

The Mystery of Bird Migration

By J. Nelson Gowanlock

Photographs from Life by Author

"And fainter onward like wild birds
that change
Their season in the night and wait
their way.
From cloud to cloud down the long
wind the dream
Shrill'd."

We know that spring is here! Birds everywhere! Warblers in the tree tops and white-throated sparrows clearly



The Cat Bird, a late migrant

piping in the thickets. The loud "laughing" call of the flicker shakes the woods. The tiny kinglet flits in the low bush. The song sparrow sings his "Sweet, sweet, sweet, very merry cheer," so gayly that you know he means every word of it. Glad company all! And how far they have come. Think of it! Thousands of miles across inhospitable land, across bleak sea, thru mist and fog and rainstorm, above the sweepy palm fronds of southern lands, where sunset dies so strangely beautiful on still lagoons. Northward, ever northward, thru countless dangers they have come, and here for an hour they sit and rest and feed, to make more perfect the joy of our spring mornings. Whence have they come and why thru so many dangers must they travel yearly to and fro from land to land so many thousand miles?

Other animals than birds migrate—the seals to their rookeries, the salmon to their spawning ground, and even certain American butterflies (the Monarchs)—but birds, of all living creatures are the supreme travellers. Gifted with swift, almost tireless, flight, they seem careless of distance. Peru sees them in December and Canada in June. They outdistance all other animals in their wanderings.

Practically all our birds migrate, either leaving us entirely or else our individuals of the species giving place to others of their kind, as with the blue jays and the chickadees. Even resident individuals perform short local migrations, as the sharp-tailed grouse, which sometimes nests on the prairie but winters in the shelter of wooded hills nearby. The great majority of our birds, however, forsake our country entirely, betaking themselves far southward, weeks before the first snow and never returning until the leaf-buds have unfolded. Species of even the same family are most dissimilar in migration. Thus the oriole winters in Central America, the bobolink in Peru. Each species in the course of time has developed a migration often quite un-

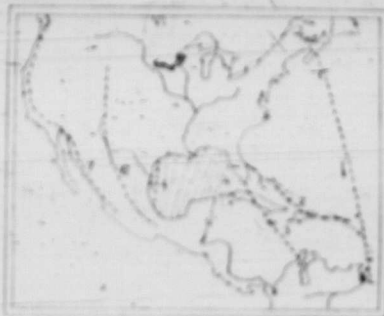


like that of any other bird. Some times many species converge and their

routes form a great pathway across the continent following favorable contours of land. Such a great highway is the Mississippi Valley—Manitoba—Arctic route, up which hundreds of thousands of birds pass every year.

Those birds and many others that winter in South America have choice of several routes in crossing to the continent. Central America, a country small in area and sparse in food, is crossed by different species in different ways. The most important route (No. 4 on Professor Cooke's map) brings the birds from the northwest Florida to Yucatan and thence by land to South America. More birds are said to travel this course than use all other routes together. Routes No. 3, by way of Cuba and Jamaica is much shorter, yet few species use it, the bobolink and bank swallow being two. Route No. 2 via the islands from Florida to South America is also not much traversed, because the land areas are too small to afford food for great numbers. Route No. 5 is used by several warblers. Numbers 6 and 7, the slow roundabout land routes, are more used. Route No. 1 will be explained later.

Most of our migratory birds travel



by night and at comparatively great height. A few swift-winged species like the tree swallow and the nighthawk have such speed that they are in no danger from hawks and other such enemies, and so can perform their migration by day. Even night travelling does not rid migration of its dangers. In the darkness thousands of birds collide with wires or buildings and are killed. Thousands more are blown out to sea or their plumage heavy with rain or sleet they sink to death while passing over wide rivers and lakes. In the autumn young birds, untried in flight, must fly thousands of miles with their parents to a winter home, which they have never seen. Lighthouses at sea lure thousands of birds down to death during stormy weather, and thousands, too, may starve, if, during the days of migration, inclement weather kill all the insects upon which they feed. Thus, you see, that migration, however beneficial otherwise, causes tremendous mortality among our small land birds.

The speed at which birds travel varies considerably, some like the yellow warbler flitting unburiedly from bush to bush, while others can, like the hummingbird, pass over one hundred miles in a single night. It is on record that the purple martin came one year from Louisiana to Manitoba in twelve nights (120 miles a night). Hence, probably quite accurately, estimates the speed of the Pacific plovers' migration at a thousand miles a day. Some species, like the Canada goose, follow closely the advance of spring, while others like the catbird and cedar waxwing seem to delay their flight strangely to a much later date than we should expect. The myrtle warbler appears



The Tree Swallow, a day traveller

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