

# OUR BEST BLUEBIRD FEEDER

by

*Fawzi P. Emad and Haleya Priest*

It took Haleya several months of experimentation and research to find the right size of openings for this feeder. The size of the entrances is very critical for the success of the feeder. Then Fawzi took her results and made plans for a practical feeder and tested it. It was such a success, both Fawzi and Haleya have been using it with very encouraging results. It prevents the bigger birds like Mocking Birds, Catbirds, and Starlings from entering, and at the same time permits the smaller birds to go in to eat! It is much easier to train the Bluebirds to find the mealworms and suet in this type of feeder than in any other covered feeder we have used!

You can use any kind of wood you happen to have if the kind specified below is not available in your area. Wood dimensions given below are nominal, for example a 2x4 is actually 1.5" by 3.5". Similarly for the 1" stock (it is in reality ¾" thick.) Other dimensions are exact (like the size of entrances, spaces, and lengths.)

*General Description.* Bluebirds can enter this feeder on all four sides. Two sides have a "lattice" with rectangular openings or windows, the back side has two round holes, and the front side has a Plexiglas pane with a long entrance above. This Plexiglas can be easily removed for cleaning the feeder. The top of the feeder is hinged so it can be open to place the food. The whole feeder or "cage" is mounted on a metal pole driven into the ground.

Description	Size, inch	Quantity
Horizontal lattice PT-SYP	1/4 x 3/4 x 11-1/4	6
Vertical lattice PT-SYP	1/4 x 3/4 x 6-1/4	8
Horizontal front tie PT-SYP	1/4 x 3/4 x 9	1
Wood corner posts 2 x 2 PT-SYP	1.5 x 1.5 x 6-1/4	4
Top and Bottom 1 x 12 WRC	3/4 x 11-1/4 x 14-3/8	2
Back plate, 1 x 6 WRC	3/4 x 5.5 x 9	1
Wood feeder plate WRC or pine	3/4 x 5-1/4 x 10	1
Wood supports for feeder plate	3/4 x 3/4 x 5	2
Wood screws 1/2" #4	1/2" #4	24
Wood screws 3/4" #10	3/4" #10	4
Wood screws 1" #6	1" #6	20
Deck screws 2-1/2" #10	2-1/2" #10	4
1" or 1-1/2" hook and eye	1" or 1-1/2"	2
Hinges 1" x 1"	1" x 1"	2
Plexiglas	4-3/8 x 6-1/8(?)	1
Water pipe 1/2", 7' galvanized	1/2", 7'	1
Floor plate 1/2" galvanized	1/2"	1
Cat food cans (empty)	3-1/4" dia x 1-1/2" approx.	2
Waterproof glue and electrical tape		

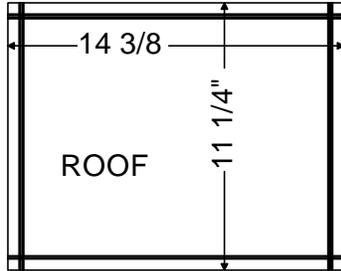
*Parts Needed.* The parts needed are described in the table above. The thin stock for the lattice is ripped from 1" stock (actually ¾".) We highly recommend using solid brass screws, hinges and hook-and-eye.

*Assembly Instructions.* Those items marked with an asterisk (\*) are optional since you may not have the tools to perform the operations needed. Omitting such steps will not re-

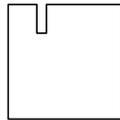
duce the effectiveness of the feeder. All sizes are in inches.

1. Cut the top and bottom to size: 1 x 12 stock, cut two pieces each 14-3/8 long.

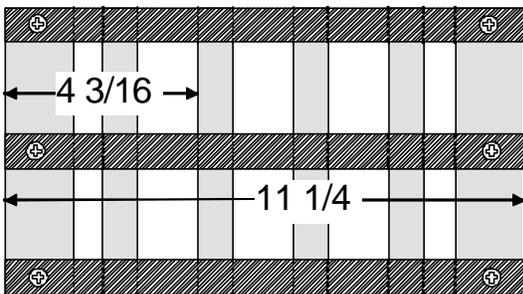
2. (\*) On the underside of the "roof" make grooves 1/8 deep 3/8 to 1/2 from the edges as shown in the figure to the right. The purpose of these grooves is to prevent rain from entering to the center of the feeder by acting as rain stops.



3. Make a groove in two of the four corner pieces for the Plexiglas to slide into. This groove is 3/8 deep, 1/8 wide (blade width) and 3/8 from the edge as shown in cross sectional view on the right.

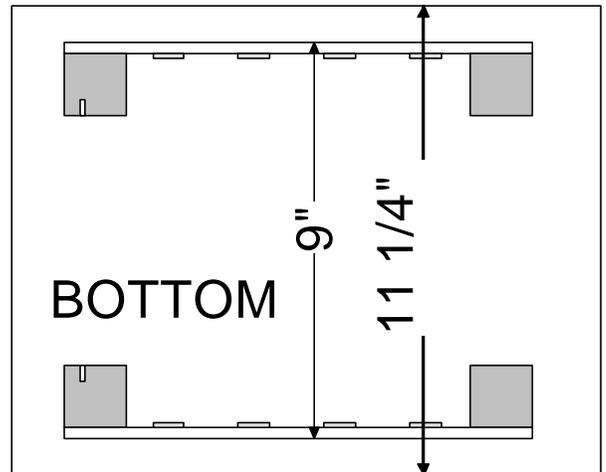


4. Side assembly. Start with two corner pieces (1.5 x 1.5 x 6.25) one with a groove and note the position of the groove, it should face away from the lattice towards the center (see figure on right.) The three long lattice pieces (0.25 x 0.75 x 11.25) are attached to the two corner pieces using six 1" #6 screws as shown in the figure below. Make sure the



middle piece is centered. [In all cases, before driving screws into the lattice and other wood parts, pre-drill pilot holes and countersink these for the heads of the screws.] The distance between these horizontal lattice pieces should be very close to 2 inches.

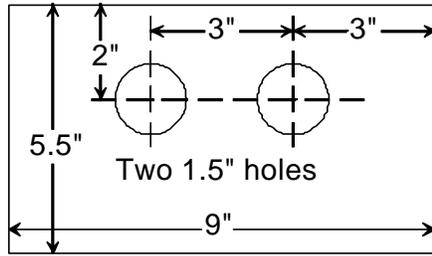
5. Make a jig for spacing the vertical lattice pieces. This is a piece of wood 1-5/16 inches wide (the horizontal space for the entrances.) On the inside, start by placing a vertical lattice piece exactly 4-3/16 from one end (as shown) using three 1/2 inch #6 screws (the heads of the screws will be on the inside, not visible from the outside. Do not forget the pilot holes and countersinks.)
6. Using the spacer jig, place the other vertical pieces as shown. This should produce six windows exactly 1-5/16 inches wide. The remaining space will form four other windows near the corners which are too narrow for any birds to go through.
7. Assemble a second side in a similar manner. Make sure the groove in one corner (for the Plexiglas) faces away from the lattice (see figure below).



8. Place the two sides, grooves facing each other as shown above. Center the two sides on top of the bottom piece and make sure they are 9 inches apart (outside measure.) Mark their position on the board using a pencil. Drill and countersink four holes at the center of each corner. Put a generous amount of waterproof wood glue under each corner piece, then drive the four #10, 2 1/2 inch screws, one in each corner. You should put a pilot hole through each corner before you drive the screws in the corners.

9. Make two entrance holes in the back plate.

These should be 1.5 inches in diameter placed as shown. If you own a planer, it is nice to



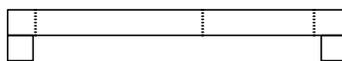
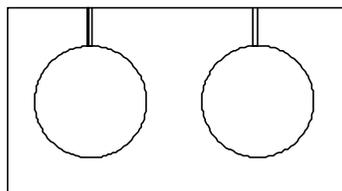
use thinner wood by planing it down to 3/8 inches thick. This is attached at the back side flush with the top of the corner posts using four screws (1" #6 screws if the wood is thin, 1-1/2" #6 screws if the wood is thick.)

10. Attach the 1/4 x 3/4 x 9 inch piece at the top front corners in order to hold the posts securely. Use 1" #6 screws and don't forget to make pilot holes with countersinks for the screw heads.

11. Attach the top using the two hinges. The screws should be attached to the underside of the top first, then into the back. Mark the hinges then drill pilot holes for the screws.

12. Attach the two hook and eye in the front as shown in the figure on right. If the hook is too tight, open it a little with pliers. If too loose, tighten it a bit so it fits snugly but will go in and out of the eye screw with ease.

13. Make the feeding tray using the 3/4 x 5-1/4 x 10 inch piece. Using a band saw cut two holes for the cat food cans as shown and glue

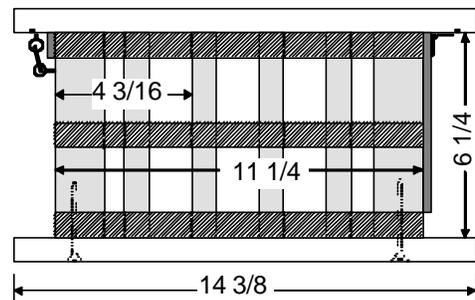
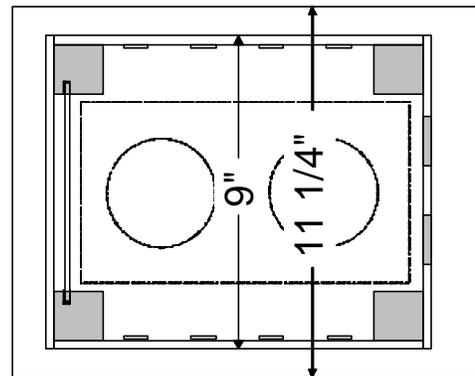


and nail the two 3/4 x 3/4 x 5 inch "legs" as shown in the two figures above. The nails should be small wire brads to hold the pieces as the glue dries. If you do not have a band saw, then omit the holes and "legs" and nail the two cans onto the feeding tray.

14. Cut a piece of Plexiglas to fit in the grooves in the front. It should be just about 1/8<sup>th</sup> of an inch smaller than the grooves allow. This permits sliding the Plexiglas out for cleaning the inside of the feeder. The height of the Plexiglas should be 4-3/8 inches. Tape electrical tape on it so the birds know it is not an exit window. They can go in and out above the Plexiglas. Fold a piece of electrical tape over the top edge of the Plexiglas to make it visible.

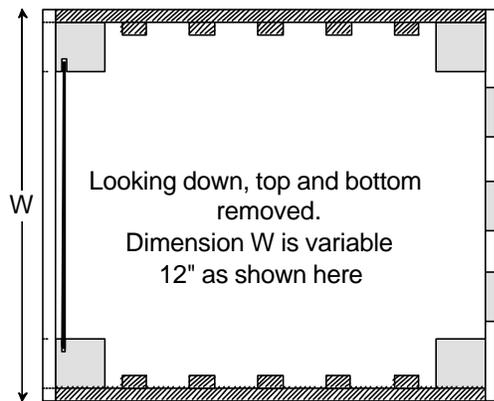
15. Attach the 1/2" galvanized floor plate to the center of the bottom using the 3/4" #10 screws. This will allow the feeder to be attached to a 1/2" galvanized water pipe driven into the ground to a suitable height (best is to make it at eye level.)

The figures below show the completed feeder. Both a top view looking down inside the feeder and a view looking at the side are shown.



*Larger version.* We have also built a larger version along the same lines. Without much detail, the diagrams for a larger version are shown next page. Besides having a larger area, it has three round entrances in the back and eight windows on each side. The smaller version allows two birds to feed at one time while

the larger one can have as many as six birds at the same time (assuming they can get along!)



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