

Iowa Bonsai Association Newsletter

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<https://sites.google.com/site/cedarrapidsbonsai/>

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IBA Response to Coronavirus

Scott Allen

As always, the safety of members, volunteers, and general public is our top priority.

The Iowa Bonsai Associations (IBA) response to the coronavirus pandemic continues to be informed by the guidance of official bodies, including Centers for Disease Control and Prevention, (<https://www.cdc.gov/coronavirus/2019-ncov/index.html>) whose framework for mitigation for community groups is based on the level of community transmission of COVID-19.

As the national response to the coronavirus pandemic shifts to a state-focused and phased approach the IBA has canceled all club meetings and implemented the appropriate protocols to help keep our members, volunteers, and the general public safe. We'll continue to follow the Centers for Disease Control and Prevention (<https://www.cdc.gov/coronavirus/2019-ncov/index.html>) guidelines and will advise our membership when plans to start in-person meetings and activities is more clear.

If you should have any questions or concerns, please contact me directly.

Scott Allen – IBA President
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EIBA October Activities

Voting for 2021 Officers will occur by email sometime in October.

Bonsai Soil Components for Sale

**Pumice \$20 for five gallons
\$15 if you bring your own Bucket.
Akadama \$32 per bag, \$30 for members**

Contact Scott Allen or Tim Peterson

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Clump Style Bonsai Photos

By John Denny

Clump style is one of my favorite styles. It can look so different depending on all of the varying tree species you can use. A clump of conifers gives a completely different look than a small grouping of tall elegant Japanese maples or a grouping of five twisting contorted K hornbeams.



Clump style Japanese maple in the first flush of spring. It belongs to Luis Vallejo). The photo is by Miguel Krause. From Bonsai Bark.

The appearance of a clump changes depending on how many trees are in the clump. Are we talking three or five in a small clump or are we talking a dozen or more of small, thin lacebark elms which looks more like a forest planting. Also, is our clump a grouping of similar sized trees or is there nice variation in size? The look is, again, different.

Often, putting together a clump bonsai is cheap. You can place together some trees you have found in nature. Or, as I



Two clumps of Lacebark elms grown from seedlings. Year three. Eighteen inches tall. These grow like weeds; I pruned three times this year and they need it again. These seedlings were not grown out prior to assembling. This grouping was assembled as very thin seedlings and allowed to mature in place.



An extraordinary clump style Japanese maple on Bonsai Nakayoshi. You can imagine that all the smaller trunks started as suckers on the roots of the main tree. From *Bonsai Bark*.

have done numerous times to good effect, is to grow out some seedling purchased cheaply. Once they have three or four years of growth, it is time to assemble them. I have grown Tridents for eight years from seedlings that now reside in a lovely, good sized clump/forest. I have also put together two side by side groupings of five and four lacebark elms the same spring they arrived. Instant, cheap, and rewarding. That double clump/forest is now looking very nice as it is in its third year.

Take a look on the internet for examples of clump style bonsai. You can get ideas of what you like. Then go for it!



A clump of five K hornbeams grown from seedlings. Sixteen inches tall I grew the seedlings for maybe four years prior to assembling. The grouping is four or five years old now.

A Mother/Daughter "clump" of Black Hills White Spruce from Andy Smith. 24 inches. Doubled in height from eight years ago when acquired in a workshop. These trees definitely, double its original size. need a Fall pruning, unwiring and rewiring.



The Whys of Fall Fertilization

Ross Clarke

With the exception of carbon dioxide, all of the inorganic nutrients that plants must have to stay healthy and grow are absorbed mostly by the roots. (Mostly? Yes . . . well, if you want to get technical, some plants can also absorb water solutions through the leaf pores/stomates, but nutrients don't usually get into plants that way.) Three of the nutrients needed in large amounts are nitrogen (N), phosphorus (P) and potassium (K). That's why N, P and K are in all general-use fertilizers.

Nitrogen is used in many ways by plants. It's an required ingredient for making proteins, DNA and RNA, molecules that are used to capture and move energy around in plants, and other vital functions.

Nitrogen is necessary for many plant structures and functions. However, since four nitrogen atoms are necessary to make a single chlorophyll molecule, and since a lot of new chlorophyll is made early in the season, it's obvious why nitrogen is needed in relatively large amounts early in the growing season. Later on, when new leaves aren't being produced (slowdown of twig and foliage growth is triggered by declining day lengths), nitrogen requirements go down. Another reason why less nitrogen is necessary later in the season is that later in the growing season, degraded chlorophyll molecules are not replaced, and some of the nitrogen that was in the chlorophyll in leaves can then be recycled for other purposes.

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So, in fall, plants require less nitrogen, but the need for phosphorus and potassium remains relatively high as long as roots are growing. Among other things, phosphorus is necessary for unlocking the energy from foods; all living cells of trees, including those in actively dividing and growing root tips, have a relatively high phosphorus requirement. Potassium is also required for many cell processes in active roots, including nutrient absorption and cell enlargement, which are very active processes in roots that are growing. Incidentally, the roles of potassium in roots is a hot research topic these days.

The bottom line is, we want to keep roots healthy and growing as long as conditions allow. The big Why? of that is: Roots are a vitally important place where plants store their main energy supply (starch) for surviving winter and powering up growth the following spring. The more healthy roots there are, the more energy molecules (= starch) plants can store. And the more healthy roots there are, the quicker a tree can rehydrate itself in late winter and ramp up for spring.

So, that's a basic summary of why we should keep the P and K going and minimize nitrogen when we fertilize in early fall. No fertilizer whatsoever is useful later in the

season when not even roots are growing much.

More on Fall Fertilization

John Denny

Like me, you have likely heard that fertilizing in the Fall with Nitrogen is a problem for bonsai trees, because it causes fresh green growth too late in the year. And that growth will not harden off properly and the tree will not over winter well. Use a low or no Nitrogen fertilizer like 0-10-10.

Like me, you may have heard the opposite, that if fertilized with Nitrogen in Fall, the tree will only use what it truly needs and will not utilize the majority of the Nitrogen. So, use a fertilizer close to 5-5-5.

So, which is it?

Nitrogen is pretty darn important to a bonsai tree, especially one in volcanic soil, which has no organic component. Recall what makes a plant's foliage green and what drives its growth and health. Chlorophyll. (You did say chlorophyll, didn't you? Good. Ten points for Griffindorf.) Chlorophyll has four Nitrogen molecules attached as part of it. No Nitrogen, no chlorophyll, no green, no growth.

Plants need lots of fertilizer (Nitrogen) in the spring and early summer to help drive plant growth and health (pine bonsai are somewhat of an exception). In the heat of summer, growth slows as does the need for Nitrogen. So, what about Fall? Does a bonsai need any Nitrogen in Fall?

We love the beautiful color of our deciduous trees in the Fall, right? Ask yourself, why does a leaf change color from green to red, orange, gold, yellow? The tree wants Nitrogen, so as the length of daylight is reduced, it reclaims the Nitrogen from the chlorophyll as it breaks down. The green 'leaves the leaves' so to speak. The tree is recycling Nitrogen for use in early spring to get a quick start on the next year. Thus, plants do need Nitrogen in the Fall so they can store it for Spring.

There are some studies on the topic of Nitrogen application in late Fall. And they point to no real issue in plants in temperate climates. No push of growth too late in the year. In fact normal levels of fertilizer in Fall actually improves winter hardiness (Smiley and Sherazin). Pruning Trident bonsai trees in August or early September can cause a flush of new growth that may not harden off properly. This is a pruning error, not a

fertilization error.. Normal Fall pruning is fine beginning in late September on.

Having spent time with Michael Hagedorn in his Fall Seasonal, I have watched his practical approach. He fertilizes with a fertilizer of roughly 5-5-5 NPK. This is a good balance of all three key components and sets his trees up for good root growth in Fall, hardiness during Winter, and a quick start from having a good supply of food (starch stored in the roots) and more than adequate NPK. If you have ever seen Michael's bonsai garden, you will want to follow his advice.

As I think about my own Fall practice, I used BioGold pellets in teabags on the surface of my trees. This is roughly 5-5-5. In mid September I hit my trees pretty hard with Miracle Grow liquid (20-20-20-20 every two weeks. In October and early November I back that application down to 10-10-10. Perhaps, I should back it down to 5-5-5. Can an old dog learn new tricks? I think maybe I can.

I hope this helps. There are lots of fertilizers, lots of fertilizing routines, and many species of trees with varying needs. There are changes during the year in what your trees need. There is a difference, too, between pre-bonsai, developing bonsai and finished bonsai. Generally, we hit the pre-bonsai hard to develop trunk girth and primary branch thickness. And we are less generous with fertilizer on our finished bonsai.

My grandfather lived a life of moderation in all that he did. (It worked for 96 years.) I was a rambunctious teenager who wanted to test the limits. With time, I have begun to see the value in moderation. So, it is with fertilization. Avoid too little, avoid way too much, and you should be good.

Timely Tips

John Denny

Well, that was a wild and wooly August. A derecho, followed by no rain for three weeks and four days of 94-95F heat. Thankfully, our weather has cooled off and there is a sense of calm and comparative peacefulness.

What shall we be paying attention to this time of year? First, tropical trees will need to come inside soon. Watch your night time low temperatures closely. I use a cut off of 50F. I used to be very conservative and use 55F as my cutoff. Others seem to do okay allowing them to

go lower than 50F, but those tend to be bigger, hardier Tropicals. Also, I am willing to put them back outside if the night time lows allow me. I only have a few Tropicals, so it is not a big deal. Tropicals live all the sun they can get and they love being outside. Life for them inside with lower light levels and low humidity is a tough go for them all winter long. When they do finally come inside for good, I clean them up and spray for pests and disease. I don't have issues with my Golden Gate Ficuses, but the Narrow Leaf Ficuses can get buggy. For them, I used a powder systemic once a month. Once indoors, give your Tropical trees plenty of light.

Deciduous trees can stay out and enjoy the root growing time of September and October. I have teabags of organic fertilizer pellets on their surface and I fertilize every two weeks with something like Miracle Grow. I hit them hard in September with full strength 20/20/20, then I back down in October to half strength. I clean them up a bit and I prune any obvious leaves outside the silhouette. Leaves can look beaten up this time of year. The drought, Japanese beetles, and fungus can take their toll. However, we can look forward to some lovely fall foliage. Send me a photo of your nicest Fall color.

Pines, if you have them, should be getting lots of fertilizer this time of year. Most of the secondary buds have pushed after decandling and the new needles are out. Most pines have not had much if any fertilizer all year, so now is the time to fertilize them hard until you bring them in for winter. In November, we do some pruning back to Good inside growth. We pluck needles from the strongest areas, usually the top of the tree. And we look at the new buds that pushed and reduce them to two shoots per branchlet end.

September is a good time to get to work on Junipers. Clean them up. Brush the surface and old dead stuff will fall away. Remove any yellow or weak growth. The tree will lose that growth eventually anyway. Remove any growth from branch crotches. In strong areas, trim out some of the branchlets. This will make wiring easier. Do not pinch tips as we used to do. Instead, trim out some of those strongest ends with scissors and don't cut them all or you risk weakening the tree. Next you can clean the trunk. It is optional, but I generally remove all the loose flaky bark either by hand or with a light brushing. Often you will expose a lovely cinnamon color underneath.

Fall work is important. We set up the tree to be healthy going into winter and then strong enough for a quick start in spring. We have our work cut out for us, so let's get to it!