The Bat House is Up - What's Next?

Maintenance: Bat houses require maintenance to keep them in good condition. Wasps can be a problem before bats fully occupy a house. If wasp nests accumulate, they should be removed in late winter or early spring before either wasps or bats return. Re-caulking may be needed after three to five years to guard against leaks and drafts. A fresh coat of paint or stain will improve solar heating. Any repairs or cleaning should be performed when the bats are not present.

Monitoring Bat Use: There are three ways to see if your bat house is being used. The most direct way is to stand under the bat house and look inside using a powerful flashlight. This should be done very sparingly, especially in the first year of use. A less intrusive technique is to watch the evening emergence, which begins around dusk, or the dawn return, which starts about an hour before sunrise. The third and easiest way of checking is to look for guano underneath your bat house.

Want to Learn More?

The North American Bat House Research Project was created by Bat Conservation International (BCI) to advance the knowledge of artificial bat habitat. Results from more than ten years of bat house research can be found in the revised edition of The Bat House Builder's Handbook, the Building Homes for Bats video and in The Bat House Researcher newsletter archives on the Bat Conservation International website at www.batcon.org. For more information on Vermont's bats and White-Nose Syndrome please visit our bat web page at www.vtfishandwildlife.com/wildlife_bats.cfm

Why Put Up a Bat House?

A single little brown bat can catch 1,200 mosquito-sized insects an hour! Bats are the primary predators of night-flying insects and play a vital role in the delicate balance of nature.

Unfortunately, five of Vermont's six cave bat species are now listed as endangered or threatened. The little brown bat used to be one of the most common bat house tenants, but due to the devastating effects of a fungal disease known as White-Nose Syndrome this species has suffered a 95 percent population decline in only a few years. By putting up a bat house, you can provide critical roosting sites for bats in your area and benefit from their insect eating abilities.

Bat houses are a great way to keep bats in your area after you evict them from your house. The chances of your bat house being occupied are greatly increased when you install one before excluding bats from your house.

Bat houses should be installed the year before an exclusion, but can go up as late as two to six weeks before exclusion is completed. Exclusions should not be done between early May and late August to avoid trapping flightless young inside your house.

WHAT TYPE OF BAT HOUSE IS BEST?

Whether you build or buy a bat house, make sure the design and placement of the house meets the criteria to successfully attract and support bats. Bat Conservation International (BCI) has a “Bat Approved” Certification Program to improve the quality of commercially produced bat houses. For a list of certified bat houses and manufacturers, check BCI’s website at www.batcon.org and look up “certified models.”

Follow these guidelines to greatly increase your odds of attracting bats.

Dimensions: Tall, wide houses work well. Bat houses should be at least 2 feet tall, have chambers at least 20 inches tall and 14 inches wide, and have a landing area of 3 to 6 inches extending below the entrance. Roost partitions should be carefully spaced 3/4 to 1 inch apart. Roughened partitions and landing areas provide footholds for bats.

Chambers: More chambers in a bat house means more bats can use it. In general, a single chambered bat house can hold 50 to 100 bats, while a multi-chambered house can hold anywhere from 150 to 300 bats.

Vents: Vented or unvented bat houses will work, unless you are in a very cold area of Vermont. Vented houses provide wider temperature variations within the roosting chamber. Unvented houses are designed for colder regions.

Color: Color is the most important factor of a successful bat house because it affects the temperature of the roosting chamber. In Vermont, dark colored houses, preferably black, are the best. The dark color absorbs more solar heat, creating a warmer roosting chamber.

THE RIGHT LOCATION MAKES ALL THE DIFFERENCE

Mounting: Bat houses should be mounted on buildings or poles at least 12 feet above ground, but 15 to 20 feet is better. Single-chamber houses work best when mounted on buildings. Bat houses mounted on trees or metal siding are seldom used. Tree-mounted houses are less preferable because they tend to receive less sun and may be more vulnerable to predators.

Choose installation sites carefully to avoid having to move a bat house once it becomes occupied. Most bat houses have open bottoms that allow guano to drop to the ground and not accumulate inside the house. Avoid a mess by not placing houses directly over windows, doors, decks, or walkways.

Bat guano is good fertilizer, but avoid using a bucket or deep container to catch the droppings. Bat pups may fall out of the house and become trapped inside the container.

Sun Exposure: Vermont bat houses should receive at least eight to ten hours of direct sunlight per day. Houses should be oriented to face a southerly direction, preferably southeast, to allow the bat house to warm up faster in the morning.

Habitat: Areas of diverse habitat, especially a mixture of agriculture and natural vegetation, provide the greatest bat house success. Most nursery colonies of bats choose roosts within 1/4 mile of water, preferably a stream, river, lake, or pond.

Protection from Predators: Houses mounted on sides of buildings or on metal poles provide the best protection from predators. Metal predator guards may be helpful, especially on wooden poles.

Timing: Bat houses can be installed any time of the year, but are more likely to be used during their first summer if installed before the bats return in the spring.

YOU CAN BUILD YOUR OWN BAT HOUSE

A combination of exterior plywood and cedar is best for wooden houses. Pressure-treated wood should not be used because it contains chemicals that may be harmful to bats. Increase the house’s longevity by using screws instead of nails. Caulk all seams, especially around the roof, to prevent drafts. Latex caulking is recommended. Not sure about a design? BCI’s website (www.batcon.org) features bat house designs.

Place bat houses in a sunny location, like this house located above the hay loft door.

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