

PACKAGE BEES

THE importation of package bees from the Southern States for the purpose of establishing new apiaries, strengthening weak colonies in the spring and for replacing losses that may occur through poor wintering or from disease, has become an important feature of Canadian beekeeping. In the Prairie Provinces and to some extent in other parts of the Dominion many beekeepers follow the practice of killing their bees in the fall and replacing them with package bees the following spring.

The Packages

There are approximately 5,000 bees in a pound and they may be obtained in packages of one or more pounds, but the two-pound size appears to be the most popular for all purposes. Many beekeepers, however, prefer the three-pound size, especially if they are living in regions where the main honey flow comes early in the season and is of short duration only, or when the bees arrive late in the spring. Unless otherwise ordered, a young queen, enclosed in a small cage, is suspended in each package.

Placing the Order

Because of the enormous increase in the demand for package bees, the Southern shippers are usually fully booked with orders long before spring arrives. Therefore, it is a wise plan to estimate one's requirements early in the winter and to place the order immediately. When writing the order, be sure to state definitely the size and number of packages required, and whether or not queens are to be included. Also state the approximate date on which

the bees are to arrive. Some latitude must be allowed in this regard, because unfavourable weather or other cause may make it impossible for the shipper to send the bees on the date requested. Once the order is sent, avoid changing dates as this is only confusing to the shipper and usually disappointing to the purchaser. When ordering, ask the shipper to forward copies of the invoice in advance of the bees. Send these to the nearest Customs Officer explaining to him the perishable nature of the shipment and that immediate delivery is imperative. At the same time, get in touch with the express agent at the nearest customs point advising him that a shipment of bees is expected on a certain date and giving him the authority to release the bees from customs, so that delivery will not be delayed. These precautions are mainly for those living long distances from customs centres.

When the bees arrive, examine the packages carefully and if they are not in good condition have the express agent sign a statement of any loss or damage. Send a copy of this statement to the shipper of the bees.

Time of Arrival

Experiments show that package bees arriving during the latter part of April usually give the best results. Arrivals during early May are also satisfactory, but bees arriving later than May 15 do not yield maximum returns. For Vancouver and the Coastal Plains of British Columbia where climatic conditions are favourable, package bees should arrive during the latter part of March or as early in April as possible.

Care of Packages upon Arrival

It is important that all equipment necessary for housing the bees be ready before they arrive, as last minute preparations may result in loss. When the bees arrive, stand the packages in a cool, shady place. Sprinkle the screening of the packages with cool water or thin sugar solution and then leave them until late afternoon or evening. If the bees do not arrive until late in the day, or if the weather is dull and cool so that there is little danger of bee flight, they may be released at once. Although there are many ways of transferring bees from packages to hives, the following is the procedure recommended by the Bee Division, Central Experimental Farm, Ottawa.

- 1. Equip each hive with five or six drawn combs, two or more of which contain a good supply of honey and pollen. Place these combs at one side of the hive leaving a vacant space on the other side for the package. Also place a small pebble or piece of wood on the floorboard of the hive. Reduce the entrance of the hive to approximately one inch leaving the opening in front of the vacant space. If drawn combs are not available full sheets of foundation may be used.
- 2. In the late afternoon or evening, place each package alongside the hive the bees are to occupy.

- 3. Starting with one of the packages first remove the covering and feeder can and lift out the queen cage. Examine this cage to see that the queen is alive. Remove the covering from the candy hole and push a nail or small stick through the candy, as this will enable the bees to release the queen more quickly. Take care not to injure the queen. Now hang the queen cage, screen side down between the top bars of the two frames nearest to the centre of the hive. Shake a few bees from the package on to the frames near the queen and then stand the package upside down in the hive alongside the combs, taking care to rest one end of the package on the pebble or piece of wood, previously placed on the floorboard, otherwise, the bees cannot leave the package. Cover the hive, see that the entrance block is properly in place and then proceed in the same manner until all the packages are released. Sometimes the queen is enclosed in a cage without candy. Where this occurs do not remove the covering from the hole in the cage but place the cage between the frames as outlined above. Twentyfour hours later remove the covering and allow the queen to escape among the bees with as little disturbance as possible.
- 4. The packages are usually empty of bees the following morning and can then be removed. If any bees remain shake them out into the hive. The space in which the package stood can then be filled with drawn comb or left for feeding purposes.
- 5. Twenty-four hours after releasing the bees, examine the queen cages, remove those from which the queens have been released, but in those which still contain queens, enlarge the hole through the candy and replace the cage between the frames without disturbing the bees.

Do not examine the colonies for at least seven days after releasing the bees, otherwise the queens may be killed. Many a good queen has been lost through premature examination of the bees. The longer the period between releasing the bees and the first examination, the better, provided the colony has a plentiful supply of food and the queens have been accepted.

If the weather is extremely bad when the packages arrive so that the bees cannot be released outside, this work can be done in a dark, cool cellar or building. Artificial light may be used while the bees are being released. Prepare the hives as outlined above but close the entrances completely. Release the bees as described, and about thirty minutes after placing them in the hives, open the hive entrances to about one inch, otherwise the bees may suffocate. If care is used the transfer can be made with scarcely a bee lost. As soon as weather permits the hives can be taken from the cellar to the apiary.

As the bees usually arrive before they can gather enough from the fields for their use, it is imperative that they be fed liberally, especially if they are released on foundation only, so as to avoid any check in the building up of the colony. If the bees are not installed on combs containing honey, they must be given a syrup made of equal parts of sugar or honey and water. On no account use honey from an unknown source, for fear of introducing disease.

Honey is the best food for bees during the spring, but if this is not available sugar must be substituted. Hiving the bees on combs of honey is the

ideal way of feeding. Beginners, however, are not likely to have them, therefore syrup must be used. If feeding is necessary it should be commenced about twelve hours after the bees are installed. The syrup should be given while warm and preferably in the evening, as this reduces the danger of robbing. Honey pail feeders are the best to use and when filled with warm syrup they may either be placed in the hives alongside the combs after the empty packages are removed, or placed in an empty super above the clustering bees. If placed inside the hive be sure to raise the pail slightly from the floor with small blocks of wood so that the bees may reach the syrup.

If the bees are to be used to strengthen weak, queen-right colonies it is advisable to have them arrive early in May so as to give the beekeeper time to make a complete survey of the over-wintered colonies and thus know exactly where the packages are to be placed upon arrival. It is not necessary that queens accompany these packages. Treat the bees when they arrive in the same manner as outlined above, then proceed as follows: First cage the queens of the colonies to which the package bees are to be added and hang these cages between the frames of the hives. Remove four or five of the lightest combs from each colony and push the others over to one side of the hive. In late afternoon or evening remove the feeder cans from the packages and stand a package upside down alongside the combs in each colony. Be sure that the packages are raised slightly from the floorboards so as to allow the bees to escape. Cover the hives and reduce the entrances and except for replacing the empty packages with combs, do not disturb for at least a week. See that the queens are released from their cages within forty-eight hours. Another method is to release the package bees in an empty super above the colony. The bees will soon leave the package and mingle with the bees of the colony. A small can of syrup given to each colony at the time of releasing the bees will reduce any tendency towards fighting.

Regulations Governing the Importation of Bees

"To prevent the further introduction of American Foulbrood and other diseases which affect the brood of bees, the importation into Canada of bees on combs or of used or second hand hives and bee supplies is prohibited. The importation of bees in combless packages is also prohibited, unless such packages are accompanied by a declaration signed by the shipper that the food supplied to the bees and carried in the package is free from disease."

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