

warblers and shore birds as early as July, by more in August, but the bulk of it takes place in September; the number of birds decreasing rapidly during October, and a few bringing up the rear in November.

Now, as to the time of the *day* in which the migrations take place. The rule here seems to be: The weak-winged and timid birds, such as rails and some sandpipers, etc., birds finding their food under cover, as the warblers, some finches, thrushes, vireos, etc., migrate during the *night*, so they can rest during the day and find their food more easily than they could at night. Other birds, strong of wing, fearless, finding their food more in the open, as the blackbirds, the robin, etc., travel partly during the day or night, making use of either or both times to suit their pleasure. A third class, such having long wings, expert tireless fliers, which find their food while flying, as the swift, the swallows, also the gulls, terns, hawks, etc., travel by day exclusively, for apparent reasons.

Over what *distances* do their migrations take the birds? That is again extremely variable. When our Ruffed Grouse (*Bonasa umbellus togata*) leisurely walks from its summer haunts on top of one of the Laurentian hills to the north of us and goes down a mile into the nearest cedar or spruce swamp, that may also be called a migration. The same can be said, when some birds breeding in the Rocky Mountains near the summit or the timber line, leave these *quasi* boreal regions and by descending a mile or two enter the temperate or even subtropical zone. Some of our breeding birds go further, as the Purple Finch, Junco, etc., and winter 2-300 miles south in New York State. From that the distances increase rapidly to as much as 8,000 miles for one trip, as in the case of the Golden Plover, the Knot, the Eskimo Curlew and many more.

Over what *routes* do they travel? As a general rule we may say, that the birds breeding from Labrador and Ungava southward, go to Florida, as their first stage of migration, many species of course wintering north of that. Those breeding west of Hudson Bay and east of the Rocky Mountains in the great Mississippi water shed, go towards and to Louisiana. Those breeding in and west of the Rocky Mountains travel overland entirely into