

Notes from the Central Ontario  
Apiaries.—Wintering Bees.

—C. W. Post.

When the out apiaries were brought home in October, they were prepared for winter as follows: Forty-three colonies were transferred at once to double-walled hives, permanently packed with four inches of dry sawdust with 3½ in. cushions placed on top, which is covered by a four inch sun cap. About the first of December, the back end of the sun cap was lifted and slid forward to rest on the rim of the cushion with entrance the full width of hives, and a board set up in front of each hive to keep out the snow and wind. I know that some of our best bee-keepers prefer a small entrance, but it will not work with me. The balance 282 colonies were wintered in three cellars. About one half had 2 in. cushions filled with saw-dust, and the balance wintered with the honey-boards left on hermetically sealed. They were placed in the cellars about the middle of November. The bottom row is six inches from the cellar bottom, which distance I consider as safe as two feet or more. I am aware that it is generally given in that bees suffer more in winter confinement in the bottom rows, than they do near the top of the cellar. Some claim that it is from excessive moisture near the bottom of cellars, while others say they suffer from foul air. Now, I don't believe that it is from either of the above causes. I keep three first-class hygrometers in my cellars, and if there is any difference in the humidity of the atmosphere between the bottom and top of cellars, the instruments fail to register it. But, I do know that there is a great difference in the temperature, it will run from 3 to 10 degrees, but that difference should not necessarily make the bottom colonies suffer if they are properly protected. In wintering bees in large numbers, a slight ventilation seems necessary and the ingress of air will circulate or lodge in the bottom of the cellar and gradually raise as it becomes warmed and that is a safe-guard from foul air at the bottom. I know that as bees are usually placed in cellars the bottom row will suffer most, whether they are six inches or two feet from the bottom of the cellar, but when we find out the cause, it

is very easy to apply a remedy. As I said before, the ingress of air circulates through the bottom of the cellar first, which brings a cool current of air in contact with the bottom of the lower row of hives, causing the warm damp air in the hives to condense and wet the inside of the hives, but by placing a good warm cushion under the lower row of hives, there will be no moisture and I can see no difference in wintering between the bottom or top rows. I arrange my stands in the cellar by laying down sun-caps about four feet apart in a row, then place a 2x4 in. scantling edgewise at the back and flatwise in front, giving two inches pitch. Then I fill in between the scantling with pieces of boards and pile it up high with dry forest leaves and as I set the bees on, it packs the leaves down solid making a good warm cushion, so no cold air can come in contact with the bottom of the hives. All hives with sawdust cushions are placed by themselves and piled up five in height, and those with honey-boards were kept by themselves. My honey-boards are cleated on top at each end with one inch cleats. As they are piled up I place dry leaves between them so no draft of cool air can strike the honey-boards to condense the moisture of the warm air in the hives. Now for results; out of the forty three wintered in doubled-walled hives, I lost one by bees clogging the entrance and from the lot of 282 in the cellars I lost two by starvation, the balance came out strong and dry and not a spot on a hive. The bottom rows were just as strong and dry as the top ones.

Trenton, May 22, 1899.

I wintered 238 colonies and only lost two. There were of course a few weak ones. There has been plenty of rain, it will be a week or more before clover yields, the prospects are also good for basswood.

G. A. DEADMAN.

Huron Co., June 1st, '99

Clover is badly killed, though not as bad as on clay land, field after field of it being plowed up in the back part of the county. It will interest you to know, there is no spraying being done. The winter seems to have killed some kinds of insects, even the potato bugs.

H. R. RICHMOND,

Halton Co., June 2nd, '99