

Bonsai Development Planning

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He who fails to plan is planning to fail – Winston Churchill

Development of quality bonsai is a long term process. Some high quality bonsai have been developed with minimal planning, but those normally take decades or longer in nature. Putting together a good plan will speed up the process dramatically and is the only way that most of us will see our trees develop into quality bonsai in our lifetimes.

A bonsai development plan can range from fairly simple to very complex. For those with few trees and great memory it can be a mental image and the steps to get there. For the rest of us we should plan on some form of written plan. This can range from notes in a spiral notebook, to a binder with sections for each tree, to a full blown computer database. Pick what works for you. I try to keep a binder with sections for each tree since it is well organized and I can write the notes in the garden while working on the tree.

Documentation - It is a good idea to document the progress of the tree and what was done to produce that progress over the years. Digital cameras are great for taking pictures to document the tree – pick a background that is not too busy so the tree is easily seen. As the quality of the tree increases you will probably want to improve the quality of the background and lighting, but early on a simple background in the shade works great. At the minimum, repotting should be documented to make sure that the tree is repotted at appropriate intervals. As the tree develops and techniques such as decandling and defoliation are applied the timing and response of the tree to these should be documented, particularly with regards to the weather that season.

Those who cannot remember history are condemned to repeat it – George Santayana

Developing the Plan – The duration and complexity of the development plan will depend upon where the tree is in its path to becoming a quality bonsai. Trees that are early in their development will have fairly short simple plans while trees that are being prepared for a major show will have multiyear plans that are quite detailed. Winter is a good season to review the documentation and develop the plan.

Pre-bonsai – The development plan should address the development of the roots and trunk – fine branches will be grown and developed later. It should address the use of sacrifice branches and the repotting sequence and will often be for 2 – 4 years with little detail – *i.e.* repot in 2012 and trade out sacrifice branches in 2013. For trees that do not bud back strongly on old wood (pines, spruces, etc) you have to keep some small branches that will be further developed once the trunk and roots are in good shape. One of the biggest failures in the development of prebonsai is not paying enough attention to the roots. A good root base will visually anchor the tree and also assist in development of well ramified branches later.

Early Bonsai – This tree is in a growing box or a bonsai pot and the branches are being developed. Sacrifice branches are still used, but they are often cut exchanged every year so that the pruning scars are not too large and can heal before the tree is shown. Root pruning is more detailed and may include notes about using root grafts to fill in blank spaces at the next repotting. New branches may be grafted to fill in gaps. Approach grafts are one of the easiest grafts to use since the foliage will match and the scion is still receiving nourishment from the roots. But the whips that are grown out for approach grafts sure look like sacrifice branches and can easily be pruned off by mistake.

Midlevel Bonsai – Branch and root ramification are often the major tasks during the stage of development. Sacrifice branches can still be used to thicken selected branches, but it is now critical to cut them off before they grow too thick. In addition to pinching and pruning this often involves control of water and fertilizer during active growth phases to control internode length. Having a development plan will help insure that the tree is placed in a different area than where the prebonsai and early bonsai are grown with lots of water and fertilizer.

Show Quality Bonsai – Trees at this stage of development continue to go through multiyear cycles to reach a peak at show time. This often involves careful control of growth to obtain very small foliage and internodes. Even if they are only being pinched to maintain shape they will eventually decline in health or become too thick and have to be restyled. Repotting, defoliation, and candle cutting will all stress the tree and can be used to reduce the foliage and internode size. However, too much stress will kill the tree. It is very common to defoliate or cut candles every other year or 2 out of 3 years to allow a recovery year. Repotting often results in smaller growth that year followed by large, strong growth the following year that becomes declines as the roots fill the pot. Coordination of repotting and defoliation/candle cutting so that the tree is repotted during a defoliation/candle cutting rest year and then defoliated/candle cut during the strong growth year will maximize results.

Timing – Take pictures whenever you can. Late fall once the leaves have fallen and excess needles have been removed is ideal since it allow you to see the branch structure. Summer pictures are good to show the foliage as well since the IEBS holds its show in July and the PNBCA convention is in September. Document major events and overall behavior as they occur – don't trust your memory until mid winter. Develop the plans during the mid-summer and winter when there is not as much that can be done with our trees as during the active growing seasons. Late winter is also a good time to prune and wire conifers – the first stages of implementing the development plan for the new year. Finally, be willing to adjust your plan to accommodate unforeseen events such as an early or late hard freeze, poor watering while you are on vacation, or a particularly long or short growing season.

Longer Term Planning for Bonsai

- What do we mean by long term planning in bonsai?
 - Next year?
 - Two to three years?
 - Five to ten years?
 - Decades?
- Time to a good bonsai, based upon source of material
 - Semifinished bonsai 2 to 4 years \$250 - \$2000
 - Prebonsai stock 5 to 8 years \$50 to \$500
 - Nursery stock 10 years to never \$5 - \$100
 - Seed 10 – 30 years \$0 - \$5

Resources (time and/or money) must be invested to create good bonsai
- Priorities
 - Horticulture
 - Keep the tree alive
 - Soil, water, fertilizer, summer and winter protection, etc.
 - Keep it growing strongly – most of us do not fertilize enough
 - Size
 - Bonsai are generally less than 1 m (40 inches) tall
 - Can be larger for specific purposes
 - Thickening the trunk or branches
 - A very large tree
 - Remember that they must normally be movable in cold climates
 - Aesthetics
 - Does it please you?
 - Does it please people who frequent your garden?
 - Does it please others?
 - Nuances – what style, does it look like a tree or a bonsai, etc.
- Cycles
 - Bonsai move in cycles
 - Annual
 - Spring, Summer, Fall, and Winter
 - Repotting - two to four years
 - Repot – inhibits growth
 - Next year – strong growth
 - Following years – declining growth as the pot fills with roots
 - Repeat
 - Appearance – three to six years or longer
 - Wild growth – build strength and/or thickness
 - Controlled growth – develop ramification
 - Show – weaker growth with smaller leaves, etc.
 - Repeat
 - Restyle (moderate to full)

- Planning
 - Annual - should become part of your bonsai habits
 - Mid-term (2 – 4 years) – the focus of our planning – long enough to require a plan, but short enough to show tangible results
 - Long term (5+ years) – the big picture defining where we want the tree to go
 - Allow room for the unexpected – a branch dies or is broken, an unexpected bud, evolution of your aesthetics

- Time to create:
 - Roots – 5 years
 - Trunk – 10 to 20 years
 - Main branches – 3 to 5 years
 - Ramification (fine branches) – 2 to 10 years

- Which comes first – roots or trunk?
 - Roots (nebari)– good roots will help create basal flare in the trunk and speed trunk development
 - Trunk – the trunk takes longer to develop and roots can be grafted on
I prefer the first approach since I feel a good bonsai must have a good nebari

- Pots
 - Provide for growth of the tree
 - During development
 - Too small inhibits growth
 - Too large remains cold and wet which also inhibits growth
 - Right size will be colonized in 1 – 2 years
 - During refinement
 - Helps to define the image of the tree
 - Encourages strong growth
 - Enjoyment/Exhibition
 - Serves as a frame for the tree

Keeps the tree alive

- Basic program from nursery stock
 - Years 1 & 2 - Repot to get the roots sorted out and recover
 - Year 3 - Cut back the trunk and let a branch grow wild (keep lower branches)
 - Year 4 - Repot to get the roots growing properly
 - Years 5 to 8 to 10 - Repeat years 3 and 4 to develop a tapered trunk, start cutting off the low sacrifice branches
 - Years 9 & 10 – Develop the main branches, remove the rest of the low sacrifice branches
 - Years 11+ - Develop secondary, tertiary, and smaller branches

Bonsai Planning Sheet

Tree:

Date:

Size (height, width, trunk, etc.):

Attach current pictures and picture/sketch of the goal.

Last Repotting:

Strengths:

- 1.
- 2.
- 3.

Weaknesses:

- 1.
- 2.
- 3.

Describe the Long Term Goal:

Plans to achieve the goal (build on the strengths, minimize the weaknesses)

1 – 2 years:

3 – 5 years:

Longer: