

## **Insects of Alberta - How to Build a Bumble Bee House**

- 1) Gather materials and tools and assemble in a safe work area.

*Tools:* Hammer, hand saw (or jig saw), staple gun, tape measure, ruler, pencil, drill bits, electric drill, 5/8" flat wood bit, screwdriver bit, safety glasses and a paint brush.

*Required materials:* 1/2" Plywood or board, staples, 1" nails, 1" and ½" screws, 2 angle brackets, 2"x2" piece of fiberglass or wire screening, hamster bedding and yellow paint.

*Optional materials:* Glue and 2 hinges

- 2) Measure and cut out four pieces of plywood as follows (photo 1)
  - a. Front of the house 8" wide by 8" tall
  - b. Back of house 8" wide by 6" tall
  - c. Two sides 7" wide and one side 6" tall and the other 8" tall.
- 3) Start 6 1" nails (three on each side) of the 8"x8" front board. Nail the board onto the 8" side on each side board. Optionally, you may apply glue to the edge of each side board before nailing (photos 2 and 3). If the plywood is splitting drill pilot holes first.
- 4) Next start 4 nails (two on each side) on the back board and (glue - optional) nail to the 6" edges of the side boards. (photo 4)
- 5) Turn the house onto its top (the side with slanted edges) and measure the size of the hole. Cut the bottom board so that it will just fit into the space - roughly 7"x7". Slide the bottom into place and nail from each side. (photos 5, 6 and 7)
- 6) Cut a small 2"x2" square of wood for the entrance. Attach it with either nails or screws to the lower front right corner of the house 2" in from each side. (photo 8)
- 7) Drill the entrance and ventilation holes. Using an electric drill and a 5/8" flat wood bit drill a hole towards the top of the house at a 45 degree angle through the 2"x2" entrance square (photos 9 and 10). Next drill a hole on the front of the house approximately 2" by 2" from the top left corner (photo 11).
- 8) Cut out a 2"x2" piece of screen and staple it over the (top) ventilation hole. (photo 12)
- 9) Measure and cut a piece of plywood so that it is 10" long by 9" wide for the roof. (photo 13)
- 10) Next place the roof on the house so that there is approximately half an inch of over hang on each side and the back. Drill four holes (one at each corner) so that the holes intersect the underlying plywood. Then attach the roof to the house with four screws. (photo 14) Optionally, you can attach the roof to the house using only 2 screws and hinges at the back.
- 11) Attach two mounting brackets, one onto each side of the house about halfway up on the back edge of each side. Allow for the ½" overhang on the roof. (photos 15 and 16)
- 12) Take some yellow paint and paint the front of the entrance block yellow. (photo 17)
- 13) Allow the paint to dry before you put the house outside. Don't forget to put some hamster bedding inside first. (photo 18)

See next pages for photographs ->



Photo #1: Sides, front & back cut out.



Photo #2: Front with nails set & ready to attach to sides.



Photo #3: Sides attached to front.



Photo #4: Back, front & sides attached.



Photo #5: Measuring inside dimensions.



Photo #6: Base inserted into house.





Photo #7: Ready to nail base to house.



Photo #8: 2"x2" entrance block in position.



Photo #9: Drill entrance hole up at 45 degrees.



Photo #10: Entrance hole.

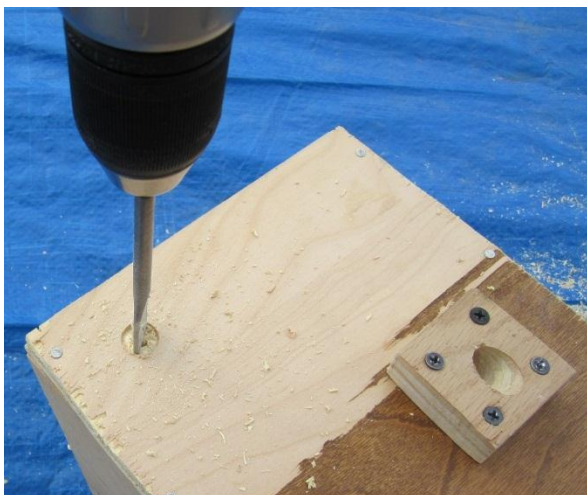


Photo #11: Drill ventilation hole in top corner.

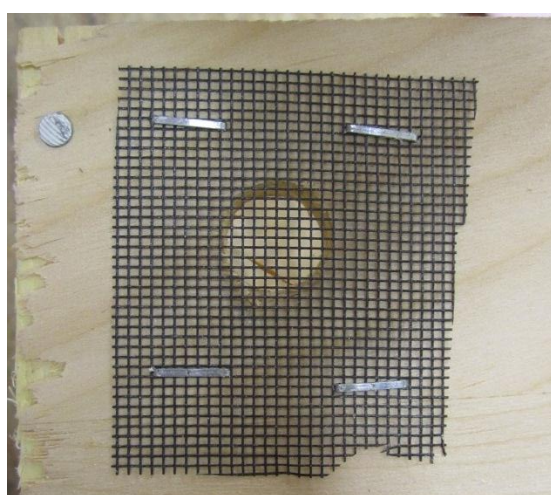


Photo #12: Screen stapled over (top) ventilation hole.





Photo #13: 9"x10" roof cut out.



Photo #14: Roof screwed onto bee house.



Photo #15: Mounting bracket attached to side of house.



Photo #16: Shot showing mounting brackets at back of house.



Photo #17: Area around entrance hole painted yellow.



Photo #18: Hamster bedding in bee house.