Hiving Packages in Cold Weather

Packages may arrive in MN when the temperature is below freezing and there is a foot of snow on the ground. The below management practices cover what the UMN Bee Lab has learned over the years on how to successfully get packages of bees into their new hive in cold weather.

Should I hive my package?

In general, it is better for the bees to be put in a hive as soon as possible rather than be kept in the package. Your goal is to get the bees out of the package as soon as possible, but avoid exposing them to temperatures that may harm them.

When the temperature is above 45°F (7°C), even if it will get colder during the night, the package can be installed using the normal procedure outlined in "*Beekeeping in Northern Climates*" manual found at Z.umn.edu/beemanual, or the poster at Z.umn.edu/freebee. If the forecast predicts warmer weather (above 45°F or 7°C) in the next day or two after receiving the package, then you can wait to hive your packages until the warmer weather comes. To keep bees healthy and happy in a package for a day or two while you wait for the warmer weather, spray them twice a day with light sugar syrup (1:1) through the screen and keep them in a cool (70°F or 21°C), dark place. A good sign that the temperature is correct is when the bees are lightly clustered in the package with a few bees moving around. Many bees running around the package screen indicates that the bees are too warm. A tight cluster with no bees moving around indicates that the bees are too cold.

If the temperature is unseasonably cold, between 32°F (0°C) and 45°F (7°C), with no break in the next couple days, then you should use the below cold weather tips.

Hiving the package in cold weather

Warming up the hive
The bees will have less of a shock if you hive them into equipment that is not freezing cold. There are a couple options to warm up the box and frames before hiving the package bees, or you can keep the bees in a warmer location while hiving.

One option to warm the equipment is to remove 2 frames from each side of the box and spread the frames out from the center (Figures 1b and 2b). Then place the package of

bees (without opening the package) into the space (Figures 1b and 2b). If the package does not fit, take another frame from the outside. Place the cover back on the hive and leave it for 2-4 hours.

A second option is to bring the hive equipment inside a warm building to warm it up. The length of time to get it warm will depend on the temperature of the building. When you remove the hive from the warm building, hive the package of bees in as soon as you can before the hive cools down. In this case, it is not necessary to remove the frames and place the package inside before hiving.

The option to hive the package in a warmer location requires access to a garage or shed (not heated). Hive the package as normal inside the garage or shed and keep them inside until it warms up. Be sure to move the hived package outside before the bees start flying. While this is an option, it is best to use one of the two methods above for warming the hive before installing the bees.

Hiving the package

Hive the package following the normal procedure outlined in "*Beekeeping in Northern Climates*" manual found at Z.umn.edu/beemanual, or the poster at Z.umn.edu/freebee, except with the below modifications.

When it is cold, use little or no spray of sugar syrup on the bees. The spray of sugar syrup is to "stop" them from flying. If it is cold, the bees will not fly much, and any sprayed sugar syrup will be cold for the bees to clean off. Keep the sprayer with syrup you are going to spray on the bees warm (80°F or 27°C). Bring along a large bucket of warm water to keep the sprayer in, or tuck the sprayer inside your jacket. You will freeze the bees in the package if you leave your sprayer in the snow, then spray the bees. Use little or no sugar spray on the package bees when you hive them in the cold.

DO NOT let the queen get cold. When you remove the queen cage from the warmth of the package bees surrounding her, put the cage with her in an inside shirt pocket until you put her in the hive.

When you dump the bees in the package into the hive, try to dump them together in a group. Bees that are dumped too far away from the rest may get too cold to join the cluster. Release the queen down in the box on a frame, so she does not fly away. If she flies when it is cold there is a good chance she will not get back. It is best to use the direct release method to install the queen, especially in cold weather it is important that

the queen can be in the center of the cluster. A caged queen can't move to where the bees are clustered.

After dumping the bees and releasing the queen, slide the frames in the box to the center and put the 4 frames you took out at the edges of the box (Figures 1c, 2c). This puts warm frames where you want the bees to cluster. Check on the new package the next day to be sure the bees are under the feeder. In cold weather the bees cannot go very far to get food.

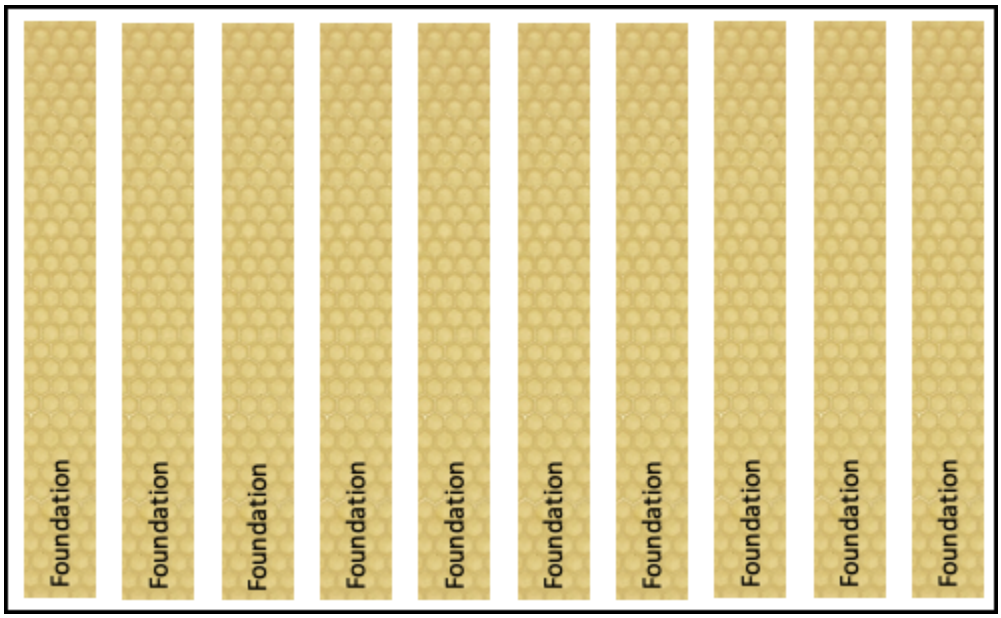

Figure 1a: Frames of foundation in a box ready for a package of bees.

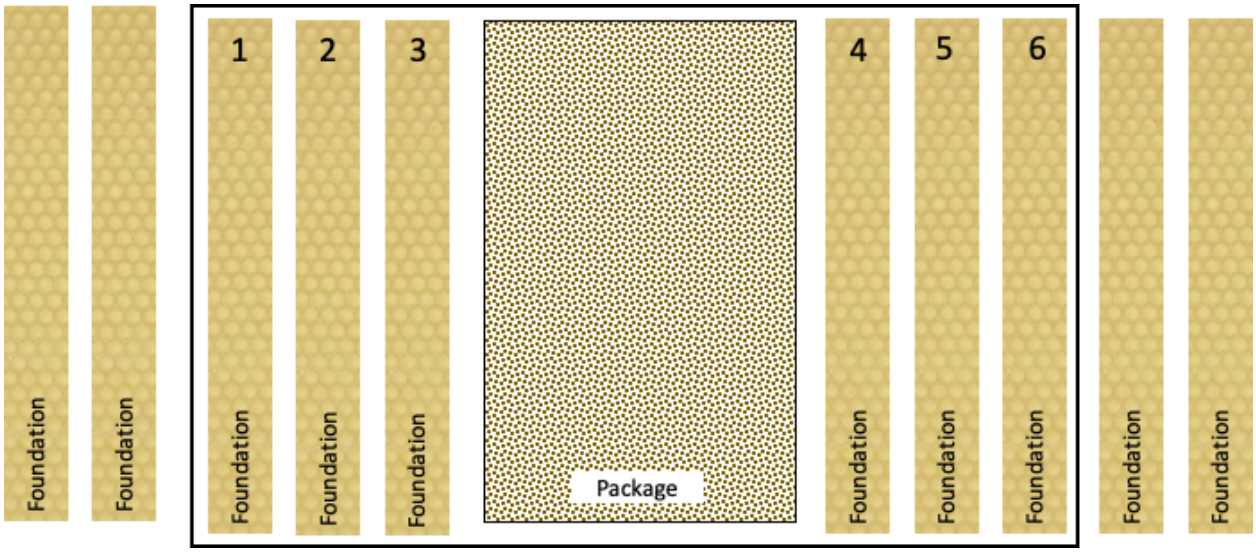

Figure 1b: Frames removed to make room for the package. Leave the package in the box with the cover on for 2-4 hours to warm up the hive.

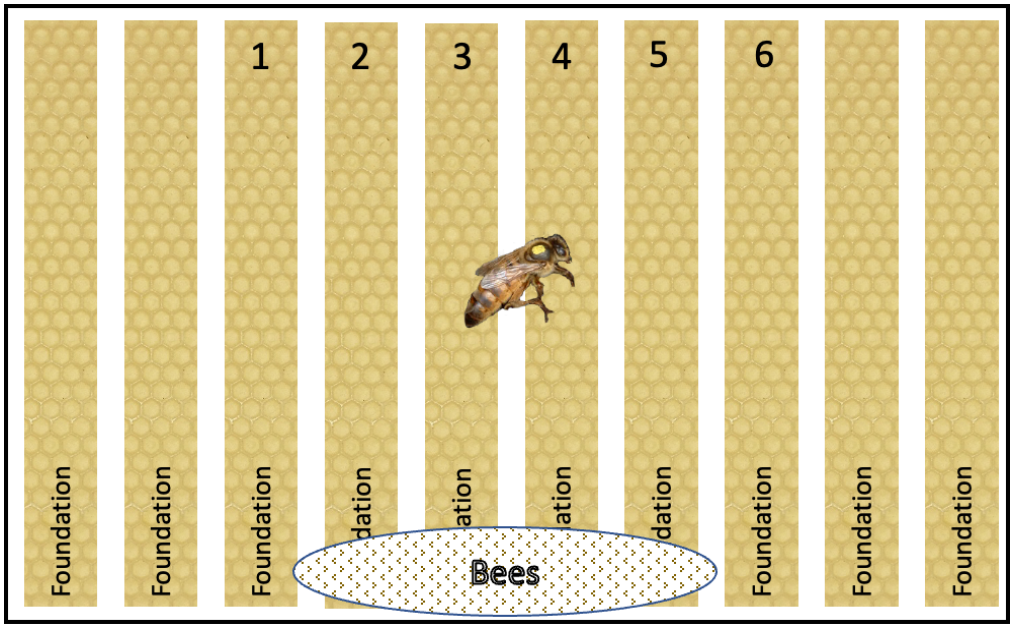

Figure 1c: Bees dumped into box, queen released on a frame, the frames moved to the center and side frames replaced.

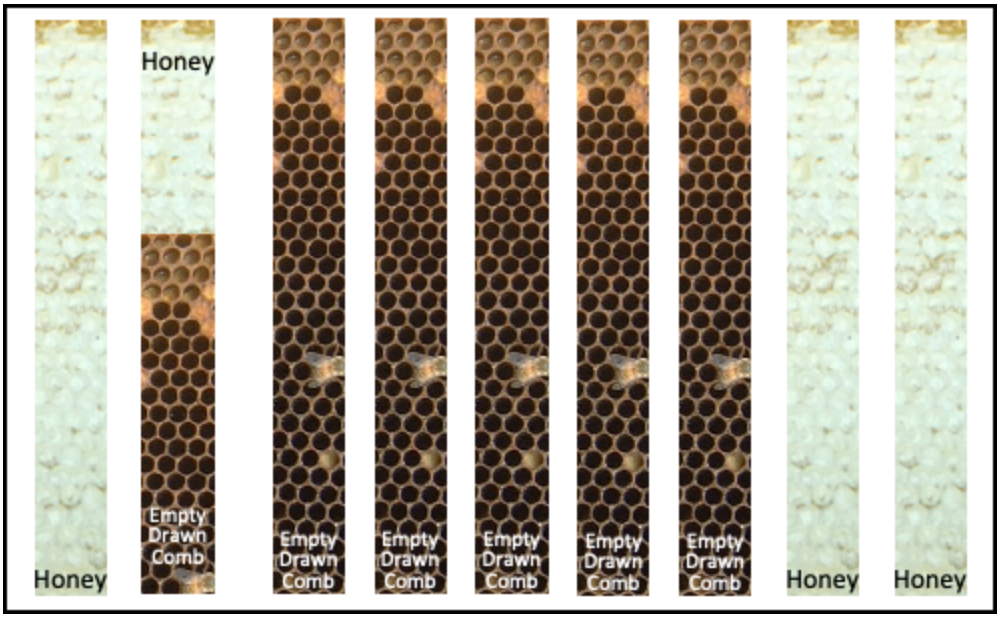

Figure 2a: Frames of drawn comb in a box ready for a package of bees.

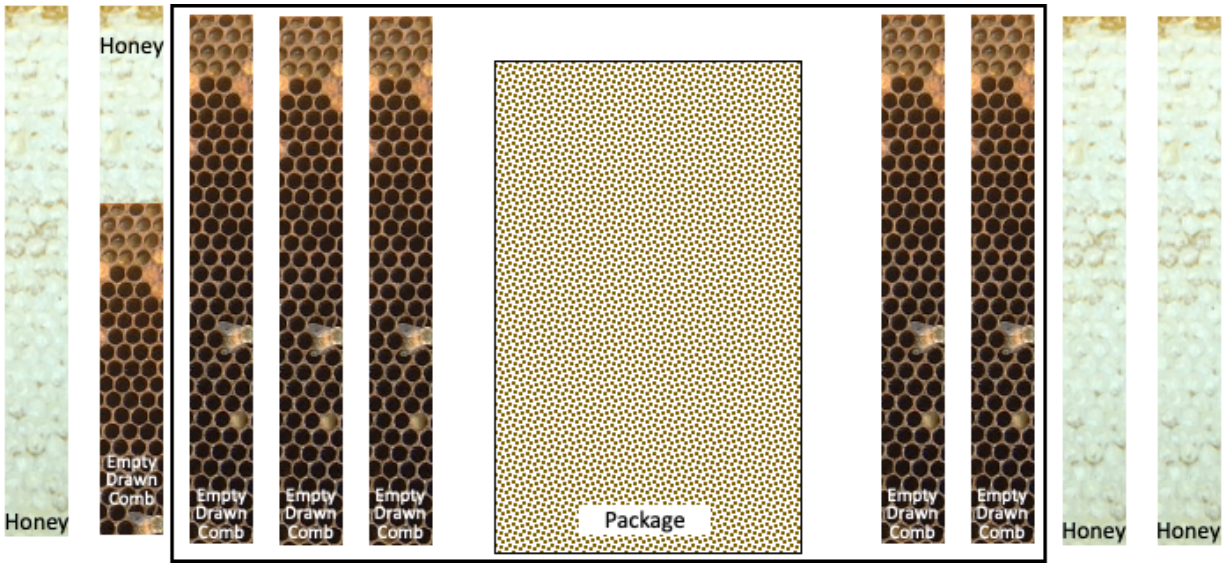

Figure 2b: Frames removed to make room for the package. Leave the package in the box with the cover on for 2-4 hours to warm up the hive.

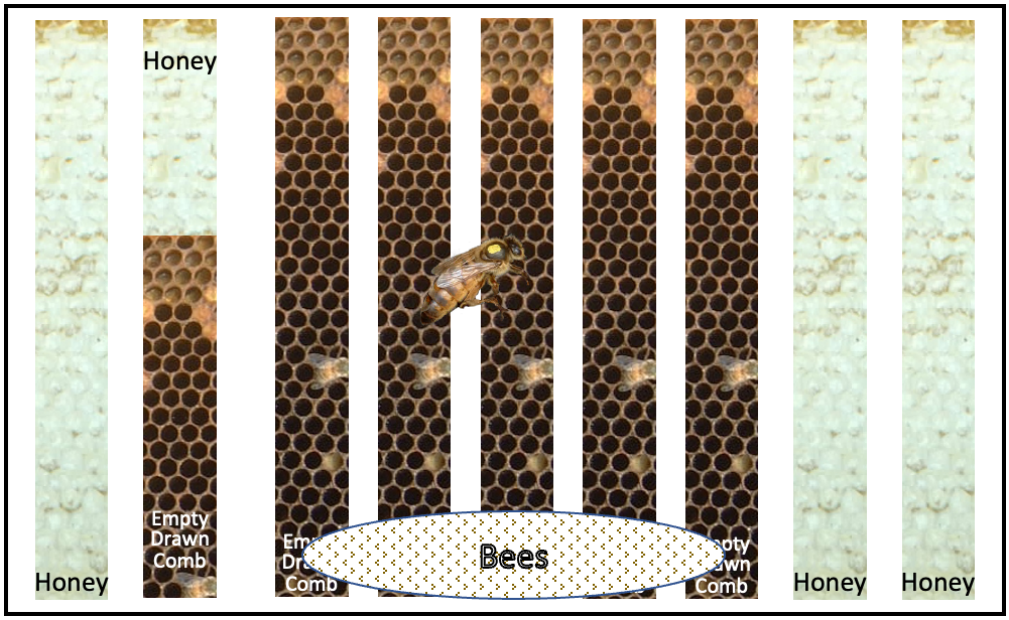

Figure 2c: Bees dumped into box, queen released on a frame, and the frames moved to the center and side frames replaced.