

## The CONTROL of INCREASE

(By L. Stachelhausen, Converse, Texas.  
Paper and Discussion at National  
Bee-keepers' Convention.)

The natural way of increase is swarming, and, therefore, the first problem is control of swarming, and this is very important for bee-keepers who keep a large number of colonies in several apiaries. As we have no man in the out-yards to watch for swarms, and as it would not pay at all to keep such a person there during swarming-time, every swarm cast by any colony would be very probably lost.

I am tempted to give you a scientific talk about the cause of swarming, but I think you prefer more practical hints. One of the most practical ways to prevent or, at least, to delay swarming, is to use large hives; that is, a large comb-surface, by which the bees can extend the brood-nest in every direction. At the same time colonies in such large hives will develop faster during the spring, and become stronger colonies. We can force such a development in smaller hives by spreading the brood and other laborious and dangerous manipulations. In a large hive with plenty of honey a healthy colony will develop to the greatest possible strength without any manipulation made by the bee-keeper.

It may be said that such large hives do not always, and under all circumstances, prevent swarming. This is true, but I have observed, if, in an apiary, 10-frame Langstroth hives are changed to larger ones, the bees will swarm less by and by every year. In my locality the bees from hives not larger than 8 or 10 Langstroth frames

will swarm so much that one man could hardly manage an apiary of 100 colonies. I could tell you stories about the ways some of my bee-keeping neighbors acted to get rid of these surplus swarms. For about 24 years I have used larger hives, and have no trouble of this kind any more. This is a very important difference, if bees shall be kept in as many colonies to make a profit-bearing business.

In my locality the problem is to keep the bees from swarming till the main honey-flow commences. During this flow the bees will not swarm, if they have not made preparations for it before this flow commenced. With such circumstances, hives as large as the Dadant hive will prevent swarming sufficiently in most years. In other years, which are more favorable for brood-rearing, I have to watch my colonies more carefully. If I find a very strong colony with brood much extended, I have to manipulate it, especially if I find queen-cells started. It may be set down as a rule, if we find 2,500 square inches of comb-surface, occupied by brood, this colony will probably swarm soon, even from a very large hive.

The prevention of swarming may have different purposes. If we can't, or are not willing, to watch our colonies during swarming-time, we can make the swarms artificially a little earlier; thus they could swarm naturally, but in this case we will get as much, or even more, increase. If we want less increase, we make only so many artificial swarms as we think necessary to prevent natural swarms. Or we may not want any increase at all, and wish to keep the whole force of a colony together, and have it as strong as possible during the honey-flow. For this reason we have to select different ways for prevention of swarming. If we make swarms artificially, we can make one or more

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