



RESOURCE HIVES

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**RESOURCE HIVES
FOR
OVERWINTERING**



This is a resource hive.

Dadant calls them Support Hives (<https://www.dadant.com/catalog/hive-parts/support-hive-m60035>).

Some people call them Double NUCs or Side by Side NUCs or 4 over 4 NUCs.

Some people call them Palmerized after Michael Palmer.

Brother Adam used them.

Image copyright https://www.betterbee.com/images/Double_nuc_instruction.pdf





The red arrow points to a center divider in the lower box.

These are really two hives that share a center divider.

There are 4 frames on each side of the divider in the bottom box.

There are 4 frames in each of the upper boxes.

There is nothing in-between the bottom box and the upper boxes.

The blue lines represent frames in one hive, the green lines represent frames in the second hive.



THE ADVANTAGE OF RESOURCE HIVES/SUPPORT HIVES FOR OVERWINTERING:



Blue line marks the shared center divider .

- The blue line marks the shared center divider of the Resource Hive.
- The main advantage is that both colonies of bees share the center wall of the hive and they share the heat. Each colony benefits from the extra heat of the other colony. Usually they will both end up clustered up against the center divider, almost like one big round cluster with the center divider between them. As winter progresses the two clusters will move up the hives.



THE ADVANTAGE OF RESOURCE HIVES/SUPPORT HIVES FOR OVERWINTERING:



- The other advantage is the vertical configuration. Four frames over four frames is a tall narrow space. Since heat rises this tall narrow space seems to give the bees a heat advantage.
- Andy Joseph has used these hives to overwinter in Iowa and he says eight frames of bees in one of these hives overwinters much better than 10 frames of bees in a standard single Langstroth box.
- If you are breeding queens these hives give you an opportunity to test the winter survivability of a queen and only use 8 frames of bees. Instead of the 20 frames of bees in a standard hive.

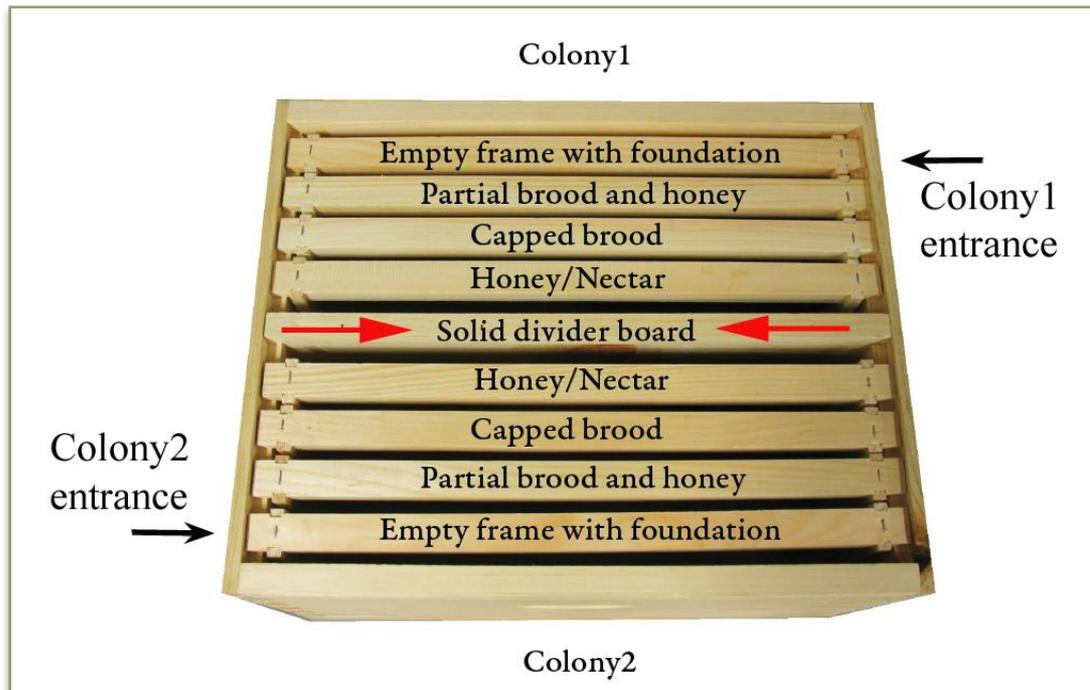
Better Bee has a nice set of photos and instructions at:
https://www.betterbee.com/images/Double_nuc_instruction.pdf



WHEN AND HOW TO START RESOURCE HIVES/SUPPORT HIVES:

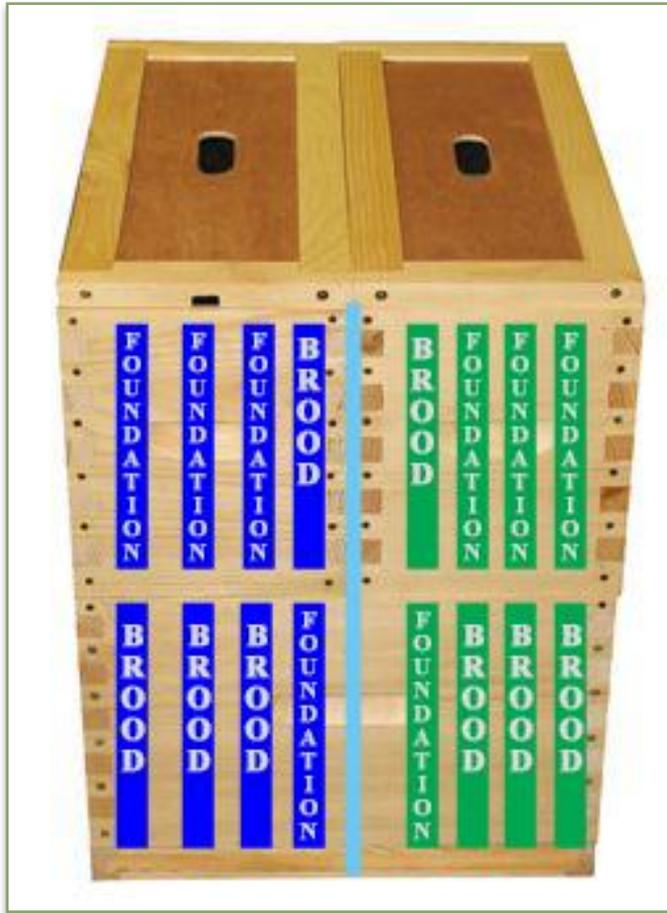
Michael Palmer in Vermont and Kirk Webster also in Vermont both make up these Resource Hives/Support Hives from their weak hives. Not sick hives, but the ones that have not built up like they should have and the ones that are not making honey like the other hives are. Instead of trying to save their weak hives by stealing frames from their strong hives, they pinch the queens in these weak hives and split them up to stock new Resource Hives/Support Hives. They will give each new Resource Hives/Support Hives a new queen. Either a new laying queen they have raised or a capped queen cell.

Kirk starts doing this in the last half of June and the first half of July. Conventional thinking may tell you that July 1st is kind of late for starting a new hive. But remember you only need to build these up to 8 or 12 frames of bees to overwinter, not 20 frames. Also, if it works in Vermont, it should work here in Iowa as well.



- When making up these hives, Mike puts a frame of honey with bees in both sides, closest to the center divider. Then two frames of brood & bees. Then an empty drawn frame on the outside of each half. So each half ends up, from the center out to the outside, honey-brood-brood-drawn(empty). Then he moves the hives to a new location at least 6 miles away. They are pretty weak and you do not want the field bees flying back to the original location.





- About 4 weeks later (8 weeks if you used a queen cell) it is time to expand these colonies to 8 frames by adding the upper box.
- You cannot just put the box full of foundation frames on top. Bees do not see foundation above as room for expansion. Sometimes they don't even see drawn empty comb above as room for expansion.
- Take the frame of brood that is against the center divider and put it up in the box you are adding. Put it where it will be against the center divider in the top box. Fill the empty spot in the bottom box with foundation.
- So you end up with the bottom box from center divider out being foundation - brood - brood - brood. And the top box from the center divider out being Brood - foundation - foundation - foundation.



- About 4 weeks after this, if there has been nectar available, the colonies may need more space. At this point you could add a third box or you could swap frames of foundation for frames of brood and use the frames of brood in other hives that need a boost. This all depends on how late in the season it is and if the bees would have enough time to fill a third box before winter.
- If your 4 over 4 hives have filled 2 boxes (8 frames) and you decide to add another box of foundation, put it between the two boxes. Now you have brood on the bottom, brood on the top, and foundation in between. The bees DO see this as room to expand, because it is in the middle of the brood nest.
- Kirk says In a good year two thirds of his summer Resource Hives/Support Hives will expand to 8 combs by winter (4 over 4). This is without feeding.
- Michael Palmer builds his up to 12 combs by winter (3 boxes - 4 over 4 over 4).



TIMELINE:

- **May 26** A May 26 grafting date would result in queens verified and ready on July 1. This is probably later than when we will have them in reality.
- **July 1st** make up Resource Hives/Support Hives and give each hive a new laying queen you buy from the Siouland Bee Improvement Project.
- **July 29 (Four weeks later)** Three to five weeks later add a second box of drawn frames or foundation, bringing the hives up to 8 frames each.
- **August 26 (Four weeks later)** Three to five weeks later, if the colonies have filled most of all 8 frames, then add a third box or pull some frames and replace them with foundation.
- **September** may have a fall nectar flow and they may fill the 4 more frames added in August.
- **October** you can reconfigure the hives setting them up for winter. You can leave them at 12 frames, just make sure the top box is full of filled frames, hopefully full of honey. Any unused or partially used frames can go in the bottom box. You can also reduce them to 8 frames if they did not fill out the 12 frames very far.
- **Next spring**, after these hives have survived a winter, they really take off. People who use them say they build up faster than many of the full sized hives they overwintered. You can start new hives with them or use them to replace your winter losses. Just clean out your dead hives and move the 8 frames from your Resource Hives/Support Hives into them when weather permits. If you have more survive the winter than what you need you can sell the extras as overwintered NUCs.



- In 2018 I made up Resource Hives/Support Hives and gave them capped queen cells not on July 1 but **July 15**. Queen cells are 4 weeks behind laying queens. I had to feed these in August and September. They did build up to around 8 frames per hive by the time it got cold enough I had to stop feeding them.
- And here is something you may want to think about doing yourself: If you can create queen cells by grafting or splitting or catching a hive before it swarms, put a capped queen cell, one frame of honey + bees and one frame of brood + bees into each of your Resource Hives. That's just 2 frames per hive, but it is just enough to support the new queen once she is mated, and it does not use so many frames of bees that you will weaken your other hives much. Not all of the queen cells will hatch and not all of the queens will get mated. So at some point you can take frames and bees from the unsuccessful hives and add them to the successful ones giving them a boost.
- Let's say you make up 15 colonies with queen cells and 5 of them don't hatch or don't get mated. Take the 10 frames from those 5 unsuccessful hives and put them in the 10 successful ones. Now every Resource Hive has a new mated queen and 3 frames of bees, brood and food.
- When you add the second 8 frames you may want to feed right away. Depending on how slow the bees are building up and if your other hives are bringing in nectar or not.



A SHIFT IN THINKING.

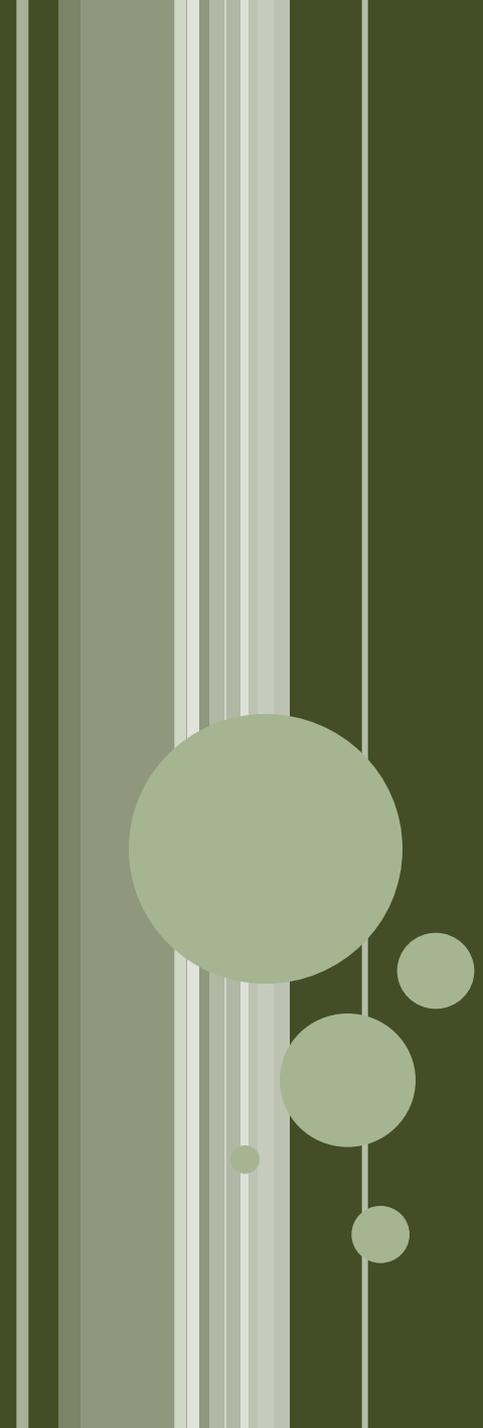
If we want to increase the number of hives we have, do we really need to always increase in the spring with packages and NUCs? Or can we shift our thinking and start making our increases in summer? The disadvantage is you will not get a honey crop from your increases in the first year. But many times you don't get a honey crop from packages and NUCs in the first year anyway. The advantage is you can get northern bees. Local bees that are acclimated to your area. Bees that can time the nectar flow in your area and can survive your winters.

A SHIFT IN THINKING.

Kirk Webster article titled "Cell Building And Overwintering Nucs - The Key To Stability And Resilience In A Northern, Non-Migratory Apiary"

<http://kirkwebster.com/index.php/cell-building-and-overwintering-nucs-the-key-to-stability-and-resilience-in-a-northern-non-migratory-apiary>

"If the demand (for northern queens) is there, then only one basic change in northern beekeeping practice is necessary for a whole new industry to grow up; and it's a change in the beekeeper's mind only: Forget about queen cells and new queens available in March, April and May; and learn what you can do with cells and queens produced in June, July and August. This is the key to everything. It's the starting point of real bee breeding in our region, self-sufficiency, the ability to produce surplus bees, and the way to make beekeeping really profitable and enjoyable once again."



THANK YOU.

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