Triple-chambered Bat House Plans

MATERIALS

- One 3' foot long 1" X 8" (7½")
- One 8' foot long 1" X 6" (5½")
- One 6' foot long 1" X 4" (3½")
- Two 3' foot long 1" X 1" (¼")
- One 2' X 2' sheet of T-111 exterior siding or rough sided plywood.
- One 4' by 4' sheet ¼" plastic mesh (Optional).*
- 46 - 1 5/8" #8 galvanized wood screws.

*Plastic mesh is only necessary if the interior of the bat house is constructed with smooth-sided wood. A better approach is to use T-111 siding for the partitions and rough-sided lumber for the back wall. If smooth-sided wood or plywood is used, it can be grooved at ½” intervals to provide a rough surface for the bats to grasp onto. See also the note at bottom of page 2.

INSTRUCTIONS

Step 1. From the 1X6, cut six 14” sections for the front and back panels of the bat house.
From the 1X8, cut one 16” section for the roof and one 14” section for the back.
From the 1X1’s cut four 17” sections. These will be used as spacers to secure the partitions.
From the 1X4, cut one additional 14” section for the back. From the remaining piece of the 1X4 cut two sections for the sides. One end of each piece will be cut at a 30-degree angle for the roof. This can be done by cutting each piece with a front length of 21½” and a back length of 23½".
Step 2. From the T-111 or plywood sheet, cut a 17"x12" section for the back partition, and a 16"x12" section for the front partition. **Note:** If a larger piece of plywood is available, these two pieces can be cut 12½" in width to provide a flush fit at either side.

Step 3. Bevel the back of the 16" roof section at 30 degrees. The roof will look best if the top (widest side) is made 6½" wide when the bevel is cut. Bevel one of the 14"x6" pieces at 30 degrees. This piece will be used at the top of the front and the bevel is necessary to match the roof.

Step 4. Begin assembly of the bat house by placing the two side pieces on a table with the long sides up and 14" apart (outside to outside). It is recommended that glue or caulking be used as the bat house is assembled to strengthen and weatherproof it. Place one of the 14"x6" pieces on top and align it with the bottom of the two side pieces. Fasten it with two 1-5/8" wood screws on each side. Drilling 3/32" pilot holes for all screws will help prevent the wood from splitting. Repeat the process with a 6", 4", 6" and 8" piece, in that order. This will place the 8" piece at the top of the bat house. Now turn the bat house over so it is laying on its back. Drill one 5/16" hole at the top, and one 5/16" hole bottom. These will be used for mounting the bat house to a post or building. The holes should be located in the center and 2" from the edge.

Step 5. If plastic mesh is being used, cut two sections of plastic mesh the same dimensions as the plywood partitions. Staple the mesh to the plywood using vertical rows of staples about 2-3" apart. The side with the mesh will face the front of the bat house. Cut a section of plastic mesh 12" wide and 23" long and place it on the back wall of the bat house. Fasten the mesh with vertical rows of staples about 2-3" apart.

Step 6. Position the 1X1’s in the left and right-hand corners with the bottom ends located 4½" from the bottom of the bat house. This will create a 4½" landing pad. Place the 17" partition with the rough or mesh covered side up on top of the two 1X1’s already in position. Use three 1-5/8" wood screws in each; one in the center and the other two about ¾" from each end. Make sure the top wood screw securely attaches the 1X1 to the 8" board on the back wall. This will add strength to the bat house.

Step 7. Position the remaining two 1X1’s on each side of the partition directly above the previous two. Place the 16" partition on top (rough or mesh side up); allowing 1" of the previous 1X1’s to show at the bottom. This open space makes it easier for bats to crawl into the forward crevices. Now fasten the plywood section and 1X1’s using two 1-5/8" screws on each side. Locate them about 1½" from the top and bottom of the plywood partition to avoid the screws underneath.

Step 8. Place the beveled 14"x6" board at the top of the front, aligning the beveled edge with the 30 degree angle of the two side pieces. Fasten it using two 1-5/8" screws on each side. Repeat using a second 14"x6" board. Locate the third and final 14"x6" board about ½" down from the previous one to form a ½" gap for the vent.

Step 9. Center the roof section such that there is equal overhang on each side. Fasten it to the side pieces using two 1-5/8" screws on each side. The roof should be caulked where it meets the back wall. Adding roofing material and painting the bat house will greatly extend its life. A light brown color works well in Florida.

Step 10. The bat house can be mounted on a 4"x4" post or the side of a building using the holes drilled in step 4 and three-inch long, 5/16" lag bolts. A large galvanized or stainless steel washer (fender washer) is recommended to protect the wood. Mounting on trees is not recommended because they have proven to be the least successful location for bat houses. Bat houses should be located at least ten feet above ground. Experience indicates the higher the bat house is mounted the more likely it will get bats.

**Note:** There are photographs of this bat house during various stages of construction on the web at: http://www.floridabats.org/BatHousePlanPhotos.htm.