



## Build a Honey Bee Bait Hive



by hacknbuild

If you're a beekeeper, or an aspiring beekeeper, you can catch your own honeybees using a bait hive.

Learn how to build a simple swarm trap from inexpensive plywood. Once built, the swarm trap can be hung from a tree to catch wild honeybees. The traps are based off of Langstroth Nucleus hives and are 40 liters in volume.

According to an experiment done by Cornell the 40 liter size was optimal for attracting swarms of honeybees.

A single 4x8 sheet of plywood is enough material to make 3 traps. To complete this project, you will need the following:

### Materials

- 15/32" x 4' x 8' plywood CDX or sheathing
- Weatherproof wood glue
- A 10d finishing nail
- Finishing nails for assembly
- Glue
- (3) 4x4 chunks of nylon screen for creating the entrance covers
- Masking tape
- (3) 4"x24" pieces of wood for hanging traps (optional)
- Drywall screws

### Tools

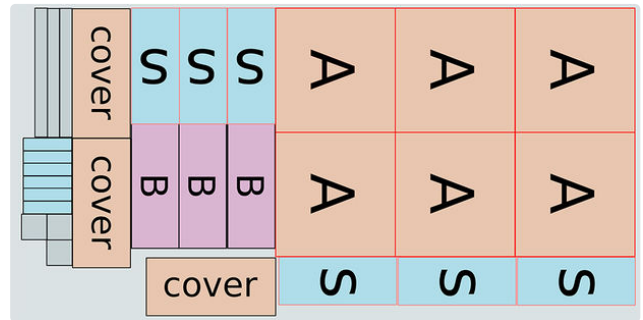
- Circular saw or track saw for ripping the plywood and cutting to length
- Finishing nailer
- Hammer
- Drill
- 1 1/4" spade bit
- 1 1/2" spade bit or hole saw

[https://youtu.be/4Di21MOQe\\_E](https://youtu.be/4Di21MOQe_E)

## Step 1: Cut Pieces to Size

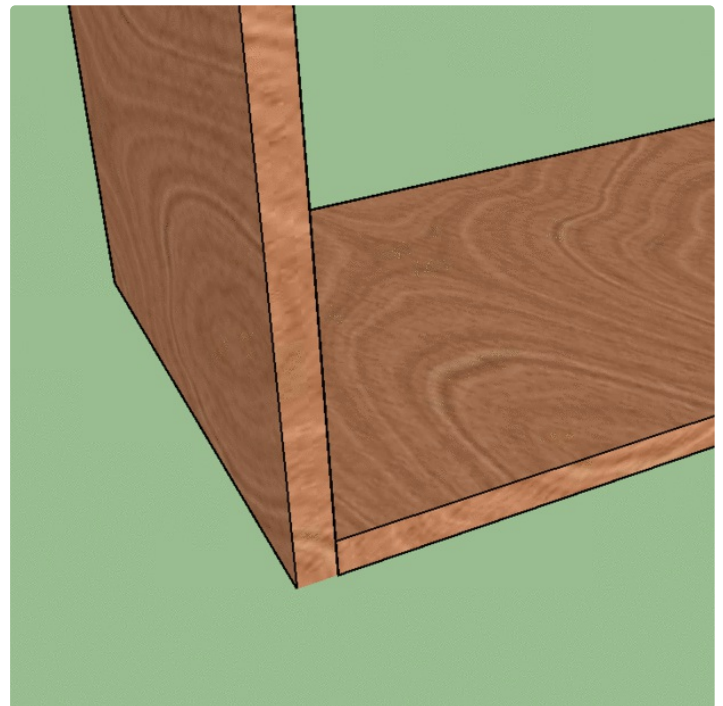
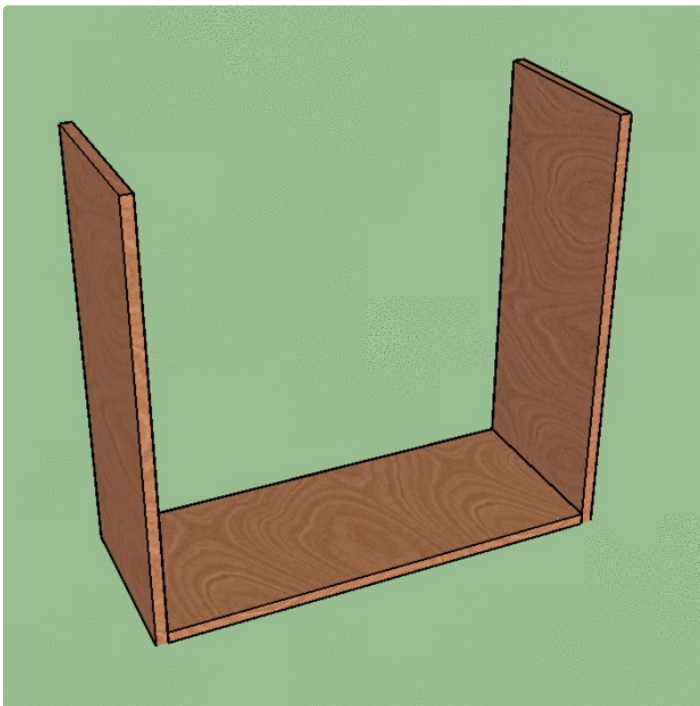
Use a circular saw or track saw to rip down the sheet of plywood into the appropriate sizes. The attached cut list and diagram show how I used a sheet of plywood to create three traps.

Qty	Piece	Length	Width
3	Cover	20 1/8"	8 29/32"
6	Font/Back (A)	18 15/32"	19 3/16"
3	Bottom (B)	18 1/4"	7 1/2"
6	Sides (S)	7.5"	18"
6	Side Rails	2"	8 7/16"
6	Front Rails	2"	20 1/8"
3	Entrance Gate	4"	4"



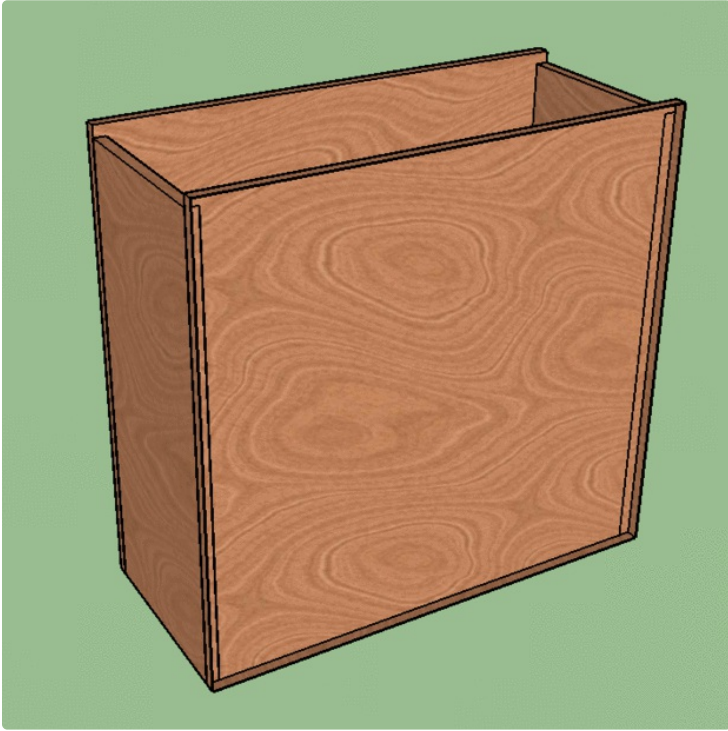
## Step 2: Assemble Sides

Start by nailing a bottom piece to a side piece. Run a thin bead of glue on each mating surface then nail together. Assemble the remaining side.



## Step 3: Assemble Front and Back

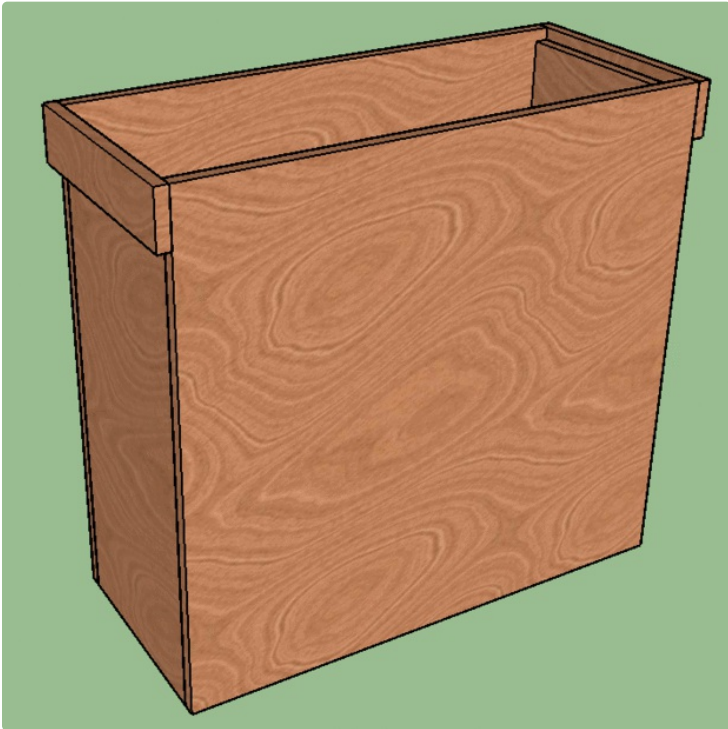
Attach the front and back pieces of the box with glue and nails the same way as the side pieces.



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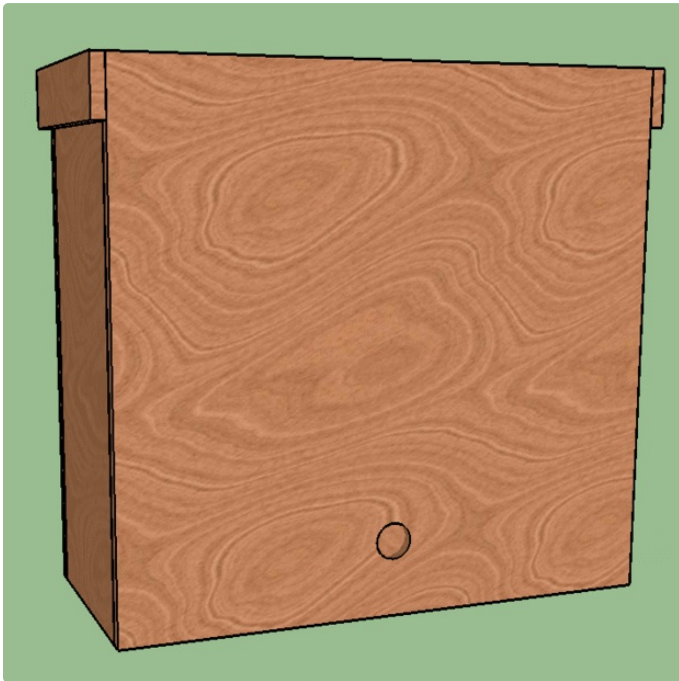
#### **Step 4: Attach Side Rails**

Attach the side rails with glue and nails. Be careful not to get any glue on the top of the side pieces as this is where the frames will rest.



## Step 5: Create Entrance

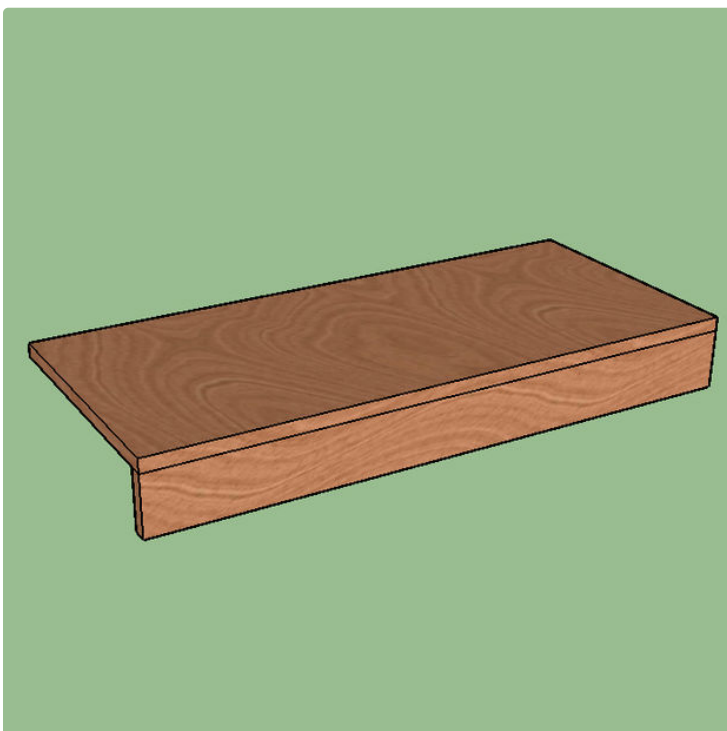
Drill a 1 1/2" hole for the entrance using a spade bit or hole saw. The center of the hole should be in the center of the box and 2 5/8" from the bottom. From the inside of the box, nail a 10d finishing nail through the hole in the center.



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## Step 6: Assemble Lid

Glue and nail the 2" strips of wood to the lid.

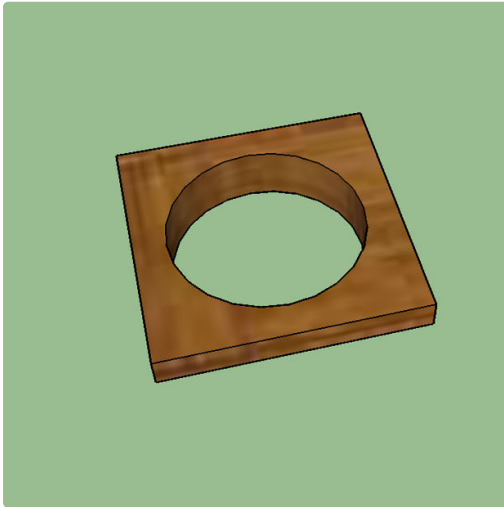


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## Step 7: Assemble Entrance Cover

Using a hole saw, drill a 2" hole in the center of the 4"x4" piece of plywood. Cut a 4"x4" sheet of screen to fit. Apply glue to the entrance cover, and carefully fit screen on top. Tape each side of entrance cover to prevent bubbling.

Once the glue has dried, remove the masking tape. Use a single drywall screw to fasten over the entrance such that the entrance cover can be rotated so that the screened portion of the cover is on top of the hole.

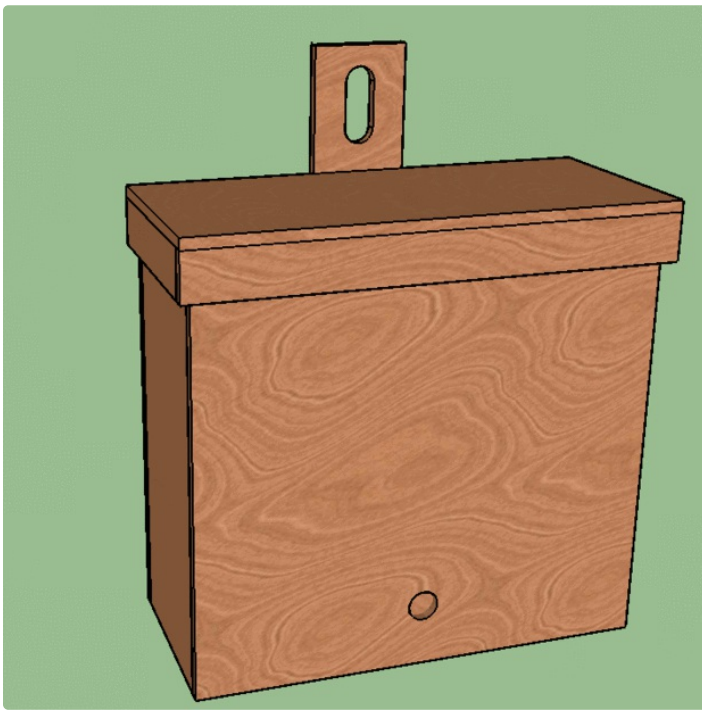


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## Step 8: Add Trap Mounts

To hang your traps from a tree, you can attach a strip of wood to the back of the traps using wood screws or bolts. I used a piece of 4" wide strip of 1/2" plywood left over for another project. I used my 1 1/4" spade bit to drill two holes about 1" apart. From here, I cut

out the area between the two holes with a jig saw. I secured the strip with 6 1" drywall screws, though a couple of 1/4" or 5/16" nuts and bolts would have probably been better.



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## Step 9: Bait Hives and Deploy!

To bait your hive, you can use a commercial queen lure or a few drops of lemongrass oil on a cotton ball. The previously mentioned paper from Cornell has some suggestions on how to setup and deploy your traps.

Happy swarm catching!



Thanks for the Instructable.



You're welcome!



Can you please explain **why** someone would want to catch swarms of bees?



For beekeepers, a swarm has a monetary value and it represents a new honeybee colony. A nucleus or starter hive costs in the neighbourhood of \$150, so a swarm is a welcome catch for a beekeeper. I currently have one hive and would gladly increase by catching a swarm.



This is my reason. I've been wanting to get into be keeping, but we've had some pretty brutal winters around here recently. I'd hate to spend a few hundred bucks getting a hive going only to have the colony die off after the first year.



Well, for myself: I recently moved to the country and am establishing an orchard and rather large garden. Having a swarm (or two) of honey bees will help with pollination and get me some sweet, sweet honey. :)