

Insect Hotels

<http://www.inspirationgreen.com/insect-habitats.html>

Provide a home to pollinators and pest controllers. Tidy gardens, lawns and lack of dead wood, mean less and less habitat for wild bees, spiders, and ladybugs.



A wildlife stack can harbor numerous beneficial insects and amphibians. This habitat was made up entirely of recycled materials, the support is made up of old pallets.
Image copyright: Cheshire Wildlife Trust, cheshirewildlifetrust.org.uk.



Wildlife stack. Some creatures like it damp, others (like bees) dry. Ladybugs hibernate during winter in piles of dry twigs and leaves, which you can provide in your insect hotel. Might be better to think of it as habitat or a condo, as you really want long term residents.
Photo by Sarah Barker at the Shrewsbury flower show. www.flickr.com.



Bug hotel in Oakham, UK at the Lyndon Nature Reserve, built by Paul Stammers and Michelle Househam. Although often called a hotel, some bees will live in a nest for up to nine months as they develop from egg, through the larval stage, into adulthood. Photo by Anne Crasey. www.flickr.com.



Solitary bees like sun. The ideal location for an insect hotel is in full sun and protected from the weather. This will ensure that the heat required for the brood is present, and wind or rain will not destroy their nest. Provide that, and the flowers, and they will come.
www.sav-überlingen.de.



Insect hotel in Hamburg, Germany. Wild bee houses have been popular in Europe for many years. insektenhotel24.de.



Insect hotel at the Heimanshof, North Holland. Many solitary bees are very small and you may not have realized they are bees. More species of bees live alone, than in hives. Wild bees are considered to be as important to the food chain as bumblebees and honeybees.

Honey bees are not native to the Americas (see below). Photo by Bob Daamen.

www.flickr.com.



Insect home or bug bank, on the grounds of Oxburgh Hall in North Norfolk. Because solitary bees have no hive to defend, they are not aggressive, they rarely, if ever, sting. Photo by Mabvith. [flickr.com](https://www.flickr.com/photos/mabvith/).



Insect hotel in Helmsley, UK. Hotels should be relatively close to flowering herbs, wild flowers and native shrubs and trees to cover the food needs of the insects. Photo by Munki Munki. www.flickr.com.



Solitary bees are different from social bees (such as honey bees) in that every female is fertile and makes individual nest cells for her offspring. Some native bees are ground nesters but more than 30% are wood nesters. The female wood nester will look for pre-existing cavities such as hollow stems or holes in wood that are just the right size to use as a nest.

The female typically creates a series of compartments (cells) and within each cell she will lay an egg on top of its future food source. The female bee will make numerous foraging trips to flowers collecting pollen and nectar that she will pack into each cell. It is on these trips that the female wild bee acts as a pollinator for plants and food crops. It can take anywhere from 20 to 30 trips to fill each cell with food. When she is satisfied with the amount of food, she lays an egg, compartmentalizes the cell, and moves on to creating the next cell. When she feels the chamber is complete, she seals off the end, and moves on to filling a new chamber. The last cells (those closer to the opening) contain eggs that will become males, as males hatch before females. Although each species is different, mason bee females live for about a month, and can build a cell nest for about two eggs every day. The larva hatches from the egg after a week or more and begins to eat the provided pollen and nectar. After the food has been eaten, the larva spins a cocoon and pupates within the cell. By the end of summer or early fall, the bee transforms but remains in the cocoon as an adult throughout the winter. In spring, the males begin to emerge by chewing their way out. The females, which are almost always in the deeper cells of the tunnel, emerge a week or two later.

While solitary females each make individual nests, some species prefer to make nests near others of the same species, giving the appearance to the casual observer that they are social. Nest photo by Mike N. of Vancouver, BC.



Insect hotel in Hoofddorf, Holland. Drilled 4 x 4s, logs, twigs and sticks. There are many different species of solitary bee, all are excellent pollinators. Photo by Bob Daamen, www.flickr.com.



Insect hotel in St. Poelten Landesmuseum, Austria. That shutter will keep the birds out.
Photo by Klasse im Garten, flickr.com.



Bug stack. Keep an eye on activity as some ants will eat bee larvae. www.infojardin.com.



Insect Hotel. Photo by Steve Leverett, flickriver.com.



Bug Mansion. Ladybugs are always looking for places to hide and escape from the weather.
By the Harrogate District Biodiversity Action Group. [flickr.com](https://www.flickr.com/photos/harrogate-biodiversity/).



Wildlife stack by Dawn Isaacs. How-to: www.guardian.co.uk.



Insect Condo in Scotland. Photo by Sheila, flickr.com.



Wild Bee Hotel in Austria. www.flickr.com.



Bee Condo. Photo by Sissi de Kroon. www.flickr.com.



Insect Hotel in a private garden in Austria. www.klasse-im-garten.at.



Insect Hotel, Ebersberger Forest, Bavaria. Photo by Terry Cooke. www.flickr.com.



Insect Hotel (Zen-like). www.wildbienen.de.



Place cut bamboo in metal pipes. Photo by Bob Daamen. www.flickr.com.



Wire screening keeps the small stuff in place and protects against birds. Photo by Joeke Pieters. www.flickr.com



Wild bee house in the Black Forest, Germany. Photo by Michael Bohnert. www.flickr.com.



A fun learning project for kids.



Insect hotel in the Netherlands, close-up. www.flickr.com.



An 'Insect hotel' at the Durrell Wildlife Conservation Trust in Jersey ©RLLord.
www.sustainableguernsey.info.



Insect Habitat assembled from foraged organic materials and reclaimed scrap, a habitat-in-waiting for bees and other native creatures. By Kevin Smith and Lisa Lee Benjamin.
www.floragrubb.com.



Insect Habitat at The Garden Tulln, Austria. www.flickr.com.



Insect Hotel in Germany. www.wildbienen.de.



Bug hotel by Lisa and Andrew Roberts (Living Willow Wales) at Ysgol Pontrhydfendigaid.
andrewroberts.net.



Bug hotel created by kids at the RHS Flower Show, Tatton Park. www.flickr.com.

Honey bees represent only a small fraction of the approximately 20,000 known species of bees. No honey bees existed in the Americas before their introduction by Europeans.

Also known as:

Bug condos, bug hotels, insect habitats, wildlife stacks, insect boxes, insect houses, insect walls, wild bee walls, insect accommodation, wild bee houses, solitary bee walls or wild bienenhaus.

Who lives in Insect Hotels:

Wasps: cuckoo wasps, parasitic wasps and many more species...

Dragonflies, beetles, lacewings, ladybirds. moths, spiders, frogs, newts, hedgehogs, et al...
www.wildbienenstand-neuhof.de

Bees: leafcutter bees, masked bees, mason bees, digger bees and hundreds more...

Bumblebees nest in hollow trees and in rodent burrows. They are among the first bees to emerge in the spring and the last to disappear in fall. They are superb pollinators of tomatoes, blueberries, cranberries, clover, and more. Bumblebees can “buzz pollinate” by hanging on a flower and vibrating with their flight muscles to release pollen.

Mason and Leafcutter Bees select existing hollow stems and bored holes in which to build their multiple nest chambers. They carry pollen underneath their bodies rather than on their legs like most bees, and the pollen falls off rather easily. Mason bees are first-class pollinators of many fruit crops, toiling long hours and in inclement weather. Squash and Gourd Bees help pollinate up to eighty percent of squash, pumpkins, and melons. They are ground nesters, so it is important to leave some open dirt for these very important bees as well.

Buy one premade:

www.folksy.com

www.arkwildlife.co.uk

www.etsy.com

www.etsy.com/andrewsreclaimed

How To:

For a simple hotel, drill holes 1/4" to 3/8" in the ends of logs, or cut some bamboo sticks of equal length, and stuff in a wooden box. Layer old pallets. Logs, drift wood, cut bamboo, straw, dry reeds, roofing tiles, cob. Do not use softwood for bees, as the drilled holes might fill with resin and suffocate the bees! Make sure all wood is free of chemical preservatives.

www.foxleas.com/bee_house

www.merthyr.gov.uk

www.resonatingbodies.wordpress.com

www.guardian.co.uk

Building an insect habitat: www.cheshirewildlifetrust.org.uk



Lots more inspiration here: www.flickr.com/groups/insecthotels.

More Info:

Lots of info here (use Google Translate): de.wikipedia.org

Creating a Bumble Bee Nest by the USDA: ars.usda.gov

Farming Native Bees in Delaware: dda.delaware.gov

Enhancing Habitat for Wild Bees: www.xerces.org

Lots of answers to your *Mason Bee* questions: www.crownbees.com

The above site suggests that drilled holes and bamboo are not the best for *mason bees* after just one or two seasons, for parasites or disease might also invade these homes. They state that mason bees prefer reeds or paper straws, these also allow you to observe the mason bee's nest. Yet they say even the reeds might attract pests after three years. The company Crown Bees suggest that trays which are like a block of drilled wood that comes apart for cleaning are best. See the tray video here: www.youtube.com.

Some suggest spraying your existing drill holes every couple of years with a 5-10% bleach solution to keep them free of disease. You might also wish to redrill the holes in case anything is stuck in there (after the bees are gone). Actually it would probably be best to have two sets of nesting blocks, after each washout, drill and store inside, and put out the alternating block.

What to use and/or include

The following list is in no way exhaustive, feel free to come up with your own ideas.

Pallets, or strips of wood

Pen casings and drinking straws

Cardboard tubes and corrugated card

Straw, hay, dry leaf litter and moss

Plant pots

Plastic and ceramic pipes of various diameter

Roofing felt

Stones

Bricks and concrete blocks, preferably with holes

Roof tiles

Hollow bamboo canes

Dead hollow stems cut from shrubs and herbaceous plants

Pinecones

Logs drilled with various sized holes

Crushed brick and concrete rubble

Succulent plants

Sand