

e with Natives



Garden fashions aren't just the clothes we wear when draped on the garden lounge under the pergola. The whims of gardeners are almost as accurate as carbon-14 when it comes to assessing the period in which a garden was created or redesigned. It is easy to date the colonial recreations of English

cottage gardens. What about the long era of the suburban Aussie lawn, where the onty 'native' was an abysmal statue



which has now mercifully passed into oblivion? Then there was the 'native garden phase', and, currently trendy once again, the cottage gardens. Liana Christensen

takes a fresh look at native gardens, and good garden design for W.A.'s climate.

he fashion for native gardens was prompted, in part, by the severe water restrictions of the seventies, as well as a growing appreciation for the subtle beauty of our native plants. Native gardens were a solution for the gardener concerned with our continent's aridity. They were also promoted as 'no-work', a theory based on the premise that since the plants grew here originally, they would thrive and flourish with little or no work on the part of the gardener. This, however, is only a partial truth, and caused many a disillusionment. Promotion, sometimes unscrupulous, of certain types of natives also led to the creation of such horrors as tiny terrace front gardens overstocked with gigantic gums. The first premise of good design is selecting plants appropriate to the scale and condition of your garden. Too many Tasmanian bluegums and straggly grevilleas later, the honeymoon was over, and fashion swung away from 'native gardens'.

This is an enormous pity, because the problems of water shortage will only increase, and armed with the right advice and a balanced approach, gardeners can make native plants work for them.

The scope for using native plants varies greatly. Some schools of thought believe 'a native is a native is a native' and don't much care from which part of Australia it originates so long as it's compatible with its adopted home. To others growing local plants is *de riguer*, and they wouldn't dream of planting something that belonged outside a ten kilometre radius of their selected site. The majority,

Meandering paths and a profusion of vegetation contribute to the untamed look of this garden at Murdoch University.

however, are happily eclectic in their tastes, and are quite content to have a combination of natives and exotics. Each approach has its place. The peculiar delights and problems of each are discussed below.

Nouvelle Jardins

The school of thought which presumes vegetarians eat meat-and-two-veg minus the meat, also presumes native gardens are all-of-a-kind (and probably grown by the same slightly disreputable people). Silver princess gum, a tastefully arranged boulder or two, loads of woodchips: you know the sort of thing. I've heard them referred to disparagingly as 'tombstone territories', but they are the plain, wholesome bread-andbutter of native garden style. Nothing wrong with them, so long as your imagination can use them as a springboard, not a trap.

The key to good garden design is to analyse the elements of a successful system, and then put them to work for your habitat. For instance,

woodchips function both as a mulch and as an element of design. Mulches are an essential part of an efficient garden: they reduce surface evaporation and lower water consumption by keeping the root-zone cool.

The type of mulch you choose will depend upon what is available cheaply, and the style of garden you wish to create. Woodchip or bark mulch can evoke a wild and woodsy atmosphere. Gravel and crushed brick, also efficient mulches, can be used for a more formal effect.

With the correct selection of plants, and the appropriate layout, you can create any style of garden you like using native plants. If you have raked gravel, a small water feature (a 'dry streambed' can be created from small river stones, and a clever arrangement of larger rocks), a stone lantern or two and nobody is going to worry whether or not your plants originated from Japan or Australia. The overall effect is the same.



Pining for a cottage garden?

It is not necessary to resort to exotics. The general principle behind such gardens is a profusion of flowering plants growing in happy, seemingly untended, 'confusion'. The scale of plants tends to be small, ranging from groundcovers to low shrubs. Once established, cottage gardens are not labour intensive, and the density of planting, and the use of selfseeding annuals, acts as a form of renewable mulch. There are literally hundreds of native shrubs, ground covers, annuals and perennials which can be combined to achieve the look of a cottage garden, generally requiring less water and less labour than the exotic version. This style of native garden would sit well in a terrace house 'pocket handkerchief' yard.

Just follow the golden rule of gardening and group plants with similar requirements together: i.e. dry/sunny, filtered light, shadeloving and moisture-loving plants should be kept with their companions where it is easy to manage their care.

Multiculturalism

The same principle of grouping plants applies if you mix exotics with natives. You might wish to grow exotic annuals in baskets hung from a pergola, for instance. Why not underplant your native 'woodland' with exotic bulbs which will thrive in the filtered light? You could also supplement your tough natives with equally hardy favourites which originated from similar climates around the world. Try creating a micro-climate by using an area which is shaded or sheltered from prevailing winds to give tender plants a greater chance of survival. That is the trick to producing an oasis in difficult conditions, such as coastal or arid areas.

Always keep plants with a high demand for water in one restricted area. Best of all, take advantage of 'free water'. The classic example of this is the old Aussie trick of growing mint under the tap of the rainwater tank. There are a number of ways in which water can be harvested. Water-loving plants can be planted near lawn edges to catch the runoff. Downpipes can be channelled into the garden. As gutterless roofs become an increasingly popular feature of Australian architectural design, rainfall can replace, or at least minimise the need for irrigation, even in arid zone gardens. Any paved surface, such as driveways and carparks, can also be used to channel water into the garden rather than into drains. The planted areas should be lower than the lawns or driveways, both to accomodate mulch, and to allow water to accumulate in the depression.

Wherever irrigation is necessary, if you feel you must have a lawn, for instance, make sure it is as efficient as possible. According to the Western Australian Water Resources Council 'an average household, even in arid parts of Western Australia, should be able to supply all domestic and garden needs with a water consumption less than 600 kilolitres per annum'. Details of how to plan an efficient irrigation system can be found in Water Conservation Through Good Design, which is put out by the Council.

Barking Up the Right Tree

If you are lucky enough to have the choice of retaining trees on your block then read the next section. If you are choosing trees to reafforest your urban wasteland, then the following advice may prove helpful. Unless you wish to emulate Jack and the Beanstalk, leave the Tasmanian blue gum, lemonscented gum, karri and tuart off your list. Beware of all tall gums, for that matter. They have a disturbing habit of dropping limbs without warning, and they are not as effective for shade as a small grouping of medium size native



This attractive pink-flowering paperbark (*Melaleuca nesophila*) would make an attractive addition to any native garden.

trees. Siting the trees will depend on their function. Do you want them for shade, privacy or simply for beauty? If you want a tree to shade a window, for instance, do not plant it directly in front of the window. Choose a small-growing species and plant it at least three metres away from the window, so that it provides shade at the right time of day.

Quick growing trees might offer instant privacy, but will often sprout so fast that sun, sights and sound will be revealed once again. Get advice about the size, shape, requirements and growth rates of trees and shrubs which interest you. Ask at nurseries, and look in a few books from your local library. You will soon be able to draw up a list from which to make an informed choice.

If you admire a tree for its beauty, it is better off in an open area, where it can be appreciated from many angles. Don't forget, though, that one person's beauty can be another person's beast. Keep trees away from boundary lines, wherever possible. Internecine warfare can erupt over shaded swimming pools, solar heaters, even falling leaves. Tall shrubs, planted a couple of metres in your side of the fenceline are more suitable, anyway, and they may well be an efficient peace-keeping force.



Ini Lochman

The Laissez-faire Gardener

People with an eye for natural beauty often select a block which is virtually in its native state, create minimal disturbance building their dwelling, and sit back to enjoy the undisciplined beauties of nature. This laissez-faire approach can certainly be accounted a 'no-work' garden, but there might be some problems with trees. On blocks with shallow surface soils over clay or rock, which become excessively wet during the winter months, the chances of trees blowing over are greater than on deep, well-drained soils where the roots can penetrate and the soil is more stable. Remember to make a careful assessment of which trees should be removed prior to building, as it is far more costly and dangerous to have them removed afterwards. The following guidelines might help you decide:

- tall trees close to a house do not provide a great deal of shade except to surrounding properties.
- buildings sited over the main root system of large trees are susceptible to cracks in foundations or walls, or the dreaded drain invasion.
- all trees have a lifespan. If a tree is mature, carries a large proportion of dead wood in the crown, or is visibly unhealthy, it will most probably require extensive tree surgery, or removal in the near future.





Local Heroes

Some truly dedicated enthusiasts make serious attempts to restore partially or even fully cleared blocks to their former pristine glory. This can hardly be counted a 'no work approach' since it involves collecting and propogating local seeds. You can, however, vary the scale of your involvement from part-time commitment to magnificent obsession. The rewards are great; particularly for the local wildlife. It is a really practical way to make a personal contribution to conservation. If you are interested in gardening local plants contact the Local Plant Group (3 Barque Place, Kallaroo, W.A. 6025).

saplings of naturally large

growing trees are frequently

to new homes. More suitable

nearby so that at some future

stage the original trees can be

Dense bush adjacent to the house is

a bushfire hazard. If you live in the

country or outer suburban fringe, it

varieties should be planted

gradually removed.

is essential to minimise fire

hazards.

retained in very close proximity

Exotic-looking caesia (Eucalyptus caesia) flower buds (top left).

Low maintenance native trees and shrubs, pleasantly intermixing with lawns, achieve a restful effect (top).

An appealing garden in the Darling Scarp, containing plant species that grow naturally there (left).



EDITORIAL

It is difficult to remember a time when our daily news did not feature some environmental controversy. To people involved in environmental research and management, the popularity of `the environment' is a mixed blessing.

Greater public consciousness of environmental issues has meant increased funding and, to some extent, greater prestige. But many scientists working on ecosystems are uncomfortable when their work is placed in the political spotlight.

The knowledge that a scientific observation that once would have been tucked away in a scientific journal to be read only by a few colleagues could become the centrepoint of a political controversy is daunting.

Retaining objectivity in any research area is difficult. For those engaged in research on the natural environment it is even more difficult. Unlike the physical sciences in the natural sciences the truth is often camouflaged by interactions between factors which vary over time and space. When the results of this type of research are placed in the political arena, the mixture is often volatile and the truth a casualty.

To enable scientists to better seek the truth and communicate it, the scientific community has adopted what has been called "the scientific method". The scientific method is a code of conduct with rigid requirements. An offshoot of that code is a set of rules which scientists must follow, at least in reputable scientific journals, if they are to have their research published. Unfortunately, a byproduct of this is that scientific articles are not the easiest to read and are often plain boring.

Given that the environment has become a major political issue, it is important that those involved in the debate are fully informed. But scientists are faced with a dilemma. They need to popularise their work to reach a wider audience. On the other hand, they cannot afford to lose objectivity.

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NATIVE CREATIONS



Nouvelle jardins, multiculturalism or laissez-faire; which garden fashion will you choose? Turn to page 22.

WILD MARRON



Do our wild marron have a future or will local gourmets keep catching them to the point of extinction? Find out on **page 4**.

KARRI MAGIC



What is really going on in the karri forest? On **page 32** we take a look at the system of conservation reserves that have been established to preserve this awe-inspiring forest.

STRANDED!



Relive the euphoria of the Augusta whale rescue on page 18.

BACK TO BASICS



With today's massive land boom it's hard to imagine that the State once couldn't give land away fast enough. Now the government is buying back our valuable conservation areas. See page 43.

DESERT GEM

The Gibson Desert Nature Reserve covers over 1.8 million hectares. It is a desolate but subtly beautiful landscape. Read about this unique area and the management problems it presents on page 48.



AFTER THE FOX

SNAKES & ADDERS



Slim and active snakes have emerged hungry from their winter hibernation. But they're not all venomous. See **page 51** for tips on living with snakes.



Foxes pose a major threat to native mammals and other fauna. Can we outfox them? See **page 12**.

A SIGHT TO BEHOLD



'Its pouch can hold more than its belly can', goes the popular rhyme. Find out more about this awkward but graceful bird on **page 39**.

Cover Photograph

One of our natural wonders the beaches of Hamelin Pool (Shark Bay) consist of billions of small shells.

Photo by Bill Bachman.



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