Austral fauna along warm lowland valleys in the west. It forms the northern limit of range of the Cotton-tail and Jack-Rabbits and the American Elk, and is just touched upon by the Varying Hare from the north; the Common Mole of the south meets the Star-nosed and Brewers Mole of the north and the Wild Cat partially replaces the Canada Lynx. Amongst birds, the Wild Turkey, Bob-white, two Cuckoos, Towhee, Wood Thrush and Yellow-Vireo are at the northern limit of their ranges, and the Baltimore Oriole, Bluebird, Catbird and Bobolink overlap the solitary Vireo and Wilsons Thrush.

The Upper Austral Zone in Canada is small in area but important in production. It just crosses our borders in a narrow shore belt along Lake Erie extending to the south side of Lake Ontario including the Niagara Peninsula. It forms the famous Ontario fruit belt and is comparatively strongly marked by quite a number of characteristic forms especially amongst plants. It extends south as far as the northern borders of the Gulf States, variously dotted and cut into by intrusive branches of the neighbouring faunas from either side, especially in the broken country of the west.

There are not many peculiar mammals that are well known to the general public, and perhaps the Opossum is the most distinctive. Among birds we have the Yellow-breasted Chat, Mockingbird, Carolina Wren, Carolina Chickadee, Orchard Oriole, Barn Owl, a number of distinctive southern warblers and southern subspecific forms allied to more northern variations.

Photo by P. A. Taverner.

Fig. 5. Chipmunk.

These make the latitudinal or thermal divisions of our faunal life. Outside of the species mentioned are numerous forms that extend over the whole area, but show in different zones variations recognizable to the expert but stopping short of specific distinction. A good example is the Hairy Woodpecker. This bird breeds over all the wooded parts of North America, but the birds from the Lower Austral zone are quite separable by the trained eye from those of the Upper Austral and Transition and these from the large northern form of the Hudsonian. This is but one case of many where a northern and a southern race exist in the same species and which we designate subspecies. Some of these geographical races are so slightly differentiated as to require an expert to separate them while others are marked and striking. The critical difference between a full species and a subspecies is the fact that the latter intergrade and blend into each other gradually. With species the break between is sudden, and intermediates do not occur.

With this zonal distribution and a variation of life groups depending basically upon temperature, we have another system of distribution east and west, depending largely upon physical conditions of habitat—the arrangement of land and water or mountain ranges forming barriers