

Build Your Own Modular Bug Home

A Guide to Creating a Haven for Insects

Bug homes, or bug hotels, are handmade shelters designed to support garden-friendly insects. From solitary bees and ladybirds to beetles and spiders, these bugs play important roles — pollinating plants, breaking down waste, and keeping pests in check. Building a bug home is a fun, hands-on way to support biodiversity right in your backyard or school garden.



What Is a Modular Bug Home?

A modular bug home is made up of different sections, each tailored to attract a specific type of insect. You can fill each part with materials and conditions that different bugs prefer — like damp logs for beetles or hollow stems for bees. This setup makes it easy to swap parts out, clean individual sections, or expand the home over time.

There are two simple ways to make it modular:

- **Use multiple small boxes or crates** – Connect them side-by-side or stack them like building blocks. Each box becomes a self-contained room for a different insect.
- **Use one larger box and divide it internally** – Add partitions using wood offcuts, bricks, plant pots, or tin cans to create separate compartments.

Materials for the Outer Structure

To build the main frame of your bug home, you'll need:

- A sturdy wooden box, crate, or drawer
- Chicken wire or mesh – to cover the front and hold materials inside
- Screws, nails, or staples – to securely attach the wire to the front
- Optional extras: bricks, pallets, or tiles for stacking and support

If you're working with a single box, try these ideas for creating sections:

- Wooden planks or sticks wedged in to make barriers
- Terracotta or plastic plant pots turned on their sides
- Tin cans or small containers grouped to form tidy pockets

Make it!

Fill each section with natural materials like pinecones, dry twigs, moss, or bark — based on what different bugs like (you'll find instructions for different bugs on the following pages). Once full, secure the front with chicken wire so everything stays in place while insects can still move freely.

STAG BEETLE

MATERIALS

✓	Old logs, branches, or tree stumps
✓	Dead wood chips & bark, pinecones, dry twigs for cover
✓	Soil and leaves to keep it damp
✓	Shaded nooks and crannies
✓	Coconut coir
✓	Moss
✗	Glossy leaves (like holly)
✗	Painted or treated wood inside the bug home

CONSTRUCTION

1. Stack logs or thick branches in a pile, making sure they touch the soil.
2. fill in some of the gaps with smaller things like wood chips or straw
3. Add bark, leaves, and twigs on top for extra shelter

LADY BUG

MATERIALS

✓	Hollow plant stems (bamboo, reeds, elder, sunflower stalks)
✓	Dry twigs & sticks
✓	Pinecones
✓	Straw or hay
✓	Wooden blocks
✓	Coconut coir
✗	Overfilling the house - they like airflows and layers
✗	Soil or compost

CONSTRUCTION

1. Layer in your larger materials, making sure to leave plenty of gaps and places the sunlight can shine in to
2. Fill a few gaps with loose handfuls of hay, coconut coir, or straw
3. Tuck in a few smaller pieces, like twigs, pinecones, or bark

SHIELD BUG

MATERIALS

✓	Dry plant stems
✓	Bundles of grass or hay
✓	Bark
✓	String
✓	Wooden blocks
✓	Pinecones
✗	Overfilling the house - they need to be able to crawl around the gaps
✗	Painted or treated wood

CONSTRUCTION

1. Tie up small bundles of dried materials, like plant stems, grass or hay
2. Add some loose twigs, bark, or larger materials around the bundles
3. See what shapes you can create with the bundles and larger things, think about making it an interesting path to crawl around

SOLITARY BEES

MATERIALS

✓	Dry bamboo canes or hollow plant stems
✓	Logs or wooden blocks with holes in them
✓	String
✓	Pinecones
✗	Loose or wobbly materials
✗	Dark or shady places - they need lots of sun

CONSTRUCTION

1. Tie bundles of bamboo tubes tightly together
2. Place logs or blocks of wood with holes in them into the house
3. Pack the bundles and blocks tightly together in the house - you want as little movement as possible

EARWIG

MATERIALS

✓	Small flower pots
✓	Bark
✓	Straw or hay
✓	Coconut coir
✓	Pinecones
✓	Wooden blocks
✗	Sunny or empty spaces

CONSTRUCTION

1. Fill as many small pots as will fit into the house with materials. You should layer different materials inside the pots
2. Place the pots into the house - make sure there is space so the earwigs can crawl into them
3. Fill any gaps with loose materials - like twigs, hay, or bark