



Eucalyptus parramattensis - Calgaroo

CALGAROO

Newsletter of the Parramatta & Hills District Group
Australian Plants Society NSW Ltd

Samuel Gilbert Fete

SAMUEL GILBERT PRIMARY SCHOOL FETE

Our group is again running a stall at this fete. It is on Sunday 19th August, so very soon. As usual we will be selling both plants and cut flowers. If any members have a few flowers in the garden that they are happy to donate for our flower bunches, this would be much appreciated. The flower bunches always sell well. We dividing the flowers into bunches at the school on Saturday afternoon 18th August from 2pm. Bunching the flowers is great fun, with much laughter. Bring your secateurs. No flower arranging expertise is needed. The beautiful flowers sell themselves. The school is on the **corner of Gilbert Road and Ridgescrop Drive, Castle Hill**. It would be best to enter the school via the Ridgescrop Drive entrance. Walk up the hill through the school buildings to the area above them. We usually sit in a covered area with tables where the children sit for lunch. Bring a thermos and nibbles to share for afternoon tea. The more helpers we have the easier the job. If you have some flowers to donate but can't come on Saturday afternoon, contact a committee member, so we can arrange to acquire them.



On Sunday we need helpers to man the stall. The busiest time is from 11.00am to 1.30pm.

Just bring yourself. We have aprons with pockets to collect the money and information about the plants to pass onto customers. There is **no parking inside the school grounds**, so park in the nearby streets or in the little shopping centre carpark near the school. If you can bring any boxes or plastic bags, eg supermarket ones, for people to carry their purchased plants, that would be useful. We have attended this fete for many years and usually our stall is well received. Come along and be part of it.

**Parramatta & Hills District
Group, APS
ABN 87 002 680 408**

Contact us at
info@apsparrahills.org.au
or visit apsparrahills.org.au
or contact a Committee person



Calendar

Aug

Sat 25 at 2pm Meeting at Gumnut Hall, Gumnut Place Cherrybrook with guest speaker Brian Roach on "Native Plants for a Cottage Garden"

Sep

Wed 12 at 10am Propagation at Bidjivong Community Nursery

Sat 15 2-4pm Meeting at Gumnut Hall, Gumnut Place Cherrybrook with guest speaker Andrew Berneutz on "Breeding Aust Plants for Overseas"

Oct

Wed 10 at 10am Propagation at Bidjivong Community Nursery

Sat 20 Bushwalk: Darwins Walk Wentworth Falls

Did you know that: specimens of *Eucalyptus regnans* regularly exceed 85 metres in height and that one tree was measured at 132m tall. Often they were measured after they had been felled and the uppermost branches (and sometimes the stump) were not included in the measurement. Today the tallest specimens are just under 100m tall and the biggest tree is 10.74m in diameter and 33.75m in girth (measured at 1.4m above the ground).

They are second only to the coast redwood, *Sequoia sempervirens*,



Stump of a *Eucalyptus regnans* in Tasmania's Styx valley. TTaylorWikipedia

The Conversation - Beating Around the Bush

There is a new series created by the website "The Conversation" which may be of interest to APS members. It is called "[Beating Around The Bush](#)" and focuses on presenting articles about interesting Australian Plants written by authors authoritative in the field.

Pilostyles

The first article which caught my eye was about Pilostyles - The Plant within a Plant. In contrast to all other plant species, Pilostyles is a parasite which takes parasitism to a whole new level. Unlike most parasitic species which look like normal plants but use roots to tap into their hosts to get a free meal, Pilostyles lives almost entirely within its host. It is called an "**endoparasite**". Unlike almost all other plants, Pilostyles has abandoned stems, leaves and roots. When not flowering, it lives inside its host, as pale threads of cells within the host's roots and stems, from which it acquires all its nutrients.



Pilostyles flowers on its host plant's stem
Photo: K. R. Theile

Only when flowering is Pilostyles visible externally, the flowers erupting from the stems of its host like a weird botanical Alien.

Three species of Pilostyles occur in Australia, all of them in Western Australia. Each has a specific host. *Pilostyles hamiltonii* only grows in plants in the genus *Daviesia*, *P. collina* in the poison-pea genus *Gastrolobium* and *P. coccoidea* in *Jacksonia*. Another seven species occur outside Australia, and they also infect shrubby relatives of peas.

Pilostyles flowers are about the size of a match head. They appear on stems after its host has finished its own flowering. Thus, the host plant seems to flower twice in a year, but with completely different flowers.

Eucalyptus regnans

Another recent article from 'Beating Around the Bush' was about *E. regnans*, the world's tallest flowering plant.

We will never know if a *Eucalyptus regnans* was the tallest living thing on Earth; they are certainly the largest **flowering plants** in the world. Many of the biggest were felled in the mid to late 1800s before they could be properly measured.

There have been, and continue to be, a number of rivals for the tallest mountain ash; of course there have been the usual rivalries between states. Tasmania currently holds the record, but there are several tall specimens in Victoria that may take the crown in future.

Some of these trees were so large that the stumps could neither be transported from the forest, nor processed in the timber mills of the day. These huge logs can still be seen rotting on the forest floor more than a century later.

These trees were so large, an old forester related in the early 1970s, that when they felled them by hand with cross-cut saws, air could be heard being sucked into the cuts - the so-called sighing of the ancient trees as they died.

The Rainforest: Yes, it can be Copied

Geo. W. Thorpe

From *Australian Plants*, ASGAP 1978

Who, having ventured deep into a rainforest for the first time, could fail but be captivated by the sheer overwhelming power of the scene, even sensing a feeling of oppression as the abundance of life forms closes in around one. The sight of so many tall trees, their trunks forming the framework of the rainforest as they stand so close together, some with gigantic buttresses, others straight stemmed and varying little in girth from ground to topmost branch, is surely a magnificent and awe-inspiring experience. But then stand still and observe that, as well as the trees, there are ferns, epiphytes, mosses, fungi and small plants, some growing at ground level, others clinging to tree trunks and branches or merging into the green canopy above, and the spectacle makes one wonder how the earth can support and sustain such a weight of living material in an area so small.

Here, deep in the forest, with so much vegetation blotting out the outside world, and only soft filtered light penetrating the canopy, is a retreat of solitude and tranquillity such as can be found in few other places.

How then can we bring more people to the realisation that, just as the rainforest can be used for relaxation and interest, it needs understanding to ensure its continued survival. The simple answer is to make more rainforest visible to more people by bringing it closer to them. Hence my reason for encouraging the creation of rainforest plantations within home gardens and project areas, so that people and the rainforest can both survive. Note that I don't enthuse about the growing of individual rainforest plants as specimen subjects. I can tolerate that use, but as my love is for the rainforest as an entity, I always see an



Hymenosporum flavum
(red/yellow form)



Xanthostemon chrysanthus
Golden penda



Backhousia citriodora
Lemon Myrtle



Tristaniopsis laurina
Water Gum



Callicoma serratifolia
Black Wattle

All Photos:

**Peter Vaughan,
Robert Logan,
Brian Walters**

isolated plant as lonely and longing for the company of its own kind.

A suburban rainforest - is it for you?

Lest our impassioned pleas encourage the over enthusiastic approach to the growing of rainforest plants, I think it is only fair to point out that there are some disadvantages.

Firstly the work angle, and even though a visit to a well-established rainforest garden may evoke the observation, "well, here is a real minimum-care garden, no lawn, no weeds, no pruning, no spraying, nothing to do but enjoy and encourage the exuberant efforts of Mother Nature," there is a "but".

However, you as keen gardeners will know that a lot of work has to go into the initial preparation of any garden, and in order that a recognisable rainforest may be produced a tremendous amount of work is usually necessary. In four or five years time, and I think that's long enough to wait to enjoy the fruits of one's labour, the work content will have dwindled to almost zero, and the enjoyment soared to great heights.

Unlike a "normal" garden, a rainforest plot does not become "leggy" or sprawling with age. Its character is permanence, as growth is upward. where space is abundant and age serves only to add usefulness. Tree trunks and branches become robust enough to accommodate epiphytic orchids and ferns, and the canopy reaches the right height for nesting and roosting birds. Under natural rainforest conditions trees grow for perhaps a hundred, or maybe hundreds of years, until they reach maturity then die and decay on the spot to provide food for those that remain, so the cycle goes on "ad infinitum". Only a rainforest tree can be a thing of beauty during the decay phase, as any rainforest enthusiast will testify.

Tall trees in a suburban allotment scare the wits out of some people, and particularly in Queensland where we're liable to receive winds of cyclonic force, it can be argued that tall trees are a potential hazard. The reason for the abhorrence of tall plants by some people is, I think, rooted in the idea that humans are the dominant creatures on the earth and must be able to stand above their garden and look down on their subjects. Just as some people feel claustrophobic when taken deep into a rainforest, so some people cannot tolerate a

garden in which humans are insignificant and the plants dominate the scene.

A further benefit from a rainforest garden is the reduction in temperature which results from the micro climate produced by the rainforest plot itself. In summer this is very welcome, and within our own backyard rainforest I have regularly measured temperatures of five to ten degrees celsius below ambient on very hot days. It is certainly conceivable that we could reduce the temperature of large tracts of suburbia if sufficient people could be induced to follow the rainforest plan.

Plants for the urban rainforest

A rainforest plot may not be considered to have the eye appeal of a well laid out, landscaped, log-edged, bark-chip mulched bed of healthy vigorous flowering grevilleas, melaleucas, callistemons, etc. As opposed to this the enjoyment of a rainforest garden is the opportunity it provides to stand within the garden completely enshrouded by masses of vegetation. Here the pleasure is in the feeling of total absorption within a soft green mantle enhanced by the subtle intermingling of various leaf shapes, colours and patterns, and the play of sun and shadow through the canopy above, all of which combines to generate feelings of harmony and tranquillity.

Repeatedly, visitors to our backyard rainforest plot express the feeling as "gee, isn't it peaceful in here, you'd never know you were in a city". Isn't it ominous, people always associate the bush with peace, never the city! But it is wonderful to be able to provide yourself and your visitors with marvellous tranquillity and a breathing space away from city pressures just by judicious use of the right plants in the right situation, and isn't that what gardening is all about?

One characteristic of rainforest plants in a rainforest situation which may be a disadvantage to some people is the paucity of flowers on plants which in an open situation may flower profusely. *Hymenosporum flavum*, the so-called native frangipani, provides a good example of this phenomenon. In open sunny situations I have seen it remain for years as a tall-



Archidendron grandiflorum
Pink Laceflower



Archidendron grandiflorum
Seedpods



Elaeocarpus reticulatus
Blueberry Ash

growing shrub or small tree with branches and leaves to ground level, and in season smothered in creamy yellow sweet-scented flowers. However, in our rainforest *Hymenosporum flavum* in five years has grown to 10 m, with a slender trunk 10cm in diameter, on which the lower branches in turn die and are shed, leaving a long bare trunk with leaves only on the few topmost branches. It still flowers, but the flowers are quite remote and unnoticed. This is often the style of rainforest trees, particularly in well-established situations.

First steps

Before deciding to establish a rainforest garden there is a need to ensure that sufficient space is available, and an area of 16 square metres is probably the minimum size in which desirable results can be achieved. Remember, I prefer to see rainforest plants used in as authentic a rainforest situation as possible. Just as we would, for very good reasons, if deciding to construct a semi-arid garden keep the appropriate plants together and not scattered among other more tolerant plants, so for those same good reasons I like to see rainforest plants in company with their own kin.

Our home rainforest site was most inhospitable, being a few centimetres of poor topsoil derived from Brisbane metamorphic shale, which has little to recommend it except that tree roots are able to force their way into its fissures and gain a firm footing, but nothing else. It is a south-west facing slope, and that in Brisbane means that in winter it receives all the icy blasts from Hobart via Melbourne, and the cold dry westerly winds from the interior, but in summer it has some advantages because we avoid the full effect of the sun and get shelter from the hot drying north-west winds.

There were no humps or hollows on the site, so our first moves were to throw up contour banks, which of course slow up water runoff, but more importantly for rainforest production stop organic material from being carried away. As the top soil was so scarce and of such poor texture we knew that rainforest plants would not flourish until soil quality had been vastly improved.

It is a popular notion that rainforest land is inherently fertile, and this misconception in the past was, and probably still is, the reason why rainforest was and is being felled to make way for agricultural pursuits.

The truth is that rainforest creates its own fertility through the decay of organic material (the original organic garden), hence the ability of rainforest to flourish on pure white sand in places such as Fraser Island and Cooloola in Queensland, and on extremely rocky places in other areas. But the mystery to me is how in nature the first rainforest plants know when it's time to establish themselves. We know that areas which are now rainforest covered must have begun their soil/plant relationship with very hardy species, slowly building up through a succession of varying species, until such time as pioneer rainforest species appeared. As conditions became more suitable more rainforest species would have arrived on the scene, and eventually the complex rainforest community that we see today would have evolved.

Well we, of course, had to short circuit this procedure, and knowing that organic material is the key to success we arranged to collect all the "waste" lawn clippings, raked leaves, prunings, etc., from all the homes around us. I even mowed and scythed vacant allotments in the neighbourhood, vacant to the bewilderment of locals, who thought I was either mad or uncommonly civic-minded, or both.

After months of organic matter collection, and repeated heavy applications of a 15:3:10 fertilizer, soil texture began to improve and the earthworm population exploded. During these early days we made preparation for our rainforest by planting a complete external shelter belt of non-rainforest hardy species, including *Casuarina glauca*, *Acacia fimbrialis*, *A.spectabilis*, *A.podalyrlitolia* and *A.cunninghamii*, *Grevillea pferidifolia*, *G.hodgei*, *G.banksii*, *Eucalyptus tereticornis*, *Hakea florulenfa*, *H.gibbosa*, as well as *Callistemon pachyphyllus* and *C.polandii* - all species able to withstand sun and wind and tall enough to force the young rainforest plants upwards.

That is what we did, but with the benefit of hindsight we now know that we could have avoided the use of non-rainforest plants by using a group of rainforest plants which are, or can be. pioneer species, and under the good conditions provided would have been perhaps more effective as a shelter belt. I refer to plants in the family Sapindaceae such as *Alectryon*, *Cupaniopsis*, *Sarcopteryx*, *Jagera*, *Toechima*, *Ellatostachys*, and *Harpullia*. Other hardy rainforest plants may

be found in the family Euphorbiaceae and include the genera *Glochidion*, *Baloghia*, *Crofon*, *Mallotus*, *Macaranga* and *Omalanthus*. Other genera which are hardy enough to use as initial planting material include *Alphitonia*, *Aphananihe*, *Trema*, *Streblus* and *Ficus*; also we could include genera from the family Celastraceae such as *Mayienus*, *Denhamia* and *Elaeodendron*. The list could go on and on, but those plants mentioned are ones whose seed is usually available in sufficient quantity to provide material to "wall" in any area selected for a rainforest plantation. Propagation material for some of the rainforest species may present supply problems, but at least in Queensland we have organised a small group of enthusiasts who regularly exchange plants and seeds.

Choice of plants

Having defined the edges of the rainforest, thought may then be given to the body of the rainforest, where the choice of plants is limitless. Plants growing in our own rainforest which have responded to garden culture, in addition to those previously mentioned, include the following:

Plant Family	Plant Selections
Pittosporaceae	Several <i>Pittosporum</i> species and <i>Hymenosporum flavum</i>
Verbenaceae	<i>Clerodendron tomenfosum</i> , <i>Gmelina leichhardtii</i> and <i>Premna lignum-vitae</i>
Oleaceae	The fast-growing <i>Olea panicula</i>
Araliaceae	<i>Delarbrea michieana</i> , <i>Tioghemopanax elsgans</i> and the best known of our rainforest trees, the ever-popular umbrella tree, <i>Schefflera actinophylla</i>
Myrtaceae	A big group of our plants comes from this family and includes several <i>Syzygium</i> species, <i>Rhodamnia trinervia</i> , two <i>Ptilidostigma</i> species, two <i>Backhousia</i> species, the very beautiful 'Golden Penda', <i>Xanthostemon chrysantha</i> , and the equally delightful <i>Tristaniopsis laurina</i> .
Sterculiaceae	This family is represented by <i>Sterculia quadrifida</i> , the interesting 'peanut tree' with edible seeds, the flamboyant 'flame tree', <i>Brachychiton acerifolium</i> , trees with attractive foliage, <i>Argyrodendron</i> species and <i>Commersonia bartramia</i> .
Elaeocarpaceae	Three <i>Elaeocarpus</i> species and <i>Sloanea australis</i> .
Anacardiaceae	The beautiful 'deep yellow wood' <i>Rhodospaera rhodanthema</i> and the very useful 'Burdekin plum' <i>Pleiogynium timorense</i> with edible fruits.
Meliaceae	This family is represented by the well-known 'red cedar' <i>Toona ciliata</i> , the tree renowned for glorious 'rosewood' cabinet timber <i>Dysoxylum fraserianum</i> and the 'scentless rosewood' <i>Synoum glandulosum</i> .
Rutaceae	The interesting 'thorny satin wood' with its beautiful floral display, <i>Zanthoxylum brachyacanthum</i> . Also <i>Geijera salicifolia</i> the 'scrub wilga', <i>Euodia elleryana</i> the food plant of the flashing electric blue Ulysses butterfly, <i>Pentaceras australe</i> covered in white flowers in November, <i>Flindersia australis</i> , in my opinion Australia's most shapely shade tree when grown outside the rain forest, and <i>Acronychia laevis</i> , with the attractive white to blue turpentine flavoured fruit.
Fabaceae	This family gives us the golden-flowered <i>Barklya syringifolia</i> and the well-known 'Moreton Bay chestnut' or 'black bean', <i>Castanospermum australe</i> .
Caesalpinaceae	This family has the rainforest <i>Cassia</i> species.
Mimosaceae	Those plants with delightful white and pink pom-pom flowers and spiral seed capsules, the <i>Archidendron</i> species.
Cunoniaceae	This family has given us the attractive foliaged <i>Ackama paniculata</i> and the plant which was the original wattle of Port Jackson days, <i>Callicoma serratifolia</i> .
Escalloniaceae	This family is represented by the low-growing tree of the gullies, <i>Cuttsia viburnea</i> , by the rare and extremely beautiful <i>Anopterus macleayanus</i> and the delightful small tree <i>Polyosma cunninghamii</i> .
Lauraceae	From this family we have taken <i>Neolitsea dealbata</i> and <i>Cryptocarya glaucescens</i> .
Proteaceae	This gives us the rainforest <i>Grevillea</i> species and the well-known 'wheel of fire', <i>Stenocarpus sinuatus</i> .

Victorian APS Event

Showcasing Goodeniaceae at the
12th FJC Rogers Seminar to be held in
Horsham, Victoria 20-21st October.

For details visit:

apsvic.org.au/fjc-rogers-seminar

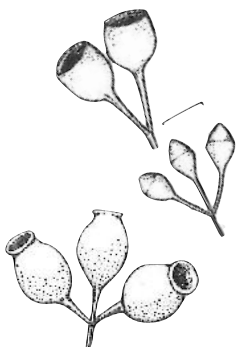
Keynote speaker Dr Kelly Shepherd,
Senior Research Scientist based in
Perth, whose interests include the 'salt-
loving' samphires.



Lechenaultia biloba 'Big Blue' Photo:
Flickr)

Guest speaker **Brendan Lepschi** from
Australian National Herbarium talking
about his interests in Melaleuca,
Santalaceae and Goodeniaceae. Guest
speaker **Neville Walsh**, Senior
Conservation Botanist at Royal Botanic
Gardens Victoria.

Sunday includes garden tours to
Wartook Gardens



The Golden Everlasting

Bracteantha bracteata is a most variable and widespread plant, found on the margins of dry rainforest in north Queensland, through to coastal areas of Western Australia, and seemingly every imaginable habitat in between except wet or heavily shaded areas. They generally flower from spring to autumn, although those varieties which occur in arid inland areas flower in the cooler months.

Plants may be either annual, or woody perennials. The specific name "bracteata" refers to the prominent and numerous, dry, papery bracts, which are often incorrectly referred to as petals.

In the early 19th century, noted East German horticulturist Herren Ebrisch, at Arnstadt, developed many unusual colour forms by intensive breeding of the annual varieties, and these were widely distributed in European gardens in the 1850s. These varieties known as Strawflowers, have globular heads, the bracts of which are coloured maroon through to bronze. The bracts remain cupped around the flowers rather than opening out flat to the perfect flower head of Golden Everlasting. Seed of the Strawflowers is still commonly available. Variability of wild populations of *Bracteantha bracteata* is seen in vigour, foliage and flower.

The annual varieties may grow from 30 cm to 1.5 m high, usually well branched but more or less erect. Foliage may be 20 mm long, but only 1 mm wide, or up to 100 mm long and 25 mm wide, whilst the flowers vary from 20 mm to 50 mm across.

Plants are easy to establish from seed sown following autumn rains and flowering can be expected to commence about October/November in Melbourne conditions. For best results, choose a situation with full sun, and well worked soil into which some complete fertiliser has been incorporated. Place plants at 30 cm centres, and keep well watered during establishment period. Light feeding each month with a liquid fertiliser will produce healthy and bushy plants which reward the grower with heavy flowering for six months or more, depending on the severity of the season.

Plants may also grow well in dappled shade, but, depending on available light, may grow taller and produce smaller or fewer flowers. To overcome this, prune lightly but regularly to promote bushiness, and use a low nitrogen fertiliser when preparing the ground.

Picking flowers for decoration or drying will encourage further flower production, but be sure to leave some flowers to produce seed for next year. Seed may be collected and stored for sowing in autumn, or be allowed to disperse naturally, where it will pop up in the most delightful places. It is unlikely to germinate in areas where the soil is heavily compacted or heavily mulched with organic material. However, it germinates well in gravelled areas.

Seed is ready to collect when the bracts have reflexed slightly and the centre of the flower becomes downy, like a dandelion. It should come away from the flowerhead with no effort. When storing, be sure the seed is dry and free from insects. Store in paper bags or envelopes in a dry area. Seed is likely to be available from various distributors of Australian plant seed.

Extract from Australian Plants, Sept 1990

Creating a bird friendly garden

What is in your garden now?

What vegetation is currently available? Is it open lawn and a few scattered trees or is the site complex with different heights of vegetation such as trees and shrubs, grasses, ground covers, leaf litter? A more varied garden will attract a wider variety of bird species. Understanding the habitat currently provided by your garden will allow you to decide how it needs to be changed to attract more birds.

What birds are using the garden and are nearby? Know which bird types you are trying to target, for example small birds or parrots. It is best to encourage birds that occur in your local area and may be attracted to use your garden. It is no good creating a habitat for Superb Fairywrens if they haven't been seen anywhere near your area in 20 years. However if they are located a short distance away then creating a habitat for them has a much greater chance of success. Local bird clubs, councils or community groups may have bird lists for your area but it is easy to complete your own surveys. The Birds in Backyards surveys are ideal for this at: <http://www.birdsinbackyards.net/surveys/>. Use this site to monitor the change in birdlife in your garden and also contribute your citizen science observations and provide important information.

Planning your garden

Before beginning any work to restore or develop habitat in your garden plan and outline what you need to do and what you want to achieve. Consider each individual piece of work that must be completed such as an assessment of the current vegetation and bird life, planting of new vegetation, weed removal and disturbance minimisation and ongoing maintenance. However enjoy the experience of creating and maintaining a garden that is used by a wide range of native birds.

What do the birds require?

All birds need food and water, shelter and a safe place to nest. That could be a dense thicket, tall tree or hollow. Often this can be achieved by the use of suitable plants. Frequently, locally native vegetation is best, although exotic vegetation can also be important. Domestic pets can disturb or prey upon native birds. Keeping cats indoors or in a cat run is advisable if you want to attract more birds.

One suburban garden will not be able to provide everything that a bird will need. However, every garden helps build the web of habitat that birds will attract more birds back into our urban areas.

What and how to plant?

Assess the current vegetation: Most vegetation can provide habitat for birds. Before removing any vegetation, weeds or otherwise, be sure to observe the birds that use your garden before you start to change it.

Wherever possible do not remove vegetation immediately: instead wait until new vegetation establishes

(produces flowers and/or fruit). Some weeds, such as Lantana which is considered important to control and remove, are popular with birds and provide important habitat so their removal should be carefully planned and staged. Remove only small patches of weeds at a time and replace it immediately with new plantings. Be aware that it can take years for new vegetation to establish but many birds may abandon the garden, or be preyed upon if all or large portions of the intact vegetation are removed too quickly.

What to plant - species: We recommend locally native plants. This vegetation was traditionally used by birds in the area and is best suited to the conditions of the site. Once established, many Australian native plants are also drought tolerant. Use a variety of different species throughout the planting rather than a single, or select few plants. Gardens that contain a broad range of plant species, are more likely to support a broad range of bird species. Plant clumps of 5-7 plants of the same species together so there is enough of the resource (food or shelter) available to be used by the birds. Some councils have programs that provide assistance to residents and have lists of local endemic species available.

What to plant - structure: The key is to create diversity - so lots of plants and lots of different layers. Having a mix of trees, shrubs of varying heights, grasses and ground covers will maximise the numbers of birds using a site. Gardens do not have to have trees to attract birds, therefore if space is an issue a garden consisting of shrubs and grasses can still be effective. Grass is important for some birds such as the parrots and finches to forage on.

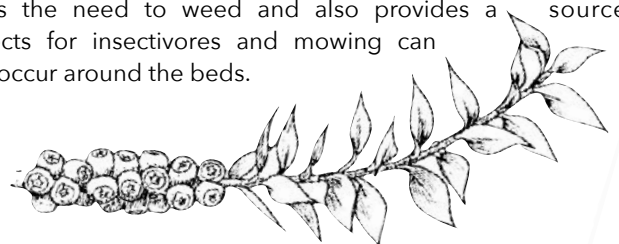
Gardens with tall trees and grass but without shrubs are more likely to have large and aggressive birds in them like Noisy Miners and Pied Currawongs. Restoring this shrub layer is key for providing a habitat that small birds can use.

Native plants and gardens can look tidy: Small birds like dense shrubs. A more formal and neater garden can be created by the use of pruning which encourages denser growth. Most native plants respond well to pruning. Hedges using native plants can provide privacy from neighbours as well as bird habitat.

A wide variety of gardens can attract birds, from typical 'native' gardens without lawn through to pruned and trimmed neat gardens consisting of shrubs and open lawn space.

Use local native plants rather than hybrids such as the popular hybrid grevilleas. These large flowering plants may encourage large and aggressive honeyeaters such as Noisy Miners and Red Wattlebirds that can chase away smaller birds. Select plants with smaller flowers, ones that small honeyeaters can fit their beaks into but large ones cannot.

Maintenance: Maintaining garden beds is much less time consuming than mowing vast areas of lawn. Pruning is very quick and needs to be done only infrequently. Heavy mulching reduces the need to weed and also provides a source of insects for insectivores and mowing can simply occur around the beds.



Banksia robur



Banksia robur flower bud



Banksia robur flower

Banksia robur occurs from Gladstone in Queensland to southern New South Wales. It prefers sandy and swampy situations and so is known as the Swamp Banksia.

Not considered to be at risk in the wild, B. robur is a small to medium shrub, 2-3m high and wide. The leaves are stiff, leathery, egg-shaped and broadest at the tip, shiny above and dull beneath with toothed margins.

The species will tolerate poor soils and poor drainage and has been used as a rootstock for less hardy species. It naturally occurs in wet areas (hence the common name) on sandy soils and appreciates extra water, especially when actively growing and during dry spells. It can flower from seed in 3 years

Western Australian Samphire

WA Samphire (aka. sea asparagus, swamp grass, glasswort, pickleweed, sea beans) is a delicious salty treat that's high in vitamin A and a good source of calcium and iron. Samphire is a protected native salt-tolerant edible succulent that plays a vital role in our coastal ecosystem.

The young, green shoots are crisp and crunchy in texture, similar to asparagus, giving a fresh, sea-salt burst of flavour. Enjoy these raw, sautéed or quickly blanched and tossed with olive oil and lemon. Samphire is considered best for use in Summer when the succulent 'leaves' are pale green and aromatic. Though the leaves turn pink in winter, any green remnants may still be blanched and eaten. Serve with seafood; in salads, pesto or salsa; or use as a garnish.

Harvesting the tender new shoots will offer the best flavour without compromising plant growth. This WA native requires less moisture than many other samphire species, and will continue growing with little fuss. However, a deep, occasional watering will improve the quality of new growth.

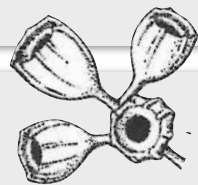


Tecticornia lepidosperma

WA Samphire is adapted to a range of conditions, but does best in full sun or part shade, planted in sandy, free-draining soil. New shoots are fleshy and green in colour, and grow upright as the plant sprawls outwards.

Plant grows to 50cm in both height and width when grown in the ground, but may be kept small in pots with regular harvesting. Will provide shelter for small birds and lizards if planted in dense numbers.

*<https://tuckerbush.com.au/wa-samphire-tecticornia-lepidosperma/>



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