

hey are called *Murcielagos* in Spanish, *Chauve-souris* in French, *Fledermäuse* in German, and they have many other names the world over. Here we call them bats, and as humans disturb their habitats their numbers are declining. How to help? Build them a new home – a Bat Box!

### Materials needed

- One 12 ft. piece of 1" X 8" untreated, roughsided cedar (Actual measurements will be slightly smaller).
- □ One 11 in. piece of 1" X 10" untreated roughsided cedar (This will be the top of the bat box).
- Approximately 20 six-penny galvanized nails

### Tools needed

- 🗅 Skil saw with crosscut blade
- 🖵 Hammer
- 🗆 Ruler
- Tape measure
- 🖵 Pencil

# Construction recommendations

1. Read instructions completely before beginning.

2. Do not paint the sides or interior because the odor might repel bats.

3. Bats need rough surfaces to secure a foothold. Therefore, be sure that all surfaces, especially those on the interior, are rough. If you can't obtain rough-sawn cedar, you can roughen it manually.

4. Some types of lumber split easily. Avoid splits by pre-drilling small holes before pounding nails.

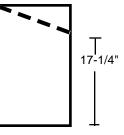
# **Assembly directions**

**Step 1**. Cut the 12 ft. piece of cedar into six pieces of the following sizes:

- a) 3 pieces 22" long (These will be the two sides and the back).
- b) 1 piece 17-1/4" long (This will be the front).
- c) 2 pieces 13" long (These will be two of the three partitions).
- d) 1 piece 11" long (This will be the other partition).

**Step 2.** Take two of the 22" pieces and measure 17-1/4 inches on one side of each piece. Make a pencil mark at this point.

**Step 3**. Draw a diagonal line from the mark to the closest corner on the other side of the board.

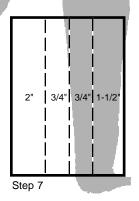




Step 4. Repeat Step 3 on the second piece.

**Step 5.** Using a Skil saw, cut along the diagonal lines. Put these pieces aside for the moment. (They will be the sides).

**Step 6.** Adjust your skill saw to a 33 degree angle. Take the third 22" board (the one you didn't mark a diagaonal line on) and angle off one of the ends. (This piece will be the back of the box). Repeat the same for the front piece, top piece and the two partitions.



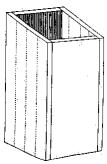
**Step 7.** Take the two side pieces from Step 5, and using a rule and pencil, mark both pieces according to the measurements shown in the Step 7 illustration. Mark both sides of both boards.

Step 6

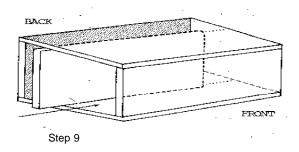
**Step 8.** You're ready to start building. Take the two sides, the 22" back

and the 17-1/4" front and nail them together as illustrated on the next page, angled ends up. Note that the side pieces fit over the ends of the front and back pieces.

**Step 9.** Now, insert the partitions. Lay the partially completed house on its side. Take the 13" internal partition and slide it into the box, centering it along the set of pencil lines closest to the back of the box. Position the partition so that it is flush with the



Step 8

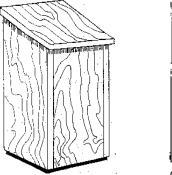


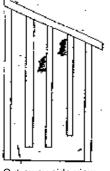
tops of the sides. See illustration for Step 9 above.

**Step 10.** Secure the partition in place with nails from the outside. Use the outside lines as a guide for placement.

**Step 11.** Follow the same procedure for securing both of the shorter partitions along the other two sets of lines near the front of the box.

**Step 12.** Place the ten inch 1" X10" board on top so that the back edge of the board is flush with the back of the box and creates an overhang in the front and on the sides. Hold firmly and nail the top to the main frame. The completed house should look like the drawings below.





#### Cut-away side view

#### Hanging your bat house

Your house can be hung in a variety of ways, depending on the circumstances. One of the easiest methods is to drill two 1/4" holes in the back of the box. The holes should be centerd and about four inches from the top and bottom. Drive two stout nails into the desired tree or wall and hang the house by placing the holes over the nails. In other situations, hooks or hangers may be best. Use your imagination!

#### About your bat house

Mother bats normally prefer the most stable temperatures available in the 80 to 100 degree Fahrenheit range, though some bats tolerate temperatures as high as 120 degrees or more. A nursery colony may include 30 or more individuals in one bat house. Bachelor groups tend to be smaller, sometimes consisting of six or fewer bats. Bachelor groups frequently select cooler roosts.

Since appropriate temperature may determine how or whether or not your bat house is used, you may wish to

consider several geographic factors before mounting it. With increasing latitude and altitude, lowere temperatures require that bat houses intended for use by nursery colonies be oriented to receive maximum solar radiation, especially in the morning (southeast exposure). Bats may also benefit from having the roof painted black. In

exceptionally hot climates, plain tops and shaded sites may be preferred. Even if your bat house is too cool for a nursery colony, you may still attract bachelors.

Bat houses located near a permanent source of water, especially a marsh, lake or river, are the most likely to attract bats. Bat houses should be hung roughly twelve to fifteen feet above the ground, sheltered as much as possible from the wind. Don't be discouraged if conditions for your bat house are not perfect. Even natural roosts are seldom ideal.

Bats sometimes move into newly erected bat houses within hours, but more often, bats may not take up residence for as much as one to two years. If your bat house is not occupied by the end of the second year, try moving it to a warmer or cooler location. Unfortunately, in some areas, heavy use of pesticides, a lack of hibernating sites, too great a distance to feeding or drinking sites, or even an abundance of already available summer roosting sites may preclude occupation.

From: Bat Conservation International P.O Box 162603 Austin, Texas 78716

BAT BOX!