

## Revegetation vs Indigenous gardening

Botany Group  
Thursday 16<sup>th</sup> February 2006

Jeff Yugovic led us through an interesting evening pointing out how to use indigenous plants for **sustainable revegetation** and **aesthetic, practical gardening**.

He explained that many revegetation projects have failed to be **self-sustaining** as

- 1) Preparation was inadequate or conditions unsuitable for regeneration to occur eg use of deep mulch-beds.
- 2) Management was insufficient or inappropriate eg herbicide use on regenerating indigenous species.
- 3) Plant species were not suitable for the site i.e. they were not appropriate to the site's Ecological Vegetation Class.

Maps of pre 1750 EVC's have been developed for Victoria. The scale is often too general to be taken literally, especially south of the divide where small-scale site diversity is common. Research and attention to detail is required to really understand the site, its management history, soil type, natural complexity etc. This detail is needed to create **dynamic revegetation** with self-sustaining populations, a reservoir of local provenance genetic material.

**Conservation reserves** should be managed for **dynamic revegetation** where new plants are obtained by regeneration. Diversity can be promoted by management that uses the existing soil seed bank (eg. fire) and strategic introduction of missing species (eg. grazed out) or genetic material for that EVC from local plants.

**Indigenous gardening** is the use of site-indigenous plant species for practical or aesthetic reasons. This includes using species suitable for pruning (eg. topiary to keep a view or coppicing to create archways) screens or to create a lawn or wild flower bed.

An example of **stable revegetation** using indigenous species is the use of *Poa labillardieria* on roadway and freeway reservations. Although they were aesthetically pleasing for a while they will not be self-sustaining as this species requires shade for regeneration and is particularly herbicide sensitive.

**Dynamic indigenous gardening**, often referred to as **ecological gardening**, uses site-indigenous species in a landscaped garden that is **managed for natural regeneration**.

Jeff then showed us slides of his grassy woodland garden and some of its 80 species. After spreading topsoil (from under the house) around several *Kennedia* plants regenerated (from 30 year old seed). After a mechanical disturbance it took 7 years to gain control of the weed problem. He left it fallow for two years, **weeding** it and leaving regenerating natives. Weeding, especially in the first spring after disturbance, is done in an orderly manner working between 10m tapes so that no weeds are missed as in random weeding. Jeff thinly mulched the area after two years and then direct seeded it.

Below are some of his **management tips**. Pioneer species come in anyhow. *Senecio quadridentatus* and *hispidulus* are worth keeping as they are food for the magpie moth. The black wattle, *Acacia mearnsii* can be pruned into a dome or pom-pom shape but their fast growth makes it time consuming. To prolong the life of the *Kennedia* lift the branches out of leaf litter as it can smother them. Sheoke bonsai well. Painted woody weed stumps can translocate herbicide to nearby parasitic Cherry Ballart plants and kill them. Burn *Lomandra* and lily beds every three years or so. Keep bracken looking neat by removing dead fronds each year. Trees may be managed by coppicing to sound wood near the base. In *Eucalypts*, this gives attractive juvenile foliage. Manna gums with wide leaves are more edible to possums than the shiny narrow leaf form. Annually, in summer or at least every two years *Poa labillardieria* are cut down to the base and then watered well to encourage vigour. Good lawn species include *Austrodanthonia geniculata* and *A. racemos*. These thin leaved species that only need to be mown twice a year. *Microlaena* grass is a bit more vigorous, invasive and difficult to keep out of garden beds. *Themeda* tussocks require grazing mowing or burning one year in five so it does not shade out its own crown. *Dichelachne crinita* is a beautiful graceful grass in flower and with seed. Prune *Chrysocephalum semipapossum* in autumn. Kangaroo apple is a fast grower and birds love it. Inter-tussock spaces increase diversity. The soil crust (mosses, lichens and fungi) should be cared for. Prune *Juncus pallidus* annually to get fresh green foliage. Mowing makes inter-tussock spaces more visible. *Dianella* and *Lomandra* make good substitutes for *Agapanthus*. Try to negotiate with your neighbours but when all else fails build a paling fence to reduce incoming weed seed.

Jeff showed us pictures of the fire resistant CFA garden he designed at Mt Eliza using indigenous plants to show that appropriate plantings could look good but is not a fire hazard. Some of the coastal plants he used included a hedge of *Rhagodia candolleana* beautiful tussocks of *Austrodanthonia racemosa* *A. caespitosa* (blue coastal bluff form).

When managing larger areas for **bush regeneration** secure borders such as logs or walls help to limit infiltration by weeds. If this is not possible English Ivy or Kikuyu are useful as bordering ground covers because they smother other weeds, (even Veldt grass) and can be controlled by spraying or cutting back runners. Ivy will not seed as a ground cover. Using tree guards can help a possum defoliated gum recover to 100% in a year. The local reserve is Gully Woodland EVC with swamp gum, *Bursaria*, *Poa lab* and ferns. Brushcutting the *Poa* and *Austrodanthonia* is undertaken for fuel reduction purposes. Grassy woodlands generally respond well to fuel reduction.

Sit back and enjoy the way the garden responds to the seasons and rainfall events.

Jeff provided us with a most informative evening as to how to manage indigenous vegetation for a variety of purposes. For those wanting further information on the topic Jeff recommends the book "Indigenous Gardening" by George Seddon.

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