

bees to work on. I picked up a number of leaves from the ground where the sap had fallen and evaporated. These trees had been tapped by red squirrels early in February or March, if mild they commence to tap earlier in the season and it is quite common to see them run out on the limbs and cut small pieces of bark off in many places through the trees both on the tops and trunks, the sap will run and turn to a thick syrup in a few days and for about six weeks afterwards they live on little else than maple syrup and if the bees can get out safely so early in the season, it beats any basswood honey flow we get. For many years I have followed my bees into the bush and found them digging down under the old leaves and in hundreds on the trunks carrying syrup as clear in color as honey, but our spring weather is often too windy and cold. My comrade was overheard to remark "he don't go to the bush to smoke." Now Mr. D. A. is this reason or instinct of the squirrel or a kind act serving a double purpose.

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It is instinct that leads the red squirrel to get sweet sap to drink just as it is instinct of the sap-sucker to tap various trees, according to the season, in order to furnish them sap to drink and food at the same time. Many animals are possessed of a great deal of natural ability and from them we learn many valuable lessons if we are only close observers. The point you make regarding their assistance to the honey bees is only a further proof of the great wisdom of the Creator in arranging everything for general good.

Superseding of Queens.

HOW do bees know when to supersede a queen? G. M. Doolittle, an eminent authority says:

After a careful watching of all cases of supersedure of queens which have come under my notice, I am led to believe that the bees, as a rule, supersede a queen on account of her ceasing to be as prolific as she has been heretofore, and especially is this the case where the attempt is made to replace the old queen previous to swarming or immediately after the new swarm has sought a new abode, say during the first two weeks after the swarm has been hived.

In all of the cases of supersedure which happened at the time above mentioned, the queens

were failing, and soon died, nearly always before the young queen began laying, so that I had positive evidence that the fewness of eggs laid by the queen was the real cause of her being replaced by another from her brood. Later in the season, however, the evidence that the bees know at all times what they are about, is not so great, thus we have exceptions to the rules regarding the workings of our pets.

During the latter part of August one year, I found that the bees were bent on superseding one of my best queens; one which I valued very much, so as fast as they got the queen-cells sealed I removed them, hoping that they would give up the idea. While cutting out these cells one day, having a friend with me who kept bees, we found a nice young queen which had hatched from an unobserved cell, at the sight of which he said he would give me two dollars for the old queen and take the chances on her. As he was an apiarist of considerable experience, I thought he knew what he was about especially as I had explained the whole matter to him, so I let him have her. He took her home, succeeded in safely introducing her, and to the surprise of both of us, she lived and did good work for two years, he rearing scores of queens from her. This proved to me that the bee makes mistakes sometimes.

Another case coming under my observation, showed a still worse blunder on the part of the bees. In the fall of 1880, as I was preparing my bees for winter, I found two queens in a hive, the mother having her wings clipped. They were left to see what the result would be. In the spring both were there and soon had the hive full of brood. One day a man of prominence in the scientific world called on me, and I showed him the two queens both on the same comb, which seemed to be a great curiosity to him. After he returned home he sent me a high price for the colony, as he wished to study into the matter, but when I went to prepare them for shipment I could find only the old queen in the hive. After a short search in front of the hive I found the young queen where the bees had drawn her out after having killed her. The old one failed fast, and was only able to lead out a swarm (from the brood of the two) before she died. These are the only two exceptions to the rule which I have found, so that it is generally quite safe to let the bees follow out their own instinct along the line of superseding queens.—Lewiston Journal.

Hasting's and Porter's Bee Escape mailed upon receipt of twenty cents. Beeton Manufacturing Co. Beeton Ont.