

of the tail when in this attitude varies a good deal, as it may be straight out along the limb, raised slightly from the limb and with a downward curve, or the basal portion resting on the limb and the apical half curved upward. But when it settles itself to consume something which will take some time to eat, it almost invariably elevates the tail straight in the air or applies it even more closely to the back. In eating a nut it first gnaws through the shell at a point just to one side of the apex, then breaks away the shell until it has consumed all the meat. In eating a beechnut it pulls one of the sides off with its teeth and then gets the kernel out whole.

STORAGE.

The squirrel practices three methods of storage—carrying things off to one of its main hoards, burying each object separately, and arranging them in a fork or on a limb. It classifies the things that it stores into two classes—hard objects and soft. Hard things such as nuts and seeds it either carries to one of its hoards or buries; soft things, such as meat, apples, etc., it arranges about the tree. It thus buries nothing which will mould or decay readily. It has several main hoards, though I only know the exact location of two, and when it is carrying off a number of things consecutively it takes them to two or more of these hoards alternately. When it buries a nut in the soil it scratches out a hollow with its fore-paws, places the nut in it, shoves it in as far as possible with its nose, and then covers it with a few swift strokes from right and left with the fore-paws. It performs this operation with much rapidity, but does it so well that when it has buried a nut in a location where there is moss and dead leaves there is no trace of any disturbance. In fact upon three occasions I noted the location of the spot at which I had seen it bury a nut as accurately as possible, but upon going to the place I was unable to find the nut.

During the winter its chief method of storage is burying in the snow. In doing this it shoves the object into the snow with its nose, then covers it with a few quick sweeps from right and left with its fully extended fore-paws. It will thus bury in the snow not only nuts and other hard objects, but also pieces of meat and small apples. That is, it treated them as hard objects, as indeed they soon were, being frozen solid in a short time.

CARRYING CAPACITY.

It is able to carry off objects of considerable weight, as the following instance shows. On the morning of May 11th, it entered the pantry through the open window. There it discovered a bowl of boiled potatoes, some of which it hid behind cans in the pantry, while it carried others up the maple

tree and arranged them in the forks. Some of the potatoes which it carried up the tree weighed a quarter of a pound.

TUNNELLING UNDER THE SNOW.

When the snow became deep the squirrel made tunnels beneath it, first driving the tunnel which touches the tree, and later constructing the system of tunnels shown in Figure 3. During the winter

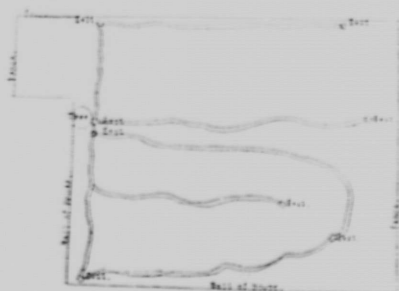


Fig. 3.—Plan of tunnels of red squirrel under the snow.

I was able to judge somewhat of the extent of the tunnels from the positions of the exits, and when the snow thawed I was able to map them.

The purpose of these tunnels was to gain access to the keys of the sugar maple which were so thickly scattered about the yard. The squirrel usually brought them to one of the exits to eat.

ACTIVITY IN WINTER.

It was out every day during the winter except in very stormy or in extremely cold weather. At such times it would not appear for two or three days at a time.

LEAPING ABILITY.

None of the leaps which I have seen it make seemed to tax its leaping power at all. A jump which it made often dozens of times a day in the winter was from the roof to the main crotch of the maple tree—a distance of eight feet with a drop of two feet. I noticed that it never tried the return leap, that is a leap which would land it two feet higher than its starting point, but always ran out on a limb and then to the roof.

In leaping it extends its legs and flattens its body, while the tail is straight and stiff behind it.

MANUAL DEXTERITY.

Though it lacks a "thumb" its dexterity with its fore-paws is much greater than in the case of most animals. By taking them between its paws it handles both large and small objects with the utmost precision and certainty. It can turn a smooth and slippery nut round and round in its paws and I have never seen it let anything slip. I have seen