

RECENT CHANGES IN THE RANGE AND DISTRIBUTION
OF CORY'S SHEARWATER IN NORTH AMERICAN WATERS

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Cory's Shearwater (*Puffinus diomedea*) is a species of Palearctic breeding distribution, nesting on the Azores, the Canary and the Madeira Islands in the eastern Atlantic Ocean, as well as on several islands in the Mediterranean Sea during the summer months. Following the breeding season, the birds migrate westward across the Atlantic to North American waters, returning to the eastern Atlantic by early winter (December-January). Individuals occurring in the western Atlantic in May-July are apparently non-breeders. At all seasons, this species shows a close affinity for warmer, shallower waters than the Greater (*P. gravis*) or the Sooty (*P. griseus*) Shearwaters, these species being found primarily in the colder waters of the high latitudes at all seasons.

Cory's is the largest Atlantic shearwater, distinguishable from the Greater by the deep yellow bill, entirely white underparts and particularly by the warm gray-brown sides of the head, which give it at times a distinctly hooded appearance. The flight, which is strikingly similar to that of the Northern Gannet (*Morus bassanus*), is quite different from that of the Greater, being generally heavier, with looser, slower wingbeats. The Greater, on the other hand, has a thinner black bill, variable black smudges on the belly and a sharply defined blackish cap. Its wingbeats are stiffer and more rapid, and the flight feathers from above are considerably darker in coloration than the rest of the wing, giving the wing a two-toned appearance. All of these differences can be obscured at great distances, and caution should be employed in distinguishing these two species, especially in view of the following information.

The indication from the majority of the modern field guides, as well as from many regional works, is that Cory's Shearwater is essentially a species which occurs as a fall migrant off the northeastern coast of the United States, with maximum numbers occurring between Cape Cod and eastern Long Island, with scattered records north to the Grand Banks off Newfoundland. Dates of occurrence, for the most part, lie between mid-August and October. Locally, the species was, prior to 1971, a common to abundant fall migrant from Cape Cod Bay to the Nantucket Shoals.

In recent years, three distinct changes in the range and distribution of the species seem to have occurred:

- 1) During the last four years, the species has markedly decreased in abundance on the shoal waters off southeastern Massachusetts, where it was previously abundant.
- 2) Cory's Shearwater occurs commonly off the entire coast of the United States from Massachusetts to Florida with the region of maximum abundance not clearly defined, but clearly not lying in New England, as previously believed.
- 3) Cory's Shearwater occurs with great frequency and in large numbers off our coast in late May and June as well as during the latter months of the summer. During the spring, it has been noted in largest concentrations from New Jersey to Cape Hatteras.

*DATA

The accompanying table illustrates the decline of Cory's Shearwater within Massachusetts waters (Cape Cod Bay to the Nantucket Shoals) during recent years. Total numbers for each month are noted by year. The word "few" refers to scattered records of less than five individuals reported.

	June	July	August	Sept.	Oct.	Nov.
1970	0	0	0	1050	2200	few
1971	0	2	0	20	28	few
1972	0	0	30+	100 ⁺	few	0
1973	7	0	34+	65 ⁺	0	0
1974	0	0	0	36+	1	0
1975	2	80 ⁺	6+	23+	47 ⁺	0

As can be seen from the table, the major decline occurred following the summer of 1970. Since then, the species has never regained its former numbers off Massachusetts. The totals from 1970 are representative of typical counts for the species for the years prior to that year. In addition, there are an increasing number of spring and early summer records in the last four years.

If we look at the situation further to the south of Massachusetts, we see that it is very different. For instance, in Florida, where Cory's Shearwater was first recorded in 1966, it is now considered abundant, and quite possibly the most common shearwater species to occur there during the summer months.

It is also now occurring in abundance off of North Carolina and Maryland. Note that the shallow, sandy waters of Cape Hatteras, N.C., constitute a habitat similar to the shoals of southeastern New England, the region where the species was formerly so abundant. The following table summarizes the recent records south of New Jersey:

	May	June	July	August	Sept.	Oct.	Nov.
1972	0	3(Md.)	3(Md.)	185(Md.)	27(Fla.) 3(Md.)	0	0
1973	2(N.C.)	10(N.C.)	3(N.C.)	500(Fla.)	0	0	0
1974	0	200(Md.)	49(Fla.) 92(N.C.)	22(Fla.) 56(N.C.)	0	27(Fla.)	300(Fla.)
1975	0	40(Md.)	52(Fla.) 15(N.C.)	DATA NOT YET AVAILABLE			

To the above information, it should be added that on May 31-June 1, 1970, a total of 4000+ of these birds were identified in a tremendous flight of pelagic species passing Cape Hatteras, N.C., following an extended period of easterly winds. It is anyone's speculation as to why such a large number of non-breeding individuals were present on this side of the Atlantic at this season. If this were a typical trait of immature birds, why don't any comparable records exist for continental North America?

CONCLUSIONS

From the above information it can be hypothesized that large numbers of non-breeding Cory's Shearwaters cross the Atlantic in late May to feed on the littoral waters between Florida and New Jersey, and more rarely north to Massachusetts. These birds are joined in August by the remainder of the population (comprised of the post-breeding birds), the whole group then remaining until early November.

In Massachusetts, the above mentioned situation is essentially echoed in smaller numbers. In our waters, it is greatly outnumbered at all season by the Greater Shearwater. Only careful future observations can lead to the ascertaining of the true picture of the species' current distribution.

*All data was taken from American Birds (Vols. 25-30) and Bird Observer of Eastern Massachusetts (Vols. 1-3).

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Northern Fulmar, photograph from Massachusetts Audubon Society