Building an Insect Hotel

What is an insect hotel?

An insect hotel is a yard or garden feature that attracts beneficial insects like solitary bees, syrphid flies, lady bugs, beetles, and moths to your yard. These animals benefit the gardens overall health by pollinating the plants or eating pests like aphids. Insect hotels come in many different shapes and sizes from small hanging hotels, to large hotels made of pallets. The wonderful thing about insect hotels is they can be made from “found” or recycled materials.

What materials will I need?

As stated above insect hotels can be made from anything! Some easy to find and useful materials include:

- Old 2 liter bottles
- Cinder blocks
- Leaves from your yard
- Pieces of scrap wood
- Pine cones
- Small logs
- Bamboo (the holes are already there!)

What are the steps?

Below are two different ways to create an insect hotel. The first one is a hanging hotel. It looks a lot like a bird house and is a quick craft to make individually. The second hotel involves more materials and can make for a great classwide project.

For a hanging hotel:

1. Gather your materials to construct the main piece. This can be scrap wood, a small plant pot, or an old bottle.
2. Piece together the main structure. For the bottle, cut off one end. The plant pot is already completed. If you are using scrap wood, nail or glue together a simple box with one open face and a 1-2 in gap at the top. This gap will be used later to hang the hotel.

3. Fill the structure with sticks, bamboo, or wooden blocks. If you are using wooden blocks or larger sticks drill holes that are 1.5 in. in diameter and about 6 in deep. This hole size suites carpenter bees the best.

4. Tie a string around the bottle and pot to hang your newly constructed insect hotel. For the wooden structure drill two holes in the top fo your back piece and thread string through to hang. You’ve completed your first insect hotel!

This video from the youtube channel Growveg, details the steps taken for a hanging insect hotel, if you need a visual aid. The shingles are optional. Make sure if you use a drill an adult is present, or have them drill the holes for you.

For a pallet hotel:

1. Gather your materials. The main structure can be made of scrap wood, plant pot, or old pallets. You will need something like bricks, cinder blocks, or old plant pots to separate the levels of your hotel.

2. Construct the frame. You will need to layer the pallets and cinder blocks (or other material) to create gaps.

3. Once the main framework is built, further divide each level into cubbies using wooden planks, sideways plant pots, pieces of old tire, or bricks. This will make it easier to fill.

4. Gather your filler. This could be pinecones, leaves, cardboard, bamboo, wood chips, or anything you can think of.

5. Fill each cubby with a different media. Keep the decaying matter like leaves toward the bottom for beetles and other decomposers to find. You can put the small “hanging hotels” from above in the cubbies to make a pollinator level. Just make sure to fill the nooks and crannies to prevent wasps from creating nests.

This article, from insteading.com has some fabulous larger hotels to draw inspiration from! This video from the wildlife trust’s youtube channel shows you how to make a version of the hotel discussed above.

Things to keep in mind:

1. Fill each space to keep wasps from building nests.

2. These don’t have to be “perfect”

3. When picking a spot for the insect hotel to be placed, find somewhere with low traffic and good shade. The insects will gravitate toward a quieter area.
What now?

After you have constructed your insect hotel and placed it in your yard or garden, give it a few weeks. After you’ve let it sit outside for a while, return and see what insects are using your hotel. Document and research the insects you find. You can discuss what insects lives in which cubbies. Why did that insect nest where you found it? What “job” does that insect have? Does it make sense that your insect as found nesting in its cubby?