foto M.F. Leopold).

apparently did not intend to leave and some started preening) indicated that these gulls habitually used these perches in the forest as overnight roosts.

TREE-ROOSTING The Southern Black-backed Gull is a relatively recent arrival, that has spread over the Antarctic region from South America (Fordham 1963, Voous 1965). It is of interest to briefly review tree-roosting and tree-nesting in other species of large gulls. The Lesser Black-backed Gull *Larus fuscus* has been seen roosting in trees. In England adult birds were observed roosting on the uppermost dead boughs of otherwise leafy trees, approximately 25 m from the ground, for six hours at a time (King 1961). Similarly, Herring Gulls *L. argentatus* have been noted to use pine-trees as regular perches around breeding colonies in Dorset, England (Riley & Miller 1962). This species even occasionally breeds in trees, up to 60 m from the ground (Macdonald 1973, Cramp & Simmons 1983). No references to tree-roosting could be found for either *L. marinus* or *L. pacificus* of southern Australia (Mathews & Iredale 1921, Serventy & Whittel 1967, Serventy *et al.* 1971), suggesting tree-roosting is the exception rather than the rule in these larger *Larus* gulls. Smaller and more agile species may take to the trees more easily: Common *L. canus* and Ring-billed gulls *L. delawarensis* frequently breed and roost in trees (Cramp & Simmons 1983).

WHY DO GULLS ROOST IN TREES? Gulls are vulnerable to nocturnal, mammalian predators, even in dense colonies (Kruuk 1964). Most so-called anti-predator adaptations in nesting gulls are in fact anti-*diurnal* predator responses (Southern & Southern 1979), and since many gull species lack an effective means of coping with nocturnal predators other than flight, their only remaining line of defense is to select sites that are inaccessible to such predators. Recent tree-nesting in *L. argentatus* in North America and trends of increasing incidence of rooftop breeding in Larids is thought to be at least partly in response to increasing predation by Red Foxes *Vulpes vulpes* (Monaghan & Coulson 1977, Woutersen *et al.* 1994, van Dijk & Meininger 1995). Introduced mammalian predators have had a negative impact on gulls and other seabirds in New Zealand (Fordham 1970, Morris 1976, Crossland 1993, Dann 1994, Barlow 1995). Such predators have only been established in New Zealand for a relatively short time, so the phenomenon of tree-roosting among New Zealand's Southern Black-backed Gulls may be a recent adaptation in response to a relatively sudden increase in predation. However, Southern Black-backed Gulls can be found in all four southern hemisphere continents, where ground predators do exist, yet tree- roosting or breeding has not been described in studies on nest and roost site selection (Murphy 1936, Burger & Gochfield 1981). Possibly, the recent introduction of

mammals to the largely predator-naive New Zealand birds made some of them take to the trees.

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