

Building an Insect Hotel Habitat



Ulster Wildlife Trust

Why Build One?

Our gardens are home to a wide range of living creatures. An average garden could hold over 2,000 different species of insect! With all this diversity of life it is good to know that very few creatures cause significant damage to our prized flowers, fruit and vegetables, the ones that gardeners call pests. Even better, there are many more creatures that help us control the pests. By providing the right habitats we can greatly increase the number of beneficial insects in the garden. Some wild invertebrates, such as bumblebees and solitary bees, are declining in numbers in the wider countryside, so by providing homes we can contribute to their conservation.



The Insect Hotel on display is built entirely from recycled materials. The main structure is discarded pallets, and much of the additional wood is the product of routine woodland management operations. This sheet tells you how to build a similar habitat, but if this is too ambitious, there are plenty of ideas which can be used on a smaller scale in any garden.

Where to site your habitat

Many invertebrates like cool damp conditions, so you can site your habitat in semi shade, by a hedge or under a tree. Putting the habitat close to other wildlife features, such as an overgrown hedge, a shrubbery or a pond will make it easier for small creatures to find it. Not all creatures like to be in the shade: solitary bees like a warm sunny spot, so put tubes for bees on the sunniest side of the habitat, or put them elsewhere in the garden. Choose a level, even surface: the hotel may end up fairly heavy, so will need a firm base.

The basic structure

We used old pallets for the basic structure. The more you can use recycled or reclaimed materials the better. The habitat does not need to be more than 5 pallets high. Our pallets were all the same size. If you place the bottom pallet upside down, this should create larger openings at the ends, which can be used for a hedgehog house. Although the structure should be stable, you might want to secure each pallet to the one below.

Filling the gaps

There are many different ways to fill the gaps in the structure, here are some suggestions -

- **Dead wood.** Dead wood is an increasingly rare habitat as we tidy our gardens, parks and amenity woodlands. It is essential for the larvae of wood-boring beetles, such as the stag beetle. It also supports many fungi, which help break down the woody material. Crevices under the bark hold centipedes and woodlice.
- **Holes for solitary bees.** There are many different species of solitary bee, all are excellent pollinators. The female bee lays an egg on top of a mass of pollen at the end of a hollow tube, she then seals the entrance with a plug of mud. A long tube can hold several such cells. Hollow stems, such as old bamboo canes, or holes drilled into blocks of wood, make good nest sites for solitary bees. Holes of different diameters mean many different species can be catered for. You can make a home for solitary bees by collecting old canes or pieces of hollow plant stems, then placing in a length of plastic drain-pipe or a section from a plastic drinks bottle. You can also build a wooden shelter, similar to a bird box. Solitary bees like warmth, so place your habitat in a sunny spot, perhaps on a south-facing wall. Bees use differing ways to seal their egg chambers: look out for canes blocked with dried mud or bits of leaf.
- **Frog hole.** Frogs eat many slugs and other garden pests. Although they need a pond to breed in, they can spend most of the year out of water. We use stone and tiles as these provide the cool damp conditions amphibians need. Newts may also take advantage of these conditions. Amphibians need a frost free place to spend the winter; this could be in the centre of our habitat, inside the base of a dry-stone wall, under a pile of rubble or deep underground.
- **Straw & Hay.** These provide many opportunities for invertebrates to burrow in and find safe hibernation sites.
- **Dry Leaves.** More homes for a variety of invertebrates; this mimics the litter on the forest floor.
- **Loose bark.** Beetles, centipedes, spiders and woodlice all lurk beneath the decaying wood and bark. Woodlice and millipedes help to break down woody plant material. They are essential parts of the garden recycling system.
- **Crevice.** Many garden invertebrates need a safe place to hibernate in through the winter. Our insect hotel has many different types of crannies and crevices that different species of invertebrate can hide in over winter.
- **Lacewing homes.** Lacewings and their larvae consume large numbers of aphids, as well as other garden pests. You can make a home for lacewings by rolling up a piece of corrugated cardboard and putting it in a waterproof cylinder, such as an old lemonade bottle.



- **Ladybirds.** Ladybirds and their larvae are champion aphid munchers! The adults hibernate over winter, they need dry sticks or leaves to hide in.
- **Bumblebees.** Every spring queen bumblebees search for a site to build a nest and found a new colony. An upturned flowerpot in a warm sheltered place might be used.
- **Nectar producing plants.** Why not plant some nectar-rich flowers around your habitat. These provide essential food for butterflies, bees and many other flying insects.

Good Luck with your Insect Hotel! If you want any further information please contact the Ulster Wildlife Trust on 028 4483 0282 or email info@ulsterwildlifetrust.org