## Great Cormorants nesting on New England Coast

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INE SPECIES OF seabirds were extirpated from the New England seacoast in the 18th and 19th centuries, including the Great Cormorant (Phalacrocorax carbo), Doublecrested Cormorant (Phalacrocorax auritus), Northern Gannet (Sula bassanus), Labrador Duck (Camptorhynchus labradorius), Great Black-backed Gull (Larus marinus), Black-legged Kittiwake (Rissa tridactyla), Razorbill (Alca torda), Great Auk (Pinguinus impennis) and Common Murre (Uria aalge). Two of these are now extinct but four have recolonized islands on the shores of the Gulf of Maine. This article is to report the reestablishment of one more. Great Cormorant. Now only gannets and kittiwakes remain absent.

Characteristically, those species which have reestablished have subsequently increased rapidly and expanded their breeding range. Recently, Hatch (1984) brought up-to-date the information on increasing numbers and expansion of the breeding range of Double-crested Cormorants in southern New England.

On June 16, 1983, during a census of Arctic Terns (*Sterna paradisaea*), on outer islands in eastern Maine, David Folger, John Drury, and William Drury found Great Cormorants nesting on three islands in Jericho Bay, east of Isle au Haut (Table 1). Of equal importance was finding immature Great Cormorants loafing on many islands: 10-15 from Machias Bay to Schoodic Peninsula, 20-25 in lower Jericho Bay and five in the approaches to Penobscot Bay. We found none between Penobscot Bay and the mouth of the Kennebec River.

On June 4, 1984, Hatch found a single nest of Great Cormorants among 1135 nests of Double-crested Cormorants on the Weepecket Islands, near Wood's Hole in Buzzards Bay, Massachusetts. On July 20, two large and apparently healthy young were seen near this nest. No Great Cormorants were found nesting in Massachusetts Bay (north of Cape Cod) during a count of Double-crested Cormorants (3784 nests), in May 1984. Hatch saw one immature near Boston. Small numbers of Great Cormorants could have been overlooked amongst the Double-crested Cormorants north of Boston because the observers there were not searching for them (B. Blodgett, *pers. comm.*). Immatures have been seen in ones and twos in Massachusetts in recent summers.

Korschgen (1979), did not report Great Cormorants during his surveys in 1977, and it is unlikely that he missed them on these islands, because he landed on all three. We did not census lower Jericho Bay between 1973 and 1983.

In both Maine and Massachusetts, the Great Cormorants were found nesting on the flat tops of islands among Doublecrested Cormorants. The islands in Jericho Bay are at the very mouth of the Bay, while the Weepeckets are near the head of the Elizabeth Islands chain, but at the mouth of Buzzards Bay.

When Erskine (1972) reviewed the status of Great Cormorants in the Maritimes region, he reported them nesting all along the eastern coast of Nova Scotia nearly to the southernmost tip. Until the records reported here, those islands seem to have remained the southernmost breeding sites. The numbers of both species of cormorant have increased greatly in southern Nova Scotia in recent years (Milton and Austin-Smith, 1983). Erskine reported that the species nests on steep rock faces and we focussed our attention on precipitous cliffs in searching the outer Maine islands during the 1970s and early 1980s — to no avail.

The large number of nests and of immatures in lower Jericho Bay suggest that many birds emigrated from Canada together in the way an entire colony of Double-crested Cormorants may abandon one island and settle on another. The large number of immature birds seen in 1983 and the number of chicks fledged in 1983 and 1985 suggest that reproduction has been highly successful. Conspicuous increase in the Great Cormorant population may bring down on them the wrath of salmon fishermen, who constitute a powerful sportsmans' lobby and who regard cormorants as major competitors.

## LITERATURE CITED

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Table 1. Numbers of cormorant nests in Jericho Bay in 1983-1985

1	Great Cormorants			Double-crested Cormorants	
Island Name <sup>a</sup>	1983	1984	1985	1983 <sup>b</sup>	1985
Southern Mark	0	0	0	105	51
Great Spoon	11	10	20	20	25
	(5 chicks)		(18 chicks)		
Little Spoon	22	16	38	38	35
	(22 chicks)		(33 chicks)		
White Horse	13	14	25	11	2
			(29 chicks)		
Black Horse	0	0	0	40	55
TOTALS	46	40	83	214	168
	(27 chicks)		(80 chicks)		

aonly the islands with nesting cormorants

<sup>b</sup>no counts of Double-crested Cormorants in 1984