

in habitat, and that the habitat of a given species may vary somewhat in different parts of its geographical range. Morse has pointed out that, generally speaking, species inhabiting thickets, edges of woods, etc., are flightless, and either brachypterous or apterous, while those frequenting open places, such as fields, deserts, or exposed rocky surfaces are macropterous, and capable of more or less sustained flight. The dimorphic species in question are restricted in the south to thicket habitats, but in the north, where they are more generally distributed, they occur also, to a greater or less extent, on campestral stations. Hence the macropterous type may be here preserved in adaptation to the campestral habitat.

To what extent this campestral habit actually exists and whether it is a real factor in preserving the macropterous type in these species we are not in a position to say. We have not enough knowledge of the ecology of these species in the north to make any positive statements on the subject. A few facts may be given, however, which seem to lend some support to this view.

*Chlœaltis conspersa*, which Rehn has recorded from the cool bogs of the pine barrens of northern New Jersey (Ent. News, 1902, p. 310), in the Upper Austral Zone, occurs about the edges of woods and in thickets in the Transition Zone; and Hebard found it at Pequaming, Northern Michigan, "about brush heaps and stumps in *open fields and pastures*" (Rehn, Ent. News, 1904, p. 233). I have also taken it in similar places in the Canadian Zone in Ontario. On account of its egg-laying habits, however, this species probably never strays far from the borders of woods.

At Fort William, where it is dimorphic, *Chlœaltis abdominalis* was heard stridulating in the open grassy plain on the west side of the Kaministiquia River, and specimens were taken on the plateau, half-way to the top of Mt. Mackay. The conditions here were truly campestral, but the plateau was nearly surrounded by woods, and was so small that not much importance can be attached to the presence of the locusts here.

*Melanoplus fasciatus* and *extremus*, both dimorphic at Fort William, are certainly more generally distributed here than they are farther south; e. g., in the Georgian Bay region. Long-winged males of the former were found flying about the bare talus slope on the side of Mt. McKay, a type of habitat which this species does not frequent in the Transition Zone, where macropterous individuals are very rare. The long-winged male of