



THE BONSAI NEWS OF HOUSTON

MONTHLY NEWSLETTER OF THE HOUSTON BONSAI SOCIETY, INC.

Volume 39 Number 6, Member Edition

June 2010

Monthly Meeting

The next meeting of the Houston Bonsai Society (HBS) will be Wednesday, June 2, at 7:30 pm at the Houston Garden Center in Hermann Park, 1500 Hermann Drive. Refreshments and Curbside Consultation at 7:00pm.

Alan Raymond will show photographs of the most spectacular bonsai from Japan as well as those from the Weyerhaeuser exhibit in Washington State. If time permits, he'll also work on some tropical trees.

Upcoming Events

2010 June Saturday Study Group on June 5th will be held at a new location, Mercer Arboretum located at 22306 Aldine Westfield Rd in Humble, TX, beginning at 9:00 am. We are hoping this will create interest and participation for our members and anyone interested in the art of bonsai that live in the area. Alan Raymond will offer assistance on all tree types and all are welcome to participate. The focus, however, will be on wiring, pruning and trimming of tropical trees for bonsai.

"Cowtown Bonsai" Convention in Fort Worth

- 1) We have 50 registrants as of today. If we reach our goal of 100 rooms, all of the meeting rooms are free!
 - 2) The Haikado Elm workshop is sold out and several others will be very shortly.
 - 3) 60% of the vendors tables are sold.
 - 4) We have a couple of special announcements about the convention that will be brought out this month and next month.
 - 5) The convention committee has completed 90% of its work and will complete the last minute 10% details by the end of May.
- You can see that things are going well thanks to your help

in communicating with your club's members. Please remember to solicit your club's best bonsai for the exhibit. Details of the exhibit have been sent to you earlier and are listed on the convention webpage. Pictures sent to the Exhibit Art Directors would be appreciated. We are concentrating on Texas natives for a possible magazine article, but it is not a requirement.

It is something that I feel will eventually be historic for bonsai art in Texas, particularly after the Texas State Bonsai Exhibit opens. Please take a look at it right away because there are some deadlines involved. I have sent this note and attachment to the LSBF representative (as best I know) and probably another representative of each club. Please discuss and decide between yourselves the best way to get this information to your membership.

This same attachment is on the convention webpage section at www.fwbonsai.com.

Happy styling,

Mark A. Bynum, Chairman
2010 LSBF "Cowtown Bonsai" Convention

pH - What's All The Fuss?

by Mike Hansen

(Original article written in 1987, updated in 1988 and in 1999)

It is with some reluctance that I write this article because so much has already been said and written about pH. In some respects it's a little like the old cliché, "Everybody talks about the weather, but nobody does anything about it." I have been talking about soil pH since I moved to Austin, TX, and for the past thirteen years, I have been trying to do something about it. Now, at the urging of a friend, I am writing about it.

To understand the significance of pH and its relationship to plants, it helps to understand what pH is. pH is a unit of measure that indicates the relative acidity or alkalinity of a substance. pH is measured on a scale of 0 to 14 with 0 being very acid, 14 being very alkaline and 7 as neutral (distilled water). The measurement along the pH scale is logarithmic which means that each value along the scale is 10 times more concentrated than the previous value. For example, if we are comparing three samples of water, one with a pH of 6, another with a pH of 5 and the third with a pH of 4, the sample with a pH of 5 is 10 times more concentrated than the sample with a pH of 6 and the sample with a pH of 4 is 10 times stronger than the pH 5 sample and 100 times stronger than the pH 6 sample. The same relationship holds true on the alkaline side of the scale.

Many years of agricultural research have established that most plants will absorb nutrients from the soil within a fairly narrow band of between pH 6.0 and pH 7.0 with pH 6.5 about optimum. Some plants like junipers prefer pH 7.0 to pH 7.5 and some plants like pines and azaleas prefer pH 6.0. Therefore, we try to tailor our bonsai soil to be somewhere between 6.0 and 7.0. After raising bonsai for many years without great concern about soil pH, why am I spending so much time and effort trying to understand pH and its effects on plants, bonsai in particular? The answer is simple: within a year after moving to Austin, TX, from St. Paul, MN, some of my previously very healthy and most valuable plants were stressed and were showing signs of nutrient deficiencies. In short, they were dying.

When I asked other bonsaists in the area if they have had similar experiences, the most common answer was, "You can't raise those varieties here, it's too hot."

While that advice was true about some alpine species, one thing I have learned over the years is that plants are more adaptable to climate than we give them credit for. On the other hand, plants, especially bonsai, are a great deal more fussy about the soil environment they are grown in.

Further observation revealed that the plants showing the most stress were acid loving plants, pines in particular. I dug out the do-it-yourself soil test kit and quickly discovered that my previously mildly acid soil was testing between pH 7.5 and pH 8.0. (slightly alkaline). A little more checking with extension agents, a plant pathologist and a chemist and the cause became clear. It's in the water.

The culprit is calcium carbonate (limestone). Little wonder since all of Austin sits on the biggest chunk of limestone I've ever seen, and our water comes from caverns deep within that same limestone. Normally calcium carbonate is not considered to be soluble in water but more than likely the water we use has been in the

ground a very long time. Over time, relatively small amounts of calcium carbonate dissolved into the water.

This property of insolubility means that after you water your bonsai, the water that stays in the pot is either absorbed by the plant or evaporates leaving the calcium carbonate behind, changing the effective pH *of the soil*. With repeated watering, the calcium carbonate builds up not only in the soil but on your pots as well. Witness the hard white deposits that begin to appear after a few weeks of watering.

What to do? Every person I spoke with had a different recommendation and most of them would have worked. When each recommendation was considered, they could be summarized under one of three categories:

1. Do nothing and specialize in native and other alkaline tolerant plants.
2. Treat the soil to compensate for the alkalinity introduced by the water.
3. Treat the water to neutralize the alkalinity of the calcium carbonate.

The first recommendation was not acceptable, because I have many acid loving plants in my collection and I wasn't about to give them up without a fight.

The second recommendation was a little more acceptable but I was reluctant to change my soil formulation, which until now had been so successful. I did change it some, by substituting acid producing materials. Later, research from papers published by Dr. Carl Whitcomb and conversations with Dr. Thomas Perry lends strong support to the proposition that, due to the leaching effect of repeated watering, the pH of the soil in container grown plants will approach the pH of the irrigation water, within a few weeks after the irrigation begins. Soil amendments have little long term affect.

The third recommendation seems to have the most promise. However, water treatment is a tricky business. Every time you add something to water to get a desired effect, you will also have side effects which can cause a bigger problem than the one you are trying to solve.

Warning! The method of water treatment described below works for the water delivered to my home by Williamson County Municipal Utility District #2. The materials used are very hazardous to humans as well as plants, if not handled correctly. I do not recommend anyone to use this method unless they have thoroughly analyzed their own water and are completely comfortable with handling Sulphuric Acid.

After considerable thought and conversations with local wholesale nurserymen, I chose Sulphuric Acid as the neutralizing agent. It is inexpensive and it is readily

available from local chemical supply companies. I originally used Hydrochloric Acid because it was also readily available, but when we used enough acid to change the pH of the irrigation water, it had an undesirable side effect, chlorine gas.

The Sulfuric Acid keeps the calcium carbonate in suspension and thereby, eliminates the nasty buildup in the soil. While this sounds good and simple enough, it is anything but simple. Too little acid and it doesn't do any good. Too much acid and you kill the plants. I found that I had to mix about 7/8 of a gallon of Sulfuric Acid to 2,500 gallons of water with pH 7.3 before I noticed any change in pH. That's because the acid must react with all of the calcium carbonate, which is a powerful buffer, in the water before the acid could begin to change the pH. The second revelation was that it took only one cup of additional acid to change the pH of that same 2,500 gallons of water to pH 6.1.

Third, since I didn't have space for a 2,500 gallon water tank in my backyard, I purchased a commercial metering injection pump to add the concentrated acid to my irrigation water in just the right amount. I quickly found out that concentrated acid will destroy stainless steel and other materials in some metering pumps. I had to replace my original pump with one made of all plastic materials, made by DOSMATIC Inc. DOSMATIC Inc. metering pumps are high quality and well suited for this purpose. Also, the DOSMATIC Company offers excellent service when service is needed. Call DOSMATIC at 1-800-344-6767, and they can recommend a pump made of materials that will work for you.

Fourth, I did not trust the litmus paper and similar acid/alkaline indicators since the pH window I was trying to meet was very narrow. So I purchased a digital pH meter* from the Cole-Parmer Instrument company. Note: After accidentally destroying three different models, we recommend their LX-59000-05 waterproof hand held pH tester. So far it has stood up to our handling and continues to work well. For what it's worth, the system works. The acid loving plants are green and healthy again and so are the junipers and other native species. All seem to be much more heat tolerant and less susceptible to iron chlorosis.

Is water treatment on the scale I have described for everyone? Definitely not! For most people with modest collections, if water treatment is needed, watering by hand with an appropriate watering can, purchasing an inexpensive pH meter and batch treating your bonsai water, is the best overall answer. There are mild, effective water naturalizing products available, such as *DynaGro's*

pH Down and *pH Up* that are safe, economical and easy to use.

If you choose to amend your bonsai soil, be cautious of soil additives that acidify the soil because they do just that. An overdose of those materials in a bonsai pot can be just as fatal as putting too much acid in the water.

There is no easy answer to complicated problems, just learning experiences. Others in our area have copied what works for us and it also seems to work well for them. Before you add acid of any kind to your water, be sure that pH is the problem before you treat your water supply. There are other common components in drinking water that cause serious problems such as sodium chloride (salt) that cannot be successfully treated with acid or alkaline additives.

Note: Small changes in pH over time are more acceptable to plants, especially plants that are already stressed than making a big change at one time.

Good luck!

Mike Hansen
MBP Bonsai Studio

Monthly Bonsai Care

by John Miller

John Miller, who writes a monthly column for the Bonsai Society of Dallas and the Fort Worth Bonsai Society, has agreed to share his column with us. We need to make adjustments for our warmer, damper climate, with its early springs, long summers, late falls and erratic winters.

Repotting season is finally over. Repotting season is now here. In general it is well past the repotting time for most bonsai. Now that night temperatures are above 60°F, repotting the tropicals is at hand.

If ants or other creatures are building nests in the soil, the tunnels and cavities will prevent proper watering and may result in loss of roots. After you get rid of the ants, be sure to grab your chopsticks and work the soil down to eliminate holes. You will probably need to add a little more soil on top.

Leaf defoliation should not be done any more on most species. There must be a month of growing temperatures. And never leaf prune the atropurpeum varieties of Japanese maples, they do not rebud very well, but will usually come out again next spring.

However, some tropicals can be leaf pruned all summer. The *Ficus Nerifolia* especially benefits from leaf pruning which can be done more than once each summer. That will develop the heavy twiginess you see in the *Ficus*

bonsai from the Far East. I leaf prune my Eleagnus a month before a show if it looks ratty.

It is important to continue the twig pruning of your trees on a regular basis. While doing this chore, look at the tree to see if there is a need to do some refinement pruning. Refinement pruning is a deeper pruning to replace a branch that has grown too long or too big with a smaller one. This is usually done with the secondary or tertiary branches, not the primary branch coming from the trunk. I prefer to do this refinement pruning on deciduous trees in the winter when I can see the branch structure. But on bonsai like the yaupon hollies, I like to do it at this time when the tree is actively growing so that any winter dieback is apparent. Trees that weep a lot from cuts such as maples or pines should not be pruned at this time.

Extended cool and damp weather is good for fungal diseases like black leaf spot. Heat and humidity bring other fungi like mildew. Treat with potassium bicarbonate or sodium bicarbonate (baking soda). After the foliage is hardened a bit, you can treat with a 1% hydrogen peroxide (1 part 3% peroxide to 2 parts water) weekly.

The warmer the weather, the faster the bugs grow. The spider mite will always be near. Others to look for are scale of various forms, such as aphids and mealy bugs. I use the organic foliar feed (1 Tablespoon each fish emulsion, liquid kelp, molasses and cider vinegar per gallon water) to control all these. It also get any caterpillars and even bagworms. You can use some of the other organic controls like horticultural oil or a chemical according to label directions. Read the label directions carefully and **DO NOT** apply oil based chemicals to buttonwoods.

It does not do much good to spray if you do not do it correctly. Hose end sprayers have too coarse a spray and usually do not cover very well. All pathogen controls must be sprayed with a sprayer that has a nozzle which produces a fine spray in order to cover the entire leaf surface, top and bottom. You must get all those bugs or they come right back. And you need to **spray on a regular basis**. Any bugs or spores hiding in cracks will repeat the infestation.

Even if the days are relatively cool, the sun can still get the pots pretty hot. Not only does this dry out the soil very fast but the tree roots cannot live in a hot soil. A temperature I have heard is that 120°F will kill roots of most plants. I cannot give you a precise to-do list since your backyard is different from mine, but be sure that the sun does not hit the pots directly. If you use a cover of any kind, be sure that the side of the pot is protected also. A loose weave cover is preferable to solid paper as it lets you water more easily. Leave an air space between the

cover and pot and soil. Do not use foil for it reflects rays back up on the underside of the leaves, giving them a double dose of *too much* sun.

Most plants in pots will not enjoy a full day of 90° plus sun. Partial shade should be provided. A shade cloth awning will protect in the middle of the day. A shade cloth on the west side will protect from the late afternoon sun. This is the worst sun as the temperature is already high and the drier air makes the rays more intense. The trees can take more sun if the pots are covered loosely. There should be some air space around the sides of the pot.

Get in the habit of turning you bonsai on a regular schedule. One guy turns his a quarter turn every Monday. That way they will develop all sides evenly. This would fit in nicely with a good routine - say rotate on Monday, spray on Wednesday, and fertilize on Friday (if you do not use organic fertilizer cakes).

It's been a long time since I mentioned that watering is a chore that cannot be taken for granted. You cannot safely assume that the rain did the job, trees have a way of shedding water to the outside (the drip line?). You need to check each tree daily. Watering bonsai is a twice around the block type of affair. You water thoroughly which wets the outside of the granule and needs a few minutes to break the surface tension. Then come back and water again thoroughly so the particle can be fully soaked.

Houston Bonsai Society Board Meeting Minutes May 5th, 2010 Houston Garden Center

I. Call to order

Alan called the meeting to order at 6:37 pm.

II. Roll Call

Present: Alan Raymond, Michael Mc Cluskey, JoAnn Batey, Seda Dawson, Phillip Drilling, Dean Laumen, Buddy Allen and Carmen Lupascu.

Quorum present? : Yes

III. Read and Approve Meeting Minutes

Due to no quorum at April meeting, there is no meeting minutes.

IV. Treasurer's Report

JoAnn submitted on May 5th, 2010 the Treasurer's Report. Operating bank balance as of 05-05-2010 \$31,212.27 No check have been written since last meeting.

Membership as of 05-04-2010: 80 members. Out of those, 19 are family memberships. 39 members have not renewed yet this year. Board members agreed to contact non-renewed members.

The 2010 HBS membership list went out on April 1st via e-mail. Members who would like a hard copy need to contact JoAnn.

Motion was made to accept Treasurer's Report, seconded and passed.

V. Expenditures

Expenses made by others:

\$150.00 Timeless Trees - 3 trees

\$41.79 Ruby Holt-refreshments

\$95.00 Domain Registry for America (website) - 5 years registration

\$18.00 Cabrera Farm - 2 Bags of Soil

\$8.80 Seda Dawson – stamp, postage

\$25.52 J.C- refreshments

Motion was made to pay these expenses, seconded and passed.

Approved future expenditures:

JoAnn provided copies of 2010 proposed budget. Changes were presented by JoAnn and Hurley.

All members voted in favor of donating \$100.00 to State Convention.

Board also voted in favor of increasing the Roy Nagatoshi workshop fee to \$45.00 per person.

Motion was made to change the prior decision of reimbursing 9 members' registration fees to LSBF Convention to 4 members' registration fees; seconded, voted and passed with all ayes.

Motion was made to donate \$500.00 to Texas State Bonsai Exhibit, seconded, voted and passed with 5 ayes, 1 nay.

VI. Unfinished Business

Approve 2010 Budget – JoAnn Batey:

Motion was made to approve 2010 proposed budget with the revisions made, seconded, voted and passed with all ayes.

Special election of two additional Board Members at Large

Alan announced that two members, Ronald Kelly and Eldon Branham, applied for member-at-Large position and they will be voted by membership tonight.

VII. Routine Business:

Lecture/Demos to outside organizations:

Lone Star College Demo-Alan and Rosanna reported that they received \$150 honorarium from Lone Star College.

Three trees were used at that demo and they cost \$150.00. Warrens South Garden- Alan will do the presentation on May 8th.

Maud Marks Library in Katy- May 8th- Rosanna asked for a volunteer but there were no volunteer.

Location of Saturday Study group on May 8th changed from Timeless Trees to Cabrera Farm.

Alan agreed to facilitate Saturday Group at Mercer Arboretum in Humble on June 5th.

April Internet Hit Report:

Michael submitted April internet report created by Gary.

HBS website got 427 visitors in April and 318 of these were first time visitors. Newsletter got 137 visitors and 84

of these were first time visitors. Board members thanked Gary Teeter for providing monthly internet report.

IX. Adjournment

A motion was made and seconded to adjourn. The motion carried and the meeting was adjourned at 7:30 PM.

Notes from the meeting:

Alan called the general membership meeting to order at 7:32PM.

After introducing guests and new members, Alan announced Ronald Kelly and Eldon Branham as the two candidates for two member-at-large positions. Members unanimously elected Ronald Kelly and Eldon Branham as Members-at-Large.

Hurley facilitated the bald cypress workshop.

A total of 45 members and guests attended May 5th meeting.

Minutes submitted by Seda Dawson

Stone Appreciation

If you're crazy for stones or want to learn more about them (or want to try something more enlightening than beer), a show devoted exclusively to stone appreciation will take place in Harrisburg, Pennsylvania, September 30 - October 3, 2010. The International Stone Appreciation Symposium is the name of this fascinating, educational and inspirational symposium designed to be the most comprehensive event of its kind. The 6 organizers (Jim Doyle, Glenn Reusch, Marty Schmallerberg, me, Sean Smith and Bill Valavanis) love Bonsai, but are passionate enough about the world of Viewing Stones that we have, for the 5th time, undertaken the role of hosts. Our goal is to promote the pure joy and beauty of Stone Appreciation. This will truly be a unique learning and sharing experience. Each of the past 4 shows has been successful on all levels and the 6 of us have, after each of the last 4 shows, been thanked, sometimes overwhelmingly by registrants for the quality and quantity of information and insight we've been able to deliver. We, in turn, have the speakers and registrants to thank for making the shows fulfilling and enjoyable for us all. The list of speakers this time includes Rafael Monje Garcia from Spain, Kemin Hu from China / USA, Seiji Morimae of Japan, Larry Ragle from the USA and Peter Warren from the U.K. There will be displays, workshops, demos, critiques, vendors, raffles, a connoisseur's auction, lots of camaraderie and plenty of fun. The only complaint we've had in the past, "There's too much information, too many demos, not enough time to relax between events". Well, we can live with that kind of complaint. Have you ever been to a show where there was too much information about a topic you loved? For a complete list of events, scheduling and registration information go to www.stoneshow2010.com

HBS Membership

The HBS membership list went out to members on April 1, 2010 via email. Members who would like a hard copy, please contact JoAnn Batey at 713- 914-9180 or email her at jbatey@comcast.net.

Editor's Note

Last week-end, my son Chris announced he will have a Bromeliad show at Mercer Arboretum and Botanical Garden. I was determined to drive across town to support him. The long drive turned out to be a wonderful adventure. Besides seeing him win 21 prizes, some best of show, for the weirdest unreal plants I've ever seen, I discovered a true Paradise! Before an extravaganza of rare, unusual and unique treasures such as Ginkgo, 30 kinds of bamboo, too many innumerable flowering gingers...all very precious plants blazing with colors, I stood in awe. These spectacular masterpieces designed by landscape architects, artists, horticulturists and plant lovers came alive with the sound of music, yes music, of the waterscapes and fountains. What stunned me most were the many types of Japanese Maples, which did not like my backyard one bit. There they stood proudly, in every flower bed, displaying the most vibrant red, green or purple foliage.

This nationally recognized arboretum and botanical garden of 260 acres, along Cypress Creek, is the region's largest living museum of native plants and those collected around the world.

This coming Saturday June 5, bring your whole family there to enjoy this beautiful local gem. Don't forget to bring your hats, sunglasses, plenty of cold drinks and your bonsai tool bag. Stop by the HBS study group in the front building to help our HBS president Alan Raymond share the art of bonsai to the bonsai lovers-to-be in the region. We'll have a blast!

See you there!

Shawn Nguyen,
Email me your ideas at hbs.news@yahoo.com

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Calendar of Events

The HBS meets the first Wednesday of every month at 7:30 p.m. in the Houston Garden Center in Hermann Park, 1500 Hermann Drive, next to the rose garden. Refreshments and Curbside Consultation at 7:00 p.m.

- Jun 2 Monthly meeting: Bonsai of Japan and the Weyerhaeuser exhibit in Washington State - Alan Raymond. Possible work on tropicals.

- June 5 Saturday Study Group, Mercer Arboretum
22306 Aldine Westfield Rd in Humble, TX,
77338 - 281-443-8731 - 9:00 am to 1:00 pm
Alan Raymond host. See www.hcp4.net/mercer

- Jun 11-13 LSBF Convention, Fort Worth with Peter Warren, Guy Guidry, Matt Ouwinga, Estella Flather & Alisan Clarke, www.fwbonsai.com

- Jun 12-13 2nd US National Bonsai Exhibition, Rochester, NY. contact Bill Valavanis at 585-334-2595 or WNV@internationalbonsai.com or visit <http://www.internationalbonsai.com/>

- Jul 7 Monthly meeting: Yvonne Padilla will create an Emerald Green Ficus in Cascade style.

- July 10 Saturday Study Group, Cabrera Farms Nursery
9:00 am to 1:00 pm

- July 17, 24 & Aug 7 Intro to Bonsai Course at Bayland Park
9:00 am to 3:30 pm

- Aug 4 Monthly meeting: Bonsai of China - Dr. Hoe
Possible work on tropicals.

- Aug. 7 Saturday Study Group, Timeless Trees Nursery
9:00 am to 1:00 pm

- Sep 1 Monthly meeting: Annual Auction of donated items at Houston Garden Center

- Sept. 18 Saturday Study Group, Cabrera Farms Nursery
9:00 am to 1:00 pm

- Oct 6 Monthly meeting: Seda Dawson on Bonsai Horticulture

- Oct. 8 Setup for Fall Show/Sale 6-10, Houston Garden Center

- Oct. 9 & 10 HBS Fall Show/Sale Saturday 9-5 Sunday 10-4 at the Houston Garden Center

