

ON THE 17TH CENTURY AVIFAUNA OF ROBBEN ISLAND, SOUTH AFRICA

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INTRODUCTION

It is well known that Jackass Penguins *Spheniscus demersus* occurred and bred in large numbers on Robben Island (33 45S, 18 22E) in Table Bay, South Africa (Thom 1952, Raven-Hart 1967, Frost *et al.* 1976) but that due to human exploitation they ceased to breed there sometime before 1800 (Westphal & Rowan 1971). However, a study of Raven-Hart (1967) and Thom (1952, 1958) shows that other birds occurred there and that it is possible to determine what species were or may have been involved. The modern breeding avifaunas of the other offshore islands of the western Cape are catalogued in Brooke and Crowe (1982) and this information may be used to corroborate conclusions derived from Raven-Hart and Thom (*op.cit.*).

AVIFAUNA

Pelicans on Robben Island are referred to by Raven-Hart (1967) on p.30 (July 1604), 33 (July 1607) and 49 (July or August 1610). The species must be the Great White Pelican *Pelecanus onocrotalus*, the only pelican to breed in the Cape Province. Although July is early in the breeding season the necessary implication is that they were there to breed since they do not otherwise occur on offshore islands (Guillet & Crowe 1981). There is only one breeding colony of Great White Pelicans in the southwestern Cape (Brooke in press) currently on Dassen Island but the species has bred on different islands at different times. It appears that in the early 17th century Robben Island was where they bred.

At present Bank Cormorants *Phalacrocorax neglectus* and Crowned Cormorants *P. coronatus* breed on Robben Island (Kriel *et al.* 1980) and Whitebreasted Cormorants *P. carbo* did so in 1950 and 1951 (Brown 1952) but apparently not since (Kriel *et al.* 1980). In the 1970s in the southwestern Cape the largest colony of Bank Cormorants contained 211 nest sites (Cooper 1981); the largest colony of Crowned Cormorants contained 238 nest sites (Crawford *et al.* 1982) and the largest colony of Whitebreasted Cormorants contained 123 nest sites (Brooke *et al.* 1982). There is no reason to think that any of these three cormorants ever had much larger colonies than at present. However, five southwestern Cape islands in the 1970s had breeding colonies of the Cape Cormorant *P. capensis* with nest sites in four or five figures (Cooper *et al.* 1982).

In July or August 1610 Downton reported "Shags or cormerants at the Iland (Robben Island) in great abundance" (Raven-Hart 1967: 49). For September 1652 the Journal of Jan van Riebeeck records (Thom 1952: 58-59):

"13th The yacht returned from the Robben Island bringing back about a hundred black birds called duikers, which taste good; *item* some penguins and about 3 000 eggs, all of which we distributed among the men to serve to some extent as refreshment and by way of a change. It was very welcome, as the supply of stockfish has been exhausted and very little has been caught in the seine of late. The skipper of the yacht, Sijmon Turver, . . . reported . . . that there was no fresh water obtainable, but penguins and black duikers in abundance. . . . So on the

14th with a fine S.W. wind set sail for the island in the said yacht, taking along both sloops with a number of casks and tubs to bring back eggs, penguins and other fowl for the men to eat, as the supply of groats and peas is beginning to run low and the natives from Saldania have not yet appeared with any cattle.

"Anchored in the lee of the Robben Island in the afternoon on a sandy bottom. Went ashore and found that the gulls had carried off and eaten all the eggs at the northern corner after the duikers had been driven from their nests the previous day by the men from the yacht. We then went to the southern corner where we found plenty of eggs, but it became so late that we took aboard only 500 to 600 as well as 25 birds. Left 6 men ashore to gather the rest of the eggs on the

15th first thing in the morning (the wind blowing fairly hard from the S.E.). When they arrived there to do this, however, they found all the nests had been emptied by the gulls as before; this we saw for ourselves when we went ashore. So, not being able to find anything else, drove about 600 penguins to our vessels: they allowed themselves to be driven like sheep.

"Meanwhile the Hon. Van Riebeeck . . . went right round the island and across a few times and found it in many places quite sandy and covered with small bush; some places had a fair amount of grass and all sorts of pretty, sweet-smelling herbs and flowers. *Item* at several places streamlets of fresh water welled from the earth, trickling down to the beach and over the rocks into the sea."

The only species to which such a large number of cormorants can reasonably be referred is the Cape Cormorant which has not bred there in the last hundred years or more (Cooper *et al.* 1982). It will be noted that there were at least two colonies on Robben Island in September 1652.

On 18 August 1659 20 herons' eggs were sent to Cape Town for Commander van Riebeeck's table (Thom 1958). Heron means basically the Grey Heron *Ardea cinerea* but would have been used to cover any similar bird, particularly one which laid plain blue eggs. The only *Ardea* to breed on other offshore islands in the southwestern Cape at present is the Blackheaded Heron *A. melanocephala* in low woody vegetation on Schaapen and Meeuw Islands in Saldanha Bay (Brooke & Crowe 1982). Cattle Egrets *Egretta ibis*, Little Egrets *E. garzetta* and Blackcrowned Night Herons *Nycticorax nycticorax* breed at present on Robben Island in exotic *Eucalyptus* trees (H.G. Robertson nest record cards for 9 December 1980). In view of the absence of trees in September 1652 (see long quotation above) it seems unlikely that any of these species

was involved. It has been suggested that the "herons" were Sacred Ibises *Threskiornis aethiopicus* which currently breed on six southwestern Cape islands (Brooke & Crowe 1982). Europeans who had had no previous experience of them might well call "herons" any bird with a long neck and bill despite the fact that their eggs are patterned on a pale ground. However, in the southwestern Cape Sacred Ibises do not start laying until September and October and November are their chief egg laying months (Winterbottom 1968). 17 or 18 August is too early a date on which to collect their eggs. But August is the peak egg laying month for the Grey Heron in the southwestern Cape and a major egg laying month for the Blackheaded Heron (Winterbottom 1968). Grey Herons breed on offshore islands in extreme south-eastern Siberia (U.S.S.R.) and forage on the mainland (Litvinenko 1982). This seems to be the case as well when Grey Herons breed on islands in the Banc d'Arguin, Mauritania (de Naurois 1969), and the northern Red Sea (Meinertzhagen 1954). I conclude that Grey Herons bred on Robben Island in the 17th century and foraged in the coastal wetlands of the mainland.

Geese on Robben Island are referred to by Raven-Hart (1967) on pp. 33 and 146. The latter reference is to young birds taken for food on 11 May 1639. Thom (1952) mentions 49 goose eggs sent to Cape Town on 21 August 1654 and since there is no previous mention of domestic geese *Anser* form being sent to the island wild geese must be presumed. The only goose to breed on southwestern Cape islands at present is the Egyptian Goose *Alopochen aegyptiacus* which does so on six islands (Brooke & Crowe 1982) and it seems reasonable to suppose that this was the species on Robben Island in the 17th century. In the southwestern Cape Egyptian Geese lay between July and January with a peak in August and September (Winterbottom 1968). On 6 January 1659 the geese on the island were said to be doing well which suggests that domestic geese had been brought there by then. Alternatively, nestling Egyptian Geese had been captured and domesticated which is easily done. As a result of this report five domestic ducks *Anas* form were sent to join them on 9 January (Thom 1958).

Wild duck were present on 21 July 1607 (Middleton in Raven-Hart 1967) in addition to geese. Without further data it is not possible to say which species was involved though Raven-Hart's (1967) suggestion that they were Yellowbilled Duck *Anas undulata* is not impossible since it is at present the commonest duck in the southwestern Cape (pers.obs.). However Middleton (*op.cit.* p.33) says "Wilde-geese, Ducke, Drake, and Pellicanes" which implies a sexually dimorphic species. This would mean the South African Shelduck *Tadorna cana* (Siegfried 1976), not the other sexually dimorphic ducks, the Southern Pochard *Netta erythrophthalma* and the Maccoa Duck *Oxyura maccoa* neither of which frequents temporary pools. Alternatively, two species were seen, perhaps the Yellowbilled Duck and the Cape Teal *A. capensis*, the former of which has been seen on the island this century (FitzPatrick Institute Islands File). Duck breeding seems unlikely on Robben Island since surface water there is the ephemeral product of heavy rain.

Downton in July or August 1610 (Raven-Hart 1967: 49) refers to "another kind of foule like moore hens". This I take to be African Black Oystercatchers *Haematopus moquini* which still

occur there (Hockey 1983). The Common Moorhen *Gallinula chloropus* and the Redknobbed Coot *Fulica cristata* are unlikely to be meant since they normally occur only on permanent waterbodies or, in the case of the coot, on regularly flooded pans.

The gulls which ate the eggs of disturbed cormorants (see long quotation above) were probably African Kelp Gulls *Larus dominicanus vetula* (trinomial used because I intend to argue that it is a separate species) which are well known for doing this (Brooke & Cooper 1979). They are not known to breed on Robben Island (Kriel *et al.* 1980, Crawford *et al.* 1982) though they are common there (Gill 1932, Brown 1952). It is quite feasible that they bred there in the 17th century. On 30 July 1659 50 gulls' eggs were sent to Cape Town from Robben Island for the Commander's table (Thom 1958). The time of year precludes the African Kelp Gull which breeds from "September to March but mainly in November" (McLachlan & Liversidge 1978). The record almost certainly refers to Hartlaub's Gull *L. hartlaubii* which breeds from April to September (McLachlan & Liversidge 1978) (actually from February onwards, pers.obs.) and which still breeds on Robben Island (Kriel *et al.* 1980). It is not likely to refer to the Swift Tern *Sterna bergii* which does not lay so late in the year: the 27 August 1953 breeding record in Kriel *et al.* (1980) is of "some fully fledged young still in the colony" (Tinbergen & Broekhuysen 1954).

Among the species which have apparently bred on Robben Island this century (Gill 1932, Kriel *et al.* 1980, FitzPatrick Institute Islands File) and which on habitat grounds probably did so in the 17th century as well are the Bank, Crowned and Whitebreasted Cormorants, Crowned Plover *Vanellus coronatus*, Whitefronted Plover *Charadrius marginatus*, Kittlitz's Plover *C. pecuarius*, Spotted Dikkop *Burhinus capensis*, Swift Tern, Speckled Rock Pigeon *Columba guinea* and Cape Wagtail *Motacilla capensis*. All save the dikkop have been reported breeding on other offshore islands in the southwestern Cape in the 1970s (Brooke & Crowe 1982). There is, however, no positive evidence or even suggestion that these species bred on Robben Island in the 17th century, only extrapolation from present distribution and habitat requirements.

SUMMARY

The 17th century avifauna of Robben Island included the Jackass Penguin, the Great White Pelican, the Cape Cormorant, the Grey Heron or, possibly, the Blackheaded Heron, the Egyptian Goose, at least one species of probably nonbreeding duck, the African Black Oystercatcher (breeding not proven), Hartlaub's Gull and the African Kelp Gull (breeding not proven). Based on modern distributions and habitat requirements at least 10 other species probably also bred in the 17th century. Human exploitation and disturbance led to the extinction of the Jackass Penguin, Great White Pelican, Cape Cormorant and Grey Heron as breeding species on Robben Island, perhaps by the end of the 17th century.

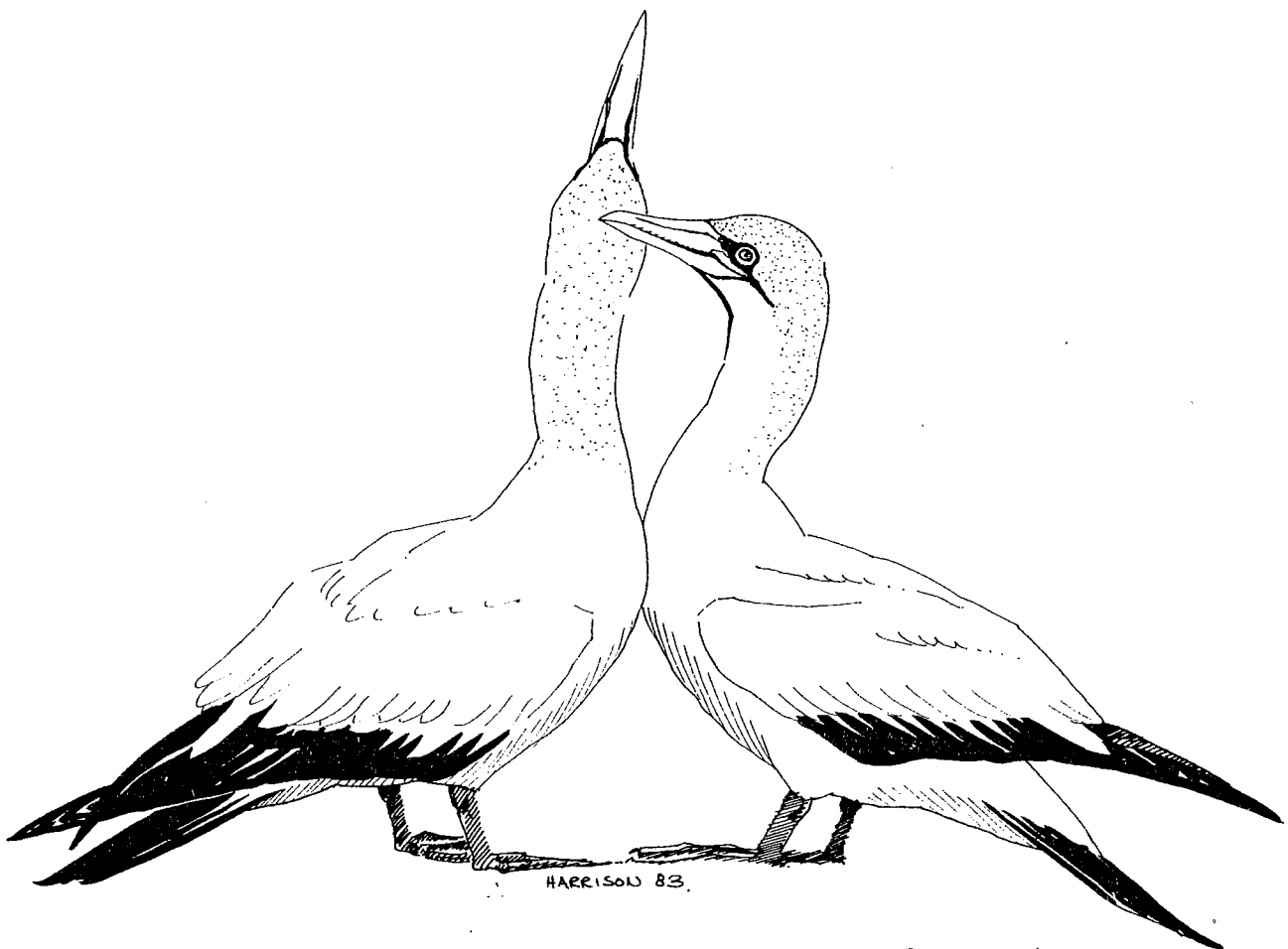
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Cape Gannets