

obtain along some parts of the Fraser River, but, on the other hand, there are many square miles of territory where the maples are so plentiful that strong colonies should secure a surplus. In the irrigated fruit regions there is apparently no break in the flow of nectar, so that brood-raising is continuous after it once starts.

On Vancouver Island the honey-flow is over by the middle of July. Like conditions prevail in the purely clover regions of the Lower Mainland, but wherever fireweed abounds the flow lasts into August.

In the Okanagan and similar regions it would appear that surplus honey is got from the fruit-blossoms. The flow from clover ends with July.

#### HONEY-DEW.

Honey-dew, which is usually considered to be an excretion from aphides and certain scale-insects, is in some years very plentiful on Vancouver Island, and is freely gathered by the bees in the absence of nectar. It is considered very poor winter stores unless the bees are fortunate enough to have an occasional flight in December and January. It is very dark in colour, and when mixed with the honey in the supers impairs both its colour and flavour. It occurs also some years along the lower part of the Fraser River, but in the Dry Belt it is practically unknown. It would appear to be most plentiful in the fir-tree regions and where cottonwood abounds.

#### HIVE PREFERRED.

The ten-frame hive is the standard recommended by the Inspectors. The Langstroth hive is practically the only one in use.

### CHAPTER III.

#### Starting Bee-keeping.

To learn the art of bee-keeping, one must keep bees. It is not enough to buy a colony and trust to luck for the outcome; the owner must learn to *keep* bees; that is to say, have them at the end of some definite period, say twelve months or five years, or longer. The beginner in bee-keeping must realize that bees are just a variety of stock, like cattle, hogs, or chickens, and, like them, must be taken care of; therefore he must learn about bee needs and bee habits, so that in times of necessity he can give the little aid that is required to tide them over the period of trouble. Too many beginners assume that bees need no care, that they will work for nothing and board themselves, yielding profit in the form of honey, and multiplying their kind several times in the course of a single season, so that by the investment of a few dollars in one hive there will in a very few years result a good-sized apiary that has easily paid its way out of surplus honey.

The actual facts do not correspond with so rosy a picture. Without doubt, bees will pay better returns for the capital, time, and labour invested than any form of farm enterprise; but the big returns are got, one year with another, as the result of knowledge and skill judiciously applied. It is undoubtedly true that in most years bees reproduce themselves prolifically by means of swarms; but this is Nature's way of compensating for a high death-rate in normal conditions, so that there will generally be in an average of years just about the same number of colonies in a certain locality. Any permanent increase must be brought about by the skill of the bee-keeper.

Again, the production of surplus honey is not the reason for the existence of the colony; this result is due to the manipulations of the apiarist. In a state of nature, what would be surplus honey is transformed into more bees, until the hive is overflowing, when it divides, often several times, into duplicates of itself. Bees, we thus see, make honey, and then out of the honey make more bees. So the colony that