

8. Game and Game Bantam; 9. Bantam other than Game; 10. Turkeys; 11. Ducks; 12. Geese; 13. Miscellaneous.

Mr. Budeock moved to amend by adopting the following classification: 1. American; 2. Asiatics; 3. Mediterranean; 4. Polish; 5. Hamburgs; 6. French; 7. Game and Game Bantam; 8. Bantam any other than Game; 9. Miscellaneous; 10. Turkeys; 11. Ducks; 12. Geese; which amendment was carried, and the motion as amended adopted.

On motion of Mr. Felch, it was resolved that sweepstake prize birds not suffering from weight clauses competing with other classes, be handicapped one and one-half points.

Mr. S. M. Williams, of Indianapolis, moved that White Plymouth Rocks be admitted, and that the Standard be the same as Standard Plymouth Rocks except in the description of the color of the plumage, which shall be "white in every part." Which motion was adopted.

On motion of Mr. Scheel it was ordered that the Standard for White Wyandottes be the same as Golden Wyandottes with the exception of the description of color, which shall be "white in every part of the plumage." Which motion prevailed.

Mr. Orr moved that the Standard of White Javas be the same as Black Javas except in the matter of color, which shall be white, and that the disqualifications be the same, except that feathers other than white or yellowish white, and legs other than willow be a disqualification. Which motion was adopted.

Mr. Conger moved that the Standard for Silver Laced Wyandottes and Golden Laced Wyandottes be the same, including weights and scale of points, except in the matter of color. Adopted.

Mr. Mortimer offered a resolution tendering the thanks of the Association to the President for the impartial manner in which he had discharged the duties of his office, and congratulating the Association for having re-elected him for another year. The resolution was seconded by Mr. Scheel and unanimously adopted.

Aberfoyle, Ont.

W. B. COCKBURN.

The Apiary.

FOR THE CANADIAN LIVE-STOCK AND FARM JOURNAL.

April Work and Other Matters

BY ALLEN PRINGLE, SELBY, ONT.

The bees are still in winter quarters, or ought to be in this climate. They are wintered for the most part in Canada in cellars and on the summer stands, more or less protected. A few are buried and a few stowed away in lofts, granaries, etc. A quarter of a century ago when bee culture was still in its primitive stages in this country, and when the "old box hive," as it is now called, was the standard hive in use, the bees were mostly wintered outside on their summer stands without any extra protection. And they used to winter in that rough way very well, often coming through the rigors of the severest Canadian winter in good condition. The question how this is to be accounted for is often asked. And the question is a pertinent one in view of the fact that we have at present such difficulty in getting our bees successfully through the winter and spring with all of our increased knowledge and improved hives and appliances. I think the seeming anomaly may be explained on the following grounds. In the first place the bees of those days in the old-fashioned hives almost always had first class food for winter, and abundance of it, as there was no extracting done then, and the honey gathered in the early summer and thoroughly ripened and capped over remained in the hive for winter food—the surplus taken from them being mostly from caps on top after the hive had been well filled. A further cause of the successful wintering of their bees by our forefathers with their limited apian knowledge may be found in the fact that only the strongest colonies were allowed to face the music of winter—the weaker ones being all "taken up" in the

fall, *i. e.* "brimstoned," and that means digging a hole, putting sulphur in it, lighting it, setting the hive over it, and smothering the industrious little creatures to death, and then taking possession of their stores. A still further cause would no doubt be the peculiar construction and arrangement of the combs by the bees, which, in many cases, instead of running parallel to each other as we now force them to do by means of our movable frames, converged from the inner walls of the hive towards the centre, thus materially favoring compact clustering and facility in reaching the food in the cold weather. A final factor in the problem would, I think, be the natural protection afforded them by the forests, which have now mostly disappeared, leaving the bees which are outside without artificial protection, exposed to the piercing winds of winter.

If these are the true causes of the phenomenal success of old time wintering under what is thought such adverse conditions, the apiarist of to-day may learn a lesson from each and every one of them. First, let him put a little check on the extractor and leave the bees plenty of honey, and of the best quality for winter. Double up all weak colonies, and try to carry none but strong ones through. Meet the requisites of compact clustering and convenient food by spreading the frames a half inch or so in the fall and giving freedom and space to the bees above the frames in winter. When wintered outside protect them by means of sawdust or chaff packing or otherwise. Under such advantageous circumstances as surround the modern apiarist, he certainly ought to be able to carry his bees through the winter and spring more successfully than his grandfather did.

The most important part of the work among the bees for April consists in looking after the stores to see that they have plenty of food, attending to the colonies that show signs of bee-diarrhœa, and setting out of winter quarters. As brooding has now commenced there will be an increased consumption of food, and those short of stores should be amply supplied. If there is honey on hand saved over in frames (as there ought to be) supply those in need with these. If not, make a somewhat stiff candy of extracted honey and number one granulated sugar, and place in cakes over the frames under the quilts where the bees can reach it. The candy may be made by warming the honey and mixing the sugar, leaving it for several hours in a warm place till the honey and sugar get thoroughly incorporated. It must of course be of such consistency that it will not melt in the degree of heat under the quilt and above the bees—say 60° to 80° Fah. Colonies showing signs of disease and restless, ought now to be carried out to the summer stands for cleansing flight. This ought to be done on a fine, warm, calm day, and they must be carried back to the cellar at night, provided the time has not come for leaving them out. This brings us to the question of

TIME TO SET BEES OUT.

When bees ought to be put out of winter quarters on to their summer stands must depend upon the season and some other conditions. As a rule it is not well to put them out until the weather becomes warm and somewhat settled and natural pollen appears. This time will vary according to season and locality, all the way from about the middle of April till the middle of May. The bee-keeper must use his own judgment in the matter, as no invariable rule can with safety be given. But there are certain principles which apply under all circumstances and conditions, in spring management, one of which is, that food in plenty is required for brooding; and another equally important

is, that a certain degree of heat is always required. Both are imperatively essential. We can supply both, and therein will largely depend our success in getting our bees through the spring in good condition for the harvest. More bees are lost in spring than winter. "Spring dwindling" is the dreaded Nemesis of the modern bee-keeper. But equipped with the modern knowledge of his art, he can meet and vanquish this enemy. What is spring dwindling? Most of us know by experience, more or less dear, what it is. It is the gradual, often rapid, dying off of the old bees in the spring faster than the young ones are brought forth to take their place. The obvious remedies are first, to prolong the lives of the old bees in the spring; and, secondly, to hasten the raising of young bees sufficiently to meet and fill the loss of the old ones. The question now is, how is this to be done? Conserve the life of the old bees by keeping them quiet; that is, so far as out door exercise is concerned. Let their energies be spent inside the hive rearing brood. When an old bee begins to forage in the fields in the spring it will very soon shuffle off its mortal coil. Simply do away with the necessity of this. Prevent it from spending itself in that way. How? By supplying it with plenty of food within the hive, so that it need not go out for it, and by supplying it with sufficient heat for brood-rearing. But some bees, like some bipeds, like to be fussing about whether there is any need for it or not. This can be remedied in case of the bees by leaving them in their winter quarters till they get well on with the brooding.

Upon referring to my apian record I find that in the spring of 1885 I commenced setting my bees out of cellar April 16th, and finished May 13th; while the fall record shows that the latest out did as well as those out first or later. That spring was backward, and those having plenty of stores for brooding, and remaining quiet, I left in till late, with quite satisfactory results. In 1886 I commenced setting out April 13th and finished May 2d—the first natural pollen appearing in the fields April 19th. In 1887 I commenced April 10th and finished same time as previous year, May 2d—the first pollen appearing on that date.

The reader will see from the above records that I am not in favor of rushing bees out in the spring the first warm day that comes. Some that are restless, or from other causes, will require to be put out before others. I commence with those requiring the change most, and keep on in that way till all are out. Every one must use his own eyes and judgment for himself in this matter as in others.

A NEW HIVE.

Messrs. Jones & Macpherson, of Beeton, Ont., are about to (or perhaps have done so already) agreeably surprise the bee fraternity (scientific) with a new invention for the production of comb honey. The main features of the new system of reversing and taking comb honey consists of a reversible queen-excluding honey-board and super reverser with spacer, which are fitted to and work upon the Jones "combination hive." Although I had not these fixtures in hand long enough last season to give them a thorough test, I am strongly impressed with their rare merits as compared with any of the existing systems of taking comb honey. Simple of construction, safely manipulated, apparently rain and wind proof, affording the bees no chance to glue the sections, the scientific comb-honey specialist will, I am inclined to think, cry *Eureka!* when he sees it. This is an age of progress in all directions, and apiculture is keeping well up to the front in Canada.