

An introduction to creating small bird habitat

By Sue Stevens, Bev Debrincat and Louise Brodie

Watching small birds in your garden is a delight. You might catch sight of the red flashes as small red-browed finches dart through bushes, or hear female wrens chattering amongst themselves about the wonderful blue coloured male showing off. These are some of the delights you experience when you have small birds using your garden as their home or playground.

The natural habitat of many small birds (birds that are less than 20 cm long) is patches of dense vegetation within bushland. With urban settlement, little dense vegetation remains and what does remain is in fragmented and isolated pockets. This leaves very few areas in which small birds can live, breed and take shelter when threatened.

建立小型的鸟类栖息地的介绍,

苏·史蒂文斯, Bev Debrincat 和路易斯·布罗迪

看着小鸟在你的花园里是一种喜悦。当红色的小白眉雀飞入灌木丛里的时候您可能会看到红色的闪烁, 或者听到女鸫鸫叽叽喳喳在讨论那只正在向她们炫耀的奇妙蓝色公鸟。这些是一些愉悦你的经验, 当你有小鸟在使用你的花园当成自己的家或游乐场。

自然栖息地的许多小型鸟类(不到 20 厘米长的鸟儿)是在灌木丛中茂密植被的组成部分。随着城市的建设, 小密植被能够保持的部分都是分散和孤立的。这使得小鸟儿赖于生存、繁殖和躲避威胁的场所十分罕见了。

These last refuges may be all native plants or all weed plants or a combination of both. In our urban areas sadly often the small birds are only found in the "waste land" areas which are totally overgrown with weeds. In this situation what is bad is in fact good. Bad weeds do make good habitat! In fact, in many urban areas, they are the only habitat small birds have left. This tells us a lot about the requirements of small birds and something about how we should be managing our gardens, parks and bushland. It illustrates the structure of what we need to provide if we wish to save small birds, such as, superb and variegated fairy-wrens, white-browed scrubwrens, silvereyes, spotted pardalotes and eastern spinebills from local extinction.

这些最后的庇护所, 可能是所有的原生植物或全部杂草植物或两者的组合。在我们的城市区可悲的是往往只能在“荒原”地带看到小鸟儿, 这是完全杂草丛生。在这种情况下看起来是坏的杂草其实是好的。不良的杂草确实成为良好的栖息地! 事实上, 在许多城市地区, 他们是唯一的栖息地小鸟类能够留下来的栖息地。这就告诉我们很多关于小型鸟类的需求, 我们应该如何管理我们的花园, 公园和灌木丛。它先我们展示了我们需要提供怎样的环境来拯救小型鸟类。比如, 漂亮的杂色鸫鸫, 白眉丝刺莺, 灰胸绣眼鸟, 斑食蜜鸟和本地已经绝迹的东部刺嘴吸蜜鸟。

When a habitat pocket, that is, an area of vegetation which is being used by small birds, is discovered, **it should be protected - even if it is 100% weeds**. It needs to be protected until alternative native plant habitat has been created **and has been seen to be in use by the small birds for at least an entire year**, including a breeding season.

当一个小型栖息地, 即鸟儿正在使用的植被地区被发现的时候, 应该受到保护, 即使它是百分之百的杂草区。保护这些小型栖息地, 直到替代栖息地建成并使用至少要一年以上, 包括一个鸟儿繁殖季节。



Variegated fairy-wren

Structure of habitat

Small birds need protection from predators such as dogs, cats, foxes and larger birds such as ravens, currawongs and butcherbirds as well as from aggressive competitors such as lorikeets, wattle birds and noisy miners. Many Australians, in their efforts to attract birds to their garden, have planted showy, nectar-producing plants that attract aggressive honeyeater birds that compete with, and drive away, smaller birds. To keep safe, small birds generally live in and take refuge in dense, multilayered vegetation. By studying the structure of the vegetation, in which small birds are found, we may be able to reproduce these habitats utilising local native plants in bushland and parkland areas, and a mix of native and non-native plants in our home and community gardens.

The vegetation structure of areas used by small birds is mostly closed and dense around the outside while being more open and protected with lots of twiggy branches on the inside.



Fairy-wren foraging next to typical weedy habitat—dense twiggy plant covered by weed Morning Glory

息 栖息地结构



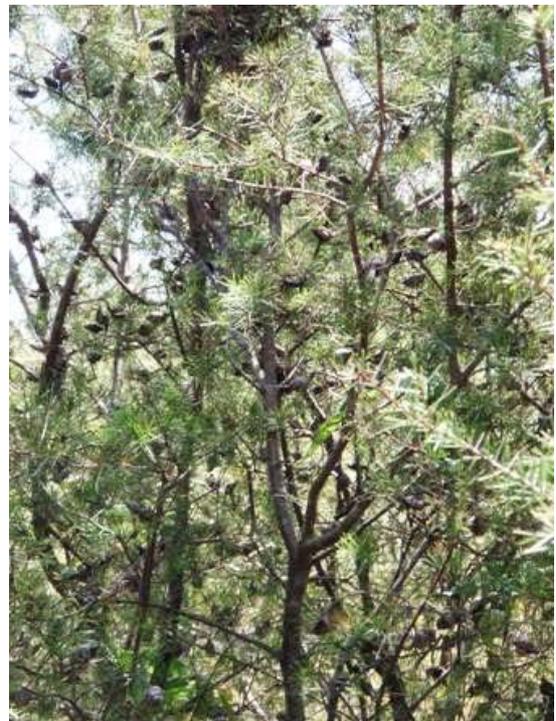
小鸟需要从掠食性动物如狗，猫，狐狸和较大的鸟类获得保护，以及攻击性对手如乌鸦和吸蜜鸚鵡，金合欢鸟和嘈杂的矿鸟。许多澳大利亚人为吸引鸟儿来到他们的花园种植了华丽的花蜜生产厂，吸引积极的食花蜜的鸟类竞争和驱赶较小的鸟类。为了保持安全，小鸟一般住在可以避难的茂密而多层次的植被。通过研究植被的结构，可以发现其中的小鸟类，我们也许能够重现这些栖息地成为当地的原生植物灌木丛和公园区，以及一个原生和非原生植物的组合，作为我们的家庭和社区花园。

小型鸟类使用的领域大多是外面封闭紧密的植被结构，同时内部有着更为纤细的树枝作为保护。

- A typical "waste land" habitat area consists of weedy plants such as privet in the centre, surrounded by lantana and with an outer covering of morning glory and/or other vines. Herbaceous weeds such as grasses and fennel are often also present. Altogether this makes a dense and varied vegetation structure, offering protection and a food source
- A typical bushland area providing small bird habitat consists of native plants such as Hakea or small Melaleucas together with weeds such as lantana which have invaded the bushland and weed or native vines. The small birds living here will make short flights out into bushland areas with a more open structure to feed. Adjacent areas of bracken and grasses are also used. These areas will always be close to a protected area into which the birds can return if threatened.
- 一个典型的“荒原”的栖息地区域包括杂草植物如以一个灌木葱为中心，周围长满马缨丹、牵牛花和/或其他葡萄树。草本杂草等草和茴香往往也会出现。共同构造一个茂密多样的植被结构，提供保护和食物来源。
- 一个典型的丛林区，提供小型鸟类的栖息地，包括原生植物，如 Hakea 或的小 Melaleucas 一起如马缨丹入侵杂草的丛林和杂草或原生的藤本植物。住在这里的小鸟将作短途飞行进入丛林地区，养活一个更开放的结构。也可用于邻近地区的蕨草。这些领域将始终靠近保护区，鸟儿在受到威胁的时候可以返回。



Find the white-browed scrub-wren in the weedy habitat



Red-browed finch nest site in dense cover of native Hakea.

Creating Habitat

To create a habitat haven, study the areas used by small birds then try reproducing what you see using local native plants. Include several 'layers' of vegetation with the highest layer being no higher than a tall shrub or small tree.

创建栖息地

要创建一个栖息的港湾，需要研究小型鸟类使用的领域，然后尝试利用当地的原生植物复制你所看到的。包括几种植物的“层次”，最高层不高于一个高大的灌木或小乔木。

Bushland, park land and "wasteland" habitat creation

In larger areas, such as bushland buffer zones or "wasteland", select a location close to an existing small bird habitat area but far enough away from it so as to not disturb the small birds. Select a location maybe 10-20 metres away. This will be the start of creating a bigger habitat corridor in which these birds will be able to move safely.

The steps:

- Check with the land owner or manager that you can create a habitat area.
- Densely plant a central area with a number of shrubs that will grow to 1.5 to 2.5m tall. These could include *Cassinia*, *Leptospermum*, local (Sydney) species of *Grevillea* (these are small flowered, and don't attract a lot of attention from the larger honey-eating birds), *Ozothamnus*, small *Melaleucas* and *Pomaderris*. Plant the shrubs close together, so there is no space between them once they reach a mature size. We recommend planting as close as 30 cm apart or even closer for smaller shrubs and groundcovers. Avoid planting tall trees, especially eucalypts and berry-producing trees, as these will attract predatory and aggressively competitive birds.
- Around the central planting add some spiky plants, such as *Hakea*, *Bursaria* and *Acacia ulicifolia*, creating a protective circle.
- Finish with an outer circle with a rich variety of native grasses such as *Microlaena*, *Themeda* and *Danthonia*, and small shrubs and ground covers, such as *Dianella*, *Centella*, *Pratia* and *Commelina*. These lower level plants add an additional food source close to the protective sanctuary you are creating, and provide habitat for insect food.
- You can also plant vines such as *Hardenbergia*, *Eustrephus*, *Clematis*, *Pandorea* or *Kennedia*. Vines can help to create a quick protective cover over a habitat area. Allow the vines to climb over the shrubs.
- Vines can also offer additional nesting sites when planted to grow over existing native taller shrubs and small trees or over dead or dying weed plants such as Privets

丛林，公园用地和“荒原”的生物栖息地

在较大的地区，如丛林中的缓冲区或“荒地”，选择一个位置，靠近现有的小型鸟类栖息区，但要足够远才不会因此干扰小型鸟类。选择一个位置大概 10-20 米的距离。这将是开始创建一个更大的栖息地走廊，在那里这些鸟能够安全移动。

步骤：

- 与土地持有人或者管理员确定你可以创建一个栖息地的区域。
- 中间地带密集种植一些灌木成长到 1.5 到 2.5m 高。可以包括 *Cassinia*, *Leptospermum*, 悉尼本地银桦（这些是小花，不会吸引很多蜜食鸟类），*Ozothamnus*, 小型 *Melaleucas* 和 *Pomaderris*。靠紧种植灌木，这样长成后就没有灌木之间就没有间隙。我们建议每隔 30 厘米或者更短些种植小灌木。避免种植高大的树木，特别是桉树和浆果生产的树木，因为这些将吸引掠食和竞争的鸟类。

- 围绕中心种植添加一些尖刺的植物，如 Hakea, Bursaria and ulicifolia, 创建一个保护圈。
- 用丰富多样的原生草如 Microlaena, Themeda and Danthonia, 和小灌木以及地被植物，如山菅兰，积雪，Pratia 和鸭跖草等完成外圈。这些低位的植物为您所创建的庇护所添加额外的食物来源，并为昆虫食品营造条件。
- 您还可以种植藤本植物，如 Hardenbergia, Eustrephus, 威灵仙, PandoreaKennedia。 , 藤蔓可以帮助创造一个快速的栖息地的保护盖区。让葡萄藤爬过灌木。
- 当过度种植本地高灌木或小乔木、死亡或濒临死亡的杂草植物，如 Privets 的时候，藤本植物还可以提供额外的筑巢场所。

Remember, the existing habitat needs to be protected until alternative native plant habitat **has been seen to be in use by the small birds for at least an entire year**, including a breeding season.

请记住，保护现有的栖息地，直到替代栖息地建成并可以看到小鸟使用至少要一年以上，包括一个繁殖季节。

Garden habitat creation

In your garden:

- Start with a small area that you can manage easily. Perhaps pick an area at the back of your garden which is not visited often. A back fence or corner might be a good place to begin. Ensure there are no gaps in the fence for cats to enter.
- Plant several larger shrubs along the fence, and then plant outwards using prickly shrubs and some smaller shrubs, finishing with some grasses and groundcovers.
- Outside a window you could reverse this pattern, to provide safe shelter for the birds while you can watch them inside their safe haven from your window!
- You can choose species such as those natives listed above, and you could also include a lemon or orange tree. Some exotic shrubs, especially bushy ones such as Plumbago or prickly ones, can be useful. Exotic climbers such as Banksia rose can also help to create good small bird habitat.
- Preferably choose shrubs with small white, cream, or yellow-coloured flowers as these attract insect pollinators (rather than honey-eating birds).
- Make sure you are not using plants which are noxious or environmental weeds in your area.
- You may already have some suitable shrubs in your garden that you can use as a basis for your habitat area. Have a listen and look - there may already be small birds using these shrubs. Also observe the structure of your existing shrubs and think about whether a larger bird like a currawong could enter. If it can be penetrated, it is not good small bird habitat. However you could add more plants to create a denser area.

To maintain your habitat area in your garden you can lightly prune the taller shrubs occasionally. This will cause the plants to add additional branches and thicken the foliage especially on the outside, providing greater protection. Use raked up leaves for mulch on your garden. This mulch will be a good source of insect food. Think about mowing your lawn less, especially when grasses are seeding. Small birds like to forage on the lawn when they are safe from predators and have a dense shrub close by to retreat to.

Many small birds are insect-eaters and they will help to control insects in your garden. Avoid using pesticides. Firstly, they will reduce the number of insects available for food for the small birds, but secondly if an insect is poisoned this passes to the bird. The poison from one insect cannot kill a bird, but after a time poisons build up within the birds and may result in death or inability to reproduce. Pesticides also kill beneficial insects - and there are more species of these than pest insects! Beneficial insects are often working to keep pest insects under control, but pesticides kill them all.



Start small and enjoy watching the changes in your garden. Place a chair to relax in where you can sit quietly to watch and delight in watching your habitat area grow and the activities of the birds.

花园生物栖息地

在你的花园：

- 开始一个小的区域，您可以易于管理。可以选择花园后面一个不经常走动的区域。一个后挡板或角落可能是一个开始的好地方。确保篱笆的间隙可以防止猫的进行。
- 植物几家较大的灌木，沿着篱笆种植向外带刺的灌木和一些小灌木，完成一些草和地被植物。
- 安装一个观察窗口，为鸟儿提供安全庇护，当你观察它们的时候鸟儿仍然感到安全。
- 您可以选择如上面列出的那些本地品种，你也可以包括一颗柠檬或橙子树。一些外来的灌木，特别是浓密的如白花或刺的，是有用的。异域爬藤植物，如山龙眼玫瑰也可以帮助创造良好的小型鸟类栖息地。
- 最好选择灌木，小的白色，奶油色或黄色的花朵这些吸引传粉昆虫（而不是蜂蜜为食的鸟类）。
- 请确保您在您的区域使用的不是有害的植物或杂草。
- 您可能已经在你的花园里，你可以使用一些合适的灌木你的栖息地面积的基础。听一听看一看，说不定已经有小鸟开始使用这些灌木。同时观察您现有的结构灌木，想想是否有较大的鸟就像一个 currawong 可以进入。如果可以进入，这是不好的小型鸟类栖息地。然而，你可以添加更多的植物，创造了一个密集的区域。

为了保持你的栖息地面积在你的花园里，你偶尔可以轻轻地修剪高的灌木。这将导致植物添加额外的分支和增稠的叶子，特别是在外面提供更大的保障。使用倾斜的叶片覆盖你的花园。这个覆盖将是一个很好的昆虫食品源。尽量少修剪你的草坪，尤其是草播种早的时候。当他们认为安全没有掠食性动物的时候，小型鸟类喜欢在草坪上觅食，并可以撤退到附近有密集的灌木。

许多小鸟吃虫子将有助于控制你花园里的害虫。避免使用农药。首先，它们会降低可用于小鸟食品的昆虫数量，但第二是毒性会传递给小鸟。“一种昆虫的毒素不足以杀死一只鸟，但经过一段时间后的毒药累积，可能导致鸟儿死亡或无法再生。农药也杀死益虫 - 益虫比害虫更多！益虫往往可以保害虫得到控制，但农药会杀了他们所有。

开始观察享受在你的花园里的细小变化。在院子里放置一个椅子放松坐着，您可以在那里静静而喜悦地看着栖息地的成长和鸟类的活动。