



Drawn by C. E. Johnson.

## SQUIRRELS AND CHIPMUNKS IN AUTUMN.

In September, one can frequently associate some stroll a-field, with a highly indignant red-squirrel, or chipmunk, resenting intrusion in the midst of gathering his autumn spoils. A number of prettily-striped, ground-dwelling chipmunks, scampering over golden leaves, makes a pleasing picture indeed.

A scene thus enacted, which lingers long in memory, was witnessed, a few miles from the town of Haliburton, in Haliburton District, Ontario.

On a hardwood ridge, bordering a small lake, innumerable chipmunks and red-squirrels, had congregated to gather beech-nuts. Whenever the weather was fine, they were to be seen at all hours of the day, busily scampering over the fallen leaves. Blue jays ate the nuts from the tree-tops, and partridges came often to feed from the ground. A box-trap revealed the presence of the deer or white-footed mouse, which no doubt took nightly interest in the bill-of-fare. White-tailed deer also came quite frequently, in the early morning hours, to lick up the fallen nuts.

Of all these woodfolk, the chipmunks were noisiest, and of particular interest. At intervals throughout the sunny mornings and early afternoons, they would break the silence with a musical outburst, which made the woods fairly ring. This would begin by some individual uttering the familiar "chuck" in rythmical succession. Nearly every chipmunk within hearing distance, mounted stump or log, and responded in unison for several minutes. This outburst would finally subside to two or three individuals; who, failing to receive a response to prolonged "chucks", speedily fell to gathering nuts again. The approach of colder weather, accompanied by a light snowfall in the last week of October, suddenly put an end to their activities.

In Elgin county one September morning, another busy family group was observed, near the edge of a hardwood bush, cutting hickory-nuts from three trees. This group contained six squirrels; five black, and one red. The blacks sometimes came through the tree-tops, and at other times over the ground, and returned by either route. One, which descended with a nut was followed at a distance, and found

to have cached five or six hickory-nuts, separately, in the seams of a partially decayed log. I do not remember distinctly whether these were hulled or not. The red-squirrel in this instance worked harmoniously with the blacks. A close watch revealed its hiding place—a hollow elm log close at hand. Within was found about a half-bushel of hickory-nuts, with hulls still on. I am inclined to believe that this was only a temporary store-room; a sort of handy hoarding place, to keep a share from falling to the blacks who had the advantage in numbers.

While watching these active occupations, a racoon emerged from a hole, high up, in an adjacent elm, to sun itself.

An instance where a red-squirrel resented the intrusion of a black-squirrel, occurred in this same bush, on a huge oak. The black-squirrel was first noticed, making its way over the ground to the butt of the tree. He quickly ascended, and, had reached the upper branches, when a wrathful red-squirrel, hitherto unnoticed, sprang to attack. Round and round the trunk they went, the black punished unmercifully. Unable to withstand so furious an onslaught, the black-squirrel rushed to the end of a branch, and, took a wild and flying leap into the next tree. Away he sped through the tree-tops, leaving the victor to hurl his contempt in characteristic red-squirrel fashion. Later he began storing acorns in a hole high up within the oak.

A few notes taken in different localities, furnish an interesting array of autumn food-stuffs.

On Mount Saint Anne, Quebec, in October, a red-squirrel was seen tucking the disk of a mushroom in the forked branch of a tree. Several up the Ottawa river last year, were busily cutting cones from the conifers, in the last week of September. A red-squirrel near St. Thomas, Ontario, had stored a butternut crop within the hollow trunk of the tree which bore them, and a white-footed mouse, in the same locality, had a tiny store of American linden or basswood seeds, under a log, beneath a brush-pile.

C. E. JOHNSON, OTTAWA.