

Itinerant Breeding by Pied Cormorants on Carnac Island, Western Australia

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Many seabirds return to the same breeding site year after year. However, during studies of gulls on Carnac Island near Perth, Western Australia we noted that Pied Cormorants, *Phalacrocorax varius* did not show this site fidelity. Although the number of breeding pairs (450-550) and the start of laying (early March) was similar in all years, the cormorants bred on a different area of the island in every year from 1976 (Figure 1). The 1976 locations include those recorded by S. G. Lane (1979).

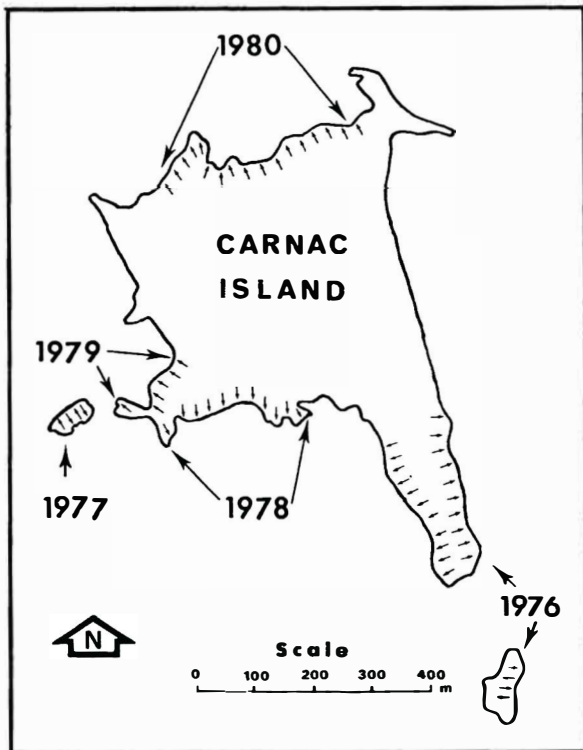
On Carnac Island, cormorants build their nests on top of shrubs and low bushes, mainly Nitre

Bushes *Nitraria schoberi* and acacias *Acacia rostellifera*, at cliff edges and on offshore stacks. These woody perennials are destroyed by the combined effects of trampling and guano deposition, and are replaced by soft annuals unsuitable for nesting platforms. This situation may have been exacerbated by the unusually dry period from 1976 to 1980. Thus, as Serventy *et al.*, (1971), have noted, destruction of their breeding habitat forces the birds to move to other sites in subsequent years. Regeneration of the vegetation in evacuated areas may take at least 4-5 years and under unfavourable conditions (e.g. dry periods) only a few suitable nesting locations may remain. A possible advantage of frequent moves may be to reduce the effects of ectoparasites, which are very common in cormorant nesting areas.

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References

- Lane, S. G. (1979), 'Breeding Seabirds on Carnac Island, Western Australia', *West. Aust. Nat.* 14: 134-135.
 Serventy, D. L., V. N. Serventy and J. Warham, (1971), *The Handbook of Australian Sea-birds*, A. H. and A. W. Reed, Sydney.



• Figure 1. Map of Carnac Island showing breeding locations by year of Pied Cormorants.

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