

The Bug Hotel

Clouded yellow butterfly



TABLE OF CONTENTS

PAGE

CREATE CREATURE COMFORT	2
SO WHAT WOULD YOU NEED TO BUILD A BUG HOTEL?	2
WHERE TO SITE YOUR BUG HOTEL	2
<hr/>	
MATERIALS	3
BUT WHERE WOULD YOU GET ANY OF THESE MATERIALS?	3
<hr/>	
SOLITARY BEES	4
<hr/>	
LACEWING HOMES	5
BETLES	5
AMPHIBIANS	5
<hr/>	
LADYBIRD HOMES	6
<hr/>	
'TIDY' LEAF PILE	7
<hr/>	
SO WHAT ELSE CAN YOU DO?	8
<hr/>	
REFERENCES	9

What is a bug hotel?

CREATE CREATURE COMFORT WITH A NEW BUG HOTEL IN YOUR BACK GARDEN

There are about 10 million species of insect in the world and they all need somewhere to live. So if you want to be kind to the planet you can start in your own environment, in your back garden or on a balcony.

You can create an insect home called Bug Hotel!

Very soon after opening its doors, you will find it a place where many insects are found.

Insects love an untidy garden! Piles of dead wood and leaves lying around the place are a source of food to some insects and provide shelter for others. For many insects a heap of autumn leaves is the ideal place to hibernate through the winter.

Unfortunately, as our gardens and green spaces are built on and become more manicured, insects have fewer and fewer places to live, so what better way to help insects than to build them a home, all for themselves!

You will also be helping local birds and small mammals, many of whom rely on insects as a food source.

And the insects don't have to live all alone! you can build something that other animals can live in as well.

SO WHAT WOULD YOU NEED TO BUILD A BUG HOTEL?

Well the easy answer is anything you can find! You don't have to spend lots of money at a garden centre, DiY store or on the internet, just have a look around and use a little imagination.

WHERE TO SITE YOUR BUG HOTEL:

Many bugs and insects like cool damp conditions, so you can position your hotel in semi-shade, by a hedge or under a tree.

Putting the hotel close to other wildlife features, such as a hedge, 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, south facing.

Put your Bug Hotel on a level, even surface: the hotel may end up fairly heavy, so it will need a firm base.



Sky scraper bug hotel

Photo supplied by
Ben Dewhurst
TRUE Manager
Trust for Urban Ecology,
Ecology Park Gatehouse
Thames Path, London

**WHAT COULD YOU USE TO BUILD YOUR HOTEL?
TRY USING RECYCLED MATERIALS!**

Materials:

Palates or strips of wood
Roof tiles
Plastic and ceramic pipes of various sizes
Deadwood – sticks and logs of all sizes up to half a metre long
Logs drilled with various sized holes
Hollow bamboo canes
Bricks and concrete blocks (preferably with holes)
Plastic and ceramic pipes of various sizes
Cardboard tubes and corrugated card (keep them dry!)
Roofing felt
Stones
Crushed brick and concrete rubble
Straw
Hay
Dry leaf litter
Sand
Plastic bottles
Pen casings and drinking straws
Plant pots
Pinecones

The main structure in this bug hotel was made from discarded pallets.



Photo taken from the wildlife Trust website

This is just a short list of materials. You may come up with many other things, there are no rules.

BUT WHERE WOULD YOU GET ANY OF THESE MATERIALS?

Ask your friends and family.
Your own back garden
Your local authority Waste Management Department
Around your school
Shops
Factories

If you look hard enough all the materials you need can be found for free.

TO MAKE THE BUG HOTEL

LET'S START BY MAKING SMALL PARTS OF THE LARGER HOTEL



- SOLITARY BEES

Solitary bees live out their lives in solitude.

Indeed, the majority of bees are solitary, even if they are much less famous than the social honeybees. The solitary bees make single nest cells, rather than working with many other bees to raise huge numbers of offspring in shared nests.

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.

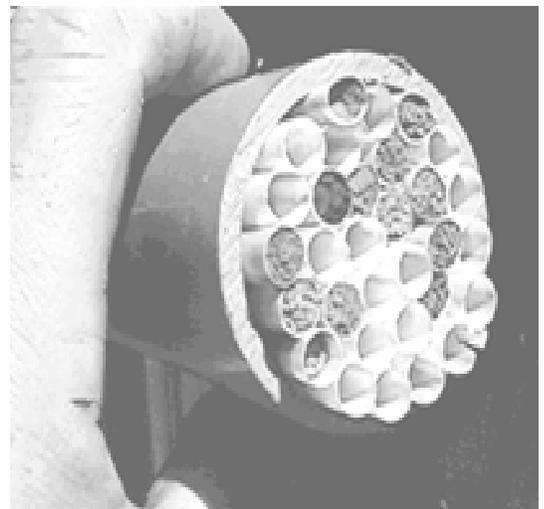
Hollow stems, such as old bamboo canes, or holes drilled into blocks of wood, make good nest sites for Solitary bees.



A clay pipe with bamboo canes pushed inside

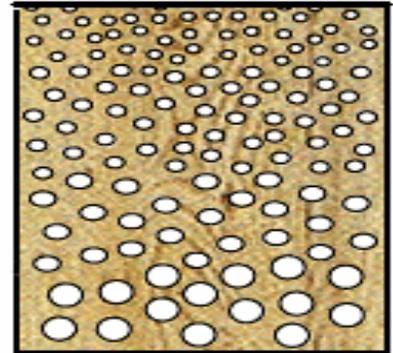
Holes of different diameters mean many different species can be catered for.

The pictures show 3 very easy ways to help solitary bees, and other insects will use them too.



This one is easy: a length of drain pipe fill with drinking straws

Block of wood with different size holes drilled into it.



- LACEWING HOMES



Lacewings and their larvae eat aphids and 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 old 2 litre pop bottle.

Photo taken from the Wildlife Trust website



- BEETLES

Most are shiny, blackish brown with some having a metallic sheen. The adults and larvae are carnivorous, preying on worms, slugs and other insects with their well developed mandibles. Some beetles eat living plants, some eat dead things, such as dead leaves, dead animals, and even animal faeces.



They spend lots of their time under old rotting logs, large stones, underground or in damp areas, depending on the species. Some climb into trees, shrubs, and crop plants to hunt, and there are hundreds of species in the British Isles.

Putting leaves, stones, and logs and sticks at the base of your Bug Hotel will provide a place for beetles to live.

- AMPHIBIANS

Amphibians are animals that can live both on land and water, and include Frogs, Toads and Newts. They eat insects and use ponds and lakes to mate and deposit their eggs.

They can often be found under rotting logs, holes in dry stone walls, or even in your new bug hotel! The very bottom of your bug hotel will in time become damp and will be a great place for amphibians to rest and hibernate, so leave some gaps for them to get in!



- LADYBIRD HOMES



Ladybirds are sometimes known as 'Gardeners friends' because they are great for controlling aphids.

Ladybirds like to hibernate in the nooks and crannies in dead wood, and a quick and easy way to mimic this habitat is by taking logs and drilling lots of holes into them, making a ladybird house.

A ladybird house will also be used by other insects in winter.

Adult assistance will be needed to make it.

You will need:

A piece of plywood (for the back)
logs (use sawn wood if logs aren't available, at least 10cm deep)

bamboo canes
small sticks
screws
small nails

wire
power drill
hand saw



1. To make the frame screw or wire together the logs.
2. Cut the plywood to the shape of the frame and nail it to the back.
3. Cut the bamboo canes and logs into pieces the same depth as the frame.
4. Use a drill to make holes in the logs, around 5mm in diameter.
5. Stack the bamboo and log pieces into the frame. Push them in as tightly as possible so they don't fall out.

6. Fill any gaps with small sticks or moss.
7. Make a loop from wire to hang it from.
8. Hang on a wall, ideally facing into the morning sun.
9. Position it near plants because ladybirds like to eat aphids.

If it is low down and near a pond it may be used by dragonflies and solitary bees too.



A REAL QUICK AND EASY ONE TO MAKE IS A 'TIDY' LEAF PILE

HERE IS HOW TO DO IT

1. **Make a tube:** Most garden centres sell chicken-wire or plastic mesh by the metre.

For this bug hotel you will need about one metre length of green plastic mesh, curled it into a tube and tied in place using four or five plastic cable ties.

2. **Put sticks through the tube at the bottom:**

Take some dead plant stems or twigs.

Poke them through the sides of the cylinder at the bottom. The twigs overlap to form a base.

This base prevents the leaves falling out of the bottom if you pick it up, and also stops the leaves touching the ground and helps to stop them getting too damp.

3. **Fill the tube:** with the twigs in place you can fill the cylinder with dead leaves



4. **Give it a lid:** put a piece of wood on top to stop the rain getting in (the wood has to be heavy so that it wont blow away).

5. **Top it up:** as the leaves in the hotel dry-out they will shrink, so try to keep some extra ones to top-up the tube.

6. **Secure it:** if your garden is very windy it might be an idea to make some v-shaped staples out of a wire coat-hanger and use them to pin the bottom of the cylinder to the ground.

Information taken from the bug life website

- **SO WHAT ELSE CAN YOU DO?**

Plant wild-flowers and herbs in your garden, school grounds or on your balcony. These will attract insects, especially bees and butterflies.

Think about installing a pond to attract amphibians and water loving insects.

But what ever you do remember you will not know if it will work unless you **TRY!**



Raised beds with a bug hotel built in.

Photo supplied by Heath Brown
Development Manager Corporate
BTCV Scotland

REFERENCES

Much of the above information was sourced from helpful people and organisations all around the UK, and we extend our thanks to those involved.

Photograph and information sources have been referenced, and below is a list of the main contributors.

Bug life

www.buglife.org.uk

RSPB

www.rspb.org.uk/

Wildlife Trust

www.wildlifetrust.org.uk/cheshire

BTCV

www2.btcv.org.uk