# Iowa Bonsai Association Newsletter

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## **IBA June Activities**

June 21, 7 pm. IBA Membership Meeting at The Greater Des Moines Botanical Garden 909 Robert D. Ray Drive

Topics: Present Chat and Chop!

Round table discussion: Black Pine De-candling and selective defoliation for deciduous/tropical/subtropical.

Bring a tree (any tree) that is healthy and you want to reduce its' leaf size or needle size. and Tree of the month

## **EIBA June Activities**

June 25 Noon to 4 pm, Guthridge Park, Green Pavilion. Dave Lowman will be vending bonsai, tools, wire, books, pots, supplies. Also, Club Auction. Come bid on interesting bonsai trees, pots, etc.

## *July 14, 6:30 pm. Board Meeting at Panera Restaurant on Edgewood Road*

**Topics:** July mtg prep, Chris Burr Memorial, Brucemore Show, Picnic wrap up.

## July 21, Noon. Club Meeting at home of John Denny Topic: Display: Pot Selection

## **Read This If You Grow Japanese Maple** by crataegus aka Michael Hagedorn

Now that I have your attention... This post is about a common bacterial disease called Pseudomonas syringae, which frequently affects Japanese maples yet is relatively



Inside This IssueIBA Activites1EIBA Activites1Grow Japanese Maple1-2From Stump to Stand2-3Root Development on Japanese Maples4Moss Basics4-6Timely Tips6

easy to control. It is often misidentified as Verticillium wilt, as both cause tip dieback. The Pseudomonas bacteria form purply-black stem discolorations, which is the result of a toxin produced by the bacteria which kills cells. Twigs, branches and eventually the entire tree may die. Older and stronger growing trees are less susceptible, as are some varieties. Do not prune maples in the fall (especially in the Northwest) as this disease

#### Japanese Maple - continued

enters any wound and is encouraged by wet, cool winters. Any cut, at any time of year, should be sealed immediately with a liquid sealant.

Control is three-fold. The first is keeping your Japanese maples strong, healthy, and damage-free. The second and third are related: If you can keep your tree dry during wet and cold periods, that is half the battle. The other is chemical control, which is by copper sulfate or similar bactericide. Consider using Phyton 35, a

## From Stump to Stand Austin Heitzman

The city is my forest for many reasons. First, for the variety. People plant whatever grows. Looking out my window I see trees from Europe, Australia, China and the Eastern United States. What is native falls into the minority. Second, it feels right. As a city grows its trees, the least mobile of its inhabitants, often suffer the most. Why waste such a wonderful resource as woodchips in a landfill? I get many of my most interesting logs within blocks of my home. Crafted into fine furniture the trees live on for centuries to come. In my view the results are well worth the effort, yet this isn't always the most cost effective of practices. systemic bactericide. Top spray and bottom drench is recommended. If you have problems with this disease, try a chemical drench after repotting or after heavy root work, perhaps with ZeroTol. And if you live in an area with wet, cool weather in the fall through spring, seasonal prophylactic spraying is a sharp idea. Clearing away leaves and especially seeds of maples like bigleaf or vine maple—is essential after leaf fall as these commonly planted landscape trees are frequent carriers of the disease. Keep leaves and moss away from trunk bases, too.

blades. Over the course of a trees life its roots grow and encapsulate innumerable pockets of these little surprises. No amount of cleaning is sufficient, you can only hope against hope. Countless times I have sworn never to mill another stump, however the payoff can be spectacular. Stumps often exhibit extraordinary color and figure. So when presented with the opportunity to harvest a burled walnut stump, I didn't hesitate to grab my shovel and start digging.

A full day of digging. (From left to right) The stump as I came to it, after severing the main roots and cutting it into more manageable chunks, the crater left behind, and the pieces loaded up and ready to be taken to the mill.

Milling stumps is a logistical nightmare. First you must dig- a lot. Even a small tree requires a 6' by 6' hole to get it out of the ground in one piece. Once at the mill things get even worse. Sand and small rocks devastate In this particular case I was lucky. The tree was growing in a clay-based soil, not abrasive sand, and I was able to mill the entire stump with only a single blade. By comparison I have milled stumps that required a new blade

#### Stump to Slab - continued

for every cut. The slabs were then carefully stacked and left to slowly air dry. At this point nothing is certain. The wood is saturated with water, and as the water evaporates the wood shrinks and shifts. The more erratic and irregular the grain the more exaggerated the movement in the wood. Again the stump, with its contorted and confused grain, is a recipe for disaster.

Cutting slabs at the mill and slabs neatly stacked and ready to dry for a year or two.

Up to this point the process is akin to farming. I can know if a log has potential and I can anticipate the complications in processing the lumber. I can do my best to mitigate all these issues; yet in the end only fate will determine if my efforts are rewarded with lumber or firewood. I consider myself lucky that Nature is kind to me more often than not.

As the wood dries its color, which is often muted when freshly milled, slowly begins to emerge though still cloaked beneath a layer of saw marks and grit. It wasn't until after the slabs were dry, shaped and sanded that I realized the stump had actually been two trees fused together. Through the process of grafting an English walnut tree had been grown with Black walnut roots. At the point where the two trees meet the color of the wood instantly changes. There are always surprises. I love it.

Freshly milled (left) the grain is interesting, yet only two tone. Once fully cured (right) a vast array of colors are revealed. The graft can be seen on the right side of the right image where the color suddenly lightens.

This marks only the start of the process. All my efforts up to this point yield only raw material, it is still up to me to craft beautiful objects from the lumber I have just created. This requires an entirely different set of skills and presents many new challenges that can easily thwart success. Many woodworkers are content to simply go to the lumberyard and relieve themselves of half the burden. For me however, the magic of woodworking begins with the tree.

## Root Development on Japanese Maples John Denny

Five years ago I visited Gary Wood in Oregon at Telperion Farms. Gary showed me how he worked on the roots of maples. I took a relatively small Jpn maple and did the root work as Gary instructed, placed the tree in an Anderson flat and left it for five years. Below are the photos of the roots after removing them from the Anderson tray and how they were trimmed back before being place in the Anderson flat to grow again.

Let's back up a bit. The tree involved was a Gary Wood #1, a particular maple sub species Gary had noted grew well and quickly, had small leaves, small internodes, etc. He propagated the tree and this is one of those trees. First we removed the tap root, then trimmed the ring of roots to a uniform size. An effort was made to remove roots to high or low so the remaining roots were all at the same level. We laid down a layer of soil and on top of that was placed a geo disc which is basically a precut circle of landscape cloth - you can see one in the final photo beneath the roots. The tree and its trimmed roots were placed on top of the disc and the roots were carefully arranged in a radial pattern so the roots became the spokes of a wheel. On top of the roots was placed some wet sphagnum moss and the rest of the soil was added on top.

The tree in an Anderson tray was left on the ground for five years, watered and occasionally fertilized. Gary brought the tree to Iowa this March and we "opened up" the roots. They were full and thick. After cleaning and trimming you can see the near perfect radial root pattern. Also, note the excellent taper at the base of the tree itself. Gary's method really works!

The top of the tree now has some work to do. It has to grow and develop good branches and ramification, but the root work will allow this tree to have a good future and the nebari will be the strength of the tree. If you use this technique with seedlings or any young tree, you can have results like this.

## Moss Basics: Biology Tamao Godo

Moss can be an important piece of bonsai display as well as impact the health of your trees. It is not easy to grow moss in Iowa and I thought a little knowledge might help. This information comes from an article by Tamao Godo printed in Sukiya Living. A future article will focus on bonsai moss specifically, what techniques there are for growing it, and how to apply it to your bonsai collection.

Bryophiytes have three phyla: liverworts, hornworts, and mosses. Among mosses there are three classes: Sphagnidae (the peat mosses), Andreacidae (the granite mosses), and Bryidae (the true mosses). In Japan, the third kind – the "true mosses" are the ones most often used in gardens. Granite mosses and lichens are also sometimes used. Many other non moss plants are mistakenly called "mosses". "Reindeer mosses" are lichen. "Scale mosses" are liverworts. "Spanish mosses" are vascular plants. And "Irish mosses" are algae. In general, real mosses show feather like or cushion like growth patterns. Japanese love true mosses and generally consider flat leafy liverworts to be a nuisance.

There are about 9500 species of mosses worldwide. Mosses are mostly found in moist, temperate and tropical areas. Mosses and lichens are important initial colonizers where vascular plants cannot easily grow. While each species is picky about where it lives, you can usually find a moss to fit your need. Hot or cold, wet or dry, sunny or half shade – at least one species of moss is likely to grow there. Though typically associated with shade, mosses do need sunlight for photosynthesis.

Mosses are small, simple plants. The plant body has leaf and stem like structures, but lacks root like structures. Mosses are attached to rocks or soil by rhizoids, which generally only serve to anchor the plant. Rapid absorption of water, CO2, and inorganic ions occurs directly through the body surfaces of "leaves and stems". Mosses are weak against air pollution because they quickly absorb toxic compounds dissolved in the air and water. The soil pH or soil nutrient levels do not directly affect moss growth rate. Certain types of soil may help or hinder the 'weeds" that compete with moss.

Mosses need something to anchor to, and it could be anything. Moss can anchor itself to rocks, concrete, or asphalt roofs that have little or no nutrients or moisture. According to commercial moss providers in Japan, fertilizing the soil is not only a waste, but also leads to fertilizer burn, excess weeds, and an explosion of unwanted bacteria growth that may kill the mosses. If there is any advantage to altering soil pH, it is not because mosses prefer it. It is because some soils will eliminate competitor plants that don't want to grow in extremely acidic or basic earth.

It is possible for mosses to be asexually produced because any part of the moss plant is capable of regeneration. This is quicker than establishing moss colonies from spores, so fragmentation of moss is often employed by Japanese producers of commercial moss and moss sod. Many people try to wet the soil underneath the moss, but that is not particularly productive. Mosses need sufficient air humidity and the occasional sprinkle of water particles. Moss plants also need to be in close proximity to each other for sexual reproduction, which is why moss grows in clumps or "communities".

People associate mosses with shady areas. This image may be one reason why some gardeners fail when they try to grow moss. Moss needs sun to survive. While there are big differences in the humidity and sun light needs of various moss species, most mosses grow in areas of dappled sunlight. Moss need to photosynthesize and mosses cannot do that if they are too dry or do not have adequate light. Another reason for moss failure is people water moss at mid-day. Mosses are weak to the combination of high temps and high humidity. A moss plant wants to close its gas exchange system when the air is hot, but if there is too much humidity, the plant is forced to absorb water and cannot go semi dormant. The water gets hot inside the plant and damages it. Some mountain mosses are especially weak in hot, steamy conditions.

## **Timely Tips**

June is here and so is hot weather. Keep your trees watered well. Water your trees, then water them a second time from another angle to assure every particle is wetted. Make sure water is running out of the drain holes in the pot. On very hot days, mist your trees later in the day to help them out.

Weeds have grown and need careful removing. Keep your soil cleaned up.

Most trees need fertilizer now. If you have fairly refined red, black, or ponderosa pines, then you may wait until after the second flush of candles have opened. This is usually mid July to August 1. If you trees are in the growth stage or developing bonsai stage, then you can fertilize as normal. Heavy fertilization of a refined tree will actually make it look coarser with too much growth. Refined trees require much less fertilization. Most of us do not have finished bonsai trees.

By now your trees have grown pretty hard and should be pruned back by now. If you have not cut them back, now is the time. Most deciduous can be cut back to the initial new leaves on a twig. This will help create taper, push back the silhouette, and allow some back budding. Clean out dead or weak foliage. Remove new buds pushing in unnecessary spots. Remove small branches that hang down from the underside of your larger branches. This helps clean the look up a bit.

Some bonsai growers will defoliate certain trees this time of year, ie. Trident and Japanese maples, elms though not the very small leafed ones, and hornbeams. First, do not do this unless your tree is very healthy. If in doubt, work to get your tree stronger for next year. If you are growing or just beginning to develop your tree, I would skip defoliation until your tree is further along. The purposes of defoliation are to get more sunlight to inner foliage and buds, to increase ramification and reduce leaf size. You may fully defoliate or partially defoliate. Check with someone knowledgeable if you are unsure whether your tree is healthy enough or if you are unsure of exactly how to defoliate your tree. Techniques can vary based on species.

Your trees should be slowing their growth now in the hot weather, but remain vigilant. Watch for wilting, changes in leaf color, holes in leaves, edge browning or curling. Look for signs of pests and diseases. And pay attention to your companion plants.

Now is also time to think of repotting your Tropical species of trees. They will need the rest of the summer after repotting to gain strength for the winter indoors, so do not wait too long.