

"Devil's Den," through which one threads one's way for about a hundred feet from daylight at the water's edge to daylight at the other end. But all this is another story from bird-banding and one that does not belong in this Bulletin. It does, however, add to the interest of our avocation to follow it into wild and beautiful places.

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## HELPING THE BIOLOGIST

BY CHARLES L. WHITTLE

BIRD-BANDERS have reason to feel gratified over the service they are rendering biological science in assisting to sustain one of the fundamental postulates upon which the present view as to the origin of geographical races or subspecies rests.

It is obvious that the various recognizable races of many species could not have come into being were it true that the nesting-places of such races were determined merely by chance. The present theory requires that the races shall return each year to the approximate area of their respective breeding-grounds of the previous season, otherwise they would intermingle and interbreed, with the result that variations of color, size, etc. would be obliterated, the races disappearing and only the species surviving. While the theory requires that this be so, it has remained for the bander to gather evidence which cannot be gainsaid, not only in support of the theory in general, but showing, in case of several species at least, how powerfully instinct draws migratory birds, not only back to the area constituting the nesting-range of the species or race, but to the immediate vicinity of their birth and often to the identical spot. It is this latter habit which in effect brings about a sort of semi-isolation of families or groups of birds, even within the territory occupied by a species or race, which gives rise to conditions favoring the survival of peculiarities of color, form, or song locally arising. I have already described a locally occurring song of the Purple Finch about Peterboro, N. H., and its persistence for several years.<sup>1</sup> Recent data favoring the view held at that time as to the persistence of the same Purple Finches or their descendants in this Peterboro area year after year are given in this issue of the Bulletin by Mrs. Whittle, pp. 63-65.

<sup>1</sup>The Auk, Vol. XI, pp. 233 and 234, 1923.

**Banders are continually accumulating in their records data of various kinds, the value of which, in part, only time will reveal; but, on the other hand, many discoveries will be found immediately available for publication in our Bulletin if the records made at each station be carefully tabulated and studied. Banders doing this will be surprised to discover the amount of information of interest and scientific value that is often hidden in their notes and banding records. In this line of work lies the lasting enjoyment in operating a banding station. Moreover, the more thought and time that are devoted to banding work, the greater will be the scientific output: the more one puts in, the more one can take out. No banders should take the view that they do not possess sufficient training in scientific methods to make contributions along many lines, nor should they go on banding day after day without making a careful study of their records occasionally in order to find out their meaning.**

Cohasset, Mass

## SIX DAYS IN A MASSACHUSETTS TERN COLONY

BY CHARLES B. FLOYD

ONE of the flourishing colonies of Terns on the Massachusetts coast, probably the third largest, is located on "Tern Island" close to the mainland in Chatham harbor. The island has an area of ten acres, about one half being salt marsh which is covered by the sea at high tide, and the remainder sand with a slightly undulating surface, sparsely covered with a strong growth of salt grass and other plants. This vegetation is of great protective value to the Terns, for the growing young find partial shelter under it from the sun and rain, both of which often destroy them in great numbers.

In 1925, from July 4th to the 10th, I spent a large part of each day on the island. Previous to this I had visited the island about June 20, 1925, at which time the young Terns, recently hatched, were found dead by hundreds, practically all perishing in the downy stage. Investigation revealed that the cause of their death was the excessively hot weather of early June, at a time when the salt grass was not sufficiently high to offer them protection from the direct rays of the sun. Cases are on record of the hot sun destroying young chickens when imperfectly fledged while exposed to similar conditions, and this appears to have been the case with the Terns.