**Small Economy Bat House**

**Materials Needed (makes one)**

- 1/4 sheet (2' x 4') 1/2" outdoor grade plywood
- 1" x 2" (0.75" x 1.75" finished) x 8' pine (such as a furring strip)
- 20" x 22 1/2" 1/8" plastic mesh
- 30 to 40 1 1/4" multipurpose drywall screws
- 5/16" staples
- 1 tube acrylic caulk
- 1 pint exterior latex paint

**Recommended tools**

- table saw
- caulking gun
- variable speed reversing drill
- scissors
- Phillips bit for drill
- stapler
- tape measure
- paintbrush

**Construction procedure**

1. Measure and cut plywood into three pieces:
   - 26.5" x 24"
   - 16.5" x 24"
   - 5" x 24"
2. Measure and cut furring strip into one 24" and two 20 1/4" pieces.
3. Screw back to furring strips, caulking first. Start with 24" piece at top.
4. Staple the netting to inside surface of back, starting at the bottom. Be sure netting lies flat and does not pucker.
5. Screw front to furring strips, top piece first (don’t forget to caulk). Leave 1/2" vent space between top and bottom front pieces.
6. Caulk around outside joints if needed to seal roosting chamber.
7. Attach a 4" x 28" board to the top for a roof if desired.
8. Paint the exterior at least twice.

**Modifications to the Small Economy Bat House**

1. Wider bat houses can be built for larger colonies. Be sure to adjust dimensions for back and front pieces, ceiling furring strip and netting. A 3/4" support spacer may be required in the centre of the roosting chamber for bat houses over 24" wide.
2. Two bat houses can be placed back-to-back, mounted on poles. A horizontal 3/4" slot should be cut in the back of each house about 10" from the bottom edge of the back piece to improve ventilation and permit movement of bats between houses. Four 2 3/4" pieces of wood screwed to the sides will join the two boxes. Bats and air will enter the sides, but not light. Leave a 3/4" space between the two houses, and roughen the wood surface or cover the back of each with plastic netting. Do not cover the vents. A tin roof covering both houses protects them and helps prevent overheating. Eaves should be about 3" in southern areas and about 1 1/2" in the North.
3. Ventilation may not be necessary in colder climates. In this case, the front should be a single piece 23" long. In general, smaller bat houses should not be used in northern areas.