

# CREATE HABITAT AT HOME



Biodiversity (the variety of plants and animals) in urban areas such as Sydney has changed dramatically from its original state. Most of the original vegetation has been cleared, and many of the animals that are here today have adapted well to urbanisation, and are common and widespread.

However, many species have declined and are now very rare in Sydney. These include plants, frogs, lizards, small birds, microbats, and probably many species of invertebrates, such as butterflies and native bees.

Unlike the common species, these ones need particular types of habitat. For example, frogs need ponds to breed in, many lizards need rocky features to shelter in and bask on, and small birds need dense shrubby vegetation to shelter, forage and nest in. These habitat types have become very uncommon across Sydney. Where they remain, urban development often isolates them from other similar habitats. This makes it even harder for many species to survive – without habitat connectivity, isolated populations continue to decline and usually disappear altogether.

**While your Council is working hard to restore habitats on public land, they need your help to improve habitat connectivity!**



## WHAT YOU CAN DO

You can create habitat in your backyard, balcony, or the common area of your apartment block.



*Habitat created in a small backyard in inner city Sydney*

A map of potential habitat corridors was prepared for a large part of Sydney in 2016. Backyard habitat created in the mapped corridors could act as 'stepping stones' that enable many species to move through the city, to and from other, larger habitat areas, such as council bushland reserves and national parks. The more habitat that is created, the more effective the corridors will become – meaning that more of the uncommon species will be able to survive here.



Having wildlife habitat around is good for you! Research has shown urban biodiversity has many health benefits and can contribute to your well-being – it's hard not to feel happy when you see fairy wrens hopping around your garden for example, or a butterfly fluttering past your window. Frogs and lizards are great at controlling garden pests too, and native bees can help pollinate your fruit and vegetables as well as the native plants in your habitat garden. And as well-designed habitat gardens can be very attractive, they can also contribute to the value of your property.



The habitat corridor map is available online at <http://greatersydney.lis.nsw.gov.au/resource-hub/web-tools>. You can type in your address to check whether your property is in a mapped corridor. Even if it isn't, you can still make a positive contribution to urban biodiversity in your area by creating habitat on your property.



Part of the potential habitat corridor map – available online

The habitat corridor map was prepared for the Connected Corridors for Biodiversity project, by the Southern Sydney Regional Organisation of Councils (SSROC) and Greater Sydney Local Land Services (GSLLS), with funding from the Australian Government through the Sydney Coastal Councils Group (SCCG) Sydney's Salty Communities program.





## TYPES OF HABITAT YOU CAN CREATE

The following are easy to create, and perfect even or small spaces. The ones that are suited to balconies are highlighted, but if you live in an apartment, why not get a few residents together to see what you can create in the common garden areas as well? You might even be able to create some rooftop habitat. And if you're lucky enough to already have some bushland on your property, there's still probably potential to improve its condition and habitat value.

**Dense shrubs, long grasses and vines** are important for many small birds. They like a range of native shrubs and grasses of varying heights and sizes, positioned close together so that in time they will create a dense thicket. Some exotic species (such as Wisteria, Plumbago, and Viburnum) also make good small bird habitat, but large-flowering Grevilleas and plants that produce a lot of fruit are not recommended, because they tend to attract common, large, aggressive birds like the Noisy Miner that chase the small birds away. Many shrubs and long grasses are suitable for pots, so this type of habitat is suitable for balconies and paved courtyards. Trellises and raised and hanging planters can be used to make the most of the available space.



**Ponds** with native reeds and fringed by long grasses and sedges will attract frogs to your garden. You can also create a pond using a large pot, half wine barrel or similar – basically anything that holds water! Try to make the pond as large as possible – preferably at least 1.5m diameter – to attract a variety of frogs. If that's too large for your space, don't worry – a small pond will be fine, as there are some frogs that will use ponds of any size. Build it and they will come! If you have a swimming pool that you no longer use, it can easily be converted into a very attractive pond – just stop chlorinating it and add some plants in and around it. Converting your pool has the added benefit of reducing maintenance costs, and you still should be able to swim in it if you want to, as the water quality should remain suitable.

**Rock features**, such as sandstone retaining walls, rockeries and even strategically piled boulders or bricks are great habitat for lizards. Many also like to shelter beneath fallen logs and branches, and will also use pieces of plyboard, corrugated iron, terracotta roof tiles or polypipe placed on the ground.



**Bird baths** are another great way to attract birds, and can also be suitable for balconies. Like the frog pond, it doesn't matter what they're made from, as long as they hold water! Just make sure they are shallow (just a few centimetres deep is fine), and position them in an open area, close to dense vegetation if possible.

**Stingless native bee hives**, which you can buy online and are suitable for any space, including balconies. Try to place your hive in a sunny spot and where you can easily see it because the bees are fascinating to watch!

**Artificial nests** for native bees, which can be made by drilling holes into rammed earth bricks or blocks of hardwood, or by cutting up branches of Lantana, Hydrangea or grape vines, tying them into bundles, and hanging them from a small tree branch.



**Roost boxes** for microbats, which you can make yourself or buy online, and can be very important for microbats to roost in during the day. The boxes need to be attached to a large tree (at least 30cm diameter) at a minimum height of 4m. There are different box designs available – it's best to do some research online, or contact your Council, about which type of box is best for your area, and about the best way to install it.

**Nest boxes** can also be installed in large trees to provide habitat for birds and possums. Again you can make these yourself or buy them online. Try to choose a box design that will be used by less common species, such as pardalotes or rosellas.

**Food plants** for butterflies and their larvae. Butterflies in Sydney tend to feed on the nectar of blue, purple, cream and white flowers, so try to find plants with these. The larvae of some species feed on native grasses so plant lots of these too.



**Enhance your bushland** – if there is bushland on your property, you might be able to enhance it by removing weeds, which should encourage more native plants to germinate. You can also plant native species to assist the natural regeneration process. Take care when removing weeds though, as some provide valuable habitat for fauna species – for example, small birds love Lantana. If you've got a large area of weeds, it's best to remove them in stages and wait until replacement habitat has established before undertaking the next stage.



**The illustrations below show how you can incorporate the above features into your home**



*Habitat features in a small backyard (left) and on a balcony (right)*

## **FURTHER INFORMATION**

For further information contact your council or refer to the following websites:

**Frog and Tadpole Study Group:** <http://bit.ly/2gF9SkZ>

**Ku-ring-gai Council's Pool to Pond program:** <http://bit.ly/2eBczDd>

**Birds in Backyards:** <http://bit.ly/2iUsJJe>

**Melbourne Zoo 10 Steps Butterfly Gardening:** <http://bit.ly/2ewBPqH>

**The Butterfly and Other Invertebrates Club:** <http://bit.ly/2x3DXS3>

**Bees Business:** <http://bit.ly/2wA4J18>

**Aussie Bee:** <http://bit.ly/2x11EMK>

**Australasian Bat Society:** <http://bit.ly/2x46iaV>

**Habitat Stepping Stones:** <http://bit.ly/202qNKZ>

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