



sydney city  
**bonsai club** inc.



## NEXT CLUB MEETINGS

**Green Square Community Hall**  
3 Joynton Avenue  
Zetland

**7pm Tuesday 14 February 2012**  
Presentation on preparing your  
on bonsai for display & workshop

**7pm Tuesday 13 March 2012**  
Presentation on preparing your  
on bonsai for display part 2 &  
workshop. Easter show roster.

## CONTACT DETAILS

 0432 461 025

 [info@sydneycitybonsai.org.au](mailto:info@sydneycitybonsai.org.au)

 [sydneycitybonsai.org.au](http://sydneycitybonsai.org.au)  
 PO Box 486  
Summerhill NSW 2130

## COMMITTEE

**Patron** Dorothy Koreshoff  
**President** Bryan  
**Vice President** Sue  
**Secretary** Alan  
**Treasurer** Chris  
**Public Officer** Warwick  
**Newsletter Editor** Tony  
**Librarian** Marianna  
**Catering** Philip  
**Committee** Richard

## MEMBERSHIP

**Full Membership** \$40.00  
**Concession** \$25.00  
**Family** \$55.00  
**Pensioner** \$25.00

## Welcome to the December / January / February Newsletter

### February Meeting

- Preparing your bonsai for the Royal Easter Show - show tips from a winner
- Bring a bonsai and talk about it - a monthly even
  - Share your bonsai's history; tell us about how you got it, what made you choose the style, how it has changed or how it came to be as it is today.
- Dealing with weird and wacky summer weather - watering considerations
- Workshop - Bring a tree to work on
- Discussion botanical queries, pests and care - your chance to ask your questions
- Monthly bonsai display - show your bonsai
- Club mail and news



A beautiful Japanese Maple bonsai

### In this month's newsletter:

- For pictures taken at the December meeting see page 2
- Sue's article on bonsai roots, see pages 3 - 5
- Mini Bonsai article & Events Calendar page 5

Pictures of Christmas theme decorated bonsai at the December Club Meeting



*pruning my bonsai  
which to keep, which to lop ...  
(sigh) can't decide*

haiku by Dave Burke  
[http://mababonsai.org/pages/burke\\_haiku.html](http://mababonsai.org/pages/burke_haiku.html)

# GETTING TO THE ROOT OF THE SUBJECT by Sue Brennen

This series of articles is designed to help take the mystery out of bonsai for absolute beginners. It will cover the basics that I wish I had known when first starting out in bonsai 20 years ago. For a beginner certain species of trees may not be suitable. Some trees coming from very cold climates may not be able to cope with Sydney temperatures well and others will have unsuitable growing habits or undesirable leaves that are extremely large. Some beginners are tempted to want 'one of everything', not realising how difficult some species can be.

## FACTS

1. A tree in bonsai form functions in exactly the same manner as a tree growing in the garden.
2. A tree in bonsai form has exactly the same needs as a tree growing in the garden. However, the bonsai grower must supply some of those needs, Mother Nature the rest.
3. Most bonsai trees are wilfully and feloniously murdered through lack of water.
4. A tree in bonsai form is kept small by cutting the top part; i.e. trunk/s, branches and foliage.
5. A tree in bonsai form is kept healthy by cutting the bottom part; i.e. roots.

## HOW A TREE WORKS - The root system

When the seed of a tree germinates it has a genetic code that tells it certain things. The tree knows how long it has to live, how tall it can grow, how wide its branches can spread, what it can do to fend off attack from insects and other trees that threaten its ground space or nutrient source. What temperatures it prefers to grow in, what soil conditions are best for it, how to cope with extreme climate changes, etc, etc, etc.

This code is so efficient that some trees can live for thousands of years as can be seen by olive trees in the Middle East that are still alive and were producing olives in the days of Jesus Christ. Some Huon pines in Tasmania are over 10,000 years old and still going.

Imagine telling a new buyer of a bonsai when they ask how long it will live, "maybe 600 or 700 years". Some bonsai trees in the Japanese Emperor's collection are documented at being 700 and 800 years old and still going.

A tree is always growing under pressure. The roots put pressure on the top to grow and the top puts pressure on the roots for water and nutrients so it can grow. This pressure is done in complete harmony within the tree to enable it to successfully reach its genetic age.

The first and probably the most dominant part of the germination of a tree seed is the formation of a tap root. (Once the tap root is removed in trees for bonsai it never grows back). The tap root initially seeks moisture and stabilisation before other parts of the genetic code of the tree start functioning.

If the initial germination is successful and the tree grows to maturity, by then the tap root is mainly assisting stabilisation only and the thick side roots are providing stabilisation and forming a framework for the growth of fine feeder roots.

The most important part of a tree is the root system, without this the tree will not live. The most important part of the root system are the fine feeder roots. Healthy and well growing feeder roots will be shown by healthy and well growing branches and leaves.

It is what you don't see in a tree that is the most important part of its visual beauty. If the feeder root system is not healthy, it will be reflected in weak growing habits and unhealthy looking foliage.

When fine feeder roots first grow and feed they grow for only about two weeks and then new feeder roots grow with the older feeder roots forming the channel for nutrients and moisture to travel to the tree to keep it healthy and growing. The main large stabilising roots of a full size tree growing in the garden started off as fine feeder roots sometimes no bigger than a human hair.

As I said before, a tree grows in harmonious pressure between the top trunk, branches and foliage and the bottom roots.

The trunk and branches are the framework for the leaves. The thick roots are the framework for the fine roots.

Cutting the top of a bonsai keeps it small. Cutting the roots of a bonsai keeps it healthy

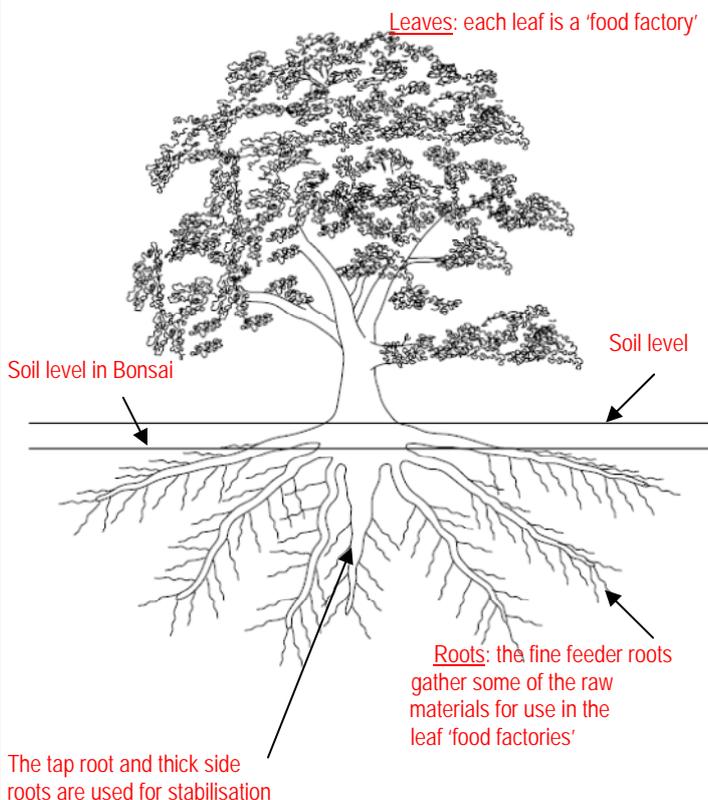


Diagram of a 'typical tree'

## GETTING TO THE ROOT OF THE SUBJECT by Sue Brennen

For every branch on a tree there is a corresponding root. If a branch is growing particularly strongly it puts pressure on the corresponding root to grow strongly.

The feeder roots of a tree grow during the night. During the day they are busy supplying moisture and nutrients to the top of the tree.

The seasonal changes in trees are triggered by the temperature of the soil during the night. This is when the root system is growing. With most varieties of trees the root system needs a certain temperature at night to stimulate growth; it is when that temperature gets colder that the roots stop growing and the tree goes into dormancy. It now becomes logical when stressing the importance of keeping bonsai outside.

The genetic coding of a tree directs that it does everything it can to protect the root system first and foremost. Under stress (when damage occurs to the root system) a tree will shed leaves and sacrifice branches, if need be, to reduce pressure on the root system. A tree will not grow any bigger than the root system allows.

When we attach the word 'bonsai' to that knowledge of tree roots, it becomes logical that provided the tree has access to a feeder root system, in bonsai form it will not need the tap root and the long thick side roots for stabilisation, so they can be cut off. With some exceptions, most trees will survive the removal of these roots.

In bonsai we are encouraging a healthy fine feeder root system that will provide enough energy for the top of the tree to grow strongly. We root prune in bonsai so we can supply fresh areas of soil and nutrients for the continuously growing feeder root system.



Roots and top pruned to remove tap root and thick stabilising roots, leaving fine feeder roots

The most daunting task for beginners is 'root pruning'; especially with regard to the earlier statement that for every branch on a tree there is a supporting root.

The initial root pruning of a young tree grown from seed that has never been root pruned is only ever performed once. (See diagram above) We are pruning the roots that would one day support the tree if it were growing in the ground.

Once they have been removed for bonsai they will never grow back. As you see from the diagram, when this initial root pruning is done a massive amount is removed from the top of the tree, thus reducing the pressure that the top part of the tree can put on the now much smaller feeder root system. When this first root pruning is done, the top of the tree must be reduced accordingly or the tree will die.

Full sized Moreton Bay fig trees were successfully dug up and transported to the Olympic site at Homebush where they now grow strongly in the ground. This was done using the 'Mysterious Bonsai Technique'!

Bonsai enthusiasts use chopsticks and scissors, tree movers use front-end loaders, cranes and steam shovels to practice 'Mysterious Bonsai Technique'.

A small root system cannot support a large top. Remember that the tree grows best with both top and bottom putting harmonious pressure on each other. After the initial root pruning the tree will need annual root pruning for the earlier stated reason of removing excess fine roots and giving the root system a fresh bed of soil to grow in.

When a bonsai has a well growing feeder root system, the energy provided to the tree comes evenly from all the way around the trunk rather than relying on the necessity of lone root for each branch', as in a full size tree.

**Rule of Thumb...** With most varieties root pruning and/or root trimming is done when the tree is dormant, late winter or early spring being the ideal times. If the tree is a deciduous variety (loses its leaves in the winter), dormancy or 'a full anaesthetic' is obvious, the tree has no leaves. If the tree is evergreen (has leaves all the time), root pruning/root trimming should only be done before signs of new growth appear.

**Figs are one exception to this Rule of Thumb.** To help you remember the best time to root prune/root trim figs is to do it on Christmas Day!

Figs prefer to be done at this time of year and will have leaves of more even size then, than if they are pruned at other times of the year. In desperation a fig can be done at just about any time, they are real survivors, but only because of our mild climate. A Moreton Bay fig will not grow in Alaska.

**PS:** Beginners should avoid the temptation of buying unsuitable varieties of cold climate trees such as Spruce or Picea, which are often found at discounted prices in nurseries after Christmas, as unwanted Christmas trees. These trees survive in areas where there is snow for many months of the year and are difficult as bonsai subjects in Sydney.

On the other hand, some varieties of cold climate trees do very well in our warmer climates. As an example of how well some trees can adapt to 'alien' climates, in some areas of Queensland Chinese Elms are the major 'weed' choking out native forest areas, just as privets are in Sydney bushland areas.

# NEW COPROSMA MINI BONSAI PICTURE ARTICLE & EVENTS CALENDAR

Each year throughout the growing season the root system takes 'afternoon naps'. The feeder root system takes a rest from rapid growth rate and slows down a bit. Each variety has a different cycle and some trees grow at a faster rate than others. These 'afternoon naps' of the root system can be witnessed by the growing shoots in the top part of the tree not having fresh new growth. New growth looks a brighter and fresher looking green at the growing tips of the foliage. For beginners this resting feeder root system is difficult to see in varieties such as pines or conifers. It is important to remember the 'afternoon naps' of a tree root system when dealing with the foliage of a bonsai.

## POINTS TO REMEMBER

- 1: The most important part of a tree is the ROOT SYSTEM
- 2: The most important part of the root system is the FEEDER ROOTS
- 3: The top and bottom parts of a tree grow in harmonious pressure.



*pruning the tree / pruning the verse  
removing unneeded twigs / removing  
unneeded words  
creating bonsai / creating haiku*

haiku by Dave Burke

[http://mababonsai.org/pages/burke\\_haiku.html](http://mababonsai.org/pages/burke_haiku.html)



*I picked up this bronze leaf Coprosma at a nursery in Dural. I have to admit it was overpriced but I could see good potential for a mini in that long lanky frame and I have been after this particular plant for several years - Lee*

Date	Event	Details
17 - 18 March 2012.	Australian Native Plants as Bonsai Exhibition, 9th National Exhibition and Symposium	Australian National Botanic Gardens Canberra, Clunies Ross Street, Acton ACT <a href="http://www.cbs.org.au">www.cbs.org.au</a>
14 April 2012.	Nepean Bonsai Society Exhibition	Police & Community Youth Club, Station Street, Penrith NSW <a href="http://www.nepeanbonsaisociety.org">www.nepeanbonsaisociety.org</a>
4 - 5 May 2012.	Mid North Coast Regional Bonsai Exhibition	Coffs Harbour Botanical Gardens, Hardacre Street, Coffs Harbour NSW Held in conjunction with Coffs Harbour Tokonoma Bonsai Society 30th Anniversary celebrations. For more information contact - raroredge@optusnet.com.au
18 - 22 May 2012.	AABC 2012 National Bonsai Convention, Melbourne	'Be Inspired' 25th National Bonsai Convention, Rydges Hotel, Bell City, Preston VIC <a href="http://www.bonsainorthwest.com.au">www.bonsainorthwest.com.au</a>