

THE BEHAVIOUR OF THE RED SQUIRREL.—II.

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The Red Squirrel, of whose behaviour I gave an account in the April number of *THE OTTAWA NATURALIST*, is still under observation, and I have been able to obtain some additional data concerning it. It is no tamer than it was last year and this fact allows us to regard its activities as typical of the species in the wild state.

A fact which has come out very clearly in the course of my prolonged observation of this squirrel is that it possesses an individuality of appearance. Its characteristic appearance is something practically impossible to define, but is none the less easily recognizable. It is a matter of "expression", as I find that I can be sure that it is *Adjidomo*, which is Ojibwa for Red Squirrel and the name by which I refer to this individual, only if I get a look at his face. When I look at the face of either of two other Red Squirrels which live in the vicinity I know at once that they are not *Adjidomo*. The other two squirrels I cannot tell apart, though it is probable, if not certain, that they too have a characteristic appearance which would be revealed by close and frequent observation.

FOOD.

One rather interesting point in connection with the food-habits of the Red Squirrel became apparent during the summer. I had always regarded bark as being a food material which was only made use of by the squirrel as a last resort—a "starvation diet" to be used only when other more attractive foods were not available. But during the summer and fall, though the squirrel was well supplied with various articles of diet, such as nuts, bread, meat, etc., he continually made meals of the bark of the hard maple. He chiseled off the gray outer layer and ate the greenish and white inner layers. The maple bore no seeds this year, and what natural food resource the squirrel could have used this winter is hard to see. The only one I know of is the horse chestnut, and during the fall he stored a good many of these.

STORAGE.

A few more points in connection with the storage of food have been observed. One fact which stands out quite clearly is that when an object is being placed in position for temporary storage it must rest against something, as well as on something. The object is usually placed in a fork of the tree, as mentioned in my previous article, but any angle, such as that formed by the top rail of the verandah and a post, will serve, and even a splinter projecting

from the surface of a board will satisfy his idea of stability. It appears as if the main idea underlying the operation is to keep the object from rolling.

The squirrel often has some difficulty in deciding upon a suitable location in which to deposit an object and frequently carries a piece of food round from place to place, trying several locations before finally depositing it. Further than this, it is not always satisfied with the place it has selected and returns, hauls out the object and deposits it in another place. This may be done almost immediately after it has been first placed in position or after the elapse of half an hour or so. If it takes a large piece of food from its location and eats a portion the remainder is almost invariably deposited in a new place.

During the summer, at a time when I was not supplying any nuts, he went to his main store under the shed, brought out nuts stored in the spring, carried them up the tree and ate them.

At the end of November, when a little snow had fallen, he buried food in it. The layer of snow was not deep enough to enable him to use his usual method of shoving the object into the snow with his muzzle and scraping snow on it from right and left with his paws, so he turned his paws over so that the palms were upward and shovelled snow on the object in this manner.

OWNERSHIP OF STORES.

Adjidomo has apparently lost the chief menace to the food which he stores in the forks of the tree, as the other squirrel which used to raid these stores has disappeared. I have not seen it since May. But there are still several other "pests" which pilfer his stores and have to be chased away. A pair of White-breasted Nuthatches frequently visit the tree and in trying to eat the pieces of food lodged in the forks usually manage to knock most of them out. A Downy Woodpecker and a Hairy Woodpecker also play the same game. The House Sparrows are also a constant source of annoyance to him, and he chases them with great dash and wonderful agility. Time and time again I have seen him spring almost on top of one of them, and it often looks as if he could have seized the bird if he had so desired. When chasing the sparrows he bounces about among the branches for all the world like a rubber ball, and one day when pursuing one of them on the verandah I saw him make what I regard as the most remarkable spring I have witnessed—a leap of five feet with a rise of three feet. It is to be noted that