

# THE LAAZY HIVE

## LANGSTROTH ADAPTED TO AZ-STYLE HIVE FOR YOU

Directions for converting your Langstroth components into an AZ-style hive

Funded by a grant from NC-SARE

### Part 1 - Background, Hive Drawings and Materials Lists



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Jeannie Saum - Grant Author and Manager

## BACKGROUND



Bee keeping is hard work! Bending, lifting, working in the heat and other demands of caring for our bees become increasingly difficult as we get older. The average age of beekeepers in the US is 47 years old - and we are not getting any younger! The style of beekeeping done in the US with Langstroth hives, is also not possible to do by people with physical handicaps.

### Filling a Need

We designed our LAAZY Hive to solve some of these barriers that we began to experience in our beekeeping and hope it will be a solution for other beekeepers or beekeepers-to-be. We are older adults with aging bodies! The physical demands of beekeeping in traditional Langstroth hives and coping with the heat and humidity in Ohio in the summer, were becoming a barrier to our beekeeping. When failed back surgeries, breathing issues and heart disease made standing, walking, lifting and coping with the heat became things we could not overcome, we started looking for a way to modify the way we kept bees. We wanted to be able to continue our beekeeping into our later years, despite physical limitations.

We happened upon some beautiful, American-made, AZ-style hives at a bee conference in South Carolina one summer. Upon seeing and learning about them, we knew this type of hive could be our

answer. These hives were beautiful pieces of woodworking and had some amazing features. However, at a cost of over \$450, plus shipping and the fact that we had tons of Langstroth equipment already, we just couldn't justify the expense. So, we set out to design a way we could modify our Langstroth pieces to make AZ style hives, so that we could continue to keep bees, despite our physical limitations.

## Slovenian AZ Style Hive History

AZ style hives have been used for almost a century in Slovenia. These hives are a fixed size and open in the back of each box, rather than the top. Serbia has a shorter growing season than we do in Ohio - more similar to MN and WI. AZ hives in Slovenia are usually 2 or 3 chambers high and susceptible to swarming more. We chose to make ours 4 boxes high to try to alleviate this issue and accommodate more hive growth during the longer growing season. Frames rest on thin steel rods and are pulled out the back. Boxes are not unstacked: the size of the hive is controlled by moving solid, slotted or queen excluder dividers around to change the bee's access to the boxes. Hives are mounted in the wall of a small building (which can be air-conditioned!) or under a simple roofed shelter outside. The beekeeper SITS behind the hive to do inspections.

## The LAAZY Hive

We set out to find a way to convert what we had, into AZ style beehives. We came up with a way we could use the Langstroth components we have, make some modifications to the woodenware, use other pieces differently, and **for about \$80 of additional lumber and hardware, common power tools, basic skills, and some manual labor, we could make AZ style hives with our Langstroth equipment. (less if you have scraps of wood to use)**

We wanted to share our design and project with others, to benefit the many beekeepers that are getting older and finding it difficult to continue a hobby or business they love. We had several friends who were getting to this point and also a friend in a wheelchair who became interested in beekeeping, after we removed a honey bee infestation from his garage wall one summer. We discovered that a SARE Grant, from the Sustainable Agriculture,



Research and Education Program under the USDA, might help us do just that. We applied for and were awarded a SARE Grant in 2018.

## Common Tools, Average Skills

Another goal we had for our design was to make this hive modification do-able by the average person with just basic woodworking skills and common hand-held power tools. Our design has undergone several modifications and versions since we started, mostly to make bee space correct and make sure there were no cracks and spaces for bees to escape! Since we were using older equipment with the wear and tear of many seasons, we ended up having to make doors for many of our boxes because the ends we cut off just didn't have the integrity to stay in one piece when we made cut-outs for the "screen window" on the back of each box. You may or may not have to make this modification,

depending on the age and wear of your wooden ware. We chose not to put a hinged vent on the door, as other AZ style hives have, since this added another thing to modify and more hardware and work. We figured that cracking the large door open would accomplish the same venting, if necessary. The most enjoyable part of the whole project was painting the fronts of the hives! Traditionally, the Slovenian AZ hives are decorated with folk art on the front, so we had to follow suit!



## Different Tools Needed

As we started keeping bees in our LAAZY Hives, we found that we needed some different tools for hive inspections and a modification of our bee suits. A standard hive tool is not long enough to loosen the frames when working from the short end of the box and having to reach the length of the frames to pry them loose. So, we have adopted the use of a long **machete** as a hive tool! We have also found that a flashlight or **head mounted light** is helpful to be able to see into the boxes. They can even be inspected with the screen doors on, if one needs just a quick look. We also found it is helpful to have a Hive Butler tub (a tub specially made to hold frames) or a rack to place the frames in when needing to pull some out to work.

Changing out the dividers to open up more boxes to the bees, was more difficult than we anticipated. The bees stick these up with propolis, making them difficult to pull out. After talking with a friend

who has about 20 American-built AZ hives, and asking her how she does it, we found that taking out all the frames from the lower box and storing them in our Hive Butler, while we worked at getting the divider out, helped. One of us went around to the front of the hive and whacked on the divider with a hammer, while the person sitting inside pulled. That did it! Our friend uses a **special rack** she built to hold the frames she pulls out. We use a **Hive Butler** (special box made especially for bee frames) to hold ours.

## Bee Suit Changes

We also found that single layer bee pants or jeans were not sufficient to fend off stings. In a sitting position, ones' pants are pulled tight against the upper legs and knees - right under where you are pulling out the frames and bees are falling off! After getting 8-10 stings every time we inspected, we decided to add a thick padded canvas patch to our bee pants from upper thigh to just below the knees. I am also finding that my brimmed hat-style zip-on hood to my bee jacket is not working out as well as it did when working outside, standing. With my head down, looking into the lower boxes, the crown of the hat falls off my head and blocks my view. I may eventually change to a fencer-style hood.

## Hive Shelter Choices

The Saum's, being the older couple, converted an old camper into a "bee house" by gutting the inside and adding 1" x 2" framing and T-111 siding and a peaked metal roof to the outside. Five hives are mounted right next to each other on a 12- inch tall shelf, in one long wall of the camper, which has been cut out and framed in around the hives. Space for 5 additional hives and a stack of nucs is covered with siding that can be unscrewed when ready to install more hives. A rolling office chair is used as a seat for the inspector.

The camper bee house gives us a place to hang our bee suits and tools, store hive equipment and even extract honey, as there is space for our extractor. We have run a garden hose to the camper and connected it to a deep laundry sink. And, it is airconditioned with a portable AC unit that sits on the floor and vents out a window.

The Dotsons, being the younger couple and not feeling that they need the indoor hives at this point, have mounted their hives in a simple outdoor shelter with a protective roof. One sits behind the hives to inspect them. They do have some building on their property where they could move the hives inside a structure if they decide to do so in the future.





## The Work was Worth It!

This has been a challenging project, but it has made it possible for Jeannie to be able to do beekeeping again, after several limiting back surgeries. Being able to do bee inspections inside, out of the heat is helping Steve be able to continue beekeeping. You can see photos documenting our work from beginning to end on the hives and the shelters, at [facebook.com/The LAAZY Hive Beehive](https://www.facebook.com/TheLAAZYHiveBeehive) (\*note the 2 A's in LAAZY).

We hope these plans will help you modify your hive equipment and make it possible for you to start or continue beekeeping, regardless of any physical limitations you might have now or in the future.

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**DIRECTIONS FOR ASSEMBLING ARE  
IN THE PART 2 DOCUMENT**

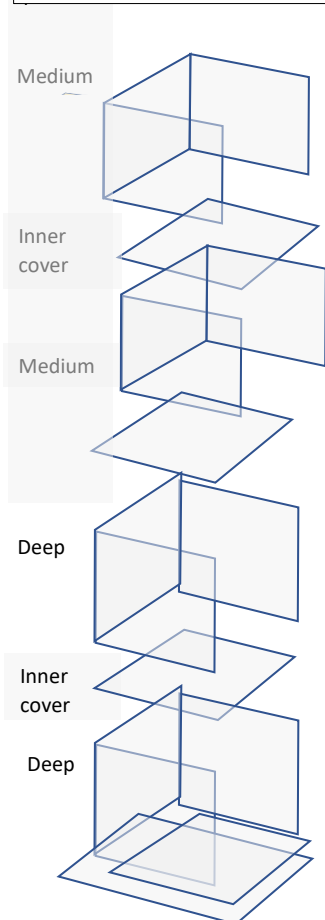
You are welcome to email [laazyhive@gmail.com](mailto:laazyhive@gmail.com), for  
help or questions.

# LA-AZY HIVE

## Langstroth Adapted to AZ Hive for You

Revised December 2020

Basic Set-Up w/o extra pieces -  
see next page.



### Langstroth Hive Components Needed

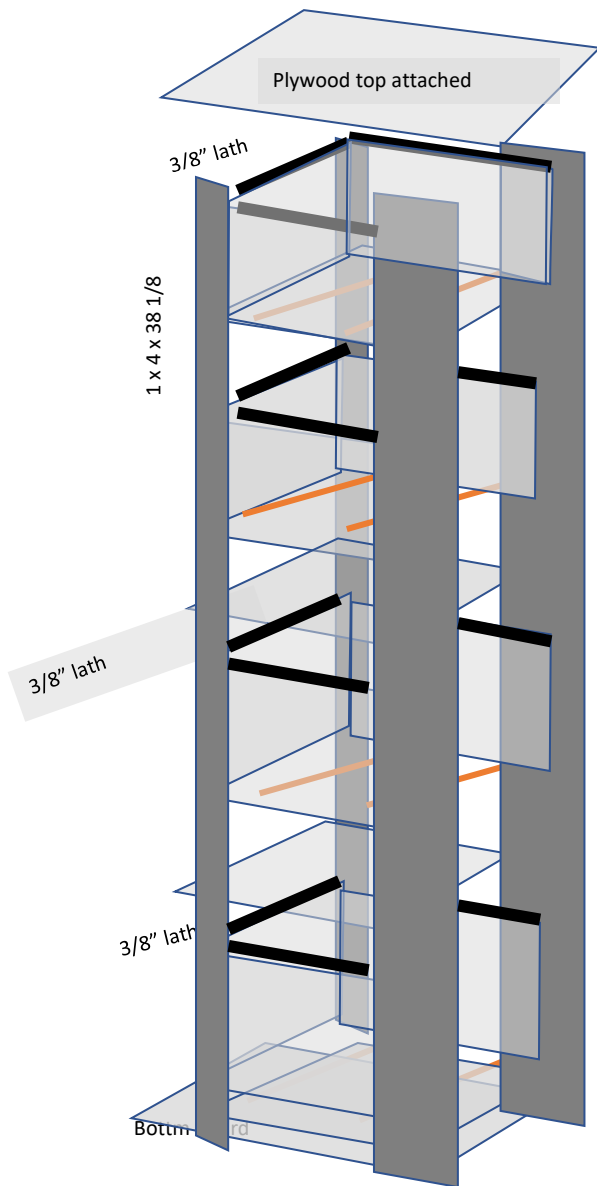
- 2 deep Langstroth hive boxes\*
- 2 medium Langstroth hive boxes\*
- 3 inner covers of the same dimensions  
~(one will be made solid, 2 will have slots cut in them)
- 1 queen excluder frames in wood with the same dimensions as the inner cover (so they are interchangeable)
- 1 bottom board

*\*We chose to use what we had. You may make yours out of deeps, mediums or combination of both. You will need to adjust size of door and upright lumber. Our measurements are for 2 deeps and 2 mediums.*

*~Will need a second slotted inner cover to put in once hive grows to 4 boxes. (no solid cover used then.)*

Bottom Board

## Diagram of Hive Boxes with Additional Lumber



### Added in this picture are:

Two 1 x 4" vertical boards at front (on left)

Two 1 x 6" vertical boards at back (on right) for mounting door

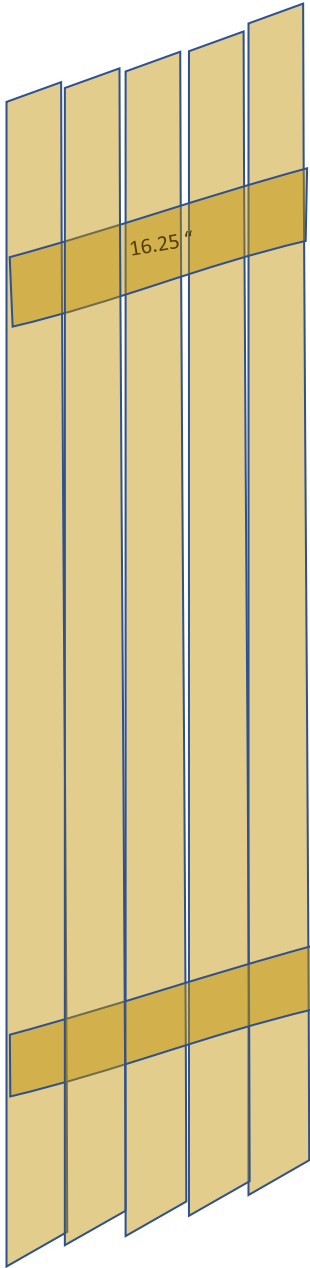
Plywood top screwed on

Lath strips around top rim of each box (to add back bee space lost when rods are put in) Shown on top box/

Metal rods for frames to rest on



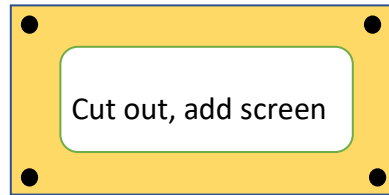
1 x 4 x 38 1/8



### Back Door

Made of 1 x 4"s the height of the hive and two cross pieces

### Screen Doors for Each Box



Deeps - #1 (bottom) 16.25" x 10 <sup>5</sup>/<sub>16</sub>"

#2 (2<sup>nd</sup> up) 16.25 x 10 <sup>15</sup>/<sub>16</sub>"

Mediums - #3 (3<sup>rd</sup> up) 16.25" x 8 <sup>3</sup>/<sub>16</sub>"

#4 (top) 16.25" x 7 <sup>9</sup>/<sub>16</sub>"








Cut out - Deeps - 12" x 6"

Cut out - Mediums - 12" x 3.5"

Lumber Needed - Purchase and Cut List							
BUY			CUT				
Lumber dim.	How much	Cost est.		Cutting Dim.	How many	For What	Notes
1 x 4' boards	Four -8ft. boards	\$9.35 Men		38 1/8"	2	Front of hive uprights	
				38 1/8"	5	Door uprights	
				16 1/2"	2	Door cross pieces	
				18"	1	Closure under door	
1 x 6" boards	One 8 ft. board	\$6.65 HD		38 1/4"	4	Rear uprights (back of hive, in bldg..)	Holds' door
1/2' plywood Baltic birch	20" x 20" piece	\$3.79 HD		16 1/4" x 20"	1	Lid	
1/2 x 3/4 square trim pine screen molding	Three 8 ft. pieces	\$6.03 HD		19 1/4	8	On top rim of each box -sides front ends- Added bee space on top rim of each box	3/8 " x 3/4" lath will work. Bee space taken away by adding rods at bottom of boxes
				16 1/4"	4		
1/2" plywood reg or Baltic birch * opt. - may use back of boxes cut off, as doors if wood in good shape	One 2 x 4' sheet	HD \$7.58		Two - 16.25" x 7.5"  Two - 16.25" x 10.5"		screen Doors for boxes	
1/8" thin Baltic birch plywood utility pane or 1/4"	underlayment Usually comes 5' x 5' (need less) or 2 x 4	\$6.99 HD		14 1/4" x 3 1/2"	8	Covers the rods and cracks on sides between boxes and inner cover dividers	Guides the inner cover dividers when sliding in or out.
Baltic birch or screen molding scraps						Need three 1"X 2" to 3" x3" (size not critical)	Stops to glue/nail onto front to prevent the dividers from sliding through.
1" x 2" boards *Opt. way to make box doors	two 8 ft.	\$6.60 HD		16 1/4"	8	Box door- top, bottom	Screen doors removed for bee inspection
				7 3/4"	4	Deep door sides	

				4 3/4"		Med. Door sides	from inside the shelter
Use of scrap lumber you already have is encouraged!							
	About	43.12					

*\*Prices are from Menards - MN, Home Depot- HD, Ace Hardware - ACE*

Hardware Needed							
Other Materials	How Many	Cost		Cutting Dim. / Pic	How many	Use	Notes
3 1/4" Double Hinged Door hasp latch	\$6.59 1	\$6.59 ACE			1	To secure large back door closed	Grab a BIG bolt to put through it!
3" Strap hinges	2 \$3.48	\$3.48 HD			2	For back large door	
1/8" steel rods Come 36" L.	Four 36" long	\$7.00 ME		16 1/2" long 	8	For frame rests at bottom of each box	Frames sit on these and pull in and out
Hanger Bolts - 1/4" x 20 x 2.5" - screw on one end bolt on other	8 \$1.25	HD \$15.60 per 100			8	2 for each backscreen door - hold them in place.	Mounted on 1 x 6" upright boards
Wing nuts for hanger bolts	8 \$1.50	HD \$9.37 for 100					
Eye screws #8 3/8" dia x 1 1/2" l.	8 \$1.50	\$10.65 for 50 HD			4	One for each divider and bottom board as a handle to pull	and a rest for small screen doors
Metal window screen	32" X 34" piece /\$1.66	\$6.64 a roll		16" x 10"  16" X 7"	2  2	For hive box doors	
Frame spacers	8 10.16	\$1.27 each			8	TO SPACE FRAMES	For front wall and back screen doors
	<b>About</b>	<b>\$38.31</b>	<b>38</b>				
	<b>Prev. page</b>	<b>43.12</b>					

<b>Total Cost of converting hive</b>		<b>\$81.43</b>					
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*\*Prices are from Menards - MN, Home Depot- HD, Ace Hardware - ACE*

## Tools Needed

### Essential Tools

- Circular saw
- Cordless drill
- Jig saw
- Hammer
- Electric or pneumatic stapler
- Wood glue
- 4 popsicle sticks for spacers

### Helpful Tools

- Chop Saw
- Brad nailer or elec./pneumatic stapler
- Long clamps/ pipe clamps

### Other materials

- Drywall screws
- Small brad nails or staples

## Measurements for Reference

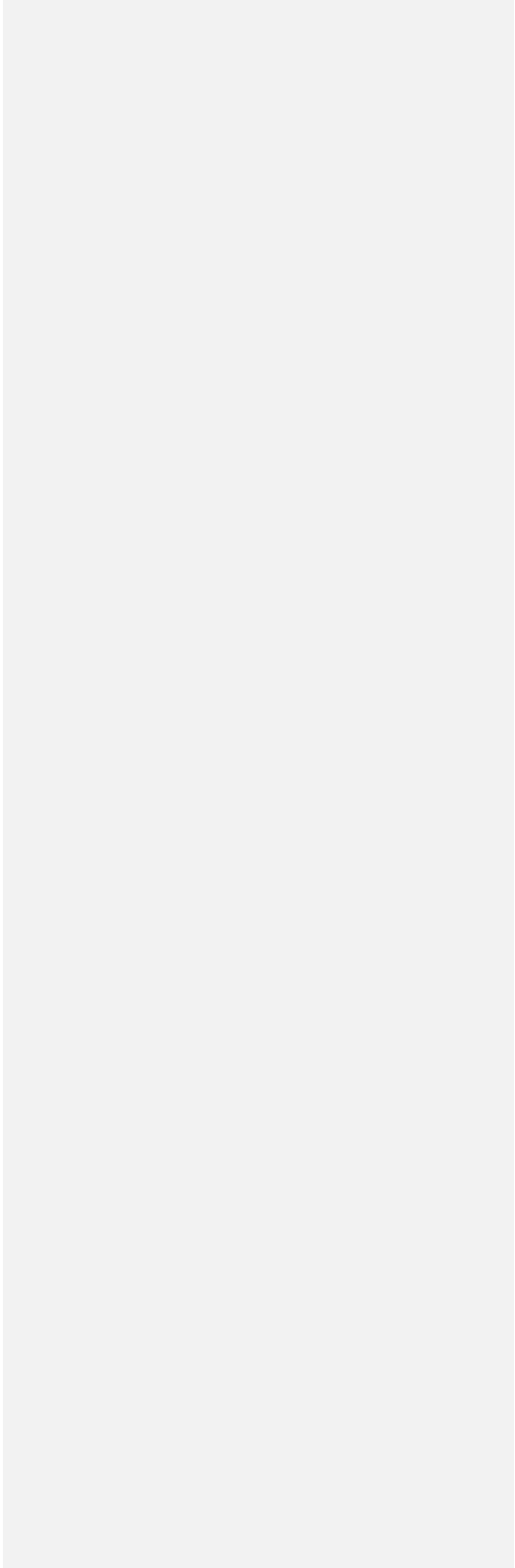
Height of finished hive	Ht. of pieces	
Two Deep boxes -	19.75 x 16.25 x 9 7/16	
	9.44	
Two Medium boxes -	19.75 x 16.25 x 6 9/16	
	6.56	
Inner cover 19.75 x 16.25 x .75 x 3 pieces	2.25"	
Popsicle space 1.25 x 3 levels	.375"	

Bottom board 2"

¼" Screen molding on each box 1"

Plywood top .5"

**38.125" ( 38 1/8") total height**





**LANGSTROTH ADAPTED TO AZ-STYLE HIVE FOR YOU**

## **Part 2 Assembly Directions**

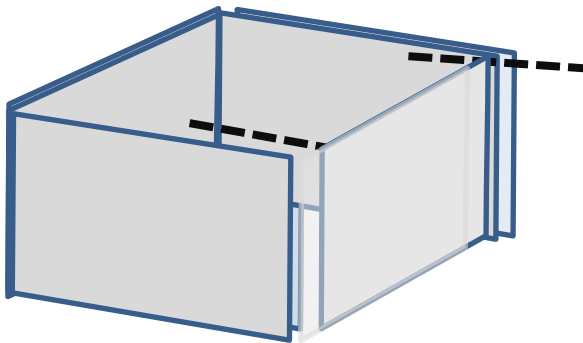


**\*Note: if you are using hand held power tools, like we did, you may need to do minor adjustments and trimming, to make everything fits tightly. Measure, fit and adjust as you cut and build.**

## A. PREPARING THE BOXES

### Cutting backs off hive boxes and making screen doors

1. Cut off one shorter width end of each box, for the door/access opening.
  - Cut ALONG and parallel to the long sides wall – you are cutting through the short end walls and rabbets. The piece you cut off will slide in and out of the now open end of the box. This piece is discarded.



### Steel Rods Rests for Frames

1. Cut steel rods 16  $\frac{3}{4}$ " long (can get 2 out of a 3-foot section) - Need 8

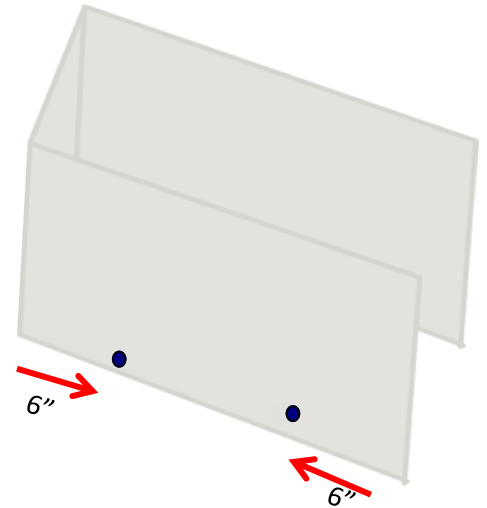


2. Drill two 3/16" holes for the steel rods, through the bottom sides of the boxes, as close to the bottom as you can get – 1/4" – 3/8" from bottom.

- 1 hole 6" from open back end, **on each side**
- 1 hole 6" from back end, **on each side**

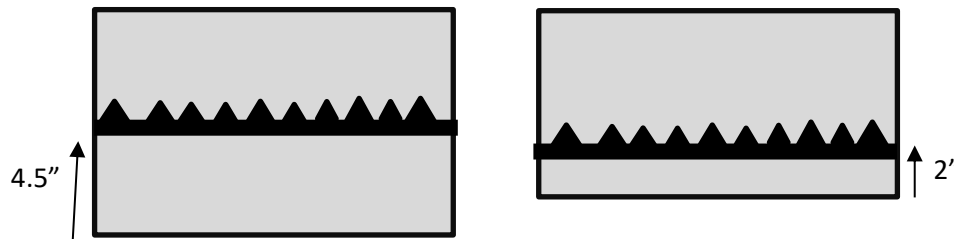
3. Do this to 4 boxes that have backs cut off.

4. Tap the cut steel rods through these holes, from one side to the other.



## Metal frame spacers - inside of boxes (and later, screen doors)

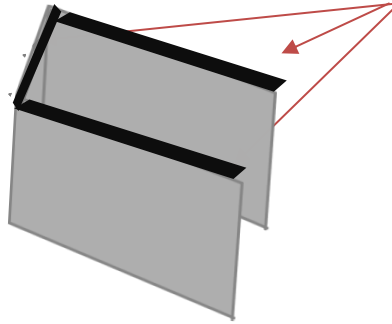
1. Using 3/4" nails or brads nail metal frame spacer to inside front edge of boxes, so low point of each tab is at the measurement below. Tabs stick out at 90° angle from the box. These are placed so that the narrow lower end of frames will slide in between these to be spaced correctly. We put nails in about every third hole.



## Screen Molding for top box

1. We took away the required 3/8" bee space with the rods at the bottom, so we have to add it back to the height of the boxes, so bees can get above the frames and frames will fit in the boxes.
2. Cut 4 pieces of 1/4" x 3/4" screen molding to 16.25"- (one for each box)
3. Cut 8 pieces of lath to 19." (two for each box)

4. Glue and staple or brad nail the molding to top rim of each box



## ASSEMBLING THE BOX STACK

### Cutting 1 x 4's and 1 x 6's

1. Cut 1 x 4's into two 38 5/8" pieces (two uprights for hive bodies and 5 for door) Save the rest to cut for the door, later.
2. Cut scraps of 1 x 4's into two **16.5" cross pieces** for door – Set door pieces aside.
3. Cut 1 x 6's into two 38 5/8" pieces for uprights for hive boxes.


### Stacking and spacing the boxes

1. Gather the 4 hive boxes, bottom board, 2 inner covers and queen excluder, two of the 1 x 4's and two of the 1 x 6's and popsicle sticks for spacers

2. Set the bottom board down and put one deep box on top of it, lining up front and side edges. *(The FRONT of the boxes are the side where the bees come and go. The BACK is where the beekeeper opens to inspect.)* The open back of the box should be  $\frac{3}{4}$  in from the edge of the bottom board (Make sure you have the landing board – bee entrance [front} on the opposite end from the open end of the boxes [back, beekeeper entrance]. We've goofed this up more than once!)

3. Align the 3.5" wide board up against the front edge of the bottom box and set one screw in through the board and the box. Use a level to make sure the board is perpendicular and set another screw through the board, into the hive bottom board.

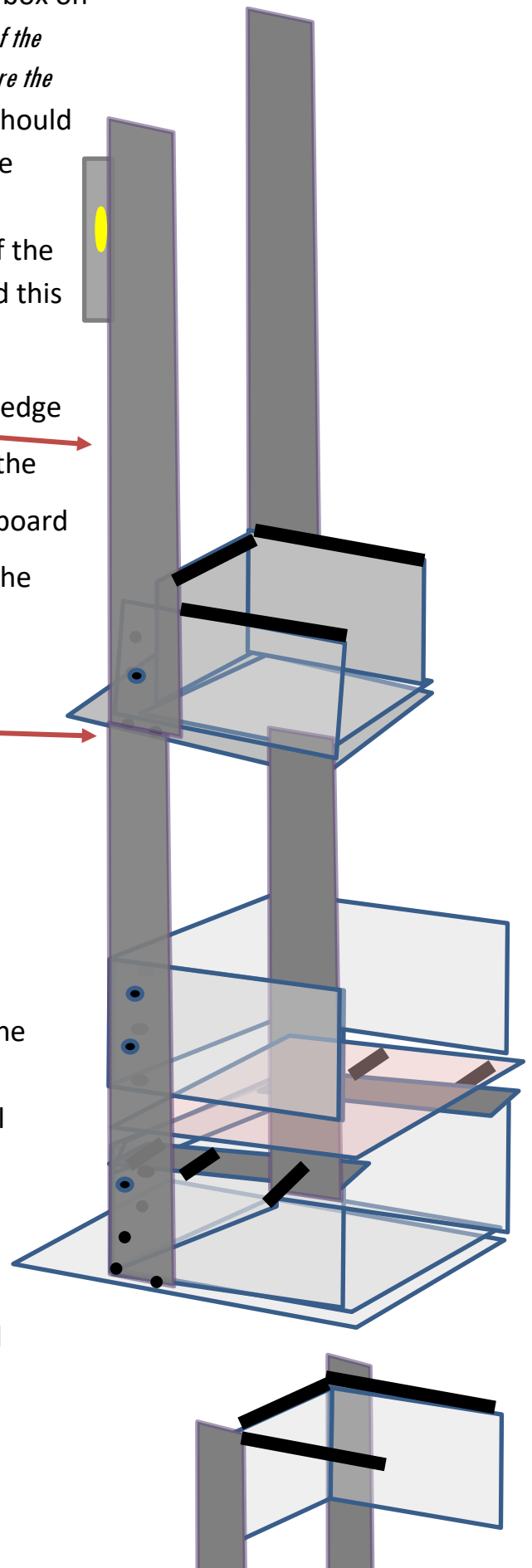
4. Repeat on other side.

5. Place inner cover or queen excluder (interchangeable) on top of stack, next. **Wedge popsicle sticks**  **under the 4 corners of the inner cover** (gives enough ease so inner cover slides in and out.)

6. Place 2<sup>nd</sup> deep on top of stack, lining it up on the box and inner cover below and making sure the front corners line up with the edge of the vertical boards

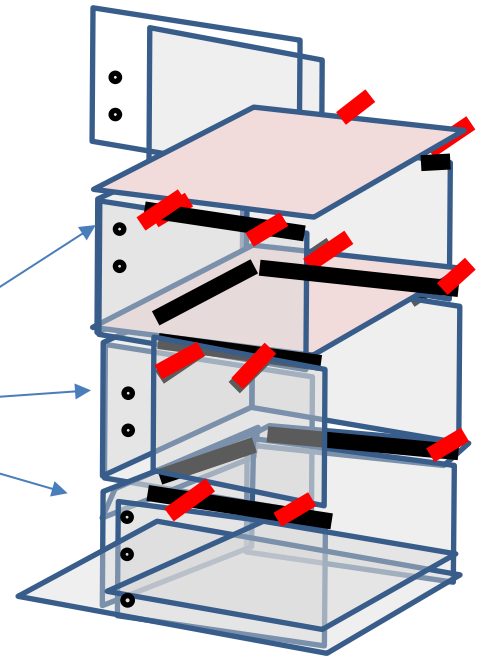
7. Drive 2 screws through the board into the 2<sup>nd</sup> deep.

8. Add a second screw through the upright board and bottom deep.



9. Repeat steps 5 -8 for the third and 4<sup>th</sup> box of the stack. It should look like this

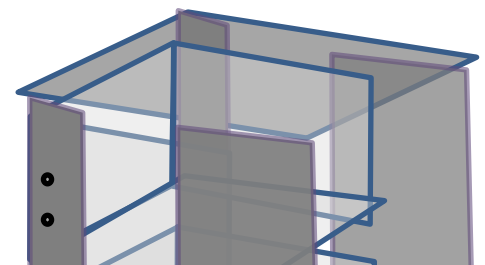
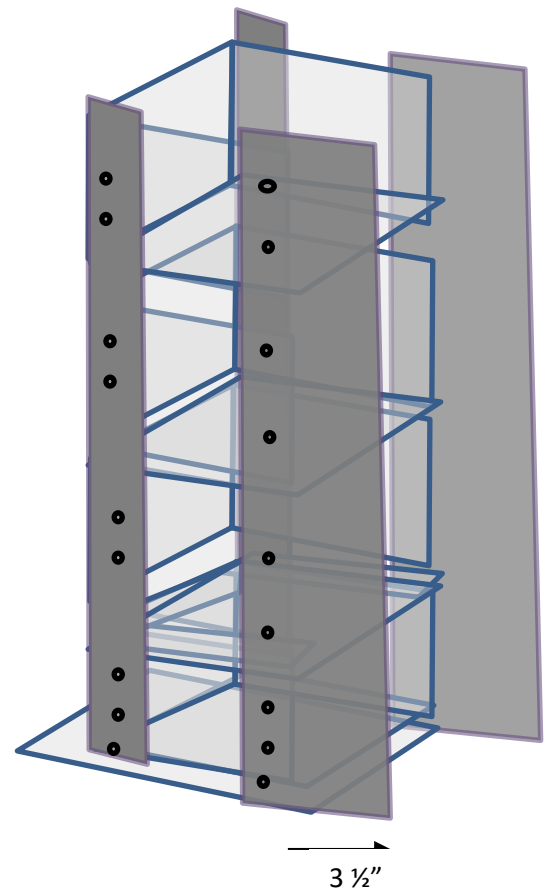
popsicle stick spacers  
on top rim of box, with inner  
cover on top of popsicle stick



10. The 1 x 6" pieces go up the back side edges, sticking out beyond the boxes to create a space between the back screen doors of the hive and the outer door. Room for a feeder.

11. Align the 1 x 6 board so it sticks out 3 1/2" from the back edge of the hive body. Starting at the bottom, screw the overlapped side of the long boards, to the bottom board and then to the first deep hive body.

13. Moving up, line up the next hive body and screw the upright to each

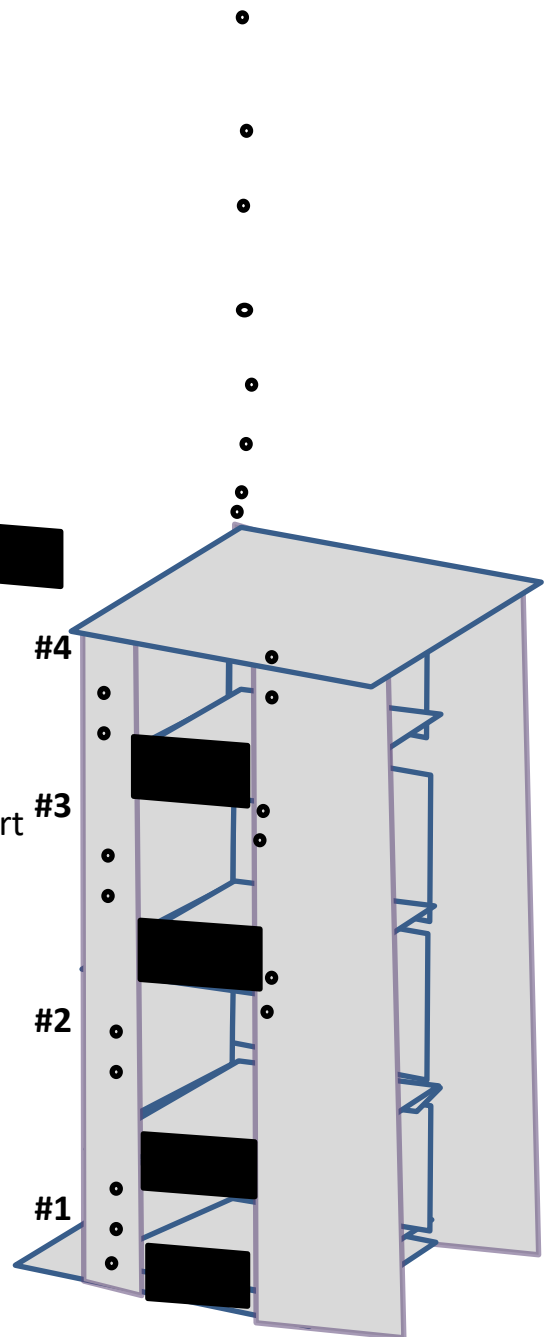


hive body using 2 screws. Do so for the remaining boxes. Make sure popsicle stick spacers are still in place

14. Cut plywood lid 17.75 x 23.25"  
Place plywood lid on top of whole structure. Make sure the back edge is flush with the outer edge of the 1 x 6" upright boards. Screw it down to the top edges of the top box.

### Sealing up the outside

1. Cut the 1/8" plywood into **eight 14" x 3" strips** –
  - 4 on each side of box stack to cover steel rod holes and space that inner covers slide into
  - Staple or brad nail these on to sides with short stapled/brads
2. Cut thin lath into 4" x 4" piece – need 1
  - Glue over hole in one inner cover



### Add Stops to Front

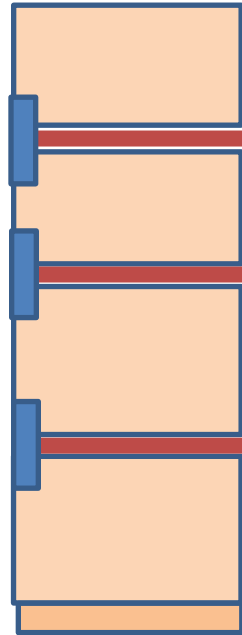
The inner cover dividers will tend to slide all the way through the hive stack and leave a gap where the inner screen doors fit. To prevent this, find some scrap of your 1/8" plywood or the 1/4 x 3/4" screen molding.

Cut 3 pieces about 3" long - width doesn't matter.

Put glue on back and tack them with a stapler, brad nailer or little brads on the FRONT of the hive, over the slots where the inner covers are. See below. These will act as stops, to keep the inner covers from sliding too far out the front.

I painted over mine and you can't even see them!

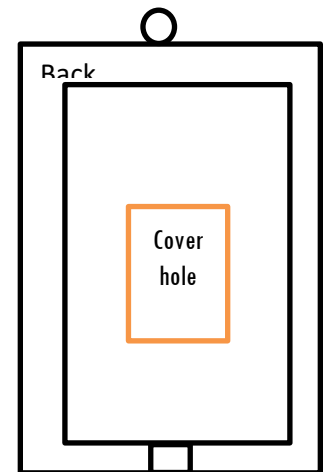
Can put at edge or in middle.



## Preparing Box Dividers Using Inner Covers/Queen Excluders

1. Screw eye screw into back shorter edge (if there is an entrance cut-out, it is the front) of 1 queen excluder and 3 inner cover frames.
2. Screw a screw eye into solid back shorter edge of **the queen excluder and 3 inner covers.**
3. Glue x4"4" lath piece (previously cut) over hole in middle of **1 inner cover.** Clamp for 30 min.

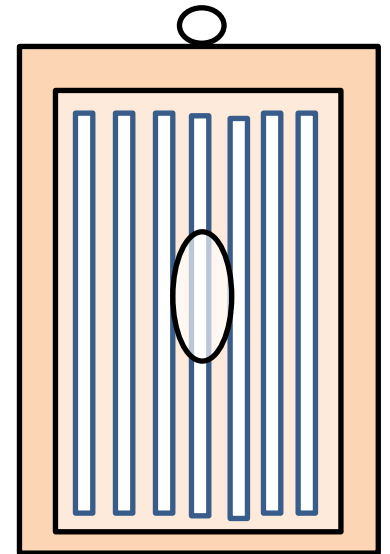
### Routing slots in 2 inner covers



1. Mark the center section of **2 inner covers** with cutting lines for 7 - 10, 3/8" slots spaced evenly across the center panel of the inner cover. This gives bee space access for bees to get through to the next box, but not giving them so much room that they will fill with comb. The second one cut will only be used when the colony has grown to 4 boxes.

2. Clamp a guide along lines and cut. Move guide...

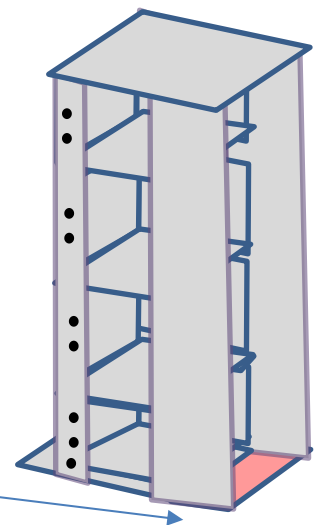
3. Slide the **solid divider** into the bottom slot of the hive stack. This would be the position when starting a package or nuc in the hive. Slide the queen excluder and one slotted cover into the other 2 open slots in the hive stack. Second Slotted divider is a spare you will need once your hive grows to need the 4<sup>th</sup> box at the top.



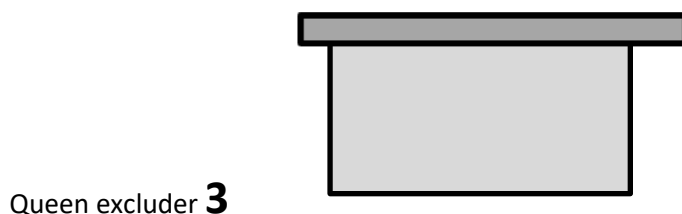
### Adding Horizontal ledge inside door

(This closes in the space between the hive screen doors and the large back door )

1. Cut an 18" piece of 1 x 4". Nail the 18" long 1 x 4" underneath, between the 2 back 1 x 6" uprights.
2. Nail/screw from underneath

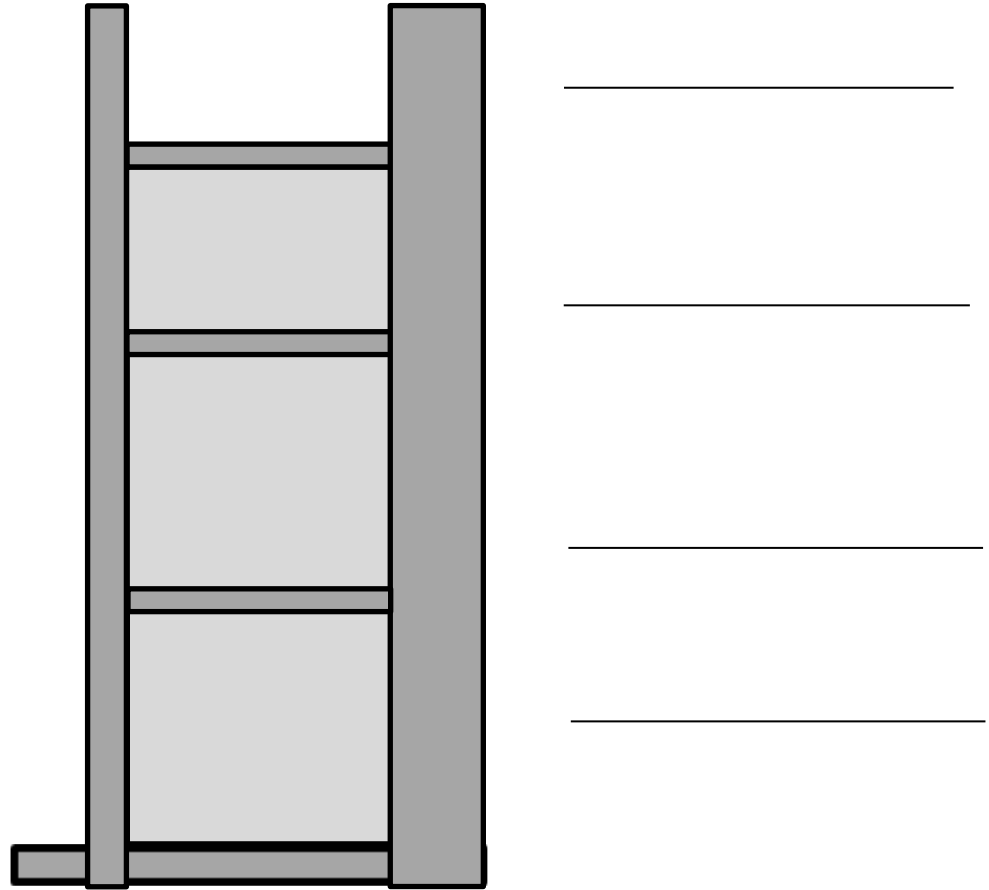


### View of Initial Set-Up



Queen excluder **3**

**Shown** is the position of dividers for a new hive in **one brood box**.  
When they grow and need a **second brood box**, pull out solid cover and insert a slotted divider in position **1**.



## Inner Box Doors

### 1. Cut doors out of ½" plywood.

*\* I recommend that you cut the doors AFTER you have build the hive stack and MEASURE FIRST. Since bees are tiny and can escape through small spaces, it is important the the doors fit pretty exactly, to cover up all cracks. If you, like we, are using hand power tools, cuts and final measurements may not be EXACT. Soooo.... Best to measure first and cut your doors to fit exactly. Measurments may be different than mine. Each door may be slightly different in height! It's ok. Mark them to know which box they go on.*

- Two Deep Doors- 16.25 x 10.5"

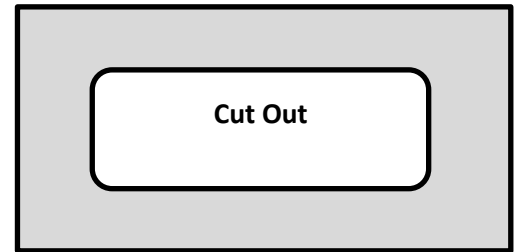
2"+ borders



- Two Medium Doors - 16.25 x 7.5 "

2. Draw rectangles for "Screen window" in each door.

- 12" x 6" rectangle in the middle of the deep doors
- 12" x 3" rectangle in the middle of the medium doors

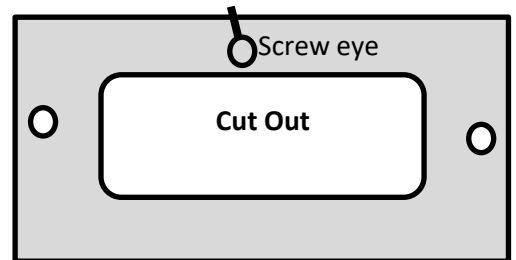


3. Drill a starting hole inside the "window" shape large enough to fit a jigsaw blade.

4. Cut out center rectangles with jig saw or router.

5. Drill **two** 5/16" holes in the **middle side frame of each door** 3/16 from the side edge and middle from top and bottom edge

6. Screw a "screw eye" 1" down from the top edge, in the middle, to act as a handle.

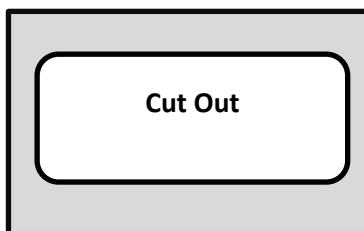


## Cut and add Screen

1. **Cut 2** pieces of screen 9" x 16"
2. **Cut 2** pieces of screen 6" x 16"
3. Staple screens over window hole on back of each door, over the cut out.

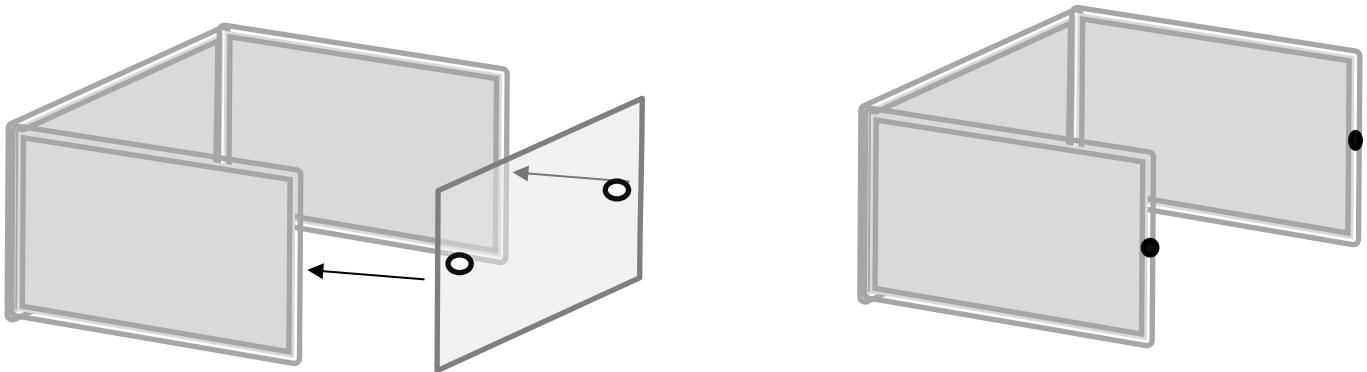
## Add metal frame spacers to doors

1. Attach metal frame spacers on inside of doors, over screen, at the bottom of each cut out, so that nails can be tacked in all the way across. We did about every third hole.

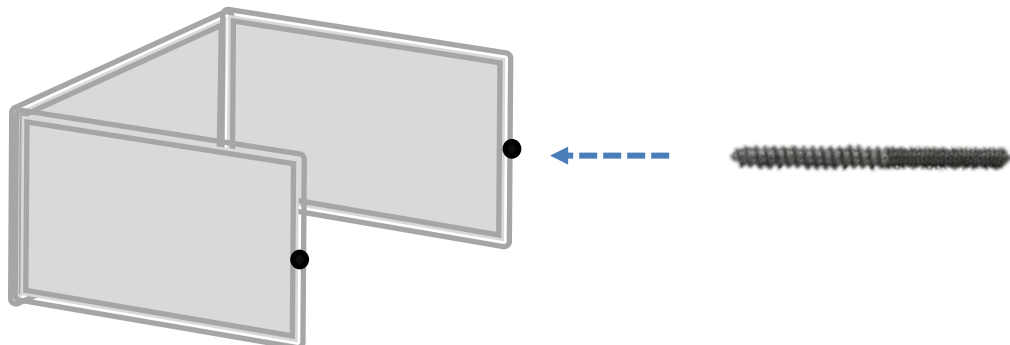


## Attaching doors to hive bodies

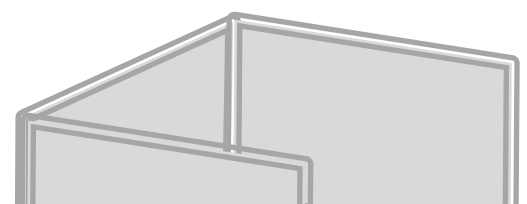
1. Starting at the bottom box (#1) Mark one of the deep doors as #1 and hold it up against the bottom box, where it will fit. Door needs to fit just UNDER the Screw eye handle on the divider and at the bottom, up against the bottom ledge. Using a marker, mark through the holes in the door to indicate where to drill for the hanger. Drill 3/16" pilot holes in box #1.

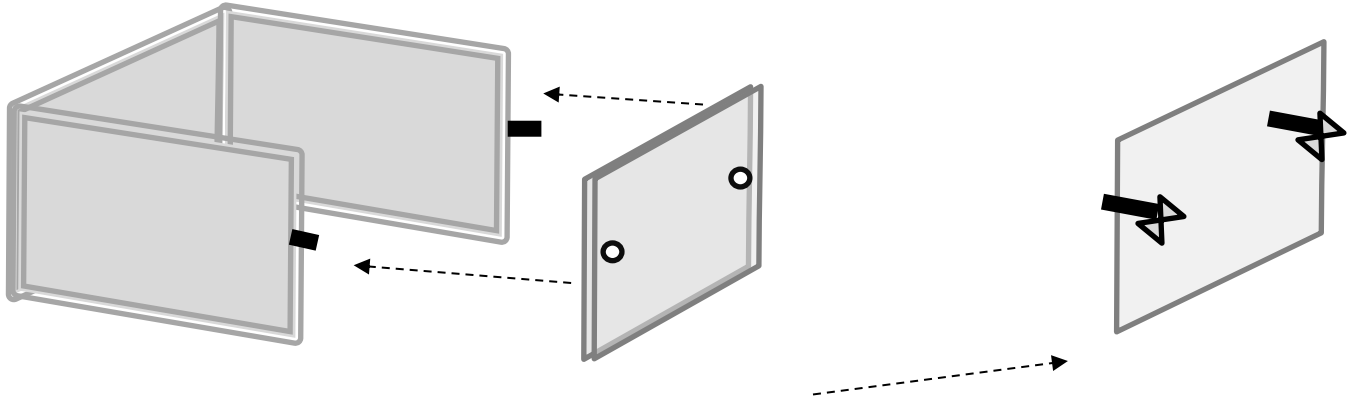


2. Screw a hanger bolt into each hole - screw end goes into wood, bolt end sticks out about 5/8" from box edge, to hang the door on. We put the hanger bolt into the power drill chuck - bolt end in the drill and screw end facing out. Then just drilled it in like this. Once in far enough, unscrew the drill chuck to get the drill off the bolt.



3. Check line up of holes on each door, to make sure they match the bolts sticking out. Adjust by tapping bolt with hammer - up, down, sideways - if necessary.





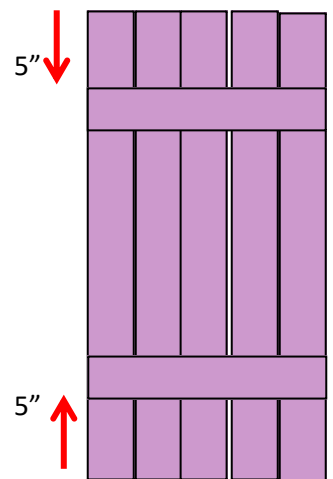
4. Slide the door onto the bolts, up against the hive box. Secure tightly with wing nuts. Repeat the process with the other doors in this order - #3, #2, #1.

## Add Hive Top

1. Measure the top of the hive from back front to outer edge of the 1 x 6" upright. You want the top to come up against the door to close off the top. Cut plywood into about a 16.25" x 20" piece. (Use your measurements.). Screw this top onto the hive stack around the edges.

## Assemble Large Outer Door

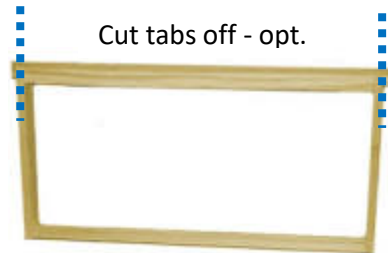
1. Lay out 5 of the 37" 1 x 4's right next to each other.
3. Lay 16.5" cross pieces across top and bottom 5" from edge
4. Screw cross pieces to vertical boards.



## Adding the Back door

1. Put strap hinges on outer door on the side desired. Line up door so top is even with the lid. Attach hinges to the 1 x 6" board along the back of the hive stack.

2. Screw in pieces on opposite side of door and 1 x 6.
3. Add frames to each box. (AZ hive frames have no hanging tabs on them - just rectangular frames. You may find that cutting off the tabs on frames will make it easier to get them into the frame spacers, esp. in the far side of the box (along front))



4. At some point, paint at least the front of each box. (Slovenian AZ hives traditionally, are decorated with folk art!) If you will mount the hive in an outdoor shelter, it is probably a good idea to paint all 4 sides. If mounted in a building, not necessary
5. May want to drill a hole or two in the front of upper boxes, for a top entrance if the inner covers are not notched. They will need to be plugged when those boxes not in use. We use grass.

**Plans for outdoor shelter, inside feeder and an inspection tray are in other documents. A document with photos of the process is also available.**

## Mounting the Hive in a Shelter

These hives must be mounted under some kind of roofed shelter, since the tops are not weather proof. This also provides shade for the beekeeper and brings the hives up off the ground for easier inspection. Hives can be put into the wall of a building, shed, camper, truck, or under a simple roofed shelter. (Air-conditioning can be added for beekeeper comfort!) One could even fashion some kind of pipe entrance and only cut a small hole in the wall of a structure, rather than cut the wall out for the whole hive to fit in.

Typically, hives are mounted on a shelf about 12" - 18" high, so one can see into the lowest box while seated, but still be able to see into and work in the top box.

Here are some examples:



To see photos of the steps we took to convert an old camping trailer into a bee house, go to **Face Book.com/The LAAZY Hive Beehive**