## **Building a Yukon Bat Nursery House**

#### **Materials (for two bat houses)**

One half sheet (48" x 48") 1/2" standard plywood

One half sheet (48" x 48") 3/8" standard plywood

Two pieces 1" x 6" x 8' spruce board

 $25 - 1 \frac{3}{4}$ " x #8 wood screws

100 – 1" x # 6 or #8 wood screws

Six to ten 2 ½" x #8 wood screws

1 litre of dark coloured water-based stain

Approximately 40 square feet of nylon window screen (or similar material)

Tube of caulking

#### **Tools**

Tape measure and pencil

Combination square or tri-square

Chalk line

Circular and/or table saw

Drill with screw driver bits and 1 ½" hole saw

Staple gun with 1/4" staples

Scissors to cut screen

Clamps (optional)

Hammer

Caulking gun

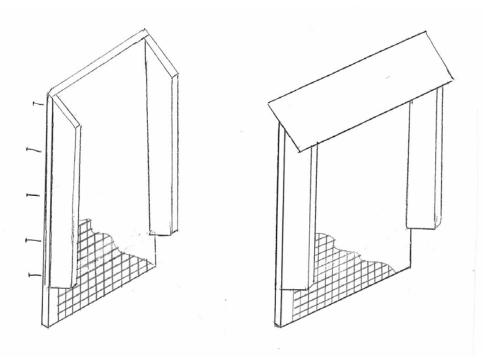
Paint brush or roller with tray

#### **Instructions**

- 1. Do not use pressure treated lumber as this can be harmful to the bats. Follow the template instructions on page 5 to mark and cut the pieces for the bat house. Drill 1 ½" diameter holes in the Partition pieces according to the template. The attached layout provides enough pieces for two bat houses. Note that some of the edges are cut at a 25° angle.
- 2. Apply two coats of dark water-based stain to all sides of the bat house parts.
- 3. Staple nylon window screen to the inner surfaces of the 1/2" Front and Back pieces as well as to both sides of the 3/8" Partitions. Wrapping the screen down one side of the Partitions and up around the other side works well. This will give the bats something to grip as they climb up the bat house chambers. Make sure to attach screen to the lower inner part of the Back as this will be where the bats land on the bat house. As an alternative to window screen, burlap or fabric could be used, or horizontal grooves could

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- be cut into the plywood with a power saw. The grooves should be 1/32" to 1/16" deep and spaced 1/4" to 1/2" apart.
- 4. Screw the 1/2" plywood Back to the Sides with the angled cuts aligned at the top using 1 3/4" screws.
- 5. Fasten the Roof to the top using 1 3/4" screws with the angled edge of the Roof aligned with the Back of the bat house.

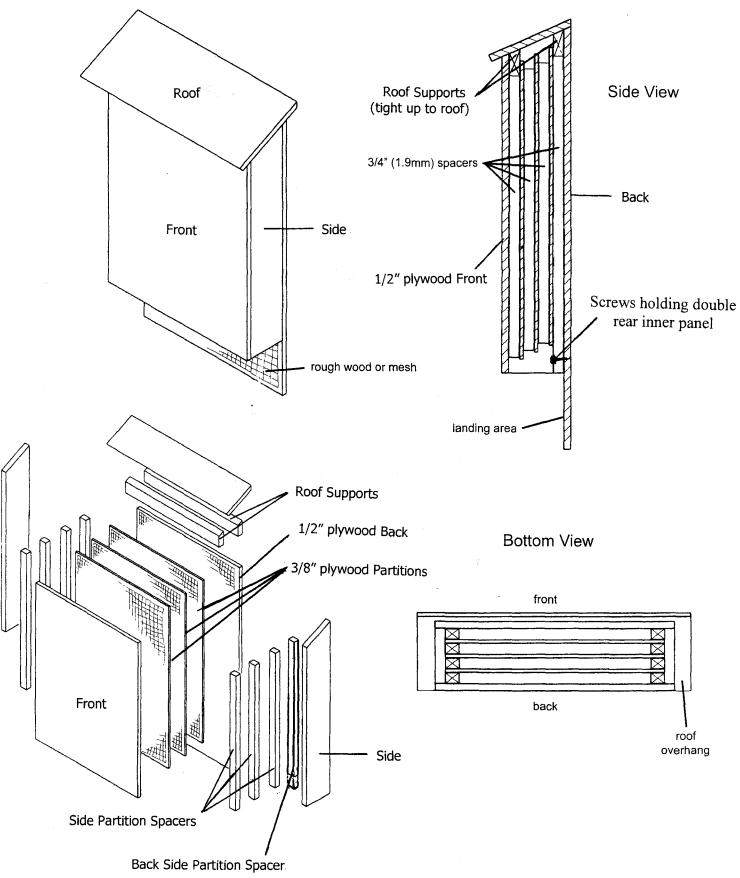


- 6. Construct the double rear inner panel as follows:
  - a. Place two Back Side Partition Spacers (these are longer than the other spacers) down parallel and about 14" apart on a flat surface.
  - b. Place a Roof Support above the two Back Side Partition Spacers to resemble an up-side-down "U". The Roof Support and spacers should be laid out with the broad sides down.
  - c. Ensure the angle on the Roof Support is visible with the wider edge of the support down.
  - d. Place the 3/8" plywood Partition 1 onto the spacers with half of the Roof Support exposed and the 1 ½" diameter holes towards the Roof Support.
  - e. Make the edges of the spacers flush with the edge of Partition 1.
  - f. Fasten Partition 1 to the Roof Support and the Back Side Partition Spacers with 1" screws.
  - g. Place two Side Partition Spacers down on top of the first Partition 1 with the bottoms of the spacers flush with the bottom of the partition. Notice in the diagram how the 3/8" plywood partitions are offset downwards toward the front of the bat house.

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- h. Place Partition 2 on top of the Side Partition Spacers so that it is centered vertically on the spacers and the 1 ½" diameter holes are towards the top.
- i. Fasten Partition 2 to the second set of spacers with 1" screws.
- j. This is the double rear inner panel.
- 7. Slide the double rear inner panel against the inner rear of the bat house with the angle of the Roof Support aligned with the angle of the Back and Sides. The Roof Support should slide up tight to the underside of the Roof.
- 8. Attach this double rear inner panel to the Back of the bat house with two 1 3/4" screws into the bottom of the Back Side Partition Spacers.
- 9. Construct the front inner panel as follows:
  - a. Place two Side Partition Spacers down parallel and about 14" apart on a flat surface.
  - b. Place Partition 3 on top and center it vertically on the two Side Partition Spacers with the 1 ½" diameter holes towards the top.
  - c. Make the edges of the spacers flush with the edge of Partition 3.
  - d. Fasten Partition 3 to the two Side Partition Spacers with 1" screws.
  - e. Place a Roof Support on top of Partition 3 so that the beveled edge is up and so that it will be aligned with the Roof angle. Half of the long side (underneath) of the Roof Support should extend above Partition 3.
  - f. Place the last two Side Partition Spacers on Partition 3 about 14" apart and under the Roof Support to create another up-side-down "U".
  - g. Fasten the Roof Support and Side Partition Spacers to the Partition 3 with 1" screws.
  - h. This is the front inner panel.
- 10. Slide the front inner panel into the bat house so that the top angle of the Roof Support is aligned with the angle of the Back and Sides. The Roof Support should slide up tight to the underside of the Roof.
- 11. Fasten the front inner panel using 1 3/4" screws through the Sides.
- 12. Fasten the 1/2" plywood Front onto the bat house with the angled top aligned with the Roof using 1 3/4" screws.
- 13. Caulk the exterior joints of the bat house to keep wind and rain out.
- 14. Touch up the exterior of the bat house with the dark water-based stain so that it will absorb heat. Bats like heat.
- 15. Mount the completed bat house to the side of a building with two or three 2 ½" wood screws through the lower part of the 1/2" Back panel and with two or three 2 ½" wood screws through the Roof at an angle into the building.

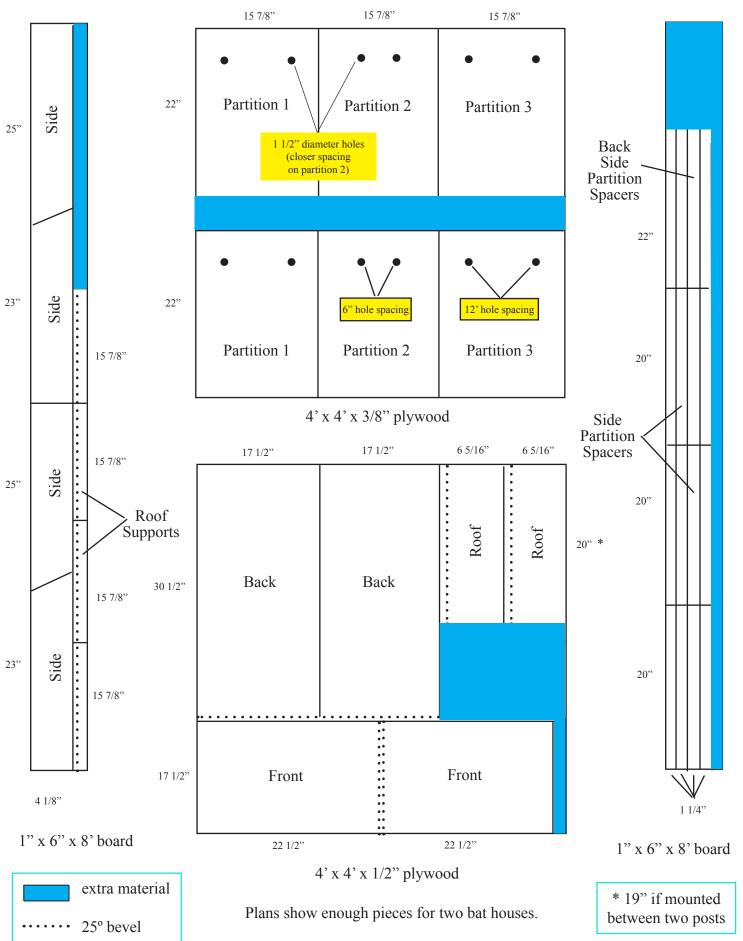
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# 2 Yukon Nursery Bat Houses

(Do not use pressure treated wood)



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