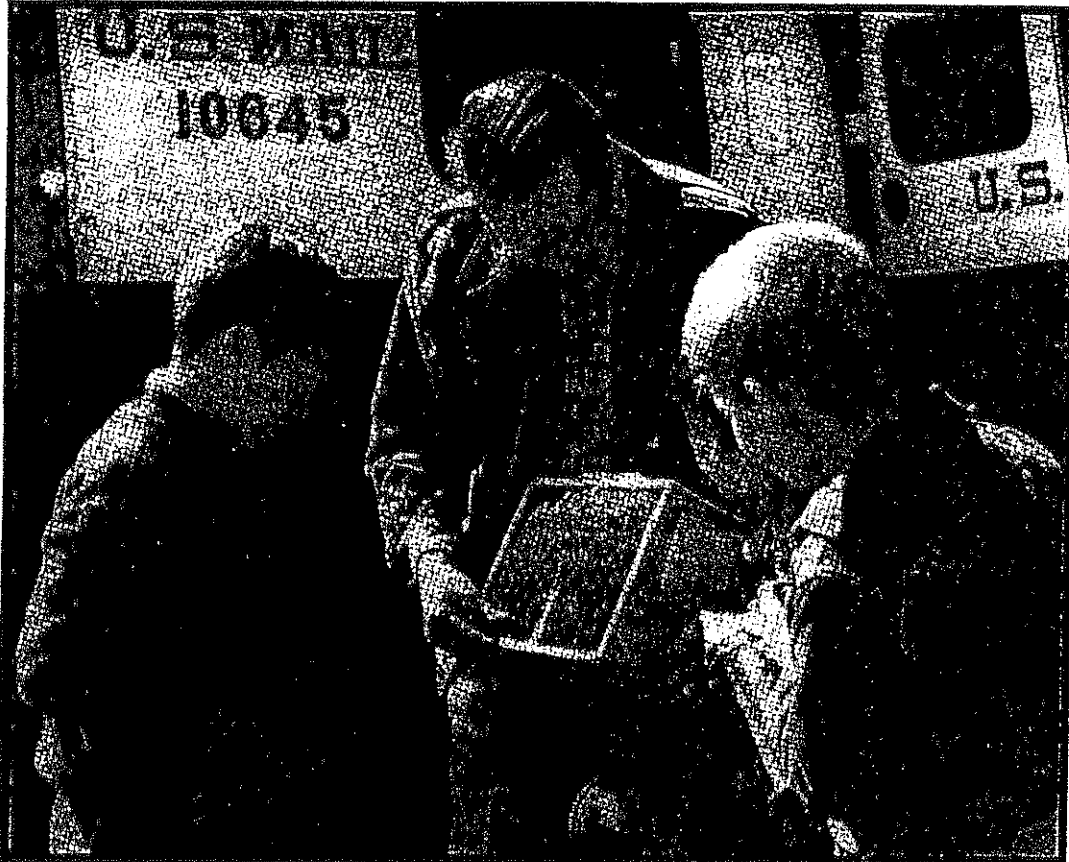


BEGINNING WITH . . .



. . . PACKAGE BEES

•ABOUT PACKAGE BEES•

Most package bees originate in southern states and in California. In the spring they are usually sent to northern states and Canada to new beekeepers or those wishing to increase their apiary.

Package bees are also used to strengthen weak colonies early in spring, for starting new honey producing apiaries and for pollinating fruit blossoms in large orchards.

The southern states are well suited to produce package bees and queens. This is because of a light, almost continuous honeyflow throughout the bee season which is more favorable for breeding bees and queens rather than honey production.

For good service and quality package bees, please refer to your Root Co. Bee Supply Catalog.



THE A. I. ROOT CO.
P. O. Box 706, Medina, Ohio 44258-0706
P. O. Box 6, Council Bluffs, Iowa 51502-0006
P. O. Box 9153, San Antonio, Texas 78204-0153



•WHY PURCHASE PACKAGE BEES?•

TO INCREASE OR ESTABLISH NEW APIARIES. Whether package bees are used to establish new apiaries or make an increase, the hive boxes should be assembled and placed on their stands before the bees arrive. If no drawn combs are available, frames with full sheets of wax foundation may be used. **Sugar syrup should be fed continuously until nectar is plentiful.** Feeding enables bees to draw out the foundation. It also stimulates the queen to her best efforts in egg laying.

TO REPLACE WINTER LOSSES. Some winter loss seems inevitable, even in the best apiaries. As soon as dead colonies are discovered, the dead bees should be cleaned from the hives and the entrances closed to keep out robbing bees and mice. The combs, with their supply of pollen and honey (if the bees did not die of starvation) give the package bees a good start. *Make sure the bees did not die of disease.*

If the bees DID die of starvation and the frames and combs are solid dark brown, scrape as much of the brown stain from the wooden parts of the hive as possible, and clean out dead bees and debris and install your package right in this. No beekeeper should allow perfectly good equipment to stand idle when package bees or swarms can make it into a productive hive in just one season.

QUEENLESS PACKAGES TO STRENGTHEN WEAK COLONIES. Queenless packages are also available to strengthen weaker queenright colonies and to assist in queen-rearing activities.

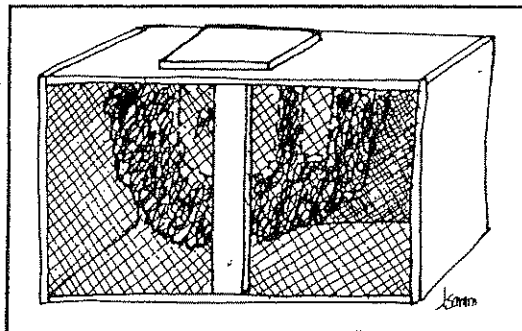
To unite these queenless packages with weak colonies and cage the queen in the colony, you can release the queen after three or four days, sooner if you feed the colony. When the queenless bees and the weak colony are gorged with syrup before being united, it is not necessary to cage the queen in the weak colony. The queenless bees will accept the queen readily, and the bees in the weak colony do not object to the additional work force.

Shake bees on the ground in front of the weak hive, as in hiving a swarm, or unite by newspaper method. Colonies thus strengthened with packages readily develop into strong colonies, ready for the honey flow.

•WHAT TO BUY•

Besides a queenless package, beekeepers can buy 3-pound or 2-pound packages. A 3-pound package contains about 12,000 bees, and in favorable seasons is capable of building up enough to gather surplus honey the first year.

In the Northwest, where the honey flow comes rather late and is drawn out (as in sweet clover areas), the 2-pound packages give good results. In the white clover and alsike regions, the 3-pound packages seem best. This higher population is necessary to have colonies build up for a June honey flow.



•WHEN TO ORDER•

The key word here is EARLY. Order your package or packages early! January is almost too late.

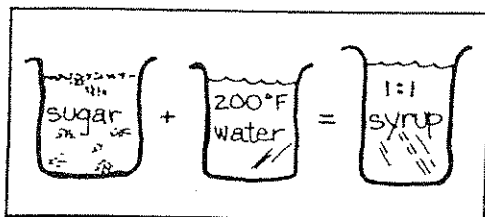
Send your check or money order to a reputable package dealer who advertises in trade journals such as *Gleanings in Bee Culture*. Be sure to tell them when you want the shipment to arrive! If possible, send the order and payment 4 MONTHS in advance of the desired date of shipment. This will make life easier for both you and the supplier, and will do much to assure the delivery of your bees at the time you require them.

There is no advantage to getting packages too early in the spring. A good time is mid-April, or

when fruit trees bloom. It takes eight to ten weeks for packages to build up to strong colonies, ready for the main honey flow.

The most critical time in the development of a package of bees is the first three weeks. This is because it takes three weeks from the time the queen begins to lay until young bees emerge. Then it takes two more weeks for these young bees to reach honey-gathering age. Thus, five weeks must elapse before the first eggs are transformed into adult, honey-gathering bees. When young bees begin to emerge, package colonies will forge ahead — provided the weather and conditions for obtaining nectar and pollen are favorable.

•PREPARE FOR YOUR BEES•

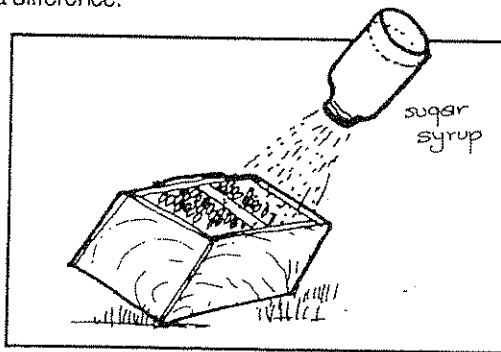


It is of utmost importance that you be prepared for the arrival of your bees! If you are a beginner, read up on bees. Have you read *Starting Right with Bees* or *500 Answers to Bee Questions*? Do you have a copy of *ABC & XYZ of Bee Culture* handy for quick reference? If not, we highly recommend these, and other books especially designed to make beginning easier.

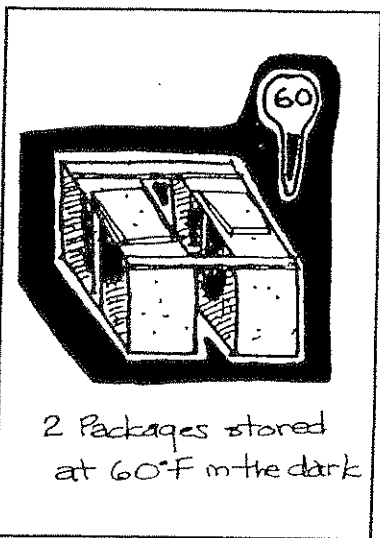
Be certain you are equipped with a good bee veil, a smoker and a new hive — containing frames filled with full sheets of wax foundation or drawn comb. There is no need to spend a fortune here, just be sure you get quality materials — it will make a difference.

BEFORE attempting to install your package in their new home, gorge them with generous amounts of sugar syrup, made of equal parts warm water and sugar.

Keeping your bees well supplied with sugar syrup is very important, unless they are able to gather nectar. Pollen is also essential for rearing brood and is frequently a limiting factor in the progress of a colony. A frame or two containing pollen is extremely necessary where pollen is scarce. Supplements and substitutes for pollen can also be fed.



•DIRECTIONS FOR HIVING YOUR PACKAGE•



1. If the weather is hot when the bees arrive, place the packages in a cool, dark room or garage. If the weather is cold, place them in a room not warmer than 70°F until they can be placed into the hive. (The weather is "hot" when it is warmer than 80°F and "cold" when it is cooler than 45°F.)

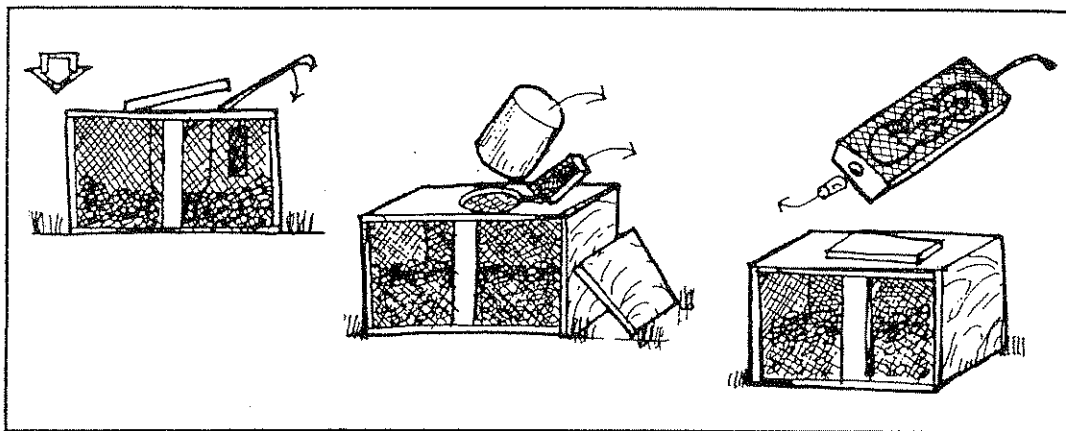
2. Each package contains a friction-top can of sugar syrup. The bees feed on this syrup during the trip through small holes. The queen is shipped in a special cage suspended among the bees. It is called a *queen cage*.

Make sugar syrup by diluting one part granulated sugar with one part 200°F hot water until the crystals are dissolved. Then lay each package on its side and spray liberal amounts of warm syrup on the wire screen. Continue feeding the bees until they will take no more; this will make them easier to handle.

3. Install your bees late in the afternoon if possible, to reduce drifting. Have the hives ready on permanent stands.

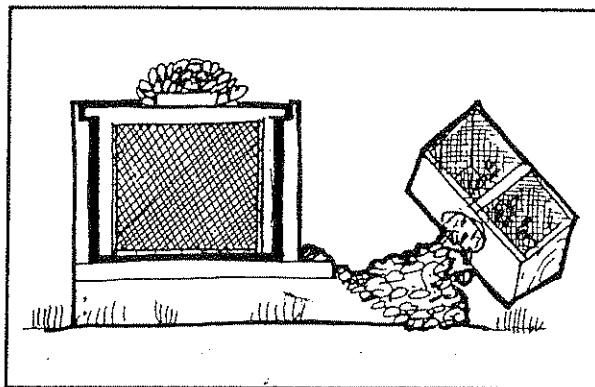
At this point, just before shaking the bees out, spray them liberally with sugar syrup. Dampen the bees sufficiently so that they become fairly inactive, but do NOT soak them.

4. Tap the cage on the ground so that the bees fall to the bottom of the cage. Remove the cover board and slowly remove the queen cage, which is usually suspended by a metal disk or a wire. Re-cover the hole, shake off the clinging bees and examine the queen. She should be alive and active. Remove the cork in the end of the queen cage and replace with a piece of marshmallow. Slide the cage, plugged opening up, down between the top bars of two middle frames, oriented so that worker bees have access to the screen to feed her; or lay the cage, wire side down, across the top of the frames. If the cage already has a candy plug, remove the cork covering it.



5. Remove the feeder can by tilting the bottom of the cage up a bit and letting the can slide out enough to grasp. Shake a cupful of bees out through the round opening on top of the queen, and the rest in front of the hive on the ground. If the bees have been dampened with sugar syrup, there should be very few flying around. Watch the bees as they crawl in the entrance.

6. FEEDING. Feed warm sugar syrup using the feeder can in the shipping cage or other friction-top pails. Punch about a dozen holes in the lid of a jar with a small 3d nail. Plastic pail feeders with a mesh screen in place of holes are longer lasting as they do not rust. Place the inner hive cover on the hive. The feeder can filled with warm sugar syrup is placed over a hole in the inner cover with the perforated lid down. If your hive does not have an inner cover, invert the pail of feed over the top of the frames.



Put an empty super over the feeder can to protect it from rain or robber bees. Then place the outer cover on top. Medicated syrup is recommended, especially treating for Nosema disease.

8. Reduce the hive entrance to about one inch during feeding. **DO NOT DISTURB THE BEES, OR LOOK FOR THE QUEEN FOR AT LEAST FIVE DAYS!** The only time the hive should be opened during this period is to refill an empty feeder. Continue feeding until nectar is plentiful (bees won't be eating syrup). After five days, inspect the hive to see if the queen is laying; then remove the empty queen cage. If for any reason the queen has not been released from the cage, free her now by pulling open the screen.

Your curiosity to see "how the bees are doing" disturbs the bees unnecessarily. The bees will make greater headway if they are left for at least five days without any disturbance.

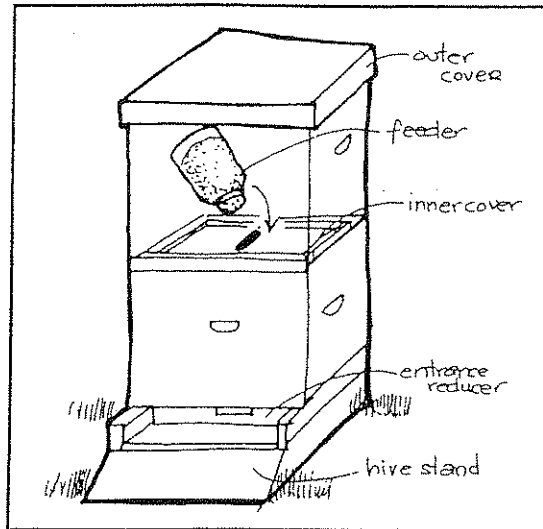
NOTE: If the queen should arrive dead, notify dealer and unite bees with another package, using newspaper method.

9. If the bees arrive dead or in bad condition, have a claim made out at your Post Office and forward it to the shipper. A replacement will be mailed at once. Do not return the dead bees, however. The normal death rate of bees is high, so don't be alarmed to find SOME dead bees on the package floor; if over an inch of dead bees is present, notify shipper.

•INSPECTIONS•

The first inspection five days after the bees are installed should reveal eggs in the bottoms of the cells. A second inspection four or five days after that should show capped larvae.

If egg laying ceases, or has not started, locate the queen. Queen loss is not uncommon in colonies started from packages. Order a replacement queen if the queen is missing.



•SAVE TIME AND MONEY: WATCH FOR DISEASED COMBS!•

When putting your package into a winter-killed colony, make sure American Foulbrood was not present. It would, of course, be folly to install your new package bees on diseased combs.

A hive is infected with American Foulbrood if it contains dead or decayed brood or the dried down, scaly remains of larvae or pupae lying *lengthwise* on the lower side of the cells. The scale stage adheres tightly to the wall of the cell.

If in doubt, contact your local bee inspector for an examination.

The combs in a diseased hive should be promptly burned and the hive should be scorched out. This is accomplished by painting the inside of the hive with gasoline and lighting a match to it. The purpose of the scorching is to make the hive safe for future use.

•IN CLOSING . . .•

Now that you know what, when, where, why and how to get your package bees — and what to do with them when they arrive — we, at Root, wish to extend to you the beekeepers' hand of friendship.

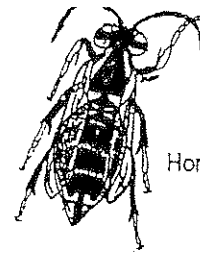
You are about to embark upon a journey into a whole new world. Many have gone before you and prepared the way. We invite you to contact us at any time in regard to your new hobby/profession. Just direct your questions and/or comments to The Editor, *Gleanings in Bee Culture*, P. O. Box 706, Medina, Ohio 44256.

Bees need your help if they are to continue living. Recent introductions of parasitic mites, called the tracheal mite, as well as diseases and the careless misuse of poisonous insecticides, have severely damaged bee colonies throughout the world. Destruction of honey plants by building construction has also limited the amount of honey that a colony can produce. A strong colony of bees can produce over 100 pounds of honey on an average year. YOU CAN HELP!

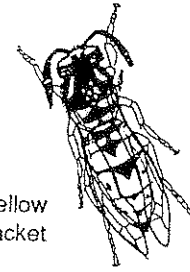
Learn to distinguish bees from more troublesome wasps, hornets or yellow jackets. Bees are fuzzy and brown, not black and yellow. Bumble bees, our native pollinators, produce small amounts of honey, but they are most important as pollinators for blueberries and other fruits and therefore should be protected as well.

Before using insecticides, read all instructions carefully and never spray directly on blooming flowers that bees might visit. Make sure that **none** of the poison gets into puddles of water that bees might drink. If in doubt, call a beekeeper or extension agent.

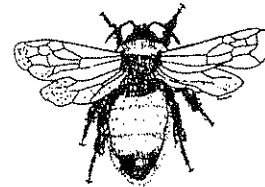
HONEY BEES ARE A VITAL LINK IN THE WEB OF ALL LIVING THINGS.



Hornet



Yellow Jacket



Bumble Bee