pfm bonsai studio ramblings

September 2013 Volume I

Sorry to say but my September notes will be very short. ABS 2013 is next week and everyone here and all the members of my club MHBS are extremely busy with last minute details. WE HOPE TO SEE YOU THERE. THERE IS STILL TIME TO JOIN US. GIVE ME A CALL TO REGISTER. 518 882 1039

September

The month of changes

Growth is still occurring. Be sure to keep fertilizing but not so much nitrogen here in the northeast. Cool winds alternate with rains so watch carefully so the trees do not dry out. Clean your winter storage areas so they are ready. We can never predict when they will be needed. I like to think not until December but who knows for sure?

Start checking each pot for root growth and mark the ones that will need repotting first thing next spring. I stick red coffee stirrers in the pots to mark this need.

I am seeing very early color changes in the nursery trees. I wonder if this is signaling an early winter or is the result of temperature stresses from the great variations during the summer.

Check all wlred trees for damage. Cooling temperatures ofter result in additional growth. This is certainly true for the weeds!!

It is still a good time to work on conifers. Now is the time to do some of that work on Shimpaku growth.

Species of the Monthe: Dwarf Hinoki False Cypress

Chamaecyparis obtusa 'nana'

by Pauline F Muth

Hinoki Cypress is an evergreen shrub native to Japan that can slowly grow up to 3 feet tall and 2 feet wide. The **foliage** is flattened and spreads in fan like patterns. It maintains a dark green color. There is a definite top and bottom to each leaf..take care to keep the orientation.

It is **hardy** in Zones 4 (with excellent winter protection) to 8A and does well to -10F. In the coldest of temperatures it needs protected from extreme cold and drying winds in **winter**. Complete protection from wind in cold is needed. Placing the bonsai in an unheated building or cold cellar is needed lower zones.

The species requires **full sun** but care must be taken to not dry out the soil which is detrimental to the shrub. Although many books state that they do not break back on old wood, I have found that this is not true. If the foliage is kept pinched and sun reaches into the bonsai, proper levels of foliage masses will be maintained.

Grow in a **well draining bonsai medium** and keep the soil from drying out. If you are growing this species in a very warm area, you may need to use a growing medium that is a bit richer in organics to keep in the moisture. pH of 6.1 to 7.5 works.

Keep the foliage **well pinched** throughout the growing season.

Wire when needed taking care as the foliage fans are easily broken and damaged.

Photos above show before and after wiring and styling by Suthin.

Repotting should be done in mid spring every 2 to 5 years depending on the root growth. You may remove at least 1/3 of the root mass. They can easily become root bound, so watch for it and repot as needed.


Harvey Carpella's Hinoki Cypress


Nick Lenz's Hinoki Cypress

PLAGEOTROPISM

Compiled by Alan Walker from Internet Bonsai Club posts by:
Colin Lewis, Brent Walston of Evergreen Gardenworks, and David Bockman of Bunabayashi Bonsai

QUESTION: What makes cutting-grown/air- layered plants flower and fruit faster than seedlings. Hormones? Cell types? Do trees die of old age? Or do they die once they are too big to support themselves? Supposing the average life of English oaks is 800 years old, would cuttings or air-layered branches of a 750 year-old tree die after a few decades or live 800 more years? It'd be horrible if all the Japanese maple cultivars just die one day. And the apples! It's a dumb question, but I have always wondered...) KIT

RESPONSES: On 6-15-99, under the topic of “plageotropism” (a cool new term for me), Colin Lewis shared, (WARNING: You may need your dictionary for some of this!) “Plants age differently to animals. Animals age in a single ‘linear’ manner, pre-determined. Plants age in three different ways - chronologically, physiologically and ontogenetically – from the base upwards and from the inside outwards.

It is essential to understand the difference between chronological age, physiological age and ontogenetic age. For instance, although the cotyledonary node is the oldest part of any plant (chronologically old), it isalso always the most juvenile (ontogenetically young). Its physiological age is governed by the general condition of the plant as a whole and is influenced by external as well as internal factors.

When considering plageotropism, one is dealing solely with ontogenetic age.On any plant, different parts may be in vastly different ontogenetic phases at any one time, because the ontogenetic development is controlled locally by the meristematic tissues. Cuttings, layers or tissue cultures taken from any part of a plant will, for many years at least and sometimes ad infinitum, continue to grow in the same ontogenetic phase (or older) as the parent branch.

Lateral branches which grow sideways purely to seek light or solely because of environmental influences are in the same ontogenetic phase as the apex, (although possibly physiologically older) so cuttings taken from them will adopt the ontogenetically juvenile growth pattern - straight up.

Lateral branches that grow sideways (or adopt any other growth pattern) because of their growth phase - flower/fruit-bearing, spur-growth (larch, cedar, ginkgo), adventitious rooting (ficus) or mutated growth – are ontogenetically more mature, so offspring propagated from them will continue to adopt that growth pattern.So, if you see a branch that has growth characteristics that appeal to you, study it closely to see if those characteristics are the result of external factors or result from the ontogenetic phase of that part of the tree. If the former, cuttings will revert to juvenile. If the latter, cuttings will retain characteristics.”

On 6-26-98 Brent Walston shared another helpful post with, “We have covered this territory before and you might check the archives for more information. Most, if not all, woody plants have no aging mechanism as does the animal kingdom. There are physiological changes with age that are not well understood, but these commence maturity from a juvenile state, that is, they allow a plant to flower and fruit. It is possible to force most woody plants back into the juvenile state with hard pruning and invigoration of the root system.

All aging in woody plants is related to environment and mass of structure (physical changes), the tissues themselves do not age in the sense that animal tissues age, that is, they do not decline after each cell division.

Consider the case of cuttings. Some grape cultivars are thousands of years old, clonally reproduced and showing absolutely no sign of age. Same thing for some desert plants that reproduce clonally by underground roots. They grow out in rings estimated to be in excess of ten thousand years old.This may not be true of annuals, but again, I don't think the process is well understood.

David Bockman added on 6-15-99, “In his book, Four Seasons of Bonsai (pp. 18-19, HB edition), Kyuzo Murata makes the following observations concerning Toyo Nishiki: “Young flowering quince trees bear white flowers, while trees over fifty years old bear red flowers. In order to achieve the desired dappled pattern of pink and white blossoms, try pruning some of the red-blossomed branches. A white blossom may grow in place of the trimmed branches. [I believe this is a warning that the technique may not work every time. DB]”

On the pages noted above is a superb mame with red flowers-- I'm guessing it was created by layering off an older branch which was already producing red flowers, or by layering off an older branch and 'waiting' for it to mature...or perhaps the layering act itself speeds the process up and helps create red blossoms sooner."

On a bizarre but tangential note, recently in the news we've read about the genetic age vs. actual age of Dolly the cloned sheep. Genetic researchers suspect that the telomeres are fraying at an accelerated rate matching the age of the original genetic material from which she was cloned. What are telomeres? "Telomeres, which define the ends of chromosomes, consist of short, tandemly repeated DNA sequences loosely conserved in eukaryotes."

What is most fascinating is the recently discovered and researched compound that would stop or reverse the ‘fraying’ (i.e., aging) of telomeres, a substance fittingly dubbed ‘telomerase’. Telomerase is defined as “a ribonucleoprotein which in vitro recognizes a single-stranded G-rich telomere primer and adds multiple telomeric repeats to its 3-prime end by using an RNA template.”

Simply put, this substance tricks the telomeres into rejuvenating rather than self- destructing, the latter causing the destruction of the attached nucleus and cell.

Use in bonsai? We could someday artificially age a subject tree (anyone for 200 year old Ginko? Pop your cutting into the Telomere Microwave!) or, conversely, rejuvenate much older specimen trees coming to the end of their genetically-determined lives (various Prunus come to mind).

Many thanks to Alan Walker for putting together this thought stimulating article.

What is Happening in the Bonsai World?

These events were covered in past issues. See their websites for more details.

I hope to see you at the * events

September12-15 ABS Love of Bonsai Learning Seminars * www.loveofbonsai.com

October 31- November 3 **Golden State Bonsai Federation Annual Convention ***

LOVE OF BONSAI

ABS LEARNING SEMINARS

SARATOGA SPRINGS NY

SEPT. 12-15,2013

Courses are closing so register now.

Go to www.loveofbonsai.com for registration forms if you need one.

Please come visit my nursery Sunday Afternoon after the close of the seminars.

Bonsai Artist Studio: OUTSIDE THE BOX

Are you ready for something different in a bonsai learning experience? GSBF Convention XXXVI – "Bonsai Artist Studio: OUTSIDE THE BOX" will deliver on October 31 through November 3, 2013, at the Burbank Airport Marriott Hotel & Convention Center. See you there!!

http://www.gsbf-bonsai.org

Sunday Sept 15

2 PM Open House after the closing of ABS 2013

Fall and winter ws schedule will be posted on the pfmbonsai.com web site soon.

September EVENTS

AT PFM BONSAI STUDIO. Also Available MOST weekdays...call to check before coming out

CALL OR EMAIL TO REGISTER FOR ANY OF THESE

Monday Bonsai Study Group 6 PM or so

Come and play and learn with our Monday study group. There is no charge for this group. We come together and work on a project. Or we simply bring some of our trees to work on. Some join in a shared meal before beginning .we chip in for the food. Bring materials to work on and join in the fun.

We will not meet Sept 23.

September 7 Intermediate Class on Driftwood bonsai techniques 1 PM
Sept 8 closed...preparing for ABS 2013

Sept 12-15 at ABS 2013

Sept 15 2 PM after ABS Open House

Sept 19-23 at PBS and Lehigh Valley Bonsai Studio closed.

Sept 28 Studio open. Intermediate Class 2 PM

Sept 29 MHBS party for all the work done at ABS

pfm bonsai studio supports

Mohawk Hudson Bonsai Society http://mohawkhudsonbonsai.org

MidAtlantic Bonsai Societies - www.midatlanticbonsai.freeservers.com

American Bonsai Society - www.absbonsai.org

Bonsai Clubs International - www.bonsai-bci.com

National Bonsai Foundation - www.bonsai-nbf.org

please visit www.pfmbonsai.com for current happenings at the studio

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