

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 August Activities

NO Board meeting in August
NO Club meeting in August

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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The Agony and Ecstasy of Bonsai

By John Denny

I have kept bonsai trees for roughly 18 years. Like other bonsai hobbyists, I have experienced both the beauty and other rewards that go along with bonsai and I have experienced the disappointments that go hand in hand with those joys.

Monday, August 10, dawned a lovely day. Coffee, a dog walk through a quiet neighborhood, breakfast. Then a text message from son, Alex, in Des Moines telling us they had just experienced quite a storm Monday morning and had lost power. I checked The Weather Channel which said 50% chance of rain. Hmm? I looked at the radar and saw a storm coming, but it looked like it would pass mostly north of us. I figured we would get some activity, so I went outside and brought in a few small trees I knew would not handle wind. I put a large angled Ponderosa on the ground as it tips easily in the wind. I placed my tropical trees on the patio concrete, as their pots would break if the wind moved them off the stone wall. I watered all my trees so the pots would be heavier and hold better against the wind.

Okay, I thought, I am prepared. My wife, the wife who knows all, came out and said, "You better move more trees, they predict heavy winds." I told She Who Knows All that my trees had handled wind gusts up to

60 mph many times and I would be good. Alas, there are no do overs in life, and I paid the price.

The sky darkened. And darkened some more. I ran to the backside of my cedar fence and put a few more trees on the ground. Then, with a fierce suddenness, it hit. The opening bid by nature was 40 mph wind. She upped the ante with a drenching rain. Then she went all in as she pushed more and more chips into the storm. The wind increased and the rain went horizontal. I stood at the back patio door while She Who Knows All was wisely secure in the lower level of our house. The windows shook. My bonsai trees became obscured in the wind and rain. I could no

feet. I righted it. As I stood up, my hat was ripped away and my glasses were just gone. I never felt them leave my face. Just gone. The power of the wind was extraordinary. I saw roughly 30 to 35 of my beloved trees laying on the ground at grotesque angles. Some were piled on top of each other. Without safety glasses, I could not stay out in the storm with all kinds of debris flying. I retreated to the house.

I stood, drenched and dripping, as the storm raged on. More siding and shingles. A landscape tree pulled from the ground and landed square on a bonsai nursery table. It knocked a heavy trunked juniper off the table and onto the slanted Ponderosa, which I had carefully placed on the ground for its safety. Later I



This is a photo after trees were set back upright and some trees placed back on tables.

longer see them. I could barely see my large Blue Alps juniper that sits on a large flat cut stone closest to the house. It weighs 70 pounds with the soil wet. I saw siding flying by. Shingles, too. And suddenly, the Blue Alps simply disappeared right before my eyes, into the nether world of a violent storm. My heart sank. I knew if this tree had fallen to the storm, every tree I had could also be gone. I figured the winds had peaked at 80-100 mph and now were likely 70 mph. I tied on a hat with two strong cords, put on safety glasses and rushed out into the storm to find the Blue Alps and see what else had happened in the bonsai yard. I found the big tree on its side sitting in the pea gravel. The wind had carried it a good 8-10

feet. I discovered both pots broken. Both pots were favorites and expensive. Damn!

There was little I could do until the storm slowly abated. I felt helpless. My trees were a mess. I was worried about what damage there was to the house. Then the power went out. I knew it would not come back on for a long time to come.

Eventually, as the wind dropped into the 30-40 mph range, I went back out. First, I noticed the siding laying on my back patio was not the same color as our house. It came from the neighbor across the street. We had shingles from probably four or five different

houses in our yard. The neighbor behind us has a high balcony and the end railing was blown away and all of his nice high end patio furniture had disappeared down onto his well-manicured shrubs below. The neighbor next door and one across from us lost good portions of their shingles and siding. It is a new neighborhood so the trees are not yet large. Yet, many folks had lost trees and large branches. Cedar Rapids lost half of its tree canopy from this storm. Older neighborhoods and city streets were impassable with all the downed trees and power lines.

We were lucky. Little damage to the home and landscape. We reset the landscaped tree that pulled loose from the ground. It may survive. Gail picked up the large amount of debris in the yard, while I triaged the bonsai area. Since I had repotted so many trees last spring, the trees that were tipped on their sides lost a lot of soil. I had to make up three different soil mixes in a garage with no lights. One by one I added soil to trees and put them back on the bonsai benches.

Eventually, I came to the two trees with broken pots. The Ponderosa was in a large round Sara Rayner pot. It had lost a large piece on one side. I brought it inside and let it dry. With Gail's help, we glued it in place, but it would not stay properly, so we glued it again and duct taped it. The tree needs repotting next spring. The root ball was excellent on the tree and it lost no soil. I am confident the tree will survive. The other tree with a broken pot was a very thick trunked Shimpaku from Telperion that sat in a favorite rectangle with nice artistic feet and a soft feel to it. One side was broken. We glued and wired it together. I think the pot will hold until next spring. Again this tree was ready to pot next spring and the root ball held together well.

Five days after the storm, I moved a tall Prostrata and noticed it was leaning more than it used to. The tree was very loose in the pot. The tree had been repotted last spring and was a tough one to stabilize. I thought it was good enough, but I did not count on 90-100 mph winds. Strangely, this tree took the brunt of the storm, but never blew off the bonsai table. Being a tall tree with the bulk of its foliage high up on the tree, it baffles me how this tree stayed upright. However, I now have to find a way to stabilize it. With bonsai, there is always a project. Now, I have another one. It is what I signed up for when I took on the hobby, so I should not complain.

All in all, it could have been worse. The house and property did well overall. And the bonsai challenges could have been worse. I am surprised there were only two broken pots. I think all of the trees will survive.

A record storm like this makes you appreciate normalcy. No power for a week makes you a better camper and helps you appreciate many small things in life. And the storm makes you a bit gun shy. The night before last there was talk of a storm around midnight coming through with rain and more wind. I moved a BUNCH of bonsai inside and set many more on the ground. Of course, the potential storm broke up and we received nary a raindrop nor any wind. So, next day, I lifted a whole lot of bonsai trees back into place. But, that was a small price to pay. Can you imagine if I had not moved all those trees and the second storm had materialized and done damage to my trees? She Who Knows All would be able to tell all who would listen, "I told him to move more trees and he said, 'No worries, Babe, I got this.'" It was quite an experience. Hearing from a few bonsai friends, it seems their trees survived pretty well. I hope you, dear reader, rode out the storm and had minimal damage to your property and to your bonsai collections.

It has been a tough year in many ways. All we can do is grit our teeth, get done what we need to do today, and move forward.

Stay safe and keep moving forward!

Notes on Watering

John Denny

Michael Hagedorn has a section on watering in his *Bonsai Heresy* book. Here are a few tidbits from that section.

Watering is a very complex topic that involves an enormous amount of variables in soil type, water chemistry, weather, seasonality, tree species, pot size and shape, on and on. What this means is there are not easy answers. And it means we have to water every tree differently, in theory, at least. Most of us tend to water all of our trees the same. "Its 10 am, time to water all of my trees with the same water." This will satisfy some trees, but is not ideal for all trees. Over time those trees suffer.

When should bonsai trees be watered? When they dry out or begin to dry out. This changes with all those variables mentioned above. Deciduous may be dried by 10 am, junipers by noon and pines by 5 pm. Do I really want to water three times a day? Most working folks cannot do that. So, we find a single compromise that works for some or most of our trees and the ones that suffer from over watering, like the pines, well, maybe we should just skip having pines in our collection. Or shohin that require more frequent watering, perhaps we will wait until retirement to grow shohin.

Those with larger bonsai collections have at one time or another considered automatic watering. Again, it works for most trees, but probably over waters some trees and under waters others. Day after day, this puts stress on those trees. Do it if you have to. There are also many horror stories of being away on vacation and the power goes out back home and the timer stops the watering system. Or a big wind from the east blows your automatic watering pattern so it misses a third of your trees. I talked to an old gentleman from New Orleans whom I met at Brussels Bonsai Rendezvous. He said when Katrina hit, he had to evacuate, but he had an automatic watering system. His place lost power and he lost his entire bonsai collection. He was awfully old to start over. It was a sad conversation.

Trees have natural cycles of water usage. In spring they need more water to support the new growth phase. Then growth slows and water usage does, too. Then the heat of summer comes on and the rate of transpiration goes up requiring more water. Early fall comes and the transpiration slows, so water needs drop, but then they rise again as the tree seriously goes into root building mode. And water usage in winter obviously drops. Do we adjust during this cycle? I am guessing the answer is not much. We likely water more during the heat of the summer, especially on sunny windy high temp days. We probably water less in late fall as the tree prepares for winter. But, we likely don't follow our tree's natural changes for water closely enough.

Weak trees should be watched carefully for water usage. Keep the soil just barely damp. Do not over water, which is the natural tendency. Often your weak tree has a weak root system that cannot handle overly wet soil. Death awaits.

Many hobbyists in the Midwest use a fired clay product in their soil, like Turface. These products are notorious for once drying out, being very difficult to rewet. You can pour water on them from above and the water will run off the surface or run down the inside of the pot edge. The answer is to soak the bonsai in a tub of water for 30 minutes to allow the fired clay to rewet itself. This works for any very densely packed root ball, say a tree that has not been repotted in recent memory. To combat a densely packed root zone that won't accept water easily, I have used a chopstick to punch holes into the root zone. This can help in the short run until you can replot in the spring.

Water is water. We water our trees with whatever comes out of the end of our hose. Do we really know anything about that water? It seems to keep my trees wet. What should we know about our water source? The two biggies are: Hardness and pH. How do we find out these numbers? Contact your city water department who will forward to you more numbers than you need. But, you will find Hardness and pH in that report.

Bonsai trees and most plants like a pH around 6.5-7.0 as an ideal. As you get up to 8.0 your trees will not have ideal ability to function. They struggle to uptake certain nutrients. pH varies throughout the year. You may want to head to an aquarium store and pick up a pH measuring kit. They are simple, cheap, and pretty accurate. You will know what is coming out of your hose each month.

Hardness is a measure of mineral content of the water, mainly Calcium and Magnesium salts. They show up as white scale on bonsai pots. They also will coat the roots of your tree with what could be called liquid limestone if your Hardness is very high

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Six years ago I moved to a new home about three miles from the old home. There was a big difference in water quality. The old home had great water. I made home brew beers that won national awards with that water. It was good for bonsai. But, the new home had water that was high Hardness and pH was 7.8 – 8.0. I chose to add RO water. Reverse Osmosis is a filtration process that removes Hardness and lowers pH to neutrality of 7.0. I make up a container of 6 gallons city water and add a gallon of RO water. This drops the Hardness down by about 15% and I add an ounce of vinegar which drops the pH to a bit above 7.0. I use a watering can and water by hand. This

is more work than using a hose. I try to alternately use the adjusted water three or four days a week and water straight from the hose the rest of the time. In the winter, my Tropicals get the adjusted water every day.

You can collect rain water, which is a great way to go if you can set up a good system to collect and save and dispense your rain water. If you are handy, go for it.

Watering trees is complicated. They do not yell or bark when they are thirsty and they can't walk away from the watering dish if they are not thirsty. To be good at watering you must have Knowledge. You must know your trees water needs year round. And you must pay Attention.

I have done bonsai for a long time now. Many days I do not pay Attention as I water my trees. I am just watering to get the task done. Sound familiar? I promise to do better at paying attention to my trees – each individual tree, so I will better know its watering needs. I encourage you to do the same.

Oh, Jeez. It's time to go water again! See ya!

Alternating Bud Deciduous Trees and Their Care

John Denny

Deciduous trees can be of two types. One type, like maples, has buds on opposing sides of a branch and they leaf out in opposing pairs. The other type is alternating bud trees where buds and leaves alternate sides as you move along a branch. They do not leaf out in pairs. Common examples of alternating bud trees would be hornbeams and elms.

Knowing this has importance because it helps determine the maintenance and care techniques each type of tree requires. For example, repot alternating bud trees just as buds begin to move. This is earlier than opposite bud trees, like maples, where ideally you should wait until buds are half open. Otherwise, repotting is very similar to repotting opposite bud trees. Use a mix of akadama, pumice and lava. The ratio should be 2-1-1. Akadama, the water holding soil component should be 50%. Do not remove more

than 50% of the root mass during root pruning. Place your tree in the shade for a good two weeks after repotting. Iowa is windy, so keep your tree away from wind which can quickly remove moisture from leaves, while the freshly pruned root system is still healing and unable to take up enough water. Aftercare is very important.

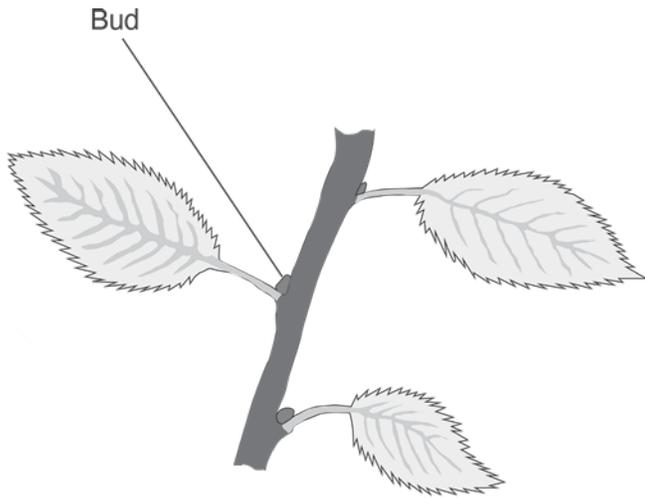
Regarding fertilization of mature alternate bud trees, do not fertilize until the first growth has hardened off. BioGold is a good organic fertilizer to use. If you plan to defoliate your tree, wait until the second flush of growth has hardened off. This avoids overly large leaf size.

Watch your soil moisture levels in spring for deciduous trees, especially ones with a lot of new leaves. These new leaves need a lot of water. When new growth is pushing is the most dangerous time of year for watering, so check your trees twice a day if you can. After leaves harden off, they will require less watering, though on hot or windy days, they need more. Water retention can be increased somewhat by placing a thin layer of sphagnum moss, shredded, on the soil surface. Keeping deciduous trees from the hot sun of early afternoon is quite beneficial. Locate your trees so they get partial shade during the hottest part of the day or use shade cloth of 30 or 40%

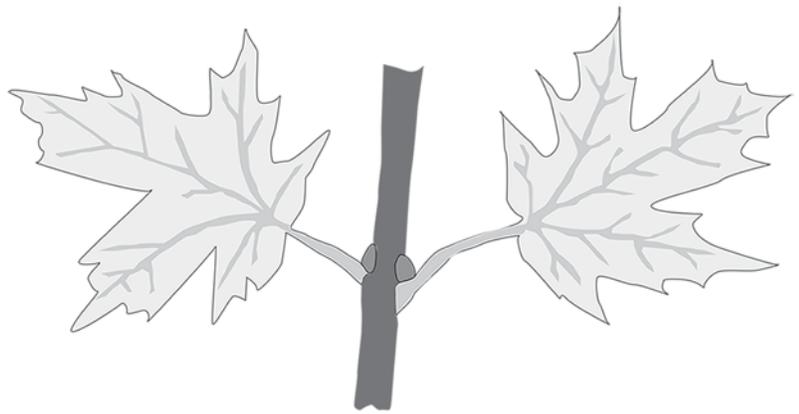
The same pests and diseases can attack both opposite paired and alternate paired deciduous trees. Be on the lookout for aphids, scale, leaf eating insects, and fungi that can damage your bonsai. Keep looking on a daily basis. Spray as needed or you can spray every five or six weeks if you are okay with prophylactic applications.

Winter care is similar for both types of deciduous trees. Protect them from winter temps below 28F (3C). Keep the daytime winter temps low so your trees do not bud out too early. If they do, keep them from freezing temps and give them light.

When considering pruning alternating bud trees, divide trees into two categories – those that can be fully defoliated and those that cannot. The first type, those that can be fully defoliated, include stewartia, flowering apricot, and Japanese snowbell, American hornbeam, pomegranate, Privet, Japanese and Chinese Quince. Let these species grow out to 7 or 8 leaves and allow them to harden off. At this point (late May or early June in Iowa?), these species



Alternate



Opposite

Designers Note: The illustration that John sent me was a bit fuzzy, so I made a new illustration.

can be defoliated. Defoliation can be partial, say 80%, taking the outer leaves away and leaving the inner leaves. This allows sunlight into the interior leaves, strengthening that area and improving good inner buds. Having ample and strong inner buds is of paramount importance when it is time to cut back your tree to redevelop good branching patterns. Defoliation also shortens internode length, creates smaller leaves, and improves ramification. One of the main differences I see between average American bonsai and Japanese bonsai is the high degree of ramification in the Japanese deciduous trees. Quince, like Chojubai, should be defoliated later in mid-July. Remember to cut the longer shoots back to just a couple of buds. Also, it goes without saying, though I am saying it, is do not defoliate any tree that is not strong and healthy to begin with.

The second category of alternating bud trees are those that can NOT be defoliated. These include Beech, Korean and Japanese hornbeams. If defoliated fully, these trees will show uneven growth with both large and small leaves and possible major branch dieback. So, how do we get light into the interior of these species? Cut the elongated branches back to two alternating buds, then cut each of those two leaves in half. Fold the leaf in half lengthwise, then cut at an angle so the leaf still retains a basic leaf shape. Doing this type of “defoliation”: will increase the amount of light penetrating into the tree which will strengthen the tree in naturally weaker areas.

In late fall or winter, prune away undesirable growth – upward growth that is too strong, too large branches

in apex of the tree, branches turning in toward the trunk, branches extending beyond the silhouette. Remember, the key to pruning alternating bud trees is to cut back to a bud that will push growth next spring in the direction that you wish the branch to grow. This is key to having a nice looking tree.

Wiring is best done on category one trees right after defoliation. You can see what you are doing with the leaves gone. Plus, the branches are most flexible then, too. Older category one and category two trees can be wired in winter, though the branches will not be as flexible. Wiring and branch placement for deciduous trees should allow the branch to initially lift, then fall, and finally the tip should rise all the while alternating movement side to side. In the apex, the branches should have a more upward angle. Aluminum wire should be used at a tighter angle of 45 to 50 degrees. The finer branches towards the end of larger branches should be fanned out in the shape of a hand to catch more sunlight and look pleasing to the eye. Deciduous trees can grow quickly, so watch your wire for branch damaging wire marks. If you wire in June or July, you may only be able to leave the wire on for two months.

Remember, we have been talking about trees in the actual stage of more finished bonsai. If your trees are young and just in the developing stage, you will be following a more aggressive plan of heavier growth to acquire thicker trunks, basic branch structure, and strong roots. Most club members in Iowa maintain a lot of deciduous bonsai. I hope this article helped make clear how to better care for your trees.