

The thrushes belong to the most highly organized group of birds—the *Passeres*—and are farthest removed in structure from the early reptiloid forms. They possess the most complete vocal apparatus—a syrinx—situated at the lower end of the wind-pipe, with five intrinsic pairs of muscles. The wing has undergone a reduction in the number of its primaries or quill-feathers growing from the long finger, there being ten of these, the first one short and abortive, so that the thrushes may be looked upon as still advancing toward the highest type of wing-structure, that of *nine* primaries. In conjunction with this, the foot or leg is “booted,” *i.e.*, covered with an unbroken plate of hard, leathery skin, not reticulated and scaled, as in other forms. A decided change has also taken place in the “molt,” or shedding of feathers; the autumnal molt being the only complete process, while the spring change is effected simply by the “casting” off of the broken points of feathers in the worn plumage. The young of all the thrushes are spotted in their nestling dress, but never carry it beyond the first autumn, assuming the full plumage of the old birds after the first molt, so that “a bird of the year” in the late fall and winter is scarcely distinguishable from its parents. Any one who is familiar with the young robins hopping about the lawn in the early summer, with their spotted breasts and mottled backs, may have wondered what became of them by October.

The thrushes are migratory birds in the temperate zone, as the nature of their food demands, partaking in the general north and south movement during the spring and fall tides of migration. Though not strictly gregarious, many of the species associate in loose flocks, on the approach of autumn, and forage over the country in quest of food. We are all familiar

with the flocks of robins in the fall, scattering overhead, or in the gum-trees feasting on the ripe, black fruit. They are for the most part arboreal, living largely among the trees, but some of the species build nests on the ground, or in the undergrowth just above it, and all of them frequent the ground at times when food is to be obtained there. Being among the most highly organized of birds, the thrushes are consequently rapid livers, possessing a high degree of vitality, and consuming a very large proportion of oxygen. Great feeders, strong of wing and stout of heart, with warm, fast-flowing blood and high temperature, they are, in every sense of the word, alive to their environment.

The robin and his world-wide congeners form the genus *Turdus*, or true thrushes, comprising upward of fifty well-defined species distributed throughout the forest regions of the globe, excepting Australia and New Zealand, where they are replaced by an allied group.

In the palaearctic region of the Old World four widely distributed species occur, all having spotted breasts in the adult plumage. The red-winged thrush breeds in the birch region, and throughout the upper belt of pines across Europe and Asia, from the Atlantic to the Pacific. He is rare east of the valley of the Yenisei, but extends his wanderings northward as far as latitude 71° beyond the forest limit. The red-wing winters in southern and western Europe and the British Islands.

The blue-backed thrush, or “field-fare,” has a range somewhat similar with the above species; Asiatic individuals migrating in winter to Cashmere, Turkistan, and the north-western portion of India. The missel-thrush breeds throughout central Europe, ranging eastward to the north-western slopes of the Himalayas. In such a mild climate as Great