



David Domoney's Complete Guide to Making Your Own



Insect Hotels



Insect Hotels



What's in this guide?

- What creatures use insect hotels
- How to build one, including:
 - Containers
 - Filling and contents
 - Assembling the hotel
 - The right site
- What to do next

Plus extra wildlife projects for everyone to enjoy

Er, I don't want extra creepy crawlies in the garden, thanks!

There's no need to be squeamish! They won't hurt you. Don't worry about them coming in the house – they will have a hotel in the garden.

Plus they help keep pest numbers down, and also attract birds which also eat slugs and snails too! It's a win-win situation.

Our gardens are home to a huge range of living creatures. It's estimated that the average garden could hold 2000 insect species!

They play a very important role in the garden: eating pests, pollinating plants, contributing to the ecosystem and attracting other wildlife like birds.

But their numbers are dropping around the world, thanks to pesticide use and the loss of their natural habitats.

So it's up to us gardeners to lend them a hand. After all, they help us out!

Make your garden a safe haven for them by building an insect hotel.

What are insect hotels?

The word 'hotel' is perhaps misleading because this isn't short-term accommodation – some insects can spend up to nine months living in them.

These structures replicate the natural habitats of insects, providing space to create a nest over the summer.

Then during winter, many species hibernate in the hotel, emerging in spring ready to help out in the garden!

Who would use them?

Solitary Bees

Don't worry – these aren't lonely bees! 'Solitary' actually refers to their nesting habits rather than their lifestyles.

They do not live in hives or colonies like honeybees and bumblebees, so the females have to go out and find a safe nesting site.

There are over 200 species of solitary bee, and they do a great job pollinating the garden.

They are harmless and not aggressive. They rarely sting unless they get squashed, and they do not have painful stings like honeybees. They don't build honeycombs or swarm either.

Mason bees, mining bees and leaf-cutter bees are all types of solitary bee.

The species you have in your garden depend on where you live and what flowers you have nearby.

The most common varieties are red mason and the tawny mining bees.



How do they use the hotel?

Solitary bees need hollow tubes to make nests. The female bee fills the tube with a mass of pollen and lays the egg on that.

She then seals the entrance with a plug of mud or leaves. A long tube can hold several such cells.

Your insect hotel will be the bees' permanent home for nine months of its short life, as it develops from egg to larvae to fully-formed bee.





Basic Bee Hotel

Create a simple bee hotel using a few recycled household items.

You Will Need

- A large, empty plastic drinks bottle
- A pair of secateurs and sharp scissors
- Some hollow bamboo canes
- String

Great for kids!

What to do

1. Cut the top and bottom off the bottle to make a casing
2. Punch two holes in the bottle halfway down
3. Push the string through both holes to make a loop outside the bottle. Tie both ends and pull taut so the knots sit just under the plastic
4. Cut the bamboo to the same length with the secateurs, so the canes sit just flush of the bottle. If it's very tough, use a small hacksaw to cut it
5. Slot the canes into your plastic tube. They need to be packed tightly so they don't fall out when you tip the hotel up
6. Hang your hotel in a sheltered, sunny spot in your garden. Make sure it is level



Tip: Stand the bottle on one end as you pack it!
That way the bamboo canes won't fall out the other side!



Who would use them?

Lacewings

Lacewings are delicate, bright green insects with almost transparent wings and long antennae.

There are 14 different species in Britain.

Lacewings and their larvae consume a huge number of aphids, so they are a great help in the garden.

Encourage them to visit by creating a place for them to nest.

They will reward you by controlling pests – without the need for chemical sprays!



Lacewing bottle hotel

Make a cheap-as-chips lacewing house for adults to hibernate and lay their eggs in.

Cheap
and
easy!

You Will Need

- A plastic drinks bottle
- A pair of scissors
- Corrugated cardboard
- String



What to do

1. Cut the bottom off a large plastic drinks bottle using a pair of secateurs or sharp scissors
2. Roll up a sheet of corrugated cardboard and slip it inside
3. Hang the bottle from its neck in a shrub or tree



Who would use them?

Ladybirds

Ladybirds are probably the most loved member of the beetle family in Britain.

The two and seven-spotted are the most numerous and frequently-seen species.

Ladybirds and their larvae are also big aphid-eaters.

The adults are always looking for a safe place to lay their eggs, and they also hibernate over winter.



Pine Cone Ladybird Hotel

You Will Need:

- Pine cones
- Chicken wire
- Scissors
- String

What to do

1. Cut a length of chicken wire 50-80cm long
2. Make a pile of pine cones in the middle, and lift up the edges to make a bag around them
3. Fold in or cut out the excess
4. Tie the top of the bag together with string and hang the hotel in a sheltered spot in the garden



Tip: Press the pine cones into one another so the scales link and hold together.

You can also tie them together with string.

Other Insects

A huge range of insects is needed to keep your garden's ecosystem healthy and thriving. They help plants and other animals, and the loss of any species can have a huge impact on the rest of the system.

Beetles, mayflies, hoverflies and spiders are just a few of the hundreds of bugs would live in the hotel!



How to build an insect hotel

Want to make something a little more advanced? Create five star accommodation for your garden critters.

P.S. I made these entirely out of recycled materials! Challenge yourself to do the same.

STEP 1

Choose your container

This can be more or less anything open-fronted – I've used a picture frame, a wine box and biscuit tins, as well as an old set of storage drawers.

I painted the storage drawers with fence treatment to protect the timber from water damage. I then took the drawers out and screwed them together to make another container.

Simple tubular containers include drinks bottles and large piping, but be sure to block off the back. It will turn into a wind tunnel otherwise, which is no good for tiny insects!

If you want something very aesthetic, have a think about shapes.

Try putting smaller containers inside larger ones to create compartments. Create curves and circles in the design too.

If you are going to make multiple hotels, take inspiration from the garden designers at the RHS Chelsea Flower Show.

Think about how the hotels will hang together, and create a theme to unify them.



How to build an insect hotel

STEP 2

Choose your materials

It's best to use recycled materials. You'd be surprised what you can find lying around the garden.

Bamboo canes & plant stems

Chop up old hollow garden canes to create nesting tubes. Keep them to a similar length and make sure they don't have any splinters.

Plant stems are what many insects use in the natural environment. Chop up the hollow stems of shrubs and perennials.

Different diameters will suit different species, so aim for a good range of sizes.

Narrow tubes will be more popular than wider ones.



Drilled Logs

In the wild, many species of solitary bee nest in holes created by other insects in trees. You can replicate this with a log and a variety of drill bits.

Aim for a mix of diameters, between 2 and 8mm.

Drill in a slight upwards angle so the holes don't fill with rainwater. Make the hole quite deep but don't push all the way through the log, or you will create a wind tunnel.

Make sure you sand down the front, as splinters can catch on insects' delicate bodies and hurt them.

For added aesthetic, drill holes in patterns like swirls or stars – make your hotel attractive as well as functional!



Dry Leaves

A large number of insects make a home on the forest floor, under all the fallen leaves.

It's easy to replicate this with bunches of dry leaves pushed together.

Fix them in to the hotel with a piece of chicken wire, which leaves space for the insects to get in and out easily.



How to build an insect hotel

Pampas grass

Love it or hate it, pampas grass is a great insect hotel filling. You can use every part of the plant to create different textures and cavity sizes.

The blades of pampas grass are fluted and will create small tunnels for insects.

Try bunching them together, but be aware that they will shrink as they dry out. Make sure you pack plenty into your space.

Seed head stems are also much easier to cut than bamboo and will create a range of hole sizes as you cut from the bottom to the top of the stem.

This will accommodate loads of different species.



TIP: Tie bunches of stems, straw or pampas leaves together with elastic bands (loom bands are perfect) to hold them still and help you cut them to size.



Straw and hay



This is great material for insulating hibernating insects against the winter cold. Aim to get hollow tubes of different lengths and widths together in one bunch.

If you want to fill a large space with it, create smaller bunches held together with elastic bands.

Straw also works when combined with other materials as a gap-filler.

Cardboard

The thick card from the middle of a roll of wrapping paper is perfect for making small tubes suitable for insects and solitary bees.

Have some fun creating some interesting shapes by folding the paper at the end before you roll it.

Newspaper rolls or toilet rolls are also an ideal filler. Or roll up a length of corrugated cardboard – the tiny tubes are ideal for little critters!





How to build an insect hotel

STEP 3

Assemble the hotel

Once you've chosen your filling, now you need to put it all together! This is the fun part.

Think about the shapes before you start, and get any big bits like logs in first. You can fill gaps with smaller and more flexible materials later.

Choose one edge or corner to start, and begin slotting things in.

It's easiest to work methodically, starting from one end and working outwards.

Some materials may shrink as they dry out, such as pampas grass and plant stems, so pack them extra tight. You can always slot some more in later.

If you don't make it tight enough, parts may fall out when you hang it. But be careful not to crush the tubes of plant stems or insects won't be able to get inside!



STEP 4

Hang the hotel

Once your insect hotels are ready, you need to find the right spot in the garden!

Hotels should be hung about 1.5m from the ground.

You can also fix them to walls and fences with nails or strapping, but please don't nail into trees – use straps instead.

The best site is somewhere sheltered and warm, usually in dappled shade.

Bees prefer a sunnier spot, but they won't want to be in hot, direct sun. They should also be sheltered from driving rain.



What now?

Check for insects

Keep an eye out for visitors!

Bees and other nesting insects will block up holes when they have laid their eggs, so watch for tubes and gaps plugged with mud and leaves.

A huge range of critters will use the hotels, so keep watching on a warm day to see a host of insect activity.

Protect from rain

It's also very important to protect the hotels from the worst of the winter weather.

Heavy rain will get into the wood and cause it to rot. It can also break down the mud walls that the bees have created to secure their eggs inside.

If your spot is not sheltered from the rain, move the hotels in late autumn or early winter to somewhere more protected.

Don't bring the insect hotel inside your house over winter!

The insects need to be kept cool because they are hibernating! Store it in a shed or under a ledge, and put it back in early spring.

You can also create a roof from spare wood, making sure the lip protects the front of the hotel.

Beware the birds

Some birds, such as woodpeckers, attack the blocked-up holes looking for insect larvae to eat.

Protect your inhabitants by covering the front of the hotels with chicken wire if you see a lot of birds around. It won't affect the insects coming and going!



Attract more pollinating insects to your garden with pollen and nectar-rich plants!

[Read my top 10 here.](#)



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