

DISCUSSION

UNORTHODOX THOUGHTS ON MIGRATION

WE refer constantly to migration paths or routes but since birds inhabit almost the entire land surface, there must be migration everywhere. This is evident not only as a logical deduction but also in practical experience. One may travel widely and stop at random, yet in season he will not fail to hear, wherever he may be, the calls of nocturnal migrants, from the sonorous honks of geese to the peeps, chirps, and squeaks of a variety of lesser voyagers. To say the least, migration must, in general, be on very broad fronts. The concentrations that suggest migration-highway terminology probably are mostly due to the configuration of land and water and apart from that modifying influence, migration must be very diffuse.

The calls of migrants heard throughout the hours of darkness, but ceasing with the dawn, pose another question. It is tacitly assumed, I believe, that when we no longer hear the birds, it is because they have alighted. This, however, is manifestly not true of the geese, and may not be of others. They may keep on going at the same height silently, or at greater elevation, out of hearing. If the stopover hypothesis were correct, on a morning after hearing migrants in apparent swarms, we should expect to find the countryside alive with birds, but how rarely do we have that experience. Referring especially to the vicinity of Washington, D. C., where I have made most of my observations for years, one may hear birds passing over in large numbers practically every night in September, yet birds in the landscape are in that month at the lowest ebb of the year.

There is at present considerable reaction against the teachings of the subspecies cult, which seems commendable, but it should not be forgotten that speculation and observation should always be kept in touch. There is evidence that some birds do not return to the area where they were reared, that apparent representatives of one subspecies sometimes breed in the territory of another race, and that wanderers, as the crossbills, have subspecies without definite breeding ranges. These are hard facts, for if birds do not return at least approximately to the area of their nativity, geographic races cannot have been developed, as now conceived, by an age-long process of environmental molding or selection. If subspecies are real and if the movement to the breeding grounds is to a considerable extent dispersive, then direct environmental influence producing its effect on the growing birds within a few weeks must be postulated as the cause of their characteristics. This is a difficult assumption; moreover there is evidence, at least for mammals, that subspecies are of genetic import. The whole question needs re-examination in the light of all available knowledge of which that relating to migratory birds, even if fragmentary, is not of least importance.

The human mind is prone to query 'Why'? but usually is not critical enough of its answers to that question. Postulated causes of migration are as numerous as alleged remedies for an incurable disease and scarcely more impressive. Probably numerous factors are involved but in divining them it should not be forgotten that most migrational phenomena are of very ancient origin. To ascertain their cause in any direct way is, therefore, impossible. In time each cause may have been modified so as to be no longer traceable. As is the case with most scientific speculation, we find in the realm of migrational phenomena that what appears satisfactory in one case must be rejected in another. A reason acceptable for southward, cannot apply to northward, migration; the urge for a bird starting to move in the middle of summer

cannot be the same as for one that waits until frost; the motivation of a species that goes to the Antarctic hardly coincides with that of one that seeks the tropics; and so on. One comparatively recent treatise on the subject was given the very descriptive title: 'The Riddle of Migration,' and that book as well as other works on migration have left cause still a riddle.—W. L. McATEE.

ANNOUNCEMENTS

THE 'Field Museum News' announces that the museum has recently acquired the private collection of Dr. Louis B. Bishop. This collection comprises some 50,000 birdskins, including specimens of nearly all forms of birds occurring north of Mexico. Among these are thirty type specimens, and several species of birds now extinct, such as Carolina Parakeet, Guadalupe Flicker, Eskimo Curlew, and Passenger Pigeon. Part of the collection had been stored in New Haven, Connecticut, but a further part will remain in Los Angeles where Dr. Bishop will continue during the rest of his life to carry on research upon it.

THE collection of the late Amos W. Butler, consisting of about 3,300 skins, has been acquired by Purdue University.

FROM the Carnegie Museum at Pittsburgh, comes word that the long-projected work on 'The Birds of Western Pennsylvania,' by W. E. Clyde Todd, is at last in press. Its publication is being sponsored by the Buhl Foundation of Pittsburgh. It will be in one volume of nearly 700 pages and will be illustrated by 22 plates in color, depicting 118 species, by Dr. George Miksch Sutton. Its appearance some time in the early part of the year will be awaited with interest.

IN order that members may keep in touch with important matters regarding bird protection and conservation, Mr. Francis H. Allen has consented to contribute a page of news items to the issues of 'The Auk,' beginning with the current number.