

411. The migration of animals might at first seem to present a serious difficulty in determining the character or the limits of a fauna; but this difficulty ceases, if we regard the country of an animal to be the place where it makes its habitual abode. As to Birds, which of all animals wander farthest, it may be laid down as a rule, that they belong to the zone in which they breed. Thus, the gulls, many of the ducks, mergansers, and divers, belong to the boreal regions, though they pass a portion of the year with us. On the other hand, the swallows and martins, and many of the gallinaceous birds belong to the temperate faunas, notwithstanding their migration during winter to the confines of the torrid zone. This rule does not apply to the fishes who annually leave their proper home, and migrate to a distant region merely for the purpose of spawning. The Salmon, for example, comes down from the North, to spawn on the coast of Maine and Nova Scotia.

412. Few of the Mammals, and these mostly of the tribe of Rodents, make extensive migrations. Among the most remarkable of these are the Kamtschatka rats. In Spring they direct their course westward, in immense troops; and, after a very long journey, return again in Autumn to their quarters, where their approach is anxiously awaited by the hunters, on account of the fine furs to be obtained from the numerous carnivora which always follow in their train. The migrations of the Lemmings are marked by the devastations they commit along their course, as they come down from the borders of the Frozen Ocean to the valleys of Lapland and Norway; but their migrations are not periodical.