

it is always wise to have the cover a little raised at the back, to provide plenty of ventilation; otherwise the lack of air may tempt the bees to make a second flight. Do not use smoke while hiving a swarm.

PREVENTION OF SWARMING.

The prevention of swarming is to the bee-keeper a real or will-o'-the-wisp. He wants surplus honey, but he knows by experience that he will get far more from a colony that does not swarm than he will get from one that does, even with the aid of all its offshoots. Therefore, he tries hard to get up strong hives by the beginning of the honey flow, and to hold the forces intact all through the season.

Thousands are wrestling seriously with the swarming problem every summer, striving to understand the immediate cause. It is not enough to say it is the bees' method of reproducing the species, for all strong colonies in an apiary do not throw off swarms in the season; often the majority do not. Again, it is not a problem of sex instinct, for the queen has no desires but to lay; in fact, the decision whether to divide or not to divide the colony is determined by the workers, who are free of the sex impulse.

Uneasiness, discomfort, practically sums up the conditions that develop the swarming impulse. It is caused by:

1. By the want of room in the combs, and this is the most important cause of all. There must be readily accessible cells for the queen in early June if the bees are to be contented, hence the importance of giving the colony a second chamber as soon as the bees are crowding the first. To put an extracting super over a brood-chamber, but with a queen-excluder between, is no preventive, for this is giving more room for honey when there is none, while it gives no additional room for egg-laying, which is what is wanted. Once the swarming fever has developed, the only cure is swarming, so that giving additional space at this stage is too late.

2. By the heat of the summer sun. This is not enough in itself, but it encourages the impulse.

3. By the presence of an army of drones in the hive, who crowd it and make it uncomfortable. Therefore, keep down the amount of drone-comb.

4. By poor ventilation. It is simply impossible during hot weather for a small entrance to give sufficient circulation of air to satisfy the needs of say 50,000 bees and about as many in the baby stage. Therefore, let the entrance after the 1st of May be at least an inch high and as wide as that part of the combs on which the bees are clustered. In most cases this will be the full width of the hive. In the hot weather period the brood-chamber may be pulled back or pushed forward a couple of inches to clear the end of the bottom board and thus give a free current of air under the frames. In extreme cases a through draught in the brood-chamber can be given by pushing forward the super enough to make a crack about a quarter of an inch wide.

5. Colonies run for extracted are very much less liable to swarm than those run for comb honey. Since extracted honey is more profitable in this Province and is produced with less labour, the beginner is advised to devote his energy to securing his crop in this form.

TO PREVENT SECOND SWARMS.

The principle involved in the prevention of second swarms is to weaken the parent hive, strengthen the swarm, and secure as much surplus honey as possible. Remove the old hive from the stand and set it in a new location, the sooner the better, as we want to catch all the bees that are coming in from the fields with nectar. Set the new hive in its place, using only starters or full foundation in the frames. Then secure the swarm and hive it in the new hive on the old stand. The bees will at once proceed to