Plans can be ordered for \$4.99 from <a href="http://www.indybeesupply.com/product/fbm-hive-top-feeder/">http://www.indybeesupply.com/product/fbm-hive-top-feeder/</a>
These are modifications to those plans. Videos of the original design are available on YouTube.

#### **10-Frame Cut List**

\* indicates change from original plans

Piece	Length	Width	Thickness	Quantity	Notes
Long Sides	18 - 3/8 *	3 - ¾	3/4	2	
Short Sides	16 - 1/4	3 - ¾	3/4	2	
D – Bee Ladder Top	5	2 - 7/8 *	1/8	1	
C – Bee Ladder Back	5	2 - 1/4	3/4	1	1
B – Bee Ladder Side	2 - 1/4	3⁄4	3⁄4	2	1
A – Bee Ladder Top	3 - 1/8 *	3⁄4	3⁄4	2	1
Slot Block short piece	1 - 5/8 *	2 - 1/4 *	3⁄4	2	
Slot Block front piece	7 - 1/8 *	2 - 1/4 *	3⁄4	1	
Bottom	19 - 1/8	15 - ½	1/4	1	
1/8" screening	5	4 - 1/4 *	N/A	1	
Bee Spacers (long)	18 - 3/8	3⁄4	3/8	2	2
Bee Spacers (short)	16 - 1/4	3⁄4	3/8	2	2
Slot Blocking Housing piece	3 - 7/8	3/4	1/4	1	2

#### Notes:

- 1. Make sure this part is cut with grain going lengthwise.
- 2. These added parts are not in the published instructions.
- 3. Published instructions call for a small section of screen or thin metal to cover a gap. The modifications eliminate the need for this since there is no gap using these dimensions.

#### Fasteners:

- Bee Ladder to Blocks = 1 ½" deck screws (galvanized or stainless)
- Pocket Holes = Kreg 1  $\frac{1}{4}$ " coarse screws
- Screen to Bee Ladder = 3/8" T-50 staples
- Bee Ladder Top (D) to assembly = ½" Narrow Crown Finish Staples
- Bee Spacers to box = ¾" Narrow Crown Finish Staples
- All other assembly = 1 1/4 " Narrow Crown Finish Staples
- Titebond III glue

#### Tools used:

- Kreg Pocket Hole Jig (for assembling the sides)
- Kreg Rip-Cut (for cutting 4x8 sheet of plywood into bottom pieces)
- Table saw
- Band saw (to cut the bee ladder notch out of the bottom)
- Pneumatic stapler with air compressor
- Cordless drill
- Ruler, square, etc.

#### Fixtures, Templates, and Gauges built:

- Bee Ladder assembly with hold-down clamps
- Main housing assembly to keep it square while assembling
- Screen cut template
- Drill template
- Entrance Hole Gauge

#### Other Materials used:

• Sugar water pan = "Half Size Steam Table Pan" by Daily Chef. 12.75 x 10.375 x 2.562, available at Sams Club in a package of 30 pans. Use a smaller size for a Nuc.

#### Other Notes:

- In use, no inner cover is used the telescoping cover goes on top of the feeder. I sprinkle powdered cinnamon on the bottom of the feeder to discourage ants.
- The Bee Ladder and Slot Blocks are sized to fit anything from a 10-frame Langstroth to a 5-frame Nuc; just adjust the Short Side dimensions accordingly.



Bottom view. The Bee Ladder Slot Blocking Housing Piece fills the space just below the Bee Spacers shown here.

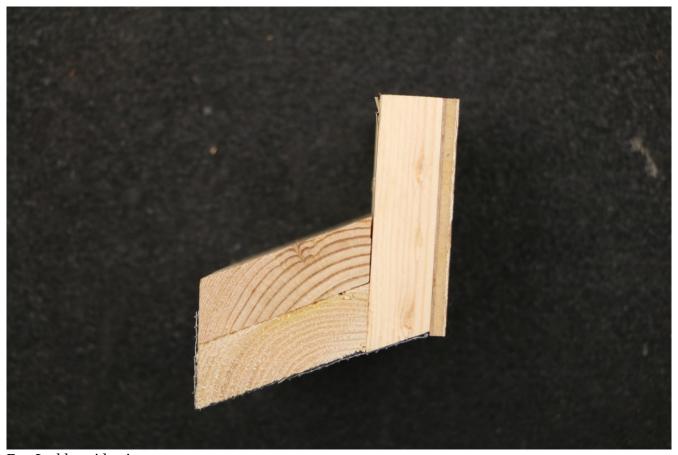


Fully assembled feeder.



Bee Ladder, bottom view.

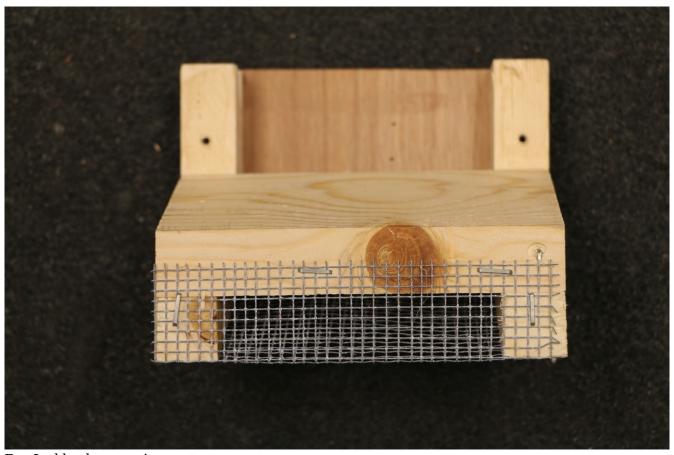
Modifications to
The FatBeeMan No-Drown Hive Top Feeder



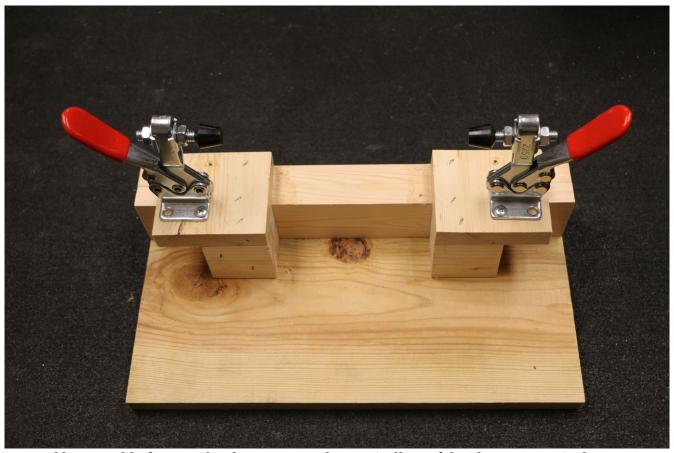
Bee Ladder, side view.



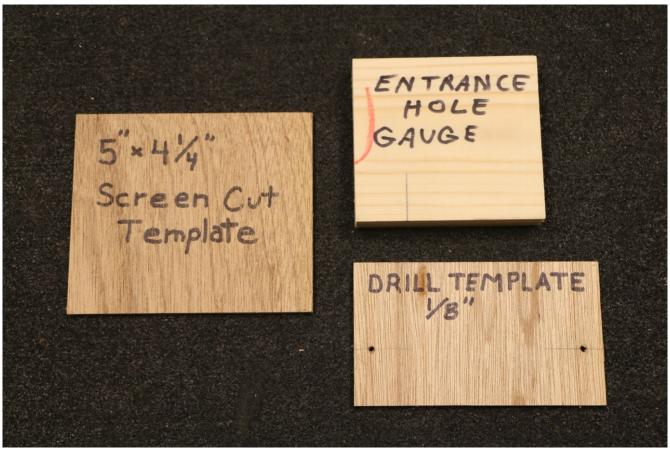
Bee Ladder, front view.



Bee Ladder, bottom view.

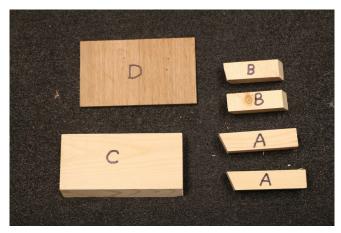


Bee Ladder assembly fixture. The clamps were only marginally useful and are not required.

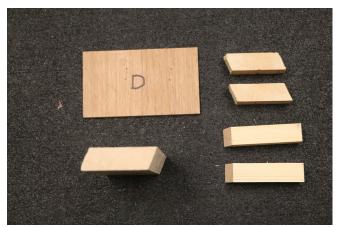


The Entrance Hole Gauge is used to position the Slot Block short piece and long piece when fastening it to the main housing.

The Drill Template is used to position the holes for the two desk screws that fasten the Bee Ladder to the Slot Block.



Bee Ladder parts, side views.

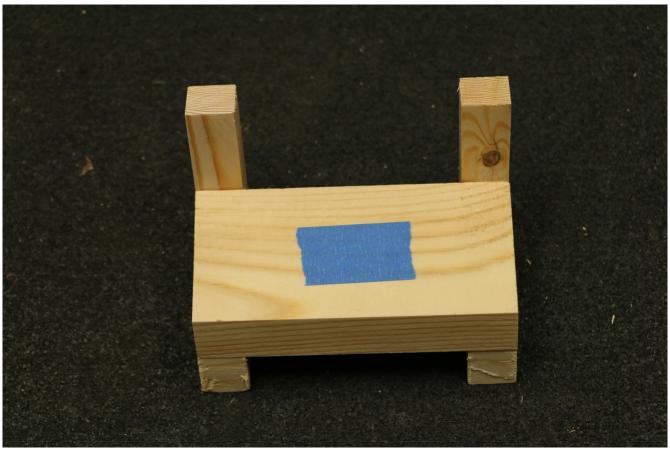


Bee Ladder parts, end views.

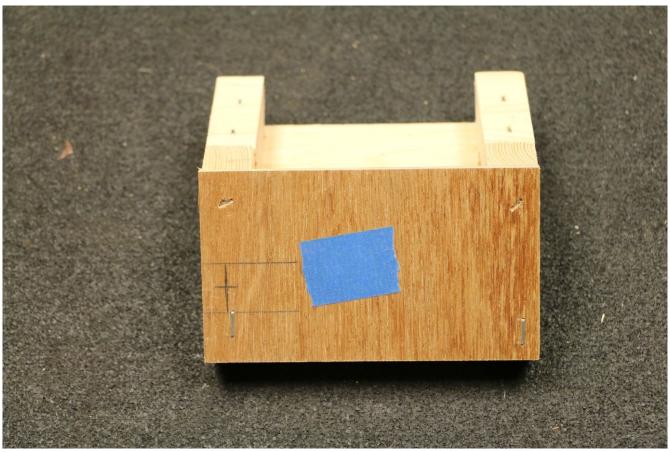
Note that Part B has been cut incorrectly. It should have the grain oriented lengthwise.



Partially assembled Bee Ladder.



Partially assembled Bee Ladder. (Blue tape indicates that this is a sample part so that it doesn't inadvertently get used in a feeder.)



Bee Ladder with top fastened in place. The pencil mark indicates where a hole will be drilled. Actual position is done using the Drill Template.



Bee Ladder with top fastened in place.



Fully assembled feeder showing the gap between the top of the feeder and the top of the Bee Ladder.



Feeder with Bee Ladder removed.