

happens. I have in use a queen nursery, an invention of my own, made like a modern Langstroth hive, except that it is 18 inches wide and is partitioned off into three apartments by means of wire-cloth division walls. The two side departments are strongly stocked with bees and make very strong nuclei. The middle department is used as a nursery or incubator, for hatching queen cells. The strong nuclei on either side furnishes all necessary heat. Well, as a matter of convenience, the entrances to these nucleus apartments are both at the front end of the queen nursery and are practically six inches apart. In very warm weather when both nuclei are crowding outside a portion of their bees, the clusters may actually touch each other. These nuclei thus situated have been employed at queen rearing for the past three or four seasons, and they have nursed from four to eight queens each, during each season, and not a single loss has ever occurred. The explanation is this: These nuclei have received close attention and been kept in *normal* condition, and the legitimate result has been as stated above. *Abnormal* condition of the nursing colony is the true cause of the loss of young queens at that period of their age when they are moved to seek a mate. I discovered this fact four years ago, and have had the matter under observation ever since. Young queens may sometimes be captured by birds, etc., and may possibly under some circumstances enter the wrong hive and perish. But these causes are as a mere "drop in a bucket" when compared to the real cause, viz.: abnormality of the nursing colony. Any one may satisfy himself of the power of these influences by a very simple experiment. Give to a colony of bees, that are in normal condition every way except that they have no queen, a good strong queen cell, and they are about as certain to have a laying queen in due time as anything earthly is certain. But if you will manage so that the young queen is lost about the time she should mate, abnormality will begin to appear and the next trial will be fraught with danger, and after a few failures it becomes next to impossible to get a queen mated under the care of that colony. The condition becomes the same as that of a colony infested with fertile layers except that no eggs appear in the combs. The trouble consists in the accumulation of superannuated bees who are ready to "ball" any young queen that presumes to put on "airs" in their presence. A peculiar feature about the matter is that the young queen, from the time she is hatched out to the time she begins to prepare for her wedding flight, may move about among the bees unnoticed and unmolested, but then her persecution begins

and is most likely to end in her death. Supplying such colonies with brood and young bees, though a commencement in the right direction, will not restore the colony to her usual conditions, because the disturbing cause, the superannuated bees, remain in the hive. My remedy is to supply the nucleus or colony, as the case may be, with a frame of hatching brood and in two or three days after the young queen is hatched out move the hive to a new location. This will draw off the disturbing old bees, and the young queen will run no risk of being persecuted and balled to death when she takes her wedding flight. Since I made the discovery that abnormality of the nursing nuclei, or colonies, as the case may be, was the direct cause of the loss of young queens at mating time, and began to take steps to remove the cause I have lost no young queens worth making mention of, while previous to that time my loss in that way was quite serious—in fact, enough to cut down the profits of queen rearing below a paying basis.

#### THE PRESENT OUTLOOK.

Previous to the 15th of the present month, August, this part of the U. S. was visited by a three weeks heated spell attended with drought working serious damage to crops and to the young clover plants. But since the date above mentioned it has been remarkably seasonable and we now have promises of honey for winter stores. I am happy to say that a large portion of the young white clover crop is now safe from the effects of drought this season.

G. W. DEMAREE.

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For the Canadian Bee Journal.

#### The Season in Dufferin County.

HAVING read the reports in the C.B.J. of the honey crop in Ontario, which are by no means encouraging, and not noticing any report from this section I thought it might not be out of place to send you a few lines stating how we have got along with our bees this season.

I put into winter quarters in fall 1887 thirteen swarms packed in chaff, of which five died of starvation and two from some cause unknown to me, as they had plenty of sealed stores. This left six to commence the season of 1888 with. I had three swarms from these but all went back again; I divided them and made nine out of the six and took so far 335 lbs. of extracted honey.

I expect to extract yet another 100 lbs. and leave abundant stores for winter. Those of my neighbors keeping bees have done equally as well, and in some cases better.