

MARINE CORMORANTS USING MOORED BOATS AS NEST SITES IN  
SOUTHERN AFRICAN WEST COAST HARBOURS

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*Received 8 May 1984, accepted 21 May 1984*

INTRODUCTION

Brooke *et al.* (1982) mention without discussion that Whitebreasted Cormorants *Phalacrocorax carbo* were breeding on moored lighters in Walvis Bay harbour (Appendix 2 loc. 14 as read with Appendix 3: 213). Breeding on moored boats has not been reported for any other African cormorant (Crawford *et al.* 1982, Urban 1982) nor for those in India (Ali & Ripley 1968), the U.S.S.R. (Dement'ev & Gladkov 1966), western Europe (Cramp & Simmons 1977), North America (Palmer 1962, Bent 1964), South America (Murphy 1936) and Australia (Serventy *et al.* 1971).

OBSERVATIONS

When visiting Port Nolloth (29 15S, 16 52E) on 19 November 1983 RKB observed the cormorant colonies on Robbe and Owen Islands and Matthew Rock in and just south of Port Nolloth harbour. Despite expectation (Crawford *et al.* 1982), RKB did not observe Crowned Cormorants *P. coronatus* breeding on Robbe Island. However, at Owen Island several Crowned Cormorants were seen flying northwards carrying seaweed for nest building. They were followed along the coast and found to be building nests on fishing boats on the seaward side of the moored fleet in Port Nolloth harbour. Six boats were involved and supported (from south to north) 5, 10, 18, c. 20, less than 10, 29 nests: over 90 nests in all. It was not possible to check the nest contents from the shore but no large nestlings as opposed to brooding adults were seen. Neither was it possible to be sure that all nests were seen and counted.

Port Nolloth was visited on 12 and 13 February 1984 by RL during a period of heavy coastal fog but he was able to reach moored boats from a rowing boat. Only two boats in the centre of the fleet supported cormorant nests. Upon enquiry it appeared that all boats were cleaned in late December 1983. The nests observed by RKB had probably not produced flying young: from laying an egg to fledging takes c. 60 days (Williams & Cooper 1983). One of the two boats with nests was the *Andrea doria* which was reported to RL not to have been to sea for at least three years. Its superstructure supported seven Crowned Cormorant nests, four with two nestlings each and three with brooding parents, probably on eggs or naked young. On its decks were 11 Cape Cormorant *P. capensis* nests, three with three nestlings each and eight with brooding parents, probably on eggs

or naked young. The other occupied boat lying to the south supported four Crowned Cormorant nests and seven Cape Cormorant nests but no large nestlings were visible.

RKB visited Lambert's Bay (32 05S, 18 18E) harbour on 18 December 1983 and walking on the causeway (harbour wall) to Bird Island noticed Cape Cormorants nesting on some of the moored fishing boats on the island side of the fleet. Bird Island itself has been a Cape Cormorant breeding site for many years (Cooper *et al.* 1982). He returned on 31 December to count nests. The most southerly occupied boat supported one nest of a Crowned Cormorant, another regularly breeding species on Bird Island (Crawford *et al.* 1982). One dredger, one medium-sized fishing boat, 12 small fishing boats and one rowing boat supported between them 47 Cape Cormorant nests, none of which was observed from the causeway to contain young. The number of nests per boat varied from one to eight (the last number on the dredger); mean 3,1; mode 2 nests.

Lambert's Bay was revisited on 5 June 1984. Nearly all the few boats in the harbour were obviously in use and only one supported Cape Cormorant nests, one containing a large downy chick and one with a brooding parent.

The only fishing harbours between Port Nolloth and Lambert's Bay are Hondeklipbaai (30 19S, 17 16E) and Doringbaai (31 49S, 18 14E). Doringbaai was visited by RKB on 29 December 1983 but no fishing boat was seen to support a cormorant nest. In fact, not even traces of guano were visible through binoculars. However, there is no nearby cormorant breeding colony at this locality or at Hondeklipbaai from which birds could readily be recruited to breed on moored boats.

#### DISCUSSION

As noted in the introduction, cormorant breeding on moored boats has apparently only once previously been reported: at Walvis Bay by the Whitebreasted Cormorant. However, Crowned Cormorants and, to a lesser extent, Cape and Whitebreasted Cormorants regularly roost on moored boats in harbours (J. Cooper pers. comm., pers. obs.). Thus, a roosting site may precede a nesting site and can become one if usage for roosting shows it to be suitable for breeding.

After discussion with Dr. R.J.M. Crawford and F. Kriel of the Sea Fisheries Research Institute it appears that the boats used for nesting at Lambert's Bay and Port Nolloth are almost entirely those used for catching Cape Rock Lobsters *Jasus lalandii*. The closed season for rock lobster fishing north of St Helena Bay in 1983 and 1984 is 1 July to 31 October. Many rock lobster boats did not renew their "K" licences to fish for Cape Rock Lobsters during the 1983/84 season and in future these boats will only be used to replace licensed boats which are no longer functional. Thus it is probable that most cormorant nests on boats will fledge young unless the owners decide to go to the trouble of cleaning boats which are not expected to put to sea as was done at Port Nolloth in late December 1983.

The usually gentle rocking of a moored boat in a harbour does not constitute an impediment to nest building and other parts of

the breeding cycle for species which usually build on solid rock. It is true that Crowned Cormorants breed on low bushes on Meeuw and Schaapen Islands in Saldanha Bay (e.g. Gillham 1963) but these bushes are so interdigitated with old nests and incidental rubbish that they are virtually rigid (pers. obs.). Besides, their height of less than 2 m means that they are relatively little affected by wind. However, they breed in proper low trees on Robben Island (Kriel *et al.* 1980), the trees being the New Zealand exotic *Myoporum serratum* and the nests being placed c. 2 m above the ground (G.D. Underhill pers. comm.).

Whitebreasted Cormorants nesting on the shroud ratlines of the *Montrose*, a wrecked ship on the Skeleton Coast of Namibia (Brooke *et al.* 1982: Appendix 2), are apparently not impeded by movement of their nest substratum. The shrouds on one side of the mast have broken away from the hull and, as a result, they sway gently in the wind (J. Cooper pers. comm.). Of course, unlike other marine cormorants in southern Africa, Whitebreasted Cormorants have populations breeding in the interior of Africa in trees which sway in the wind (e.g. Olver & Kuyper 1978).

We do not regard breeding on boats in Port Nolloth harbour as a new colony to be added to the Crowned Cormorant list in Crawford *et al.* (1982) but as a movement of the Robbe Island colony to a site a hundred metres or so away more suitable in some respect. Crawford *et al.* (1982 Appendix 3) report only one Crowned Cormorant count for Robbe Island and that was of 232 birds in nuptial plumage, a few of whom had just started to build nests (*op cit.* Table 3) in mid January towards the end of the main egg laying season (*op. cit.* Table 2). In fact, six nests contained a single egg and 56 were being built (J. Cooper *in litt.*). How regularly Robbe Island is used as a breeding site by Crowned Cormorants is not known since Port Nolloth is seldom visited by ornithologists. It may be that in the 1983/84 breeding season the Crowned Cormorants abandoned Robbe Island to breed on moored boats due to pressure from roosting Cape Cormorants on a very small island. In this connection, it may be significant that J. Cooper (*in litt.*) recorded 59 nests of the Bank Cormorant *P. neglectus* on 16 January 1980 but RKB observed only c. 15 nests on 19 November 1983.

However, in the case of the Cape Cormorants breeding on moored boats in Port Nolloth harbour we consider this to be a new breeding locality, the 54th, to be added to the 51 in Cooper *et al.* (1982) and the further two reported in Cooper & Smith (1982). Owen Island is nearly 1 km south of the harbour and the boats can hardly be regarded as an adjunct to the island as is the case with the Crowned Cormorants breeding on Robbe Island and the Cape Cormorants breeding on Bird Island, Lambert's Bay.

On Bird Island, Lambert's Bay, in December 1983 all rocky areas not used by Cape Fur Seals *Arctocephalus pusillus* or subject to wave action were occupied by breeding Cape Cormorants. However, several flat sandy or paved stretches were not occupied by Cape Gannets *Sula capensis*. Assuming that some Cape Cormorant populations prefer to nest on an elevated substratum rather than on flat ground, the only available sites close to Bird Island would be moored fishing boats. But in some years these flat stretches are occupied by breeding Cape Cormorants when all rocky areas have been colonized by breeding conspecifics (J.

Cooper pers. comm.).

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REED CORMORANT.  
HARRISON 84.