THE BIRDS OF HOLLAMSBIRD ISLAND,

LEAST KNOWN OF THE SOUTHERN AFRICAN GUANO ISLANDS

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SUMMARY

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On 9 May 1988 Hollamsbird Island supported one pair of Jackass Penguins *Spheniscus demersus*, and 13 and 45 active nests respectively of the Bank and Cape Cormorants *Phalacrocorax neglectus* and *P. capensis*. These populations and their conservation are considered in relation to previous knowledge of the island and its fauna and to the state of seabirds off the southern African coast.

INTRODUCTION

Hollamsbird Island (formerly Holland's Bird Island) 24 38S, 14 32E, the northernmost rocky island along the Atlantic coast of southern Africa, lies about 8 km offshore and 240 km north of Lüderitz, Namibia.

Apart from anecdotal comments in the reports of earlier visitors (Eden 1846, Green 1950), the only account of the ornithology of the island is that of Rand (1952) who spent 13 days on the island in April and May 1951. Subsequent attempts by ornithologists to land at the island, P.D. Shaughnessy in March 1977, R.J.M. Crawford in July 1986, A.J. Williams in August 1986, and B.M. Dyer twice in November 1987, were foiled by large swells or heavy seas. Some bird population data have been obtained from aerial photographs of the island taken for seal censuses (Cooper *et al.* 1982) and from photographs taken from a dinghy close inshore (Cooper 1981). Here we report a census of seabirds on Hollamsbird made between 11h00 and 13h00 local time after a helicopter landing on 9 May 1988. We compare our data with previous information from this island. Our discussion considers the conservation importance and status of the island and competition between seals and seabirds for space.

HOLLAMSBIRD ISLAND

The island is a rocky outcrop of about 1.1 ha and is totally devoid of terrestrial vegetation (Fig. 1). Most of the island is low and the maximum elevation of

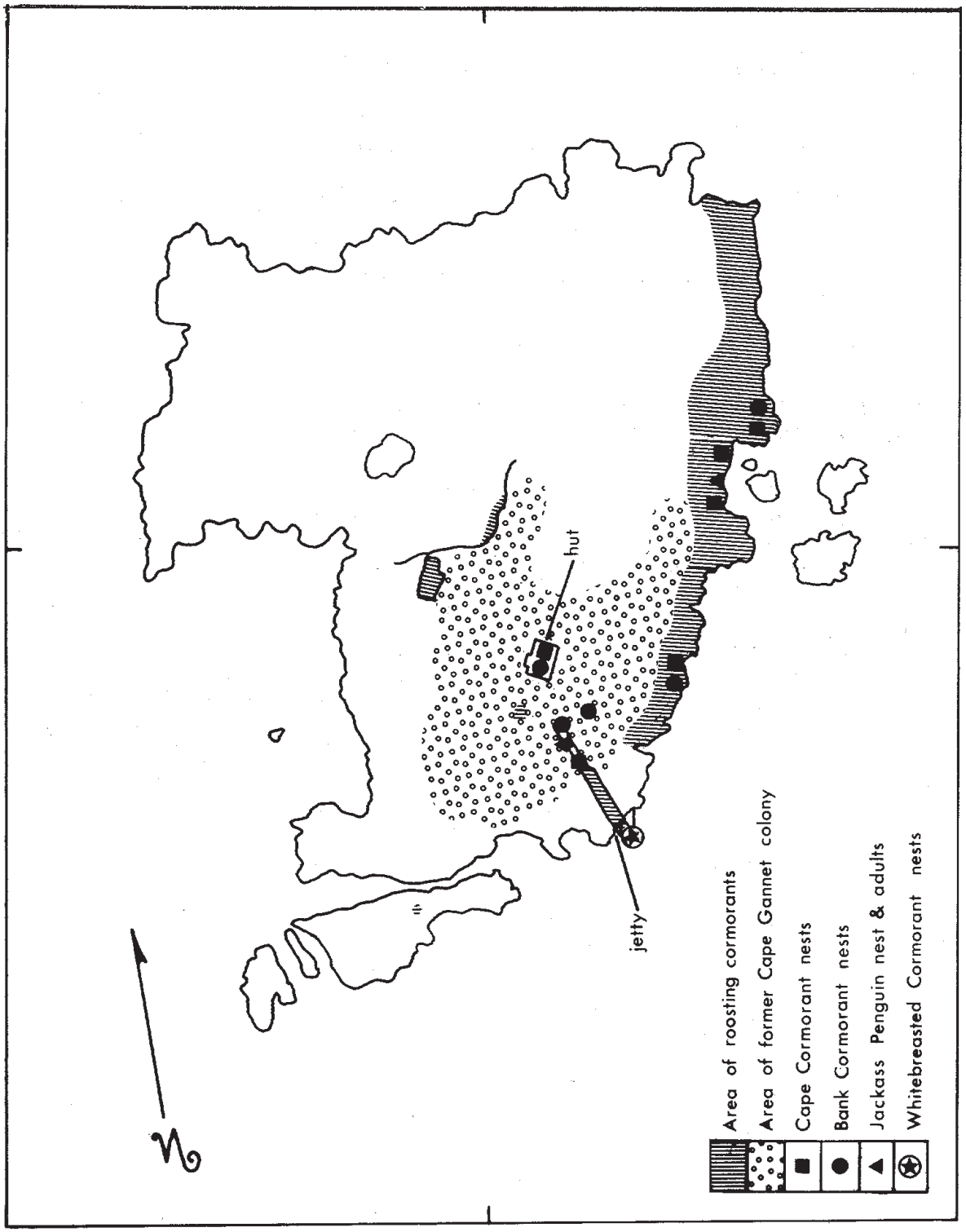

Figure 1 Hollamsbird Island indicating the location of seabirds.

about 12 m is in the northeast where there is a ridge whose seaward side forms an overhanging cliff (Rand 1952, 1963). Even on days of calm seas the passage of oceanic swells makes landing on the island extremely difficult and during severe storms almost the entire island is washed over (Rand 1952).

Although called "Bird Island" the main occupants are currently Cape Fur Seals *Arctocephalus pusillus*, of which photographs taken from the air and on the ground indicate about 3 000 on the island in May 1988 (D. de Villiers pers. comm.). Hollamsbird Island has never been continuously inhabited by humans but formerly there was irregular short-term occupation by sealers and guano collectors (Eden 1846, Green 1950, Rand 1952, Shaughnessy 1984). In 1951 a building and jetty were erected in the northeastern corner of the island, an area where there had been previous buildings (Fig. 1). Well before 1988 the roof of this building had collapsed, probably through accumulation of guano, and in 1988 all that remained were the stone foundations, the floor and some of the wooden wall and window supports, and a tall pile of debris and stores upon which birds were nesting. Immediately adjacent to the building are the jetty and concrete "barrels" for anchoring jetty support wires.

SYSTEMATIC LIST

Jackass Penguin *Spheniscus demersus*

Only four individuals were found on the island. Three nonbreeding adults, two males and a female (sexed by bill size), were among cormorants above the northern cliff. A further, unsexed, adult was incubating an egg among broken ground under the jetty.

In the only previous (1951) census there were two pairs present although "about a dozen" were nesting under the floor of a building in 1938 (Rand 1952). It is obvious from Eden's (1846) account that in 1845 there were several hundred penguins on the island, of which he captured and removed sixteen. Elsewhere along the Namib coast the breeding population of this penguin during 1984-1988 was about 5 000 pairs (Crawford *et al.* in press).

Whitebreasted Cormorant *Phalacrocorax carbo*

Four individuals, two adults and two birds in almost adult plumage, were perched high on the jetty superstructure. Two old nests in the same area were large enough, and of appropriate materials, to have been made and used by this species which should be regarded as a probable breeding species. Rand (1952) reported seeing occasional Whitebreasted Cormorants among Cape Cormorants but gave no indication of numbers.

Bank Cormorant *Phalacrocorax neglectus*

There were 13 occupied Bank Cormorant nests in May 1988. Five were on the remains of the building, two on a raised concrete jetty support and three in the cormorant roosting area above the northern cliffs. In addition, Bank Cormorants appeared to occupy a further six sites which lacked nest structures, three on the jetty superstructure and a further three on raised concrete jetty supports.

Rand (1952) makes no mention of Bank Cormorants at Hollamsbird. Photographs taken by P.D. Shaughnessy from offshore in March 1977 revealed 18 nests (Cooper 1981). Bank Cormorants were seen on the island in August 1986 (AJW) and several were carrying seaweed ashore in November 1987 (BMD). The world breeding population of this cormorant was 7 000 pairs in November/December 1978 (Cooper 1981).

Cape Cormorant *Phalacrocorax capensis*

There were 45 occupied Cape Cormorant nests on the island in May 1988 of which 32 were on the ruins of the building and the remainder in the cormorant roosting area along the northern cliffs. At least 995 Cape Cormorants were roosting on the island. This count was made after disturbance by

the helicopter landing. It is estimated that fewer than 500 birds had been displaced by the disturbance. It is probable that other Cape Cormorants which had roosted overnight on the island were at sea fishing during the brief visit.

Rand (1952) found Cape Cormorants roosting but not breeding on the island in April-May 1951. Counts of cormorants, from aerial photographs or from boats offshore, are 215 nests and 163 roosting birds in November 1956, 152 nests and 3 359 roosting birds in December 1976, 14 nests and 586 roosting birds in March 1977, and 109 nests and 592 roosting birds in November 1978 (Cooper *et al.* 1982). These counts may include some Bank Cormorants which could not be differentiated on the aerial photographs. In 1977-1981 the breeding population of Cape Cormorants along the Namib coast was a little over 170 500 pairs (Cooper *et al.* 1982).

Cape Gannet *Sula capensis*

In May 1988 several adult and juvenile birds were seen flying in the vicinity of the island but none was seen inshore or on the island.

Formerly Cape Gannets bred on Hollamsbird Island from at least 1828 to at least 1938 (Crawford *et al.* 1983, Shaughnessy 1984 and references therein). In 1845 Eden (1846), whose other estimates appear realistic (Williams 1987a), estimated between 40 000 and 50 000 birds. This number of birds would have covered almost the entire island. Possibly numbers were greatly enhanced by displacement of birds from islands farther south during the 1844-1845 guano scraping boom (Rand 1952). The population became depleted through encroachment of seals on the breeding area and, though still numbering some hundreds of pairs after 1910, was gone by 1938 or shortly thereafter (Crawford *et al.* 1983, Shaughnessy 1984). Comparison of the topography in a photograph of the gannet colony taken at some time between 1910 and 1938 with current topography indicates that the gannets bred in the northern and eastern parts of the island, centred in the area where the hut was erected in 1950 (Fig. 1). This is the area least affected by over-washing during storms. The area depicted in the photograph is not sufficient to support the estimated several hundred pairs of gannets which bred there at that time and it is probable that the breeding colony extended along the northern cliffs in the area currently used by roosting cormorants.

Kelp Gull *Larus dominicanus*

Two juveniles and one adult were on the island during our visit. At least 41 additional birds, about half of which were adults, were on the water or flying within 1 km of the island and probably had been scared off the island by the arrival of the helicopter. Rand (1952) found this gull scarce around the island with a maximum of three at one time.

Other species

No birds, other than individuals of species seen on the island, were seen over adjacent seas in May 1988, probably because of the extremely calm sea conditions during the landing period. Earlier visitors have recorded Blackbrowed Albatrosses *Diomedea melanophris*, Pintado Petrels *Daption capense*, Whitechinned Petrels *Procellaria aequinoctialis*, Wilsons Storm Petrels *Oceanites oceanites* and Subantarctic Skuas *Catharacta antarctica* over adjacent waters and, on the island, Ruddy Turnstones *Arenaria interpres*, Hartlaub's Gulls, *Larus hartlaubii* and once a Larklike Bunting *Emberiza impetuana* (Eden 1846, Rand 1952). The only other species which breeds along the Namib coast and is likely to occur at Hollamsbird Island is the Crowned Cormorant *Phalacrocorax coronatus* which was looked for, but not seen, in May 1988.

DISCUSSION

Hollamsbird Island is no longer an important seabird breeding locality and for no species does it

support more than 1% of the world population. However, it is the northernmost breeding locality of the Jackass Penguin, although there is a population of about 25 pairs in caves near Sylvia Hill on the mainland coast only 65 km south (Loutit & Boyer 1985). Probably it is interaction with birds from this mainland colony that sustains the tiny population at Hollamsbird Island. This island is also the northernmost regular breeding locality of the Bank Cormorant, although breeding has been attempted at least once 220 km farther north at Swakopmund (Williams 1987b).

The pressure of physical competition for space between the birds and fur seals on Hollamsbird Island was evident in several ways. Most breeding localities were on raised features, the remains of the building or concrete "barrels" used to support jetty cables, which were inaccessible to the seals. The main cormorant roosting area, which was also used for breeding, is a moderate to steep slope ending in an overhanging cliff. This area is accessible to seals but seems to be avoided by them. In part this avoidance may be because of the danger of falling off the cliff. Elsewhere on the island the only cormorant roosting areas are raised areas of rocks which also appear inaccessible to seals. The areas regularly used by birds show up clearly on aerial photographs because of their white guano cover which contrasts with the seal areas where the guano cover is brown.

The avifauna of Hollamsbird Island does not, under current circumstances, require or merit any especial conservation action. In February 1988 the island, along with all other South African islands off the Namib coast formerly administered as guano islands, was declared a provincial nature reserve under the control of the Cape Province Chief Directorate: Nature and Environmental Conservation.

Seals have clearly restricted the areas on the island available to birds. They are unlikely to cause further population reduction because their surface occupancy is probably already at its maximum and seabirds are restricted to areas largely inaccessible to seals. The difficulty of landing effectively precludes casual human disturbance. The rarity of such disturbance is attested by the extreme tameness at this island of Cape Cormorants, a species which elsewhere often flees the nest at human approach (pers. obs.), of which some pairs allowed approach to within one metre of the nest. In the past the main cause of "unnatural" mortality would have been human disturbance and egg collection incidental to killing of seals and collection of guano. The state of the market for seal skins and other seal products renders commercial exploitation of the relatively inaccessible population at Hollamsbird Island uneconomic. The quantity of seal and bird guano on the island in 1988 was small despite the more than thirty years since the last commercial guano scraping. The small quantity of guano, its primarily seal origin, and the difficulties of collection would probably make guano exploitation at this island unprofitable.

The conservation status of this island must be considered stable. The bird population will probably remain small because of competition for space with the seals and this situation is likely to continue unless there is a major change in the seal population of the island. Now that the island is a declared nature reserve it is extremely unlikely that even major changes in the economic factors which control the seal and guano industries will result in any further exploitation of the island's natural resources.

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