

## Native Species Arboretum at Four Winds

Four Winds' commitment to restore, to the greatest extent possible, the native vegetation on this site and thereby create an Arboretum illustrating the beauty, diversity, and horticultural value of local native species is fundamentally an act of gardening. The impact of humanity on all landscapes - every plant on earth is now having to respond to the changes in atmospheric composition and climate and too often many other drastic impacts - is such that we are now entrusted with 'gardening' the entire planet.

My personal vision in the work I do in this region is that in 1000 years people here will be able to delight in the same rich diversity of species and landscapes that delight me in the early twenty-first century. Sadly a culture that felt it needed to enhance its environment with the rabbit, the fox, the cane toad, the bitou bush, the lantana still has scant appreciation of the wondrous diversity and distinctiveness of local native species. If you glance at local gardens you will see most of them crammed with banal incoherent assortments of plants plucked from all round the planet.

And worse, through ignorance, negligence and laziness many of these plants are flooding out across the landscape displacing the natives and producing a weird homogenized mongrel assemblage. The lower reaches of the little creek here are clogged with a vast colony of South African arum lilies - there is scarce room for a native plant. Someone was once advised by an official to plant bitou here at Cuttagee and some still turn up - a plant so devastating in its impact that on the north coast it is now controlled by drenching whole beaches with herbicide from helicopters. These things don't need to happen, no one sets out to make them happen, but inexorably they will happen without changes in values and gardening practices.

### Reading the landscape

Beautiful as it is what you see here is regrowth, a convalescent, a recovering landscape. Possibly a few old spotted gums have remained standing but otherwise it has been wholly cleared at some time or another. Just down the bay there was a sawmill until a century ago - spotted gum was milled for shovel handles to dig the WW1 trenches - so we can be sure that all the finest trees were logged long ago. None of us have seen the majesty of the forest as it must have been in 1788. I've stumps round my property across the lake three times the girth of any tree now standing.

Yet this vegetation displays astounding resilience - a great array of species are making their way back into the landscape unaided, the great majority of those that once grew here. There is really not too much to be done other than assist a few species who will be slower to reclaim their place in the landscape; cull a few invasive weeds and ill-advised introductions that will impede the natural processes; and to be patient.

A remarkable aspect of Far South Coast vegetation, and indeed that of much of Australia is that two completely different communities share the landscape, intimately entwined, the fire-friendly and the fire-resistant - better known as the sclerophyll and rainforest communities.

What would have grown here and is energetically re-establishing is a mosaic of spotted gum dominated forest with Acacia and burrawong cycad understorey on the dry shaley fire-prone ridges and a closed canopy of rainforest species such as lillipilli with a ferny understorey along the moister sheltered gullies. There are virtually no species shared by the two communities. The spotted gums and other eucalypts cannot germinate in the deep shade of the rainforest gully though they would be happy there if they once got a start.

The rainforest species can spread some way up slope over time but are periodically driven back into the gully by fire, which they cannot tolerate. It is fire that structures the fundamental landscape patterns. Fire actually assists the sclerophyll forest by recycling nutrients and promoting germination. Whereas the

rainforest species can be killed by fire, mostly produce berries and are spread about by birds, bats and the like. Many of them are of much greater evolutionary antiquity, with Gondwanan links to NZ and South America. The sclerophyll species are considered to have evolved in response to Australia's geologically recent desiccation as it drifted northwards.

## Arboretum planting guide

### Eucalypt Canopy

*Corymbia maculate* (spotted gum)\*

### Rainforest buffer zones

*Claoxylon australe* (brittle wood)

*Syzygium smithii* (lillipilli)\*

*Backhousia myrtifolia*\*

*Rapanea howitteana* (mutton wood)

*Beyeria viscosa* (wallaby bush)

*Livistona australis* (cabbage palm)\*

*Myoporum bateae*\*

*Symplocus thwaitesii*

*Synoum glandulosum*

### Shore of pond

Spotted gums

*Cyathea australis*

### Margins of amphitheatre

*Lomandra longifolia*

*Correa reflexa*

*Correa baeuerlenii*

*Lepidosperma laterale*

### Excavated bank

*Hardenbergia violacea*

*Hibbertia dentata*

*Carpobrotus glaucescens* (pigface)

*Epacris impressa*

*Austrostipa stipoides*

### \*Species missing or under-represented on site. These also include

*Acronychia oblongifolia*

*Livistona australis*

*Macrozamia communis*

*Exocarpos cupressiformis*

*Howittea trilocularis*

*Ficus coronate*

### DO NOT PLANT

Acacia species

Non local - eg *Hakea*, Bluebell creeper

## Q&A

Q. Are there significant grasses on the Cuttagee/Four Winds site?

A. *Cymbopogon refractus* and perhaps the wonderfully named *Oplismenus imbecillis* - a delicate little rainforest grass, particularly beautiful when flowering

Q. There is a yellow/gold coloured banksia down on the estuary, near the Cuttagee Bridge. Is it local?

A. It is *Banksia integrifolia* and it is local

Q. Pig Face - the "common" purple pig face is on the dunes near the bridge. I would think that it is not peculiar to that location, but is it significant in any way (food, stabilisation? etc)

A. Pigface - *Carpobrotus glaucescens* - is a very popular bush tucker plant when its fruits are ripe - folk I work with are always checking them out. leaves often become very richly coloured.

Q. What other sites would you suggest visiting?

A. Another site well worth checking out is down a dirt track that leads to sea just south (100m) of Head of Cuttagee road. Magnificent *Banksia serrata* (old man banksia) forest, great bark textures, orchids etc

Q. What are the significant species from the area?

A. *Acacia pedina* (only found Bermagui-Tathra). *Haloragis exalata* subsp *exalata* (square raspwort, very rare/endangered, colonies on Cuttagee shores). *Myoporum bateae* - uncommon, colonies on Cuttagee shore. *Correa baeuerlenii* - chef cap correa, uncommon in wild, popular in gardens. *Pultenaea pedunculata* - very rare in NSW, on Cuttagee roadsides. *Wilsonia backhousei* - rare mat-forming salt marsh plant present at Cuttagee and Bermagui river. *Ficus obliqua* (small-leafed fig) - rainforest tree that reaches southern limit hereabouts