

# Population Trends of Seabird on the Namibian Offshore Islands

By Imke Cordes

“I had never dreamt of bird life in such profusion. This is one of the unknown wonders of the world.”

This statement refers to the islands, notably Ichaboe Island, along the Namib Desert coast to the north and south of Lüderitz. It reflects the awe, which the sight of masses of seabirds inspired in many sailors, sealers and whalers as they passed the barren rocks off the forbidding coast during the 19th and the early 20th century. Unfortunately, the quest for wealth defeated nature, and the overexploitation of the seabird's famous guano and eggs, was the onset of a decline in the numbers of breeding seabirds. Today, many of the guano bird species are threatened and without proper management and strict conservation measures could face extinction.

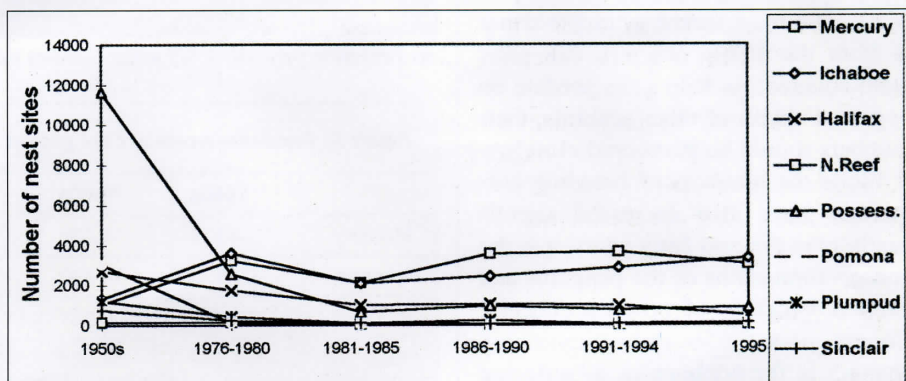
The islands, inaccessible to mammalian predators such as hyaena and jackal, provide perfect conditions for breeding seabird populations. However, human interference and competition for the once abundant fish resource, has changed the ideal conditions to a constant battle for survival.

Most seabirds in Namibia breed on 15 offshore islands or rocks, from Hollamsbird Island in the north, to Sinclair's Island in the south. The three artificial platforms at Cape Cross, Swakopmund and Walvis Bay, and a few mainland areas also support a significant number of breeding seabirds.

The species producing most of the guano are the Cape cormorant (*Phalacrocorax capensis*), Cape gannet (*Morus*



Gannets on Ichaboe island which at one stage supported the world's largest colony of gannets. The development of the gannet population is directly linked to food availability.



Population trends of Jackass penguins at the eight main breeding localities

	1950s	1976-1980	1981-1985	1986-1990	1991-1994	1995
Mercury	1 020	3 218	2 092	3 552	3 659	3 029
Ichaboe	1 306	3 598	2 070	2 427	2 858	3 343
Halifax	2 700	1 750	1 007	1 050	981	471
N.Reef	151	151	58	2	0	0
Possess.	11 623	2 568	638	946	751	895
Pomona	3 024	123	20	15	8	1
Plumpud.	1 188	438	100	228	26	23
Sinclair	741	246	124	44	63	110
Total	21 753	12 092	6 109	8 264	8 346	7 872

The total population sizes of guano producing seabirds on the Namibian offshore islands in December 1995 were as follows:

Cape cormorant:	22 000 pairs
Crowned cormorant:	475 pairs
Bank cormorant:	2 900 pairs
Whitebreasted cormorant:	56 pairs
Cape gannets	24 000 pairs
Jackass penguins	7 873 active nests
Kelp gulls	2 650

**Table 1: Active nest sites for penguins and breeding pairs of gannets since the 1950s**

Year	Jackass penguin	Cape gannet
1950s	31 640	114 633
1960s	-	89 066
1976-80	12 092	35 763
1981-85	6 130	15 691
1986-90	8 288	?
1991-94	8 373	20 593
1995	7 873	24 000

*capensis*) and jackass penguin (*Spheniscus demersus*). These species form large, closely-packed colonies, which result in a rapid accumulation of manure. The other cormorant species breeding on most of the islands are bank (*P. neglectus*), crowned (*P. coronatus*) and whitebreasted (*P. carbo*) cormorants. Although smaller breeding groups, they represent a high proportion of the world population of these particular species. Some 80% of the world population of bank cormorants breed on two Namibian islands. Other bird species that breed on the islands include kelp gulls (*Larus dominicanus*), Hartlaub's gulls (*Larus hartlaubii*), swift terns (*Sterna bergii*) and African black oystercatchers (*Haematopus moquini*).

The number of breeding kelp gulls has increased significantly in the past years. The most recent available count is from the 1970s, when 1 798 pairs were counted. As kelp gulls predate on eggs and chicks of other seabirds, their numbers should be monitored closely.

While the numbers of breeding cormorants have also decreased significantly over the past forty years, it is the conservation status of the penguins and gannets which is of primary concern. Counts since 1956 show significant changes in the populations as reflected in Table 1.

The South African red data book lists the jackass penguin, which formerly was the most numerous of the guano producing seabird species, as vulnerable. From hundreds of thousands at the beginning of this century, their number has dropped to a mere 25 194 (7 873 active nests) in Namibia at the end of 1995. The populations on the northern islands, namely Mercury, Ichaboe, Halifax and Possession, have been fairly stable over the past twenty years, while the colonies on the southern

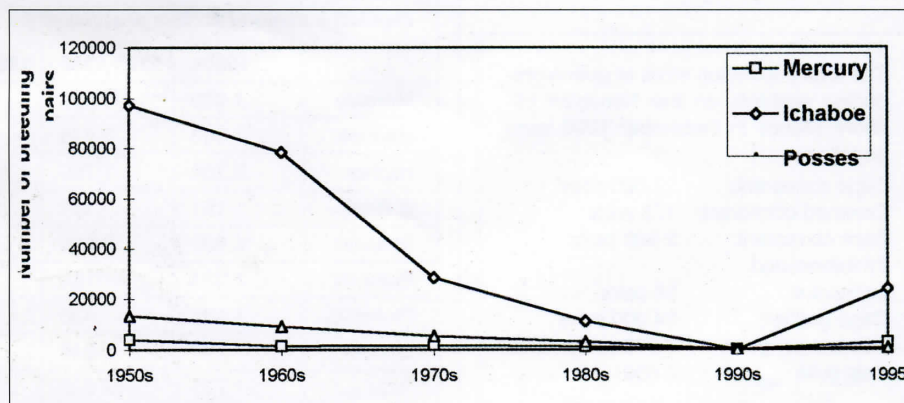


Imke Cordes

By 1995 there were only 7 873 active breeding nests of jackass penguins in Namibia.

**Figure 3: Population trends of Cape gannets at the three breeding localities**

	1950s	1960s	1970s	1980s	1990s	1995
Mercury	3 919	1 385	1 939	1 318	2 173	3 029
Ichaboe	97 239	78 430	28 427	11 335	17 667	24 000
Possess.	13 477	9 251	5 397	3 038	1 919	800
Total	114 635	89 066	35 763	15 691	0	27 829



islands have declined (Plumpudding and Sinclair) or even become extinct like those on North Reef, Albatross and Pomona islands (Figure 2).

The excessive taking of eggs and disturbances during guano harvesting are among the numerous causes of these trends. In the early part of the 20th century the commercial collection of penguin eggs resulted in the annual removal of 500 000 to 700 000 eggs from the breeding localities. This ceased in 1968. The harvesting of guano has since been reduced and is now controlled by strict regulations. When harvesting is not managed and controlled properly, it may cause substantial disturbance and deprive the birds of their nesting material.

Penguins naturally make their nests in burrows in the guano where they are

protected from predators, especially the kelp gulls. With the removal of the thick guano layer, the penguins have to make their nests on the surface where they are susceptible to predators and the heat of the sun. Competition with seals for breeding space is another threat at the breeding colony, but in most colonies this is reduced through management. At present the main threats to the penguins are scarcity of food resulting from increasing exploitation of fish by man, and oil pollution by damaged oil tankers or ships cleaning their tanks at sea.

As with the penguins, the decreasing numbers of Cape gannets on the only three breeding sites along the Namibian coast is a cause for concern (Figure 3). Ichaboe has always supported the main gannet population in Namibia and was

at one stage the world's largest colony. This colony has decreased most rapidly. The period of sharp decline in gannet numbers coincides with the dramatic decrease of the pilchard stocks in the 1960s. This suggests that the development of the gannet population is primarily a result of food availability.

The movement of gannets is closely connected with the distribution of fish shoals, especially pilchards, in the coastal waters. These birds are therefore a good indication of the abundance of fish stocks.

Careful management and monitoring is required to stabilise the bird populations, and while little can be done about the food shortage, disturbance at the breeding colonies must be kept at a minimum.



*Some 80% of the world's cormorants breed on two Namibian islands.*

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