

such a nest as this bird builds would be as secure from these enemies in the heart of the tropical forests as in the temperate ones. Therefore, safe nesting sites could not be the object of their migrating,—unless the peculiar form of nest was evolved after the migratory habit had been formed. This, however, does not seem to have been the case. Such a likeness is exhibited in the forms of the nests throughout the whole family, that we are forced to conclude that this type of nest was used by the common ancestor of *Icterus*, which must have been before the Baltimore Oriole became migratory.

The cuckoos and doves above mentioned, are notoriously careless nesters, and under this hypothesis, we would expect that migration would have been forced upon the whole of these families, or at least upon a considerable number of the species composing them. Contrary to this, we find that these are peculiarly tropical and subtropical families, and but a very small percentage of them ever get up into northern latitudes.

It may be held that the above cases are exceptions, caused by varying local conditions, but it still remains to be proved that the generality of tropical nesters take any greater nesting precautions than northern ones of the same class, as would assuredly be the case if the above were the correct solution of the problem. Furthermore, there are grave reasons, to which I will refer later, for doubting that inadequate nesting habits could ever be the cause of migrations.

A second theory, advanced under the auspices of Mr. Chas. Dixon, refers the movement to a natural desire of the individuals of a species to disperse during the breeding season, and draws attention to the fact that the bird population is more scattered during the breeding season than at other times. He utterly refutes the idea that adverse circumstances of either food, temperature, or enemies can force a bird to change its range, and cites instances of the Great Auk, Labrador Duck, and other species that have suffered extermination rather than forsake their accustomed habitat. Mr. Dixon evidently regards this dispersal as effecting a reduction in the density of the population. It certainly does result in this among the adult inhabitants, but it is open to question if we assume that the total population is