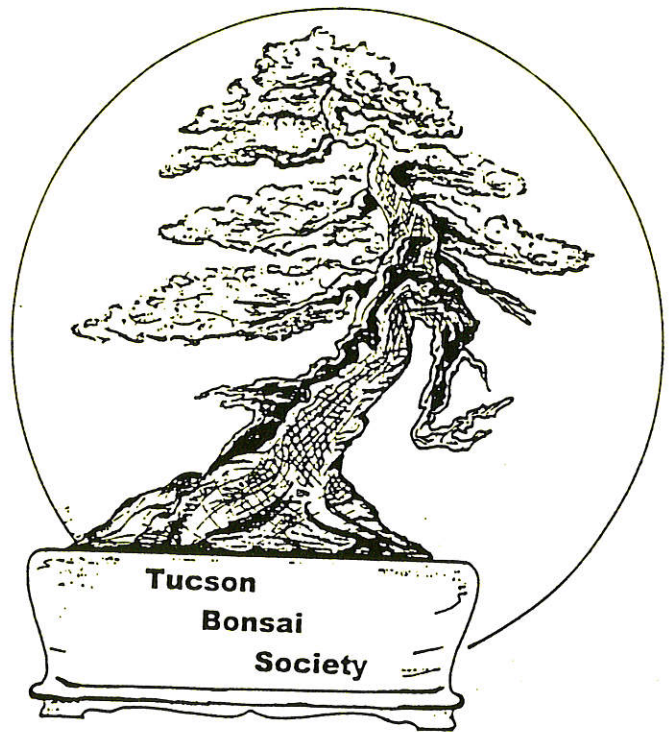


Bonsai Show

Annual exhibition of
indoor-outdoor bonsai by
members of the Tucson
Bonsai Society



Demonstrations-lectures daily Fri., Sat. & Sun. at 1, 3 and 5 p.m.
Place: North Ballroom level, upstairs

Win a bonsai in the raffle, already trained in a container with complete instructions for local care. Tickets are \$1 each, six for \$5. Two trees raffled daily.

Classes for beginners to be held in November - inquire at the Bonsai Society booth, adjacent to the exhibit.



By popular demand, BONSAI IS BACK...
at the SAHBA Home & Garden Show
Tucson Convention Center
260 S. Church
Oct. 17-19, 2003
Hours: Sat. 10-9, Sun. 10-6

MENTOR'S CORNER

This article is about the methods I use to create a microclimate to help my bonsai cope with summer heat. The main goals are to provide shade, reduce heat and raise humidity. There are many ways to do these things.

Some members use shade cloth, or a lath house, or a covered patio or landscape trees and bushes to provide shelter from sun and wind. I have my bonsai situated under a large privet tree, near a low back wall. They get some morning sun, then filtered sun/shade the rest of the day.

Underneath the benches, I have beds of gravel. When I water my bonsai, the excess water soaks into the gravel beds, creating a giant humidity tray. As the water below evaporates, the area stays cooler and moister.

I also group my trees closer together during hot weather so they do not dry out as fast. The bonsai help shade each other and form a windbreak. On very hot or windy days, I spray down the area all around my collection, sometimes several times a day. The trees seem to like an afternoon cool-down. Some members use a misting system or drip irrigation.

When the sun changes in the fall and winter, I usually move some or all of my trees to more sun on the other side of my low wall. When using your landscape trees for bonsai shelter, you will need to move the bonsai around a bit with seasonal changes. You may need to experiment to find the methods that work best for you. The important thing is to keep your trees alive through the summer heat. If you succeed, you have conquered the most difficult aspect of growing bonsai in Tucson.

---Randy McLean

Summer Care For Your Bonsai

HEAT

Keep your bonsai protected from the rays of direct sunlight during the summer months. Place trees under a lath, shade cloth, under a big tree or a shady part of your yard. Trees do need sunlight each day to encourage growth and good health. Morning sun is the best. Keep trees protected from extreme heat and wind. Provide as much sunlight as possible without over heating or burning them. Shelter plants from intense afternoon sun. Don't place your trees where they might be overheated by sun reflecting off a wall.

You also need to keep the pots cool by using some kind of insulation. If pots get too hot, feeder roots will die; by the end of the summer you will have dead trees.

Give your bonsai some elbow room. Leave about 8 to 12 inches of space between the branch ends of one tree to another tree. Adequate space promotes good health by allowing air to circulate and sunlight to get to all parts of your trees.

WATER

Heat and sunlight will influence how much water your trees will need. Depending on the conditions of your backyard (the hot or cold spots) will also influence if you need to water every day or if you water every other day.

The type of container being used will make a difference as to how much water your trees will need. Moisture escapes more quickly through unglazed clay pots than through glazed pots.

The type of soil being used will also influence how much water your trees will need. Bonsai need soils that rain freely but at the same time retain moisture. The hotter, drier, sunnier, or windier it is, the more rapidly plants lose moisture and the faster moisture evaporates from the soil.

When watering keep applying water until it runs out the drain hole. Wait for the runoff to stop and water again. Wait one more time and water again. The formula of 3. Water each tree three times. Be sure the soil is wet and that water is not just running down the inside of the pot – a sign that the plant is root bound and needs repotting.

Check your plants daily; you don't want soil so dry that the plants wilt, or so moist that the roots die from lack of air (root rot).

FERTILIZING

During our hot summer days you still need to continue to fertilize your trees. But you need to use fertilizers that are low in nitrogen, but high in phosphorous and potassium. These kinds of fertilizers, for example – fish emulsion (0-10-10) (if we can find again), Dyna-Gro, Mag-Pro (2-15-4) or some of the other Dyna-Gro complete nutrient formulas. The books and articles tell us to hold off feeding during the summer months. But I have found that my trees will take the heat and the hot winds better when I use some type of fertilizer.

Our trees need nutrients to stay healthy and resist pests, diseases, and our heat and our hot and dry winds. Remember not to feed a sick tree or a tree that is under stress. Never feed a dry tree, always water your tree before using any kind of fertilizer. The safest way to use a fertilizer is to use twice as much water recommended on the product label. Feed early in the morning after watering. Use a watering can and apply the solution to the soil until the excess liquid flows out the pot's drain hole. Feeding regularly is important. I am fertilizing once a week. Most books will tell you to feed once every two weeks. This is a call that you will have to make as to how often you will feed your trees.

PRUNING

Minor pruning that is needed won't hurt your trees during our hot days. But, be very careful about making major cuts. Minor pruning means cleaning your trees of unnecessary small branches, twigs to open up the tree. By keeping on ongoing clean up of your trees will produce dense growth. It will also help to keep healthy trees that will resist pest and disease.

WIRING

I don't like to wire during our hot summer months. If you need to do some wiring, make sure that you protect your wired trees from hot sun. The best time to do wiring is in the fall. Deciduous trees when they are leafless. Evergreens should be done in the fall so that wires are in place before spring growth begins.

---Hector Espinosa

stress. It's best to use lower nitrogen at this time of year, and using organics provides more residual feeding than chemicals.

You may observe *mineral deficiencies* during these months, due to frequent watering and leaching out the soil faster. Here are the leaf symptoms to watch for:

Nitrogen: weak growth, yellowing of lower leaves.

Phosphorous: mottled brown or yellow leaf blades, petioles and veins may be reddish or purple.

Potassium: burn at the tip of the leaves; edges may be purple. Not to be confused with browning back at tips, which can mean the roots are staying too wet, or too many salts.

Manganese: older leaves are yellow, new leaves remain green.

Iron: new leaves are pale or yellow; small veins may turn yellow.

Magnesium: blotched yellow or light brown leaf blades; the veins remain green.

Previously, I was using a time release fertilizer such as Osmocote, which I no longer use after listening to Ted Matson and Dennis Makishima. The product activates in warm soil, and will "spike" even in winter if your root ball gets warm on a sunny day. The result is that you can get a spurt of growth when you don't want it, on hot days or in winter months. I do advocate some alternating between chemical and organic fertilizers in hot weather; keeping in mind that when root balls are cool, organics may not be triggered at all.

My basic fertilizer to provide all of the above nutrients, and more (without Urea and very little sodium) is still *Dyna-Gro*. I mix the *Grow* product (7-6-9) with *Mag-Pro* (2-15-4), and *Pro-Tekt* which helps with heat stress and helps the plant's immune system to withstand infestations. Ray Noseck applies this product with every watering, diluted. I try to spray with *Pro-Tekt* on a weekly basis during warm-hot dry months, less when we have more moisture in the air. For organics, I use fish emulsion (5-1-1), and often mix 0-10-10 (I like the *Alaska Mor-Bloom*, a fish derivative), and add in *Arizona's Best* liquid chelated iron & zinc). I use fertilizers and insecticides at full label strength, except for higher nitrogen products (above 10%) which I always dilute. Bugs do not live at half-strength!

Other organics include several seaweed-derived products, with many different N-P-K formulas, some with less than 1% nitrogen. I like a powdered product such as *Whitney Farms* all-purpose Plant Food (5-5-5) at Mesquite Valley, and it contains Mycorrhizae to help activate the soil. Newly arrived (but a favorite around the country) is *Espoma Plant-Tone* (5-3-3) with 15 nutrients and is 100% natural and organic, now at Home Depot. Any of these organics will remain longer in the soil, reducing the frequency of fertilizing. Our purpose this time of year is to maintain the health of our bonsai, help reduce stress from heat and dry winds. If you see a burst of growth, fertilize less frequently, as our plants need this summer slow-down of growth to gather strength for fall and winter. When using any powdered or dry product, apply it nearer to the four corners of the pot, not around the base of the trunk. Remember, water-soluble products act very quickly, and leach out in a matter of days, while organics act much slower, and remain in the soil longer.

By mid-to-late September, I increase my nitrogen levels as plants put on their fall season of growth, and begin reducing nitrogen as we go into November. I continue with nitrogen feeding on all indoor tropicals such as ficus and Fujian tea for the winter months.

Finally, I've been using HB-101 for nearly two years, and I can see the difference in the health and vitality of my trees. It's not a fertilizer, but an "organic growth enhancer" from Japan. The product is derived from cedars, cypresses, pines and plantains. I use it every other time I fertilize. We usually carry it at the store, along with Dyna-Gro.

Again, be sure to mound sphagnum moss or coarse mulch around the base of your trunks, to protect surface roots (and those near the top of the root ball) from extreme heat. Test your soil with a soil thermometer – you'll find that it's 5 – 8 degrees cooler! Find out much more about summer bonsai care at our next meeting – and stay cool, man!

---David Meyer



??????Who's In The Kitchen??????

Thank you to all of you who have brought wonderful snacks to share with everyone so far this year!!! You have done a great job of bringing a variety and more substantial foods since we meet so much earlier in the day! Thank you! Gracias! We still need two volunteers for the November meeting - please let Dee know if you are able to help out ASAP!

As always the reminder that if you are unable to come to the meeting that you are bringing refreshments, please find someone else to switch dates with, or call Dee Telesco at 299-3405 or Cindy Peterson at 299-5952 so they can make other arrangements.

July - Chandler Sobel-Sorenson
Frank Harris

August - Ted Moskal
Bill Mitchell

September - Greg Baumgartner
Hector & Grace Espinosa