

November until the 15th of April, with only an average shrinkage of 10 lbs., the lowest 4 lbs., the highest 18. This was from actual weight in fall and spring. Again I have had the shrinkage average 15 lbs. I have followed the same plan as Mr. P., putting the lighter colonies upon top, and had imbibed the idea that 18 or 20 lbs. of stores was enough to winter a colony when stored in a cellar, but two years ago, upon going into my cellar in the last of March, I found those little piles of dead bees in front of hives, which indicate starvation. Several swarms that had 20 lbs. in the fall were entirely destitute, some dead, others just giving up. This present winter the stores are partly sugar syrup, and the bees seem to be wintering very quietly and consuming but little honey. Another important factor in cellar wintering is ventilation. Heretofore I have given the cellar much ventilation. I have a 70 foot sub-earth ventilator, and a tall ventilator, one foot square, goes up through the roof. This winter every ventilator is closed, still the one hundred swarm are wintering better than when thoroughly ventilated.

From recent articles in some of our bee journals, the tendency of experience seems to be that bees require but little air, and if you pour a stream of fresh air at any temperature above 40° you cause the bees to become restive, and though there is no light the bees leave their hives in pursuit of it.

I think, with proper stores and proper ventilation and proper temperature, bees will surely winter well in a cellar. But my experience has been so varied in finding all of these that I am now wintering 100 swarms in the cellar and 100 packed in chaff. It is too early to say where they are doing the best. I can say they are all doing well so far. Hoping to hear from others upon these important subjects, I submit my experience.

J. H. MARTIN.

Hartford, N. Y., Feb. 24, 1886.

We fear your bees packed in chaff will not do as well as those in cellar, because the tendency is to only put six or eight inches of chaff around them. We find that we can scarcely get too much chaff. It takes about double the thickness of chaff to give the same warmth as saw-dust, and we find that 12 or 14 inches of saw-dust none too much for outdoor packing in very cold weather.

FOR THE CANADIAN BEE JOURNAL.

HIVES TOO NEAR THE GROUND.

 AM much opposed to the plan lately adopted by most of the bee-keepers of placing the hives so close to the ground. The bees are more exposed to dampness and far more exposed to attacks from vermin and small animals,

such as skunks, toads, frogs, snakes, etc. A toad will sit by the entrance of a hive on a warm night and lick in the bees by the hundred while the owner is asleep. Skunks will come pilfering round the hives, and if one should happen to get stung it will leave a scent there that will entirely destroy all bees near it.

It is unnatural for the bees to be so close to the ground, and nothing but compulsion will make them accept the situation. I believe it is one cause of swarming out or deserting their hives.

We do not hear or read of any instance in which the bees of a choice accept such a low situation except the instance of a swarm going into the carcass of the lion slain by Sampson (See Judges, Chap. 14: 5). In this case Sampson was on his way to Timnath to pay his address to a lady of that place, and it is not improbable that he hung the carcass in a tree, so the desiccating wind of that country would dry the fresh meat in so short a time that putrefaction would not ensue.

I make my bee-stands for hives by taking a log large in diameter, when we are sawing for firewood and cutting it up into sections of about two feet long. I find them substantial and convenient. They are easily rolled from place to place if I want to move them, and they are easily levelled up by grading the earth a little. It is easy to try it (no patent), and if you at any time do not want to use them further for that purpose, they can be split up for wood, and there is no expense or labour lost in packing. By laying boards on top of the blocks and letting them project in front you have a convenient lighting board.

W. B. TERRY.

Keswick, Feb. 26th, 1886.

We have tried setting hives up from the ground, and down on the ordinary hive stands and although there is some loss in bees by toads etc., yet we think the gain is in favor of low stands, instead of the logs that you mention which would be very difficult to procure in a prairie country. We would suggest that you drive four small stakes in the ground a proper distance apart and brackets might be tacked on the stakes crosswise to hold them together. After driving one the proper distance others may be driven and levelled from it.

In reference to the bees in the lion's carcass, we think they would have got in if the carcass had not been hung up on a tree. Sampson was not like the young men nowadays on such a mission, or he would never have waited to hang up the carcass. We learned when in Palestine that it was quite a common thing to find bees on little bushes, on rocks and on the ground as there