Working with Two-Needle Pines for Bonsai—Notes from a workshop w/Ivan Watters on 03/10/07

(please note—this article is comprised of notes that I took while attending this workshop last year; all knowledge came from Ivan; any errors are my own! ~ Anita; also, this was IVAN's information & others may have their own ideas)

Many of the trees in the two-needle pine family make excellent bonsai. They all have one thing in common though; they're very "care intensive". While this can be overwhelming to the novice bonsai artist, most anyone willing to spend the time to learn the "care cycle" for these trees will be very happy with the results.

Here is a list of the some of the typical two-needle pine species used in bonsai:

JAPANESE BLACK PINE SCOTS PINE MUG(H)O PINE AUSTRIAN PINE PONDEROSA PINE

Here is the typical "care cycle" that Ivan follows for his two-needle pines in the Chicago, IL area:

FALL is for NEEDLE CUTTING ..from November through March, cut off the current years growth on the TOP & BOTTOM of the branches only (don't cut needles off of the sides @ the ends of the branch). Leave each branch with 6 to 8 sets of needles. This will help promote the flat layers of branches. Due to the apical dominance of most pines (stronger growth @ the top of the tree), it is recommended that you leave 6 sets of needles on the branches towards the tops of the tree & 8 sets of needles on the branches towards the bottom of the tree. The longer you maintain this process, the more the tree will fill out. But, as time passes, the vigor of the tree will also decrease due to the increased branchlets it is supporting. Once you have noticed a decrease in vigor/growth, it is probably time to remove the natural apex & direct a side branch into a new apex. Your tree should respond positively to the opportunity for new apical growth. Remember, reduced VIGOR is okay (and desired), a weakened tree is not. If the tree weakens too much, let the tree REST for a complete year with no pruning to help re-build its' strength.

WIRING – Wiring is best done AFTER needle cutting as you'll have a more open tree to work with & won't have to remove wires to remove needles!

IF YOU HAVE A WARM GREENHOUSE, Ivan recommended that you take your pines out of cold storage around the 5th of February & slowly expose them to more warmth & light (he said that they slowly move more & more trees into the greenhouse @ Chicago Botanic Gardens to give them a longer "range" of working time for the next step; of course, remember also that the Gardens are working w/a rather large number of trees & need the extra time to complete all of these steps).

BUD GROWTH starts to occur in March. Start looking @the new buds emerging; pick out the buds that you're going to want to develop.

APR-MAY is the actual bud-selection—Select 2-3 buds to keep on each branch. You're essentially forcing 2 growth cycles/year on the tree & thus will develop your bonsai faster. If you need a branch to lengthen, then leave the CENTRAL bud on the branch in addition to 1-2 buds on the branch. If the branch has reached the desired length, then keep from 1-3 of the weaker buds & remove all of the others. The remaining buds will grow into CANDLES for the next step.

MAY-JUNE—Candle breaking—as the buds lengthen they are called candles. Once the candles reach 1.5 to 2 inches in length, break them in half. If the candle is especially vigorous compared to other candles on the same tree, break off 2/3 to 3/4 of the length.

JUNE-JULY (MAY if forced in greenhouse; see above) - The candles have opened into shoots covered with needles. Growth cutting—remove ALL new growth from each branch; alternatively, for a weaker tree or younger tree, just do needle cutting (as above under FALL). New buds will form where the original needles were cut & the stubs were retained (see below for more directions on NEEDLE CUTTING).

WIRING—wiring again can be done after this round of needle cutting.

JULY (early June for the greenhouse-forced trees) - FROM the newly grown buds, repeat the BUD SELECTION process as in APR-MAY; pick 1 to 2 buds & remove all others.

LATE JULY-NOVEMBER—Sit back & enjoy your pine following all other normal bonsai maintenance procedures.

IVAN'S recommendation was to NEVER pull needles off with tweezers as he feels this pulls the dormant buds out also. He recommended that you look at each needle & cut in the middle of the sheath covering the base of the needles (this sheath is called the fascicle & is usually brown in color compared to the needle).

A VARIATION for branch development that Ivan recommended: when you need to develop more branches (ramification) you should NOT needle-cut to leave the 6-8 needles toward the ends of the branch (as detailed in the FALL section above). Rather, when you need some additional branches, remove the top & bottom needles as before but then remove alternating needle bundles from the sides of the branch up the length of the branch. New branches will form every place that you leave a needle bundle.

Ivan recommended this repotting schedule—young pines: every 3 years; mature pines: every 5-7 years; old pines: every 10-15 years. Check yearly for soil breakdown & add microrrhyzal supplements as needed .