

Tips for Beginners: Installing Package Bees

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What is a "Bee Package?"

- A container with screened sides that holds and allows transportation of a bee colony
- 2 to 4 pounds of worker bees
 - About 10,000 worker bees in a 3-lb package
- Queen separated from workers in queen cage
 - Workers and queen are generally not related
- Can of sugar syrup as food supply during transport



Overview of Steps

- Order Bee Package (generally timed to arrive in early spring)
- Set Up Empty Hive
- Pick Up Package
- Install Bees
 - Open Package
 - Remove Feeding Can
 - Remove and Prep Queen Cage
 - "Shaking" vs "Non-Shaking" Installation
- Follow-up Tasks
 - Removal of package container and replacement of frames ("non-shake" method)
 - Feeding
 - Checking for release of queen, removal of empty queen cage
 - Checking for successful brood production (eggs and larvae)



Set Up Hive <u>Before</u> Your Package(s) Arrive

- Set up Hive Box
 - Bottom board
 - Hive body with frames (1 deep body or 2 medium bodies recommended)
 - Inner cover
 - Empty hive body (optional if using a top feeder)
 - Top Cover
 - Entrance reducer

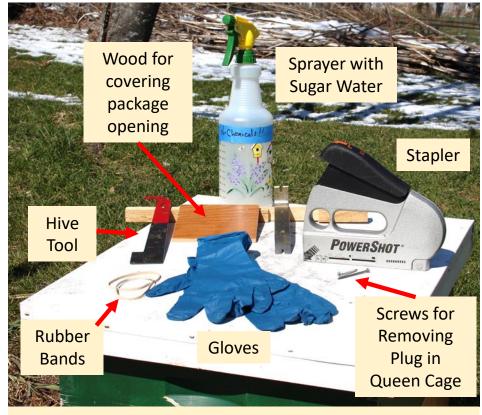


A basic hive setup ready for installation. This setup has 2 medium hive bodies, but a single deep hive body could be used instead. The hive bodies in the background will be used to cover an internal top feeder after installation.



Installation Equipment/Supplies

- Personal Protection (Veil, Jacket, Gloves)
- Hive Tool(s)
- Flat Object to Cover Package Opening
- Rubber Bands, Staple Gun, Thumbtacks
- Drywall Screw or Nail
- Small Marshmallows
- Sprayer with light sugar syrup
 - 1:1 or 2:1 water to sugar mix
- Syrup Feeder with 1:1 sugar mix



Common installation supplies and equipment.



Picking Up Your Package Bees!

- Check that bees in package seem healthy
 - Clustered around queen cage
 - Some dead workers normal. If there is a thick layer of dead bees, get a different package
- Ensure that mesh on package is intact
 - Normal to have some bees clinging to outside of cage
- Keep moderately cool for travel home
 - Keep out of wind/Avoid overheating
- Install package as soon as feasible after pickup
 - Can maintain for a few days if weather does not cooperate
 - Cool, dark place with ventilation
 - Maybe occasional spraying with light syrup through mesh



A healthy-looking package of bees. Note cluster of workers surrounding queen cage and can of syrup. There are few dead bees on floor of the package.



Prepare for Installation

- Remove 5 Frames from hive body
- Spray remaining frames with sugar water (optional)
- Pry off package cover (if there is one)
- Remove feeder can; cover package opening
- Hold onto queen cage tab and slide out of opening
- Cover package opening with something flat
- Examine queen in cage (may need to brush away workers)
- Remove cork from one end of queen cage and replace with marshmallow
 - Be sure queen stays in the queen cage! Use finger tip to plug opening until marshmallow can be inserted

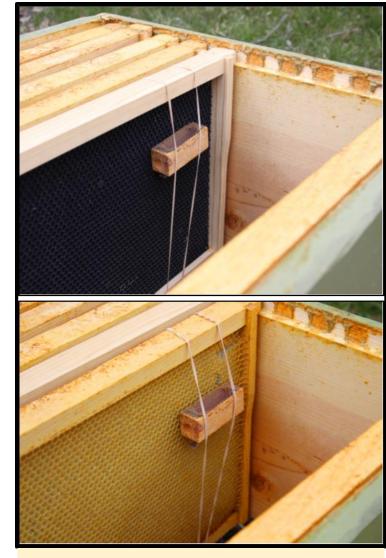


Prying feeder can from package.



Put queen cage into hive

- Attach queen cage to a frame
 - Rubber bands around frame
 - Press into drawn comb and wedge between frames
 - Staple cage tab onto top bar of frame
- About 1 inch down from top of foundation
- Off-center toward front or back of hive
 - You don't want it directly under hole in top cover
- Aim candy plug end toward middle of hive
- Screen on cage facing up or down (not blocked against foundation)
- Frame with cage goes near middle of hive



Queen cages attached to frames with rubber bands.



Method 1: "Shaking" Bees into Hive

- Give package a solid thump on ground to knock bees to bottom
- Remove package cover
- Turn package upside down with hole over frames and pour some bees over queen cage
- Gently shake package back and forth while pouring more bees into area of hive body where frames were removed
- When most of the bees are in the hive, gently lower removed frames back into hive body
 - Don't force down! There could be a pile of bees under there!
- Put inner cover into place
- Place feeders, empty hive body, and top cover as appropriate
- Place mostly empty package next to hive entrance so remaining bees can crawl/fly into hive



Method 2: "Non-Shake" Introduction

- Place entire package into area of hive body where frames were removed
 - Opening facing up
- Remove cover from package
- Put inner cover in place
- Place feeders, empty hive body, and top cover as appropriate
- If using medium bodies, will need to remove frames from both hive bodies for package to fit
- You MUST reopen hive, remove package box, and replace missing frames, within 24-48 hours!
 - Be prepared to slice away excess comb
 - Make sure queen has not moved into package box



Bee package placed into deep hive body for "non-shake" installation. Five frames have been removed to make room for package.



Feeding

- Installed packages generally require feeding for at least one week (or until nectar sources are available)
- Plan on about 1 pint of 1:1 sugar syrup per day
- Various Feeding Options:
 - Boardman feeder at entrance
 - Top feeders on inner cover (can surround with empty hive body to protect from cold)
- Might also want to provide pollen patties (protein source)



Top-feeder bucket placed over opening of inner cover and then covered with medium hive bodies.



Follow-up Activities

- "Non-Shake" Method remove package in 24-48 hours, replace with frames
- 5-7 days after installation, check to make sure queen was released from cage
 - If so, remove queen cage
 - If not, may need to ease out marshmallow plug while holding opening inside hive. If queen seems healthy and there is a cluster of attending bees, you could carefully "drill" a small nail hole through the marshmallow plug and return the queen cage for a few more days.
- 10 days after installation check for evidence that queen is laying
 - If you find eggs/larvae... you can close the hive back up
 - You don't have to FIND the queen
 - If no eggs or larvae, the queen may be a dud (not mated properly), injured, or dead.
 - May need a replacement queen.
- May want to use your smoker for later checks...



Potential Issues and Considerations

- Dead queen Get a replacement ASAP
- Cold/wet weather
 - Delay installation?
 - Set up tarp over installation area?
 - Could favor "non-shake" installation method
 - Be quick!
- Crawling bees tuck in pant legs!
- Absconding colonies
 - Do not use smoker during installation
 - Be as gentle as possible
 - Avoid over-checking right after installation









Questions? Suggestions?

