## The Art of Bonsai

By Eugene Howell

During the past couple of years the articles I have written dealt with the day-to-day knowledge and techniques needed by the average beginner in order to be successful with bonsai. In this two-part article I want to depart from that path and address a technique that is not for the "infrequent" bonsai hobbyist. This is a technique that, if not done carefully and thoughtfully, can do serious harm (even death) to your tree, so never try this unless you have the knowledge and interest to see it through carefully. The technique itself is very simple, but if not done with very frequent checks, can quickly go awry. Before trying it, evaluate your bonsai interest level. If you don't have enough interest to check your bonsai a couple of times each day then don't try it. You will likely only wind up with a dead tree.

The general rule for working with temperate plants (deciduous) and most conifers is to wait for the dead-of-winter (when the plants have gone dormant) to do any serious work with the roots. If the average bonsai hobbyist tries it at any other time of year, chances are very good that the plant will die in short order.

Have you ever wondered where bonsai nurseries get the hundreds or thousands of plants they sell to bonsai hobbyists? Many of them grow a large percentage of them themselves. They have a set of donor plants from which they take cuttings. These cuttings are then rooted and grown into saleable pre-bonsai plants. Just a few of each species of donor plant can yield hundreds of rooted cuttings each year.

What I want you to do is think about this highly successful method of getting new plants. When they take a cutting, essentially what the nursery instantly has is almost a complete plant. There are leaves, branches, a trunk...... but absolutely no roots. The fact that this "plant" can be successfully grown into a marketable pre-bonsai is proof one can survive without its roots if it undergoes the correct procedure. Since most of these nursery cuttings are taken during the peak of the growing season, i.e., Spring and Summer, it shows that under the right conditions even plants with no roots at all can survive and thrive. It also shows (if you think about it) that bonsai, after having their roots worked on, should be able to survive and develop during the warm part of the year. They can!!

Given that there is little risk to the tree when doing root-work in the middle of winter, when the tree is dormant, why even think about doing it at any other part of the year? There are probably as many reasons as there are bonsai hobbyists. For me the most pressing reason is serious root-problems. Some other examples are pot breakage, personal schedule conflict, vacations, convenience, etc. The important thing to remember is that if the reason for doing root-work in the warm part of the year is strong enough, it can be done if you are willing to take certain precautions.

Don't become confused at this point. Remember that I started the article by saying that we are discussing deciduous and other temperate plants. So everything talked about deals only with them. The preferred time to work on <u>tropical</u> plants is during the warm part of the year and you should not assume that if you reverse this procedure for them, i.e., work on their roots in winter, that they will also do well. They won't!

So what is this "magical" technique? It isn't magical at all; it isn't even difficult as long as you do it carefully and check on the plant frequently. You just need to know something about the anatomy of plants and their working principles.

How many of you actually know why a plant dies when its roots have been damaged, removed, or significantly disturbed? The reason is because transpiration in the leaves continues, giving off essential water which is not being replaced through the roots, thus the plant dies from dehydration (thirst). So if we can figure out how to keep the leaves from giving off water after the roots have been worked on, the plant should not die from this. Believe it or not, this can be achieved by humidity.

(To be continued next month)