

Environmental Arboriculture: Pruning.

A new pruning technique has been developing in Europe and England over the last few years. Some of the concepts behind this method are relevant to us here in Australia and are now being used by Arborists, particularly in relation to the creation and preservation of habitat. The technique is a part of a new movement termed 'environmental arboriculture'.

Pruning techniques developed within Environmental Arboriculture control the risk of harm associated with limb failure or structural collapse, while preserving and enhancing habitat and biodiversity.

Large or old trees in public spaces often pose an unacceptably high risk of harm from limb failure or structural collapse. What ultimately happens to these specimens depends upon the level of expertise with which they are assessed and the local political will to preserve what are essentially high rise apartments for wildlife and a range of other organisms.

Removal of old well established trees, particularly native species, usually results in the loss of many benefits. These include all of the usuals like shade, shelter, amenity value, character value, etc., and perhaps more importantly, biodiversity and habitat values.

There is an alternative approach that allows for the preservation of trees with habitat or potential hollow sites through specialized pruning techniques. An understanding of the process of hollow formation and some artistic chainsaw work by skilled Arborists can convert a high risk dead tree into a low risk, environmental attribute.



Before and after a large dead Eucalyptus camaldulensis - River Red Gum was pruned over the main path on the Torrens Linear Park walking track.

Environmental Arboriculture: An alternative approach to pruning.

In the past, the removal of lateral limbs or stems has left trees looking unnatural and in some cases downright ugly. Such trees may take many decades to develop any real habitat value. The normal flat, transverse chainsaw cuts used to remove limbs are not suitable. They look artificial and provide little or no opportunity for colonization by micro-organisms that aid hollow development.

Careful assessment of tree structure and risk by an experienced, level 5 Arborist is generally required prior to any works occurring. Well targeted pruning can substantially reduce the total crown size and mass of a high risk tree, leaving it with a natural appearance of having been through a major storm.

Each point where limbs are removed can be carved with a chainsaw into a range of shapes imitating natural failures. These are referred to as 'coronet cuts'. A large tree may require as many as 50 such cuts to be made.

The locals were inspecting the tree almost immediately after the work was completed.



In appropriate circumstances, living trees can also undergo 'environmental pruning'. I have been involved with many large trees in public spaces trees where there was simply no alternative to removal as a result of poor structure, a lack of adequate pruning options and high risk. Environmental Arboriculture may offer an alternative in the right circumstances.

Care is required though as trees in Australia are relatively fast growing, unlike many of their counterparts from England & Europe where annual growth is slower and this technique is being used more extensively. The regrowth from a large, structurally unsound native tree in reasonable health can be fast in Australia. This means the period of risk reduction may be short. Other strategies and/or regular pruning and monitoring may be needed for adequate long term risk reduction.

Environmental Arboriculture may offer another option for some trees and in some situations to that of whole tree removal. This approach certainly offers a better way to retain dead trees than methods that have been employed in the past.

If at all unsure you should consult with a qualified Arborist and conduct a risk assessment before undertaking this process on living trees. Trees may also be protected by the Development Act 1993 or the Native Vegetation Act 1991 and approval will be required for pruning. For further information on Environmental Arboriculture go to <http://www.treeworks.co.uk/downloads/3%20-%20ENVIRONMENTAL%20ARBORICULTURE%20TREE%20ECOLOGY.pdf>