



BAT CONSERVATION
IRELAND

THE BEGINNER'S GUIDE TO BAT BOXES



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Bat boxes are alternative roosting spaces that are designed to replicate tree roosts or roosts in the attics of buildings. There is an array of designs, shapes and sizes as well as construction material.

This leaflet focuses on bat box dos and don'ts. There are new versions of bat boxes coming on to the market all the time so we cannot review each one, but we will give you some pointers to maximise the chances that bats will take up residence whatever type you have.

Bats are more likely to find and use your bat box if your garden or space is bat-friendly in the first place. See our information leaflet on 'Gardening for Bats' to boost the attractiveness of your garden.

Bats are also more likely to take up residence if there are several bat boxes in an area, so it is worth considering whether you could place three boxes on different aspects of a house,

for example, or more than one box on a large tree. If you have several bat boxes, place them at different aspects so there are some facing the sunlight, but just in case it is too warm, there is at least one box north-facing and therefore cooler.

Also, please be aware that bat boxes do not generally mimic the conditions that are found in maternity roosts. There are very few records of maternity colonies of bats using bat boxes in Ireland; bat boxes just don't usually get warm enough, or stay warm for long enough, so they don't provide the right conditions for large groups of females and their young. That said, boxes do tend to be used by individual bats or small numbers of bats. Various studies have been carried out on bat box projects across Europe and uptake rate by bats has varied from as low as 6% to as high as 100% of boxes depending on the site.

WHAT TO CONSIDER

Where to put it?

A sturdy tree, a south facing wall of a building or even a purpose-erected support pole can work as a surface on which to place your bat box. Make sure the box can be attached firmly and does not rock in the wind. If you are placing it on a building make sure it is not positioned directly over a walkway, door or window as bats tend to prefer to be at the eaves if possible.



Bat boxes on purpose-erected supports.

© Tina Aughney.

Cleaning

Bat Conservation Ireland strongly recommends self-cleaning bat boxes. The reason for this is, that

only licenced individuals can clean out bat boxes, in case a bat is present. Boxes do need to be cleaned out once a year. Bat boxes should never be opened or disturbed during the active bat season (April-September).



Various woodcrete bat box designs. The bottom 3 boxes are self-cleaning bat boxes. © Tina Aughney.

These boxes are designed so that any bat droppings just fall out the bottom so there is no need to open the box and remove bat droppings on a yearly basis. The other advantage to self-cleaning boxes is that they are not usually used by birds, so you shouldn't find blue tits have

taken up residence in your bat box and brought in nest material. If you buy or build a box that has a floor where droppings could accumulate, you will need to factor in maintenance.

When maintaining the box - be prepared to do so carefully because bats sometimes cling to the lids or doors. Open it up slowly at first, and then collect up droppings or gently sweep them out. The best time to clean out boxes is winter as bats are less likely to be present. However, only a licenced bat person can open a bat box if bats are present; so it is better to use self-cleaning bat boxes.

How high?

Bat boxes should be placed at least 3m high but preferably not so high that they are exposed to constantly windy conditions. Consider whether your box is self-cleaning or not. If not, you will need to get access to it every year (if you have a have licence to do so) to clean it out so you



Erecting bat boxes in a known bat foraging area. © Tina Aughney.

need to be able to reach it comfortably and safely.

Access all areas

Bats just won't use a box that has been placed in such a way that they cannot easily access it. Most bats drop from their entrance point and free fall for a split second before starting to fly. This means that they need space underneath their box to do this unhindered, so if you want to put

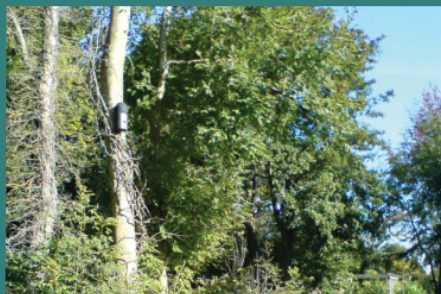
yours on a tree make sure that there are no branches directly under the entrance/exit.

The cat sat on the bat...

Cats predate on bats. Don't place the box where there is a risk a cat could climb on to it or near it! This could happen if the box is on or near a flat roofed building, near the top of a wall, or on a tree that could be climbed by a cat.

Sunny side!

A bat box has a greater chance of uptake if it is facing roughly south. Sun shining on the surface of the box increases its internal temperature and keeps the bats happy!



Woodcrete bat box on a clean trunk tree in a sunny spot. © Tina Aughney.

Night lights

Don't light up your bat box! Bats will not use a box that is lit at night; make sure it is well away from any outdoor lighting.

BAT BOX TYPES

There are tonnes of different types of bat boxes available, and many plans for bat boxes that you can make yourself. Bat Boxes generally break down into three types: timber, woodcrete (which is a mixture of sawdust and concrete), and integrated boxes (i.e. incorporated into buildings during construction).

Timber bat boxes

These are usually cubic, or wedge shaped. They sometimes look like a standard bird nesting box but without the front entrance hole. Instead, bats enter from below through a narrow slit, into a draught-free chamber. These boxes can be easily made at home, but for bats to use them, they need to

be well constructed and sealed. Chemicals or toxic paint should never be used to treat or paint the timber because this could poison the bats.



Timber bat boxes.

Because preserved timber cannot be used, wooden bat boxes tend to have a very limited life span, particularly when erected outside. On the plus side, because they are cheap and easy to construct, more than one can be used so you can provide lots of temporary bat accommodation. Timber bat boxes last longer if erected in shelter so if you have an agricultural barn or large open shed that you are happy to share with bats, this could be an ideal spot to place it. Erecting timber bat boxes in haybarns is a good

solution to ensuring they last in the damp Irish weather.



A good location for timber bat boxes, with an example of a self-cleaning Kent Wedge timber bat box.

Woodcrete

These bat boxes are moulded into different shapes. They last longer when exposed to the elements, they have better thermal properties than timber boxes, and they tend to be used at higher rates than most timber boxes. The flip side is that they are more expensive, and they are much heavier, so their attachments need to be checked on a biannual basis and after storms. They can be bought online from wildlife suppliers. There are several shapes to choose from, those that have open bases do not need to be cleaned out annually because any droppings just fall down out of the box.

Integrated

These boxes are usually concrete or brick and are installed as a building is being constructed. There is very little information on how well these work as yet, because they are relatively new products. However, they have many advantages over boxes that are placed on trees or external facades of buildings because they do not have to be checked for secure attachments and it is likely that they would have good thermal conditions. However, they can be expensive, depending on the type.



Bats using a woodcrete box. © Tina Aughney.



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