## The Art of Bonsai

By Eugene Howell

During the visit of one of the guest bonsai artists early this year, he felt it necessary to comment on the apparent lack of care that had been given to the loaner tools he was using. While this may have been an embarrassment to the club, the truth is that many (probably most) of us do not give our tools the care they should be getting. This is especially unfortunate, not only due to the cost of some of the tools we use, but also because the bonsai can suffer from having such tools used on them.

One of the things that never ceases to amaze me is the cost of bonsai tools. Even the mid-range bonsai tools are very expensive. It is not uncommon to pay between \$65 and \$90 for a reasonably good concave or knob cutter in the 8 inch size and as much as \$110 for either of these tools in the 11 inch size. Bonsai scissors are just as bad. While these usually cost in the neighborhood of \$40, one can easily find them (and I happen to have one) that cost over \$100. It would seem logical that when one pays that much for a bonsai tool that the person would do everything possible to keep it in excellent condition. Yet far too frequently, when I look at the tools of other people, I can't help but notice that they are covered with hardened sap, have dull cutting edges, and frequently have far too much rust (there should never be any rust at all).

Now, before you begin to think I am a bonsai-tool prude, let me point out that there have been occasions when I have looked at my tools and found that I forgot to clean them after the last pruning job on a Ficus and as a result the blades contained hardened sap; and on a couple of occasions I have found there was a spot of rust where I had handled the tool and left a moist fingerprint on it, only to have the spot begin to rust; but I do try hard to keep my tools in a clean, sharp condition.

So what is it that needs to be done, and when?

The first thing to do, after working on a tree, is make sure you clean the cutting blades immediately after you finish. If the job only took a couple of minutes then you can wipe the blade clean with a rough cloth. A word of caution is appropriate at this point, the cutting edges are like razors (or should be) so be very careful or you will wind up with a sliced finger. If, however, the job has taken some time, then a good bit of the sap may have already hardened on the blades. In this case you need to use the rough cloth moistened with something like "Purple Power", or any other strong, industrial strength cleaner. This will do a good job of removing the sap, but keep in mind that the blades will tarnish with use and you should not confuse the tarnish with hardened sap. After cleaning with this type of cleaner don't forget to lubricate the tool well.

No matter how much care you give your tools, the cutting edges will eventually become dull. This is especially true if you use them to cut roots. This is the problem (mentioned above) that can harm your trees. Cutting branches with dull tools leaves ragged edges on the cambium layer and in most cases the cut will not heal-over. So in a few months, instead of a nicely healed and almost invisible prune spot, you will have ugly rotted wood showing. Once you have this it is all but impossible to ever get it corrected.

The tools are made of good, hardened steel, so they hold their edges for quite a while. Nevertheless, they require periodic sharpening. The process of sharpening is not difficult, but it must be done correctly or you will wind up with even duller, rather than sharper, tools (the sharpening process is beyond the scope of this article). Depending on how much bonsai work you do during the average month, you may need to sharpen them every three or four months. They will tell you when they are too dull to continue being used. If you notice that when you attempt to cut a twig, the scissors cut only part way through and then bends the twig, you can be assured you have one of three problems; the edges are dull, the tool is bent, or the pivot joint has loosened. You may also notice that when pruning a small branch there will be lots of small strings of bark left on the edges of the cut, rather than a crisp, sharp edge to the material. If this is happening because the scissors' blades are bent or the joint is loose, there is a simple way to check it. Close the cutting edges until there is only a very slim sliver of light showing between them. Examine the top, middle and bottom of the sliver to see if any portion of it is wider than the others. If so, the blade has been bent (likely as a result of trying to cut too thick a branch) and unfortunately there is nothing simple that you can do to correct it. Set it aside for use only in cutting roots and order a new one. If the sliver of light is even all the way down the blade, then the joint has loosened.

The fix for this problem is to tighten the rivet that holds the scissors together. You can do this by placing one head of the rivet on a steel surface and gently tapping the other head with a hammer. After each tap

check the blades to insure you have not tightened the rivet too much. If, despite your effort to avoid it, you tighten them too much (the blades rub hard against each other and it is difficult to open the scissors) you must take corrective action. Stack up two or three large washers on the steel surface, place one head of the rivet in the center of the top washer's hole and using a punch or nail set, gently tap the other head. This will cause the rivet to loosen and the scissors will work properly. Do all this gently or you can spend all day going too tight, then too loose, then too tight.

Although you will not use them very often, it pays to have at least one of the 11 inch concave or knob cutters in your tool kit. Periodically you will be faced with the task of cutting a branch that is simply too large for the 8 inch cutter to handle. If you insist on trying anyway, you probably will wind up with bent blades. If you do not have 11 inch cutters, then use a saw when faced with this task.

Finally, <u>never</u> put your tools away without spraying them with WD-40 or equivalent protective oil. Sap will cause them to rust quickly, as will moist finger prints. It only takes a few seconds to spray several tools, so there really is no excuse for not doing it. Above all, remember that your tools depend on you to keep them in proper shape.....always do so.