

in heat and light, dressed in white in the winter, on the principle that, as he was a warm-blooded animal, this costume would reduce to a minimum the radiation of heat from his body. Conversely, the snow-flea being a cold-blooded animal, with no bodily heat to lose, finds its dark pigmentation advantageous in assisting it to absorb heat when it comes to the surface in winter.

A great many species of Collembola survive the northern winter, but the snow-frequenting habit is sharply confined to certain kinds, while other closely allied species never emerge while the snow is on the ground. Available North American and European records credit about one-half of all the snow appearance, accidental or intentional, to the genus *Isotoma*. The other genera represented are *Entomobrya*, *Achorutes*, *Onychiurus*, *Anurophorus*, *Orchesella*, *Tomocerus* and *Sminthurus*. My experience in this district also is that *Isotoma* can claim more species on the snow than any other genus, *Isotoma nigra* MacG. is the most abundant of the genus here, and it is sometimes found over many acres of open woodland or beaver meadow, with a frequency of one or two specimens to the square yard. *I. palustris* Mull., more local in its distribution, often reaches about the same frequency in swampy places. *I. macnamarai* Fols., which affects wet places also, is scarcer, and it usually takes some searching to collect a dozen or so specimens. *I. viridis* Bourl. var. *riparia* Nic. I have found only towards spring. Once I collected 25 or 30 specimens in April on the snow covering a rather dry pasture, but mostly they are found sparingly in woods. A couple of other *Isotomas* of undetermined species are represented by only a specimen or two, and the appearance of one at least was accidental. Also a few odd specimens of *Tomocerus* sp., *Orchesella* sp. and *Entomobrya* sp. had evidently not come out of their own accord where I found them. Among the real snow travellers, however, we must class *Achorutes armatus* Nic. It never emerges in very large numbers, but I have found it active on the snow in the vicinity of small streams from November to March.

Very seldom do any of the species mentioned so far ever appear on the snow in sufficient numbers to attract the attention of the casual wayfarer; no one but the entomologist who is looking for them is likely to notice them. This does not mean, however, that the insects occur only sparingly, for many people are extraordinarily insensible to phenomena that do not affect them directly, and even when in large numbers, snow-fleas are often passed by unnoticed. One morning, crouched on my snowshoes in a narrow pathway through a cedar swamp, I was picking up *Isotomas* with a small brush and dropping them into a vial, when I heard another snowshoer come crunching over the crust towards me. It was a labouring man of my acquaintance with his axe on his shoulder, taking a short cut to his work across the Ottawa River. He gave me a polite "good-day," but looked so curiously at my occupation, that in order to preserve at least the remnant of a reputation for sanity, I thought it well to explain to him what I was doing. He was greatly surprised to see the insects on the snow. They were plentiful that morning, and for some distance he had been crushing scores of them under his snowshoes at every step, but he had not noticed them until I pointed them out to him. "Well, by gosh!" he said, "I often heard tell of snow-fleas, but I never seen them before." A worthy man as I know, though imperfectly instructed in grammar.