HONEY BEE SWARM TRAP DETAILS

SWARM TRAP IS MADE FROM ½" CDX EXTERIOR PLYWOOD. FINISHED INSIDE DIMENSIONS ARE: <u>18 1/4" WIDE x 7 1/2" DEEP x 18" HIGH</u>





FRONT REAR FRONT AND REAR PANELS ARE THE SAME SIZE: 19 1/4" WIDE x 18" HIGH.

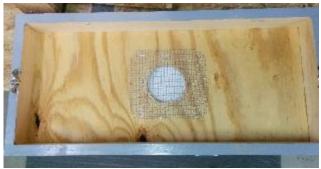
DRILL (2) 1" DIAMETER HOLES IN THE FRONT PANEL ON 1" CENTERS SO THEY MAKE A FIGURE EIGHT OPENING AS SHOWN ABOVE. STAPLE A PIECE OF ½ INCH SCREEN OR THIN STIFF WIRES ON THE INSIDE TO KEEP CRITTERS OUT. <u>A 3" WIDE BY 24" LONG</u> PIECE OF PLYWOOD CAN BE SCREWED TO THE BACK FOR A HANGER. FASTEN A 1" SPACER BETWEEN THE HANGER AND THE BACK OF THE BOX TO ALLOW FOR LID CLEARANCE.USE A 1" DIA.BIT TO DRILL AN ELONGATED HOLE NEAR THE TOP OF THE HANGER FOR USE ON A TREE LIMB OR 16D NAIL.



SIDES BOTTOM BOTTOM PANEL IS: <u>19 1/2" X 8 3/4</u>". SIDE PANELS ARE BOTH THE SAME SIZE: <u>7 1/2" WIDE x 17 3/8" HIGH</u>. THIS ALLOWS A 5/8" DROP ON THE LEFT AND RIGHT SIDES OF THE BOX RIM TO HANG STANDARD SIZE FRAMES OF YOUR CHOICE AS INDICATED IN THE PHOTO BELOW.

DRILL A 4"DIA. HOLE IN BOTTOM FOR VENTILATION WITH 1/8" SCREEN STAPLED ON THE INSIDE OF BOX TO COVER IT. REMOVE PLUG ONCE A SWARM HAS MOVED INTO THE BOX. 4" PVC PIPE KNOCKOUT PLUGS CAN PURCHASED AT THE HOME DEPOT IN THE PLUMBING DEPARTMENT. THE SMALL VENT PLUGS AT THE TOP ARE FOUND NEAR THE INSULATION PRODUCTS . DRILL ABOUT (10) 7/64" HOLES IN THE 1" PLASTIC PLUGS FOR AIR FLOW. NAIL 2 BY 2 SUPPORTS ON BOTTOM TO ALLOW AIR FLOW THROUGH THE BOTTOM VENT WHEN SETTING ON A TABLE OR FLAT SURFACE. ELECTRICAL CABLE CLAMPS WILL HOLD THE PLUG IN PLACE.





INSIDE RIM DROP FOR HANGING FRAMES

INSIDE OF LID WITH 3" HOLE FOR FEEDER JAR

SCREW A PIECE OF <u>3/4" x 2" x 8 ½"</u> WOOD TO EACH END OF THE BOX TO COMPLETE THE DROP FOR FRAME INSTALLATION. USE A PIN NAILER OR 1/4 " CROWN STAPLER AND EXTERIOR GLUE TO SECURE ALL BUT JOINTS.

THE LID CAN BE A TELESCOPING TYPE, BUT IT DOES NOT NEED TO BE FANCY. A SIMPLE MIGRATORY LID WILL WORK JUST FINE.. DRILL A 3" DIA. HOLE @ CENTER OF LID FOR FEEDING. STAPLE A PIECE OF 1/8" SCREEN OVER THE HOLE TO KEEP THE BEES FROM ESCAPING WHEN YOU FEED THEM. USE A 3" PVC PIPE KNOCKOUT PLUG FROM HOME DEPOT. IT WILL REDUCE THE HOLE SIZE TO FIT A STANDARD SINGLE PIECE CANNING LID.



FINSHED TRAP READY TO HANG

SWARM TRAPS IN ACTION !

THE SWARM TRAP HAS AN INSIDE VOLUME OF APPROXIMATELY 40 LITERS .

USE SOME OLD DARK BROOD COMB FOR A LURE. LAY IT INSIDE THE BOTTOM OF THE BOX. PUT TWO OR THREE DROPS OF LEMON GRASS OIL ON TOP OF ONE OF THE FRAMES AND AT THE ENTRANCE HOLE A COUPLE TIMES PER WEEK.

THIS TRAP WORKS WELL. I HAVE MADE SEVERAL OF THEM AND HAVE CAUGHT MANY SWARMS ON MY OWN PROPERTY IN THE PAST THREE YEARS.

MY SON CAME UP WITH THE BASIC DESIGN FOR THIS TRAP BASED ON NUC PLANS HE FOUND ON BEESOURCE.COM AND OTHER REFERENCES. I MADE SOME CHANGES TO THE ORIGINAL DESIGN BASED ON MY EXPERIENCE.

PAINTING IS OPTIONAL. I HAVE USED MY TRAPS FOR 3 YEARS AND THEY ARE STILL IN GOOD CONDITION.

PLEASE FEEL FREE TO MAKE ANY CHANGES OR IMPROVEMENTS YOU MIGHT THINK OF.

I HOPE THIS HELPS. GOOD LUCK! GET SOME FREE BEES. FREE HONEY BEES ARE GREAT!

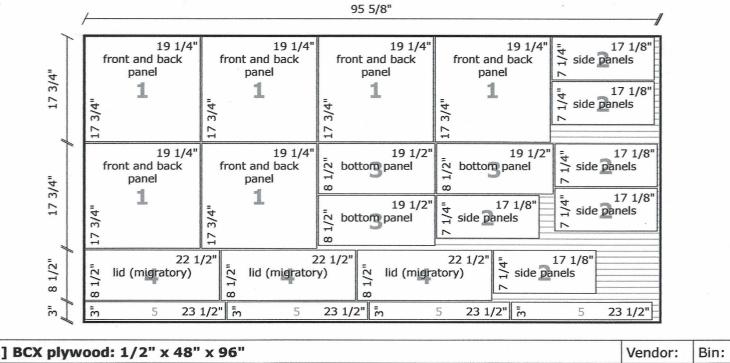
MIKE FERRERI 3/23/2015

SWARM TRAP CUT- LIST

The cut list below illustrates the cuts necessary to make 3 swarm traps from one 48" x 96" x $\frac{1}{2}$ " thick standard sheet of exterior plywood. Please note that some of the dimensions indicated on this cut-list vary slightly from those shown on the swarm trap construction illustration, sheets 1 & 2 with photos.

Those dimensions will still work, but this was done to optimize the use of material from one sheet of plywood needed to construct three (3) swarm traps. Optimization of plywood material also required the use of a migratory style top cover instead of a telescoping type cover as shown.

Please note that a small amount of ³/₄" thick wood (scrap size mat'l) will be required for the handles in addition to the plywood panels listed.



MAKES THREE SWARM TRAPS

[A1] BCX plywood: 1/2" x 48" x 96"								
[] 1 of 1 this size			irain: Horizontal	Stock Trim: 0"::0"		Standard Layout		
Kerf: 1/4"	Part Padding: 0"		Waste: 10.0%		Rough Cut Dimension		ns	

Part #	Sub-Assembly	Description	Copies in Layout	Thick	Final Cut Y	Final Cut X	Rough Y	Rough X	Banding	<info></info>
1		front and back panel	6	1/2"	17 3/4"	19 1/4"	17 3/4"	19 1/4"	None	
2		side panels	6	1/2"	7 1/4"	17 1/8"	7 1/4"	17 1/8"	None	
3		bottom panel	3	1/2"	8 1/2"	19 1/2"	8 1/2"	19 1/2"	None	
4		lid (migratory)	3	1/2"	8 1/2"	22 1/2"	8 1/2"	22 1/2"	None	
5		hanger	4	1/2"	3"	23 1/2"	3"	23 1/2"	None	

HOW TO USE SWARM TRAPS TO CATCH HONEY BEES

As spring approaches each year I become anxious, and look forward to a new swarm season because it is my <u>favorite</u> part of beekeeping. That is why in 2015 I posted a brochure with color photos and <u>general</u> instructions on how to build swarm traps. I have added a cut-list page indicating the optimal cuts necessary to obtain enough properly sized panels cut from (one) 4x8 sheet of plywood to construct (3) three swarm traps.

Note: The cut-list is for traps with dimensions that vary slightly from those shown in the previous photos to allow for optimal material usage. The use of a migratory lid as shown below was also necessary to optimize cuts. It would be used instead of the telescoping lid illustrated in the previous photos.



Trap With Migratory Lid

Here are additional instructions for their use and placement:

HOW TO HANG

I usually hang my traps in a tree with one 16d galvanized nail driven securely into a tree at a slight angle. If you do not want to harm a live tree, find a dead one to use. You can also use a ratchet strap threaded through the back of the box between the top and bottom hanger spacers and tightened it around the tree for additional support and stabilization.

I like to hang them just high enough so I can reach the entrance hole on the front the trap (for me, about 6 feet). It makes it easy to refresh the opening with lemon grass oil.

WHEN TO HANG

In northeast Ohio swarm season generally begins near the end of April or beginning of May. I like to hang my traps by mid April because I believe that honey bees sometimes scout for a new place to live ahead of time, or maybe they just remember where those places are before they are actually ready to swarm. You will have to decide when to hang them based on the expected swarm season in your area, especially if you live in a warmer climate.

HOW TO BAIT THE TRAP

OK. Everyone has their own idea about this, but this is how my son and I do it. The trap will hold five frames. They can be deeps or mediums. I hang one or two frames in the center that have dark brood comb from an old hive. Darker is better. Use new foundation with the rest of the frames to minimize attracting wax moths. I do not use honey. Why? Because honey will attract bees constantly until it is gone. When bees are out "scouting", they will show interest in the traps with old comb, a few drops of lemon grass oil inside, and a few drops at the front entrance hole. Honey is not needed to attract scout bees.

When I begin to see scout bees checking out the traps, I know there is a swarm hanging in a tree somewhere looking for a home. I believe this because I hang several traps on my property and at near-by neighbor's property. When the scouting begins, most of my traps have activity at the same time. When this activity stops, I start checking all of my traps. Usually within a half hour, a swarm will arrive at one of them. Sometimes scouting stops, but a swarm never arrives. I think that means they have decided <u>not</u> to choose one of my traps. If that happens I keep watching and waiting for scouting to begin again with scouts from a different swarm!

WHAT IF I CAN'T MAKE TRAPS LIKE THIS?

My son and I have had tremendous success with these traps. I have caught nearly fifty swarms in the last four years. Most of our friends are also having great luck with them. I think the tall construction and open volume below the frames is particularly attractive to the bees. However, if you don't have a way to build them, try this:

If you have unused equipment lying around, put a couple of old brood frames, and the rest of the frames with new foundation inside a deep hive body. Place that loaded deep on top of another one that is empty. Put your top cover, inner cover, and bottom board together in a normal configuration. Bait with lemon grass oil. Place this "bait hive" somewhere high off the ground away from your other hives. You can have a similar arrangement with a two-level nuc box instead. That would have about the same volume as a plywood swarm trap (approximately 40 liters). I have not had as much luck with this arrangement, but sometimes it works. You don't have anything to lose by trying this method.

WHEN TO TRANSFER

I like to transfer a swarm to a regular hive body as soon as possible before the bees start building comb on the bottom of the frames. If you wait too long, then you have to remove the excess comb to fit the frames into a standard hive body. Also, moving a swarm as soon as possible makes it easier for the bees to establish themselves in a standard hive configuration without another interruption.

COMMENTS

I hope you have good luck catching swarms this way. You don't have to run around the neighborhood with boxes, ladders, and other equipment to gather swarms. They come to you. They cling to the frames inside the trap and can be transferred to a regular hive body very easily. And best of all, they are free for having invested a small amount of your time.

Thanks,

Mike

(Bee Catcher)