

Pollinator Links™ are urban wildlife corridors that use backyards like yours to save threatened wildlife species while adding colour and fun to your life as birds, butterflies and bees visit your home.

Pollinator Links can use any bit of city or urban space containing flowering plants. As few as one in ten backyards re-created as Pollinator Link gardens can form wildlife corridors linking patches of urban bushland, ensuring a safe home for wildlife at risk of local extinction or destruction by bushfire.

Surprising species diversity still exists in small islands of urban bushland. Mt Gravatt Conservation Reserve has 286 native plant species and 45 butterfly species. The urban matrix of roads, houses, shopping centres is now recognised as an emerging or novel ecosystem for wildlife. To create wildlife corridors in these novel urban ecosystems we need novel solutions.



Pollinator Links are stepping stones comprised of backyards, school grounds, local parks and community gardens. These create corridors allowing wildlife to move between island habitats.

Be part of a Pollinator Link

Each Pollinator Link garden will provide a different mix of water, food and shelter, as some will attract butterflies while others attract birds. Together, they will combine to meet the needs of all wildlife species.

With three easy steps you can make a powerful contribution to wildlife and your community. As part of a wildlife corridor your garden will become known to local wildlife as a reliable site for water, food and shelter. As part of a community project to link isolated island habitats you will be part of something much greater than just your own backyard.

Birds

Birds in Backyards: www.birdsinbackyards.net

Birds Queensland: www.birdsqueensland.org.au

Nest boxes for wildlife - A practical guide

Alan & Stacey Franks

Wildlife Friendly Netting:

www.wildlifefriendlyfencing.com

Butterflies

Butterfly and Other Invertebrates Club Inc.:

www.boic.org.au

Brisbane Insects:

www.brisbaneinsects.com/brisbane_butters

Create More Butterflies

Frank Jordan & Helen Schwencke

Native Bees

Aussie Bee - www.aussiebee.com.au

Australian Stingless Bees

- A Guide to Sugarbag Beekeeping John Klumpp

Compilation: Sandra Tuszynska and Michael Fox

Initiative of:

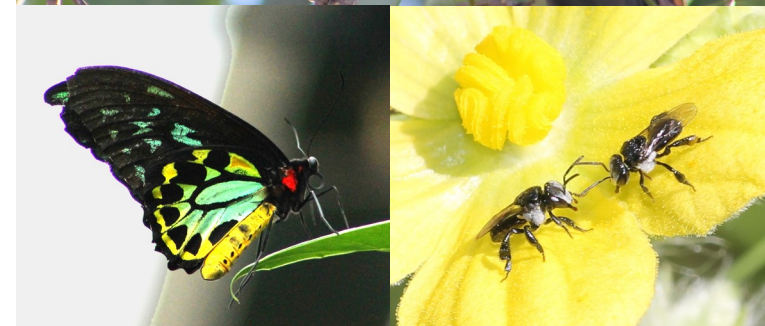


Supported by:



Dedicated to a better Brisbane

Three Easy Steps to vibrant backyards



**You can make a difference.
Make your backyard garden
a safe haven for wildlife.**

www.pollinatorlink.wordpress.com

pollinatorlink@gmail.com

Twitter: @pollinatorlink



Three Easy Steps to vibrant backyards

Step 1 Provide a source of water

Step 1 Water

All animals, including birds, butterflies and native bees, need water to survive in our hot dry summers.

Although birds can extract some moisture from their food, most drink water every day. Birds also use water to cool down and bathe, cleaning feathers and removing parasites.

Step 2 Food

Birds feed on some combination of seeds, insects or nectar depending on species and life-stage.

Butterfly caterpillars require specific host plants to feed on and butterflies require flowers for nectar.

Bees are skilled nectar and pollen collectors and are can feed from many different flowers.

By carefully selecting garden plants that provide food for birds, butterflies and bees, you will attract them to your garden and provide nourishment.

Step 3 Shelter

Some bird species require nest hollows and some need dense shrubbery for nesting and protection.

Native stingless bees need a hive. However, most of our native bee species are solitary and can be attracted with a simple home-made Bee Hotel.

Front cover: King Parrot *Alisterus scapularis*,
Richmond Birdwing Butterfly *Parastolochia praevenosa*,
Native Stingless Bees *Trigona species*



Birds

Who said bath time has to be serious?

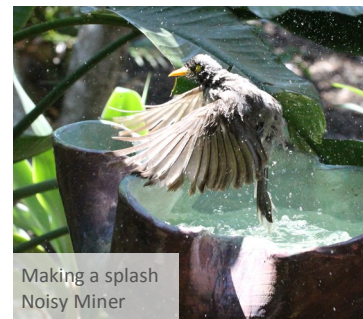
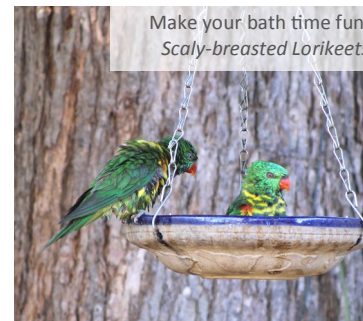
Install a bird bath and sit back to watch the fun. In our hot summers a backyard pool attracts family and friends. A birdbath brings feathered friends to your backyard. You can provide a low cost water container for birds or an elaborate fountain.

Birds love the sight and sound of moving water and it prevents mosquitoes from laying eggs. A dripping water bottle above your bird-bath will create water movement or you can install a solar pump and fountain.

Some birds like a gentle slope so they can slide slowly into the water and some just fly straight in.

Place the bird bath about 3-5 m away from a tree or shrub with branches or a perch that allows birds to see around to check for predators and allows them to hop in and out of the bird bath safely.

Cats and birds don't mix. Hanging a bird bath or raising it off the ground creates a safe place for birds.



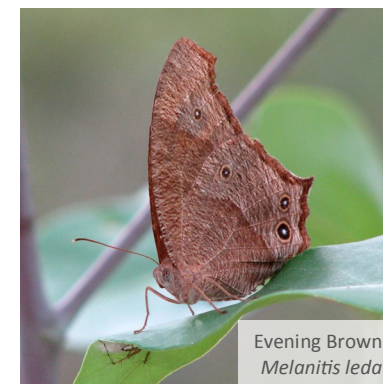
Butterflies and Native Bees

Create a **Puddling Place** for butterflies and bees.

Creating a safe place for butterflies or bees to land and drink may be as simple as placing islands of stones in your bird bath. Bees in particular can drown when accessing water so damp stones allow bees to land and suck up moisture.

A Puddling Place is a dedicated watering place for butterflies that allows access to water with salts and minerals from the soil. Male butterflies take in extra salts and minerals to incorporate into their sperm. When transferred to the female these salts and minerals improve the viability of her eggs.

A Puddling Place may be as simple as a damp patch of ground or you can re-purpose an unused plant-pot saucer. A scattering of rocks, a handful of dirt, add water then choose a spot in your garden protected from the wind.



Step 2 Create different food sources

Food - Birds

Each bird species has specific food preferences so you can either plant food plants for a certain species of birds or by planting native plants in general provide food and shelter for birds and other wildlife.

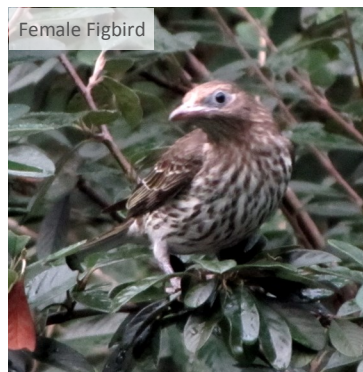


Nectar eating birds like honeyeaters and lorikeets feed on and pollinate a range of attractive native species including grevillea, callistemon, melaleuca and eucalypt. Colourful species like Rainbow and Scaly-breasted Lorikeets will flock to your flowering natives.

Nectar eating birds like Noisy Miners also eat insects, particularly in spring and summer when feeding chicks.



Fruit eating birds like Figbirds, Koels and Fruit Doves will visit your garden for Dianella berries, Lilly Pilly and Quandong fruit.



Fruit eaters may eat your tomatoes or paw-paw. Wildlife friendly netting - approximately 2mm woven mesh will protect without danger to birds. Choose netting that you cannot poke your finger through.

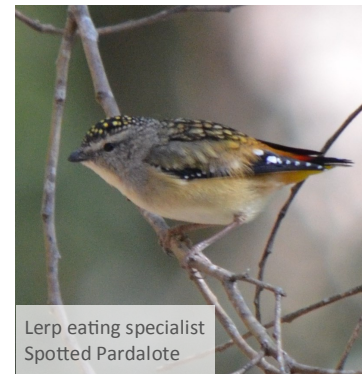
Seeds are important food for many birds. Pale-headed Rosellas and Crested Pigeons like to feed on the ground so grow natives like Kangaroo or Paddymelon Grass to feed birds and caterpillars of Evening Brown butterflies.

Brisbane Fringed Wattle and Sickle Leaved Wattle will add winter colour to your garden and seed for King Parrots and caterpillar food for Tailed Emperor and Imperial Hairstreak butterflies.



Insect eating birds like Fairy Wrens, Pardalotes, Magpies, Butcherbirds and Kingfishers provide valuable pest control services in your garden.

Magpies can often be found hunting lawn grubs while the Sacred Kingfisher will swoop down from a branch to snatch that grasshopper eating your bushes.

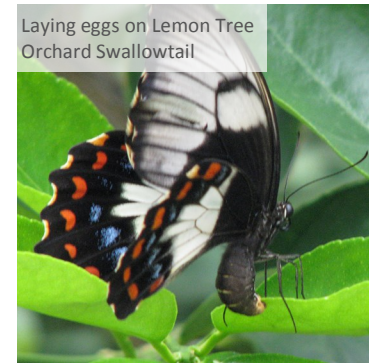


The cute Spotted Pardalote is a specialist in catching Lerp or Psyllid insects which attack Lilly Pilly and Eucalypt trees leaving pimple like growths on leaves.

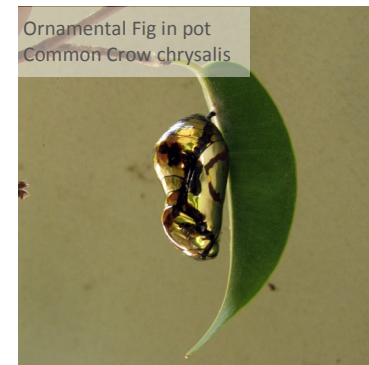


Food - Butterfly Caterpillars

The key to having more butterflies in your garden is to grow plants the caterpillars feed on. Some caterpillars have adapted to exotic species closely related to their native host plants, like citrus trees. However, many butterfly numbers have dropped as their particular native host plants have disappeared with urban development.



Caterpillars will eat leaves of plants in your garden. Mostly plants will not be damaged and may benefit from the free pruning. Importantly, caterpillars will only eat their particular host plants leaving the rest of your garden untouched.



Native plants like pretty Love Flower *Pseuderanthemum variable* or bush foods like Native Mulberry *Pipturus argenteus* provide food for a number of different butterfly species.



Remember, chewed leaves mean more butterflies. Avoid pesticides and invite insect eating birds to manage the caterpillars in your garden.

Step 2 Food - Native Bees

Blue Banded Bees' special "buzz pollination" services which European Honey bees cannot provide, are needed by vegetables like tomatoes, kiwi fruit, eggplants and chillies. To get the pollen the bee uses its flight muscles to shake the male reproductive flower parts (anthers) to dislodge pollen.

Blue Banded bees are expert foragers, visiting around 1,200 flowers a day within a foraging range of 300 metres. Attract Blue Banded bees to improve your tomato crop by growing basil, lavender, rosemary, lemon balm or passion fruit near your vegetable garden.

Leaf Cutter Bee females cut perfect discs or ovals from leaves of roses or native ginger, then carry the leaf circles between their legs to construct cigar-shaped nests in holes in timber. They are good pollinators for blueberries and carrots. Leaf-cutter and Blue Banded bees are solitary bees without hives to defend and only sting if handled.

Stingless Bees are social bees with one queen. You can keep a hive in your backyard to rob for honey. About twelve species of these small bees (3-5mm length) exist in Australia providing valuable pollination services for Macadamia Nut crops.



Collecting nectar
Blue Banded Bee



Discs cut from Native Ginger
Alpinia caerulea



Collecting Pollen
Stingless Native Bee

Step 3 Shelter for safety and breeding

Birds

Birds like Rainbow and Scaly-breasted Lorikeets, owls and Kookaburras nest in tree hollows typically found in trees more than 150 years old. We can re-create these breeding hollows in our novel urban ecosystems by installing nesting boxes.

The shortage of nest hollows means some smaller and less aggressive birds like Scaly-breasted Lorikeets and Pale-headed Rosellas are disappearing from our backyards.

Nest boxes are not difficult to build and small changes in design like smaller entry holes allow you to make homes that only Scaly-breasted Lorikeets can use. Or you can make a Kookaburra or owl box that meets their special needs.

Nest boxes are a great source of fun and learning when we create them ourselves: watch as parents feed and teach chicks to fly.

Your local Men's Shed may be willing to build boxes to help local wildlife.



Termite nest home
Kookaburra



Rental inspection
Pale-headed Rosellas



Men's Shed nestbox
Rainbow Lorikeet chicks

Shelter - Native Bees

Australia has over 1,500 solitary bee species that normally lay eggs in autumn to hatch in spring, ready to pollinate native plants, backyard vegetable gardens and agricultural crops. The solitary habit and wide species diversity reduces the risk of losing pollinators for our food crops. By providing Bee Hotels in your backyard you can help breed next year's pollinators and strengthen our food supply.

Blue Banded and Teddy Bear Bees nest in holes in the ground, typically borrowing in banks.

A backyard Bee Hotel can be an old concrete block or PVC pipe filled with mud.

Kids in Mud = Fun.

Leaf Cutter and Resin Bees love holes in timber/bamboo. So recycle some old hardwood fence posts, drilling holes of sizes ranging from 6 to 12mm then plant to post as a garden feature. Alternatively cut lengths of bamboo allowing about 150mm deep holes and stuff into some PVC pipe to hang in a tree.

Stingless Bee hives can be purchased for installation in your backyard. You can safely stand right beside the hive and watch as the bees return with yellow or orange pollen on their legs. Hives produce a small amount of honey each year.



Bamboo Bee Hotel
Leaf Cutter & Resin Bees



Concrete Block-mud Bee Hotel
Blue Banded & Teddy Bear Bees



Inside Stingless Bee Hive
Trigona species