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## Pied Cormorant Rookery Gippsland Lakes

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The Fisheries and Game Department has for some years been conducting a survey on the distribution and feeding habits of cormorants in Victoria. The object is to obtain data which will assist in assessing the role of cormorants and in particular the Black Cormorant (*Phalacrocorax carbo*) as predators on fish.

In the course of this survey, the author has been able to make observations on cormorants in many areas. A recent visit to the Gippsland Lakes area provided the opportunity of inspecting the Compass Beacons in Eagle Bay off Lake King. They are a known nesting site of the Pied Cormorant (*Phalacrocorax varius*) and at the time of the visit in July of this year, a small colony of perhaps fifty birds were nesting there as usual.

The large Pied Cormorant is common and moderately numerous on the Gippsland Lakes. It is a winter breeder. For the past three weeks (from mid-July 1955) fishermen and others have observed the birds building their nests on the beacons and pile lights at various points on the surface of Lake King. As the nests are detrimental to the efficiency of the beacons, they are periodically removed by maintenance officials. The industrious Cormorants then proceed to rebuild in the same place and have been known to rebuild the nest three times.

A detailed examination of some of the nests in the Compass Beacons rookery was made. On one beacon three nests were noted, one containing one egg, one with four eggs, and the other none. The last was still in the course of construction. These beacons had been visited a fortnight previously and no eggs or nests were seen, so that it may be assumed that the birds had only recently completed their nests and

laid. Completed nests with eggs and others in the course of construction were noted on other beacons.

The nests were all similar and were constructed of grass, straw, pieces of green *Salicornia* and sticks. Many of the last were water worn and had adherent barnacles. They may have been drift-wood collected from the shore, or the possibility exists that the birds may have collected them from the lake bottom. The components of the nests were cemented together by faecal material which also attached them securely to the piles.

The eggs were white, with rough surfaces. Some showed pale bluish patches. The great majority of eggs examined were freshly laid.

The birds flew around the rookery area uttering their harsh cries. In addition some uttered a musical trilling note. The birds returned and landed on the beacons as soon as the launch left the area.

The Compass Beacons themselves are of some interest. They consist of four piles set out in a diamond formation and one in the centre of the diamond. They are located in thirteen feet of water and were placed there in 1891 by Surveyor J. B. Mason when he was carrying out the survey of the Gippsland Lakes districts. At that time, sailing vessels were plying on the lakes and were used extensively for transport of produce before the establishment of the road and rail communication.

When it was necessary to swing the compass, the vessel was attached by the bow to the centre pile and the stern brought level with each of the other four piles in turn. Each of the four is in line with a trig. point on the mainland and marks a cardinal point of the compass. When the ship was lined up on each of the cardinal points in turn, the compass should then have read accordingly if in order.

Ships compasses were adjusted by this means then, but to-day and for many years past the beacons have been used only by the large Pied Cormorants as breeding sites each year.

Much has already been said on the question of cormorant predation on inland and marine fish, but the controversy still continues. Any information which R.A.O.U. members can supply on the location of cormorant rookeries in Victoria and on the distribution and habits of the birds will be greatly welcomed by the Department. Letters sent to the Director of Fisheries and Game, 605 Flinders Street Extension, Melbourne, will be gratefully acknowledged.

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