

PBA Clippings

NEWSLETTER OF THE POTOMAC BONSAI ASSOCIATION



Volume 29, Number 5
July 1999

POTOMAC BONSAI ASSOCIATION

Presents

The 25th Annual PBA Fall Symposium

Rocky Mountain High

September 18 & 19, 1999

U.S. National Arboretum, Washington, DC



Featuring two demonstrations, a tree critique, and an advanced workshop by HAROLD SASAKI of Wheat Ridge, Colorado, using conifers collected in the Rockies.

There will also be workshops by two of PBA's favorite vendors, Jim Doyle of Nature's Way Nursery and Todd Stewart of Gardens Unlimited. Jim Doyle's workshop will feature English Yews already established in mica pots, and Todd's workshop will feature Shimpaku, pot, and soil.

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Editorial by Jules Koetsch

Every now and then the question comes up - "Is there an American Style of bonsai or will one ever emerge?" I remember some 23 years ago when I started in bonsai, Jim Newton and Dan Robinson were suggesting the development of bonsai styles that did not mirror the well-groomed Japanese styles. It almost seemed a fait accompli when Dan Robinson was captivating us with his use of a chain saw to carve deadwood on trees and turn them into bonsai. However, during the same time frame, Mr. Y. Kimura was wowing the Japanese by creating in a similar fashion, spectacular bonsai with carved expanses of jin and shari. Hence, one possible chance to label a uniquely American style of bonsai as something like "the chain-saw-carved deadwood style" vanished.

I had not given the question of an "American Style" any thought until recently, when I found Marc Cathay's article in a back issue of *American Horticulturist* which is reprinted in this issue of *Clippings*. Dr. Cathay points out distinctions between the Chinese penjing and the Japanese bonsai. He noted that, in particular, the Japanese bonsai appear more lush than the Chinese penjing. Possibly the result of the Japanese using wire to train their bonsai, and the Chinese school using "grow and clip" to form their penjing. Now I have a way to distinguish to people what is penjing and what is bonsai. We might also take a clue from the name applied to each style, penjing and bonsai, which implies that we should start coining an expression for a uniquely American style of dwarfed trees if ever we can distinguish such a style. However, calling the trees that we dwarf by the Japanese name "bonsai" carries with it an aura of the Asian exotic. Also, many of our efforts are attempts to mirror bonsai styles found

in Japanese books and magazines, using even the same plant material. So, in those cases, the name "bonsai" is in a sense apropos and just. One might say the Japanese have categorized every shape and condition in which one might find a tree - formal upright, informal upright, root on rock, forest, and so forth. Hence, another part has been added to the challenge to find an American style of dwarfing trees - that of finding a catchy name for it.

Is searching for an American Style paradoxical? The Japanese sometimes broach the subject to Americans of whether there is an American Style. Without a definitive answer, the Japanese conclude that perhaps one will evolve if we try to replicate the shapes of trees native to North America in the dwarf trees we create. In addition, when creating dwarfed trees, we should develop and use plant material native to this part of the world. Those suggestions seem to be as good a way to go as any toward establishing an American Style.

Hence, when you visit the U.S. National Bonsai and Penjing Museum, see if you can discern any significant differences between the dwarfed trees in North American Pavilion and those in the Chinese and Japanese Pavilions. John Y. Naka's "Goshin" stands out as what one might say is the American Style in that the eleven trees together give you the feeling of standing in one of North America's towering redwood forests - an impression that is remarkable in the sense that each tree has a minimal number of branches. Jim and Helen Barrett's Foemina juniper is a lone, giant Sequoia. Marybel Balendonck's group planting of Catlin elms is that grove of trees one might see in New England - the slab instead of a tray adds to its rustic charm. Perhaps an American style would be one where slabs instead of pots and trays are used to emphasize the natural surroundings in

which one might find the trees. Then there's the "flat top style" found in Guy Guidry's formal upright Bald cypress.

Right now, my answer is that there is an American style for dwarfed trees. It is a style that emulates trees, groves and forests in North America. Now, if only I could think of a good name for it to set it apart from bonsai and penjing. Then the name of the museum will have to be changed to the "U.S. National Bonsai, Penjing and (yet to be named American Style) Museum." A national contest could be held to come with an appropriate name for the American Style. How about "American Mini" as a name for a tree styled the American way?

Postscript: As often happens after writing about a subject, one finds that there have been other articles written on the same subject. Marie Mingo, a volunteer at the Arboretum, told me about Janet Lanman's essay "Small is Beautiful." It was written just after the Chinese Pavilion was officially opened at the National Bonsai and Penjing Museum in 1996. It is included in this issue, along with Dr. Marc Cathey's article, so that the readers can judge for themselves if there is an American style for dwarfing trees.



... and since we're thinking about American styles, let's think about American bonsai stamps. Our USPO has been less than receptive to the idea of using trees in the National Bonsai and Penjing Museum for postage stamp designs. Now that President Clinton is not only receiving them but also giving them as gifts, the time may be riper to let USPO know the level of interest for this art form is much larger than the CTC Committee assumes. Send a postcard to:

US Postal Service
ATTN: CTC, Citizen Stamp Advisory
Committee
475 L'Enfant Plaza SW, Room 4474E
Washington, DC 20260-2437



Calendar of Events

compiled by Doug French, NVBS

July

Rappahannock Bonsai Society

3 11 am Tropical Workshop.

Northern Virginia Bonsai Society

10 10 am Club Meeting at Norma Merritt's home

Baltimore Bonsai Club - No meeting

Brookside Bonsai Society

11 9 am-12 pm Open House - Dan Chiplis's Collection

Kiyomizu Bonsai Club

25 2 pm Slab making at R. Davis's home. (Members only please)

August

Northern Virginia Bonsai Society

14 10 am Janet Lanman critiques member trees in a lively forum

Brookside Bonsai Society

14 Cancelled Open forum

Baltimore Bonsai Club

15 1 pm Grooming of trees for Maryland State Fair at Mike Ramina's

Kiyomizu Bonsai Club

22 2 pm Photo Session at Clearwater Nature Center; bring trees.

Other Goings On

10 July, 1 pm Auction, Merritt Collections, See pp 5 and 6

18-19 September, PBA Fall Symposium, National Arboretum

21-24 October - Atlanta, GA (Kimura)
Contact Tony Smith (404) 872-2217, fax (404)875-1464 or
hermita@mindspring.com

Doug French has moved. Club secretaries, please make note of my new snail mail address and phone number:

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If you have not sent your 1999 Activities Calendar by now, your meetings listings are due to Doug by the 10th of every month.

Yet another of our bonsai family has passed on. Barbara Bogash died on April 30, 1999, at her home in Florida. She was a prominent and very active member of the Baltimore Bonsai Club, which she joined in 1974.

In 1981, she and Arschel Morell formed Bonsai Associates which supplied quality bonsai materials to bonsai artists for many years. Barbara loved to go on tree collecting trips and to attend local, regional, and national bonsai conventions where she interacted/partied with a great many friends in the bonsai community.

Barbara moved to Florida in 1988, about a year after her husband, David, died. She leaves behind two daughters, JoAnn and Samantha, and a stepson, Ryan. Her bonsai collection has been donated to the Morikami Museum and Japanese Gardens in Delray Beach, Florida.

Photograph of Barbara with a bald cypress taken in Florida on a collecting trip with Arschel Morell, January of 1978.

Submitted by Richard Meszler



FOR PBA MEMBERS ONLY

Auction of the Merritt Collection - Pots and Trees

10 July 1999

1:00 p.m.

40% Percent of Sale Receipts to Benefit NBF
and 10% to PBA Clippings Fund

The sale will be held at the Merritt home (ergo, this is a private sale - **Please do not give the map or other info to casual acquaintances. This information is not to be put on the internet.** All items have been evaluated for insurance purposes.

Parking: NoVa club members will be acting as parking lot attendants. Norma's driveway also serves two other homes which we must not inconvenience. If weather is dry, we may park in small meadow. If wet, we may need to park on street and walk in.

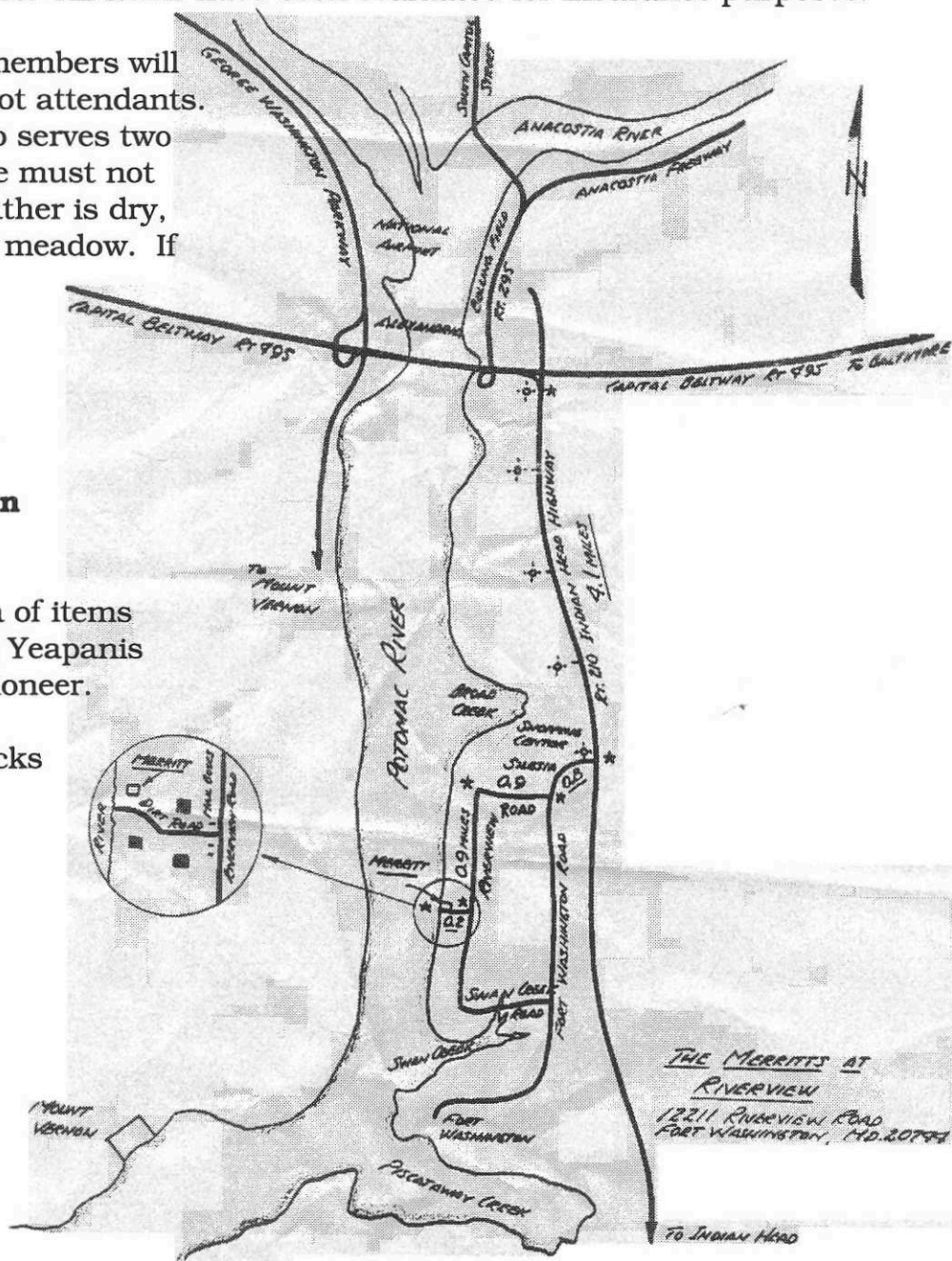
Bring your own chair.

Bug & tick protection recommended.

See page 5 for an idea of items up for auction. Chris Yeapanis will be acting as auctioneer.

Cash or personal checks only.

MAP NOT TO SCALE.



MERRITT AUCTION ITEMS

Bill Merritt's collection of bonsai and extensive collection of bonsai pots will be auctioned on Saturday, July 10th starting at 1 p.m. Directions to the Merritt home are included in this issue.

TREES IN CONTAINERS: Include 2 Japanese maple forests, a Ponderosa pine, Japanese black pine, Hinoki cypress, a number of Shimpaku in cascade and semi-cascade styles, some small azaleas, Juniper procumbens nana semi-cascade, a large Ginkgo.

TREES IN GROWING BEDS: Include a number of very mature Kingsville boxwood, Japanese red pine, azaleas, a number of very large trunked Juniperus robusta green, Juniperus procumbens nana.

BONSAI CONTAINERS: Over 200 bonsai containers, including many with chops or seals from the world famous Tokoname kiln in Japan, of which some are still in the original boxes. Sizes range from many shohin or mame pots to large trays of about 24 inches in length.

BOOKS: Many bonsai-related books.

STONES: Some viewing stones.

The H. William Merritt Fund

To celebrate Bill Merritt's life and his tremendous contributions to the National Bonsai & Penjing Museum, the H. William Merritt Fund has been established by the National Bonsai Foundation. The goal of the Fund is to raise in excess of \$25,000. At the time of the *Clippings* deadline, the fund totaled \$13,750. These funds will be used to construct a fitting memorial at the Museum, which will be named in Bill's honor.

Please send your contributions, marked for the H. William Merritt Fund, to:

Chris Yeapanis,
Treasurer, The National Bonsai Foundation
4228 Berritt Street
Fairfax, Virginia 22030.

Checks should be payable to The National Bonsai Foundation. All donations are tax deductible as provided by law.

For stock donations, please call Felix Laughlin at (202) 862-1040 to obtain NBF's brokerage account information.

Thank you for your generous support!

A Gift of Chinese Penjing *by*

Henry M. Cathey who was the fourth director of the US National Arboretum, and a former president of the American Horticultural Society (1974-1978)

This story begins in Hong Kong in November 1975. My wife and I, along with other participants in the American Horticultural Society's Asian tour, were invited to visit Dr. Yee-sun Wu's collection of artistic potted plants, called "penjing" in Chinese. Although I had just completed a gardening bulletin titled "Growing Bonsai" for the U.S. Department of Agriculture and was also aware that the US National Arboretum had recently received a gift of 53 bonsai from the citizens of Japan through the Nippon Bonsai Association, this visit gave me a totally new understanding of how landscape trees and shrubs could be contained in such small living spaces.

Dr. Wu's collection was a private one, created for personal enjoyment and maintained for viewing by only a few honored guests. Unlike the bonsai displays of Japan, where an educational or commercial aspect was often involved, Dr. Wu's collection was a statement of one person's mastery of the living landscape. At first glance I found the penjing to be too stark, too finely trained, too reduced, as opposed to the lushness I had learned to admire in Japanese bonsai. I also found the presentation of more than 800 "trees" in one setting overwhelming from the viewpoint of daily care and maintenance; the gardener in me said that the responsibilities for so many plants would be more than most people would consider.

After touring the collection, we were invited into the residence to view the Chinese antique furniture and penjing containers and were offered a classic Chinese meal with a "lazy Susan" of dishes both hot and cold. When I left, it was with several sets of slides that pictured the stone bases, ascending forms, and tiny

garden artifacts of the penjing. Over the next several years, I used these slides over and over again with different lectures to illustrate the gardener's striving to tame plants for urban life and the decisions which we all must make in preservation.

Move forward ten years: I am now director of the US National Arboretum, having moved to the 444-acre research/education facility of the Agricultural Research Service after 25 years as a research horticulturist at the Beltsville Agricultural Research Center in Maryland. One of the first things I learned on my arrival at the Arboretum was of the tentative offer of Dr. Wu to give the American people a collection of penjing--the very plants on the slides I had shown so frequently with my lectures. In the files, I found letters dating from 1975 suggesting that Dr. John L. Creech, the third director of the Arboretum, should visit Dr. Wu's collection in Hong Kong on his next trip to the Orient. Other letters over the next few years represented increasing progress toward the offering of a collection to the US National Arboretum. I then began to take up the campaign myself, as I realized a Chinese collection of trees would help us tell a more complete story about artistic pot plants. I continued the work of Dr. Creech in encouraging the formation of the National Bonsai Foundation and in establishing goals toward creating a National Bonsai Museum on the grounds of the Arboretum. Together we worked to complete the 1975 design of the internationally-famous architect, Masao Kinoshita, to display the original 53 bonsai given by Japan, along with Chinese penjing and North American bonsai.

In 1985, Mrs. Orville Bentley, wife of the Assistant Secretary of Agriculture, took a letter of acceptance for a portion of the collection to Dr. Wu from the Secretary of Agriculture, John Block, and thus began the detailed process of bringing the

trees to the United States. Dr. Terry B. Kinney, Jr., administrator of the Agricultural Research Service, provided the funds to fly the plants to this country and to maintain them during a 2-year quarantine.

On June 26, 1986, the plants were presented by Dr. Wu to the people of the United States. Sylvester G. March, supervisory horticulturist, Robert F. Drechsler, curator of the National Bonsai Collection, and I escorted them from Hong Kong to San Francisco. When we got to Dulles International Airport on July 1, we found that the airline had sent the trees to

Los Angeles while we were traveling on tickets with the same flight number. Mr. March spent most of that night tracking them down and coordinating their delivery, and finally, on the morning of July 2, they arrived at Dulles after having been in transit for almost 3 days.

We were thankful that at both Los Angeles and San Francisco the plants had been watered by an interested airline attendant. We were greatly concerned about the shallow trays and their limited supply of water--the trees could easily have become stressed. But, amazingly, an early summer downpour drenched the

A Comparison of Bonsai Styles

	Chinese Penjing	Japanese Bonsai	North American Bonsai
Form	Ascending Clearing/starkness Trunk, roots are emphasized	Dimensional Depth/lushness Foliage is emphasized	Experimentation and discovery; styles are still emerging
Species	Temperate and tropical species	Native trees and shrubs; hardy types are emphasized	Exotic and native North American species
Source	Found, and recently put into training	Found, and centuries of training	Recent interest, mostly collected from the wild
Training	Thin, prune and clip	Thin, prune, clip and wire	Thin, prune, clip, wire and mould
Media	Natural clays of region	Complex mixture of components	Varies with specialist and traditions
Artifacts	Figures, shrines and bridges to create illusions of landscapes	The plants themselves scaled to human size	Many approaches by various artists
Container	Many guidelines of size, color and texture	Many guidelines of size, color and texture	Many traditional practices are emerging

trees as they emerged from the 747 at Dulles. After a puzzling transfer of government documents for gifts of unassignable value, the staff of the US National Arboretum motored up in a convoy of trucks to transport the trees to the same quarantine houses at Glenn Dale, Maryland, that had been used for the Japanese collection 11 years before.

The staff cut their way through the crates and netting to place the trees in the screened lath house, and a team of eight specialists descended on the plants to check every aspect--insects, nematodes, snails, slugs, and diseases. There was even an inspector for the wooden packing material! The plan called for Robert Brittingham, officer in charge, Plant Germplasm and Quarantine Center, Beltsville, Maryland, to handle all of the materials and dispose of them safely (all the original growing media was to be changed and disposed of within one year). Because of these precautions, only a few groups were allowed to visit the collection. For the next 2 years, Robert F. Drechsler and Daniel J. Chiplis visited daily to care for the plants, and volunteers Janet Lanman and Ruth Lamanna (PBA members) aided in the repotting and pruning on a weekly basis.

The formal presentation of the penjing was on September 30, 1988. Stephen Wu, a banker from Boston, Massachusetts, and the younger brother of Dr. Wu, presented the plants to Peter Myers, Deputy Secretary of Agriculture, and the collection was then placed in a temporary setting at the Arboretum. Thirty-one trees ranging in age from 20 to over 200 years are in the collection. Various styles are represented: the forest, clinging to Ying tak stone, two-tree, mother with son. The containers are either white marble pots or from Shiuvan, Guangdong, Wuxi Jiangsu, or Taiwan; several antique pots are over 200 years old. The trees and shrubs have been

trained by the "grow and clip method" to create a variety of rock shapes and scenes; others represent overhanging cliffs or mountain peaks and ranges. Miniature figures, bridges, boats, and pavilions are included, so the potted plants have become artistic depictions of China's famous landscapes.

The National Bonsai and Penjing Museum collection now [Oct 88] includes over 250 distinguished trees from Japan, Hong Kong (Chinese Lingnan School), and North America. Ultimately, this 6-acre site will have a series of garden experiences. Entrance is through the Ellen Gordon Allen garden, a gift of Ikebana International, which leads into and includes the Japanese cedar forest (*Cryptomeria japonica*) and opens to the Chinese, Japanese, and North American gardens and pavilions. Offices, teaching and display rooms, greenhouse, and lath house areas will make the facility into a first-rate museum. The National Bonsai Foundation is securing funds for construction, to maintain the trees, and to provide educational experiences about bonsai and penjing throughout our nation.

It is gratifying that the slides I obtained during my 1975 visit to Dr. Wu's collection have now, in 1988, become living plants on the grounds of the US National Arboretum. I invite you to visit and to learn about these gardening practices of southern China dating from the First Century. Now, as then, they are living poems, pliable sculptures of the renewing earth, and with our nation's gratitude, they are available for all Americans to see at their own National Arboretum.

American Horticulturist kindly permitted the above reprinting from their October 1988 issue.

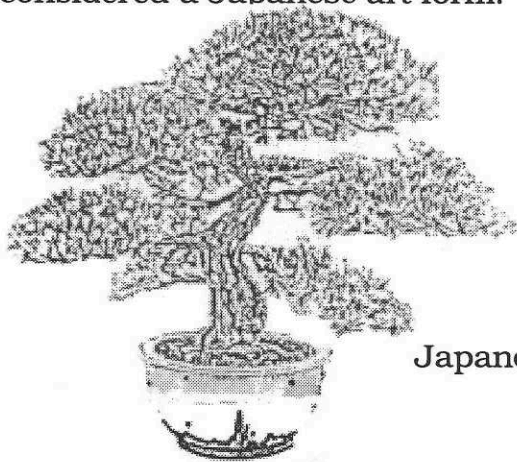


SMALL IS BEAUTIFUL: BONSAI COMBINE ART AND NATURE

Janet Lanman has been involved with bonsai for some thirty years. She studied with Yuji Yoshimura, the first person to introduce bonsai on the East Coast. She has worked as a volunteer at the Bonsai and Penjing Museum since 1977, and serves on the board of the National Bonsai Foundation, which she helped found. In this essay, Janet discusses what distinguishes each type of bonsai.

When visitors go through the Arboretum bonsai collection, the question that invariably arises is, "What is the difference between the three types on display?"

The National Bonsai Collection began in 1976, when, in commemoration of America's Bicentennial, fifty-three bonsai were presented to the people of this country by the Nippon Bonsai Association. At that time, bonsai was generally considered a Japanese art form.



Japanese

Looking at these bonsai, we were aware of the five basic bonsai styles described by Yuji Yoshimura in *Miniature Trees and Landscape*. We saw that the plant material was Japanese (Japanese black pine (*Pinus thunbergi*), Japanese white pine (*Pinus parviflora*), Japanese cedar (*Cryptomeria japonica*), hinoki

cypress (*Chamaecyparis obtusa*), zelkova (*Zelkova* spp.), Japanese maple (*Acer palmatum*)). Japanese bonsai evoke a feeling of simplicity, dignity and calm, while capturing the beauty of a tree growing in nature.

Then in 1986, Dr. Yee-Sun Wu of Hong Kong presented the Arboretum his gift of Chinese penjing, or artistic pot plants. Here, we saw, were bonsai very different from the Japanese.

The dramatic use of upward soaring rocks is the most exciting aspect of penjing. We have seen pictures of the great karst formations in Guilin, China, and viewed Chinese scroll painting with mysterious peaks piercing the clouds. It is just such drama that Chinese rockery bonsai evokes.



While the Japanese believe the container should serve only as a "frame," the Chinese consider it an integral part of the whole "story." Many pots have decorations, some have raised designs. Figurines, tiny boats, and temples are often used as part of the total composition of miniature scenes.

Many Chinese bonsai are trained by the "clip and 'grow" method and often have sharp angles, twiggy but sparse growth, and fine taper. The plant material of Chinese penjing (fukien tea (*Carmona microphylla*), Chinese banyan (*Ficus*

Poetry Corner - Calm yourself

microcarpa), Buddhist pine (*Podocarpus macrophyllus*), paupers tea (*Sageretia thea*)) are all beautifully suited to bonsai culture.

Then came the American bonsai collection, which is very different from its oriental precursors. Here too, the most obvious difference is the plant material, which is American, as varied as our country is vast, and reflective of many environments--mountains, prairies, seashores, swamps. Among popular plant materials are: California juniper (*Guntperius californica*), Ponderosa pine (*Pinus ponderosa*), bald cypress from Florida (*Taxodium distichum*), "larch or tamarack (*Larix laricina*), and fig (*Ficus*) from Hawaii.

There seems to be greater freedom in the work of American bonsai artists. "Gin" (bleached deadwood) is frequently used. Often the trees seem fuller. Some Americans do fascinating work using electric routing tools or chain saws.

Even computers are used to help formulate tree design and to choose containers. And potters throughout the country are developing distinctive containers for American bonsai.



But wherever bonsai is done, the goal is always the same: the creation of a miniaturized representation of the splendor of a tree in nature. While analysis and description go on continuously in the worldwide bonsai community, the enjoyment of the beauty of the bonsai is an ever present and sustaining pleasure.

I appreciate the opportunity to once again introduce a poem that *Clippings* has chosen to publish. This is the fourth in a series of five sonnets based on the prime styles of bonsai. If you've been following along, you've already seen the move from the formal to informal upright leading to the Shakan, or slanting style. This poem "bends" down even further, and in describing the semi-cascading style, ideas of division and reflection are explored both thematically and in the poem's form, which includes stanzas set up to reflect each other.

4. Han-Kengai: *Semi-Cascading Style*

Suppose there was such a thing as light
and below, an equal portion of darkness.
Between the two, a line straight and
thin,
that is painted the same unknown color

as the surface of a still pond.
Do you think the notion of ideal flatness
began with the idea of division?
The tree of life turned sideways,
stretching

away from its roots, utterly impartial,
pry to both sides of the story?
They grow away from their source, heads
in the breeze.

This is the problem with most trees,
they refuse to look down, and row after
row in the park
they reach for the sun, bound to the
dark.

— Ian Fulcher

The Root of the Problem. Root Rot and Its Control

by Zachary Smith

Of all the scourges warned about in bonsai literature, root rot is perhaps the worst. It is fearsome because it occurs underground and out of sight; and it invariably does its damage on the sly. One day, your bonsai is either simply dead, or its leaves have yellowed and wilted over a moist soil, which in turn causes an inexplicably hollow feeling in the gut.

There are references in the literature (for instance, *Bonsai: The Complete Guide to Art and Technique*, by Paul Lesniewicz) to the use of benomyl systemic fungicide as a means to eliminate or prevent root rot. But how many of us have actual experience that it works?

When benomyl is used periodically as a preventative measure (soil drench), the absence of root rot does not necessarily mean that the fungicide has done the trick. Few of us would brave conducting the only valid test: that being to take a sufficiently large number of bonsai and treat half of them with benomyl and half without.

Following a good bit of reading and discussion with knowledgeable people, I have reached what I feel is a reasonably good understanding of just what root rot is and how the control measures work.

The Fungus Among Us

There are many types of rot; most are caused by fungi or bacteria. The ones we bonsaiists are most concerned about are caused by fungi of the family *pythiaceae*, especially the genera *pythium* and *phytophthora*.

Since these pathogens are fungi, they produce spores, and these in astounding numbers! We literally live in a sea of spores. When carried by water, air, and other means, widespread distribution is assured. So it's not an exaggeration to say that root rot fungus spores are a component of soil in nature. Thus, the potential for root rot is always with us.

How it Occurs

Root rot fungus spores require two things for proper germination: very high moisture levels and sufficient warmth. If moisture levels are not high enough, the fungus cannot grow, or at least not well enough to complete its life cycle.

Once root rot spores have germinated, they produce threadlike food-gathering structures called *hyphae*. This network of hyphae is known as mycelium. Since fungi cannot produce their own food, the hyphae attack a tree's feeder roots out of simple necessity. What better place to find the rich source of carbohydrates the fungus needs than in structures whose job it is to gather and store food the size of a tree? Feeder root tissue is digested (rotted) by enzymes for use by the fungus. When the root rot mycelium is sufficiently large and enough moisture is present, reproductive bodies are produced (sporulation) and the cycle repeats. (Mushrooms are the reproductive bodies for certain fungi, but not for root rot.)

It is interesting to note that the mechanism by which root rot kills trees is exactly the same as that by which mycorrhiza acts in a symbiotic fashion, providing certain nutrients (especially phosphorus) while it takes the carbohydrates it needs, without causing excessive destruction of tissues.

The key to our first line of defense against root rot is to prevent germination of the spores. When we prepare our soil mixes, the first consideration is always excellent drainage. Without this, we know our bonsai will, at the very least, grow poorly. Or they may choose not to grow at all, and die. Since trees do not require the excessive moisture that fungi do, a fast-draining soil is ideal to prevent the germination of spores. Preventing germination of spores this way does not kill them. As the most well-adapted of all reproductive bodies known, some spores can survive for thousands of years.

How about sterilizing your soil? This will certainly prevent new spores from re-infecting the soil once your bonsai have been potted. Over the span of 3-5 years, the potential for root rot will certainly have returned. Sterilization of a poorly draining soil, therefore, is ineffective. In addition, sterilization not only kills root rot pathogens, but also soil pathogens which attack root rot fungi. (Yes, they have their own enemies.)

Chemical fumigation of soil (with agents such as methyl bromide), besides being a hazardous practice not recommended for the home gardener, is as useless as the sterilization process.

The use of fungicides

As noted, there are bonsai literature references recommending benomyl fungicide, a product of the DuPont company, to combat root rot. I contacted a plant pathologist at the company to ask about this use of the product.

Sold under the name Benlate, benomyl fungicide is primarily useful for controlling fungi of the exposed parts of a plant, particularly on leaves. In fact, the primary intended application for Benlate is for the control of black spot on roses and other ornamentals. (Zelkova is one such species susceptible to black spot.) Other applications include controlling brown spot on various types of fruit. Although it is called a systemic fungicide, benomyl is more correctly thought of as a localized systemic. When applied to plant foliage, for example, it will be absorbed into the leaves' conductive tissues, providing internal protection there by killing fungi which have invaded the leaves.

Benlate product labels do not indicate any effectiveness for benomyl in root rot control, nor does DuPont recommend such use. There are other fungicides on the general gardening market, such as Captan, but none are recommended for use against root rot.

Vaughn Banting says there are products which can be used as soil drenches to kill root rot fungi, but they

are not commonly available to the home gardener. Such products as Banrot, Trueban, and Subdue are specifically targeted to kill fungi of the pythium genus. These may be obtained by contacting a horticulturist or a nurseryman, but should not be thought of as products for casual use in root rot prevention. If used against root rot fungi, these products will also kill any mycorrhiza present. They are your last defense. But their high cost alone precludes frequent use.

Summary

In bonsai, there are always pests and diseases with which to contend. Many can be avoided, while others must simply be fought as best we can. Root rot is a particularly destructive disease, but it is also one of the most easily prevented. Root rot is most likely to occur when a plant is under stress; when poor soil drainage and the resulting wet conditions cause feeder roots to die, and allow root rot spores to germinate and grow on the dead tissues. Or the bonsai gets too dry, and feeder roots die; then you water, and again the spores germinate and grow.

Particular attention should be paid to soil composition, as this is the best way to regulate moisture levels. Experience has shown that proper bonsai soils should be 50% solid, 25% liquid, and 25% gas. When this ratio is maintained, root rot is unlikely to occur.

As part of a practical approach to root rot prevention, don't be afraid to adjust your repotting schedule. If your bonsai are not draining properly after watering, don't be afraid to repot. Check for clogged drain holes. Be careful to avoid over-watering. The best way to control root rot is to keep it from occurring in the first place.

Reprinted from *Bonsai News*, the monthly publication of the Lake Charles (LA) Bonsai Society, July 1994. This item has also appeared in *the Journal of the American Bonsai Society*, Vol. 24, No 3, Fall 1990.

MONTHLY CARE TIPS FOR JULY

The following tips have been compiled from 4 Japanese bonsai magazines and Yuji Yoshimura's book.

One procedure often followed is to not fertilize bonsai during the hot summer months since this can stress the tree by making it expend too much energy producing new growth. It is interesting to note that for some of the plant material listed below, the Japanese book suggests applying fertilizer during July.

Wherever fertilizing is to be done, it is noted as "apply fertilizer balls" since that is how the Japanese do it. If you do not use fertilizer balls, you can consider applying the fertilizer of your choice during that time. One application of fertilizer balls is expected to be good for about 30 days. For example, if you are using a certain strength liquid fertilizer and apply it once per week, you can apply it once every week for a month starting from when the words "apply fertilizer balls" appear. If a gap of more than a month appears between "apply fertilizer balls" in the schedule, you may consider holding back on applying any fertilizer during that time period.

Wherever the words "push back" appear, it signifies you should reduce the length of new foliage to maintain the tree's shape. If you have questions about how to push back for your species of plant, ask members of your bonsai club to help you.

CONIFERS

BLACK PINE: Water once a day. Note that the Japanese usually plant a black pine in a soil mix, usually sand, which does not hold water for too long a period of time. Gage your watering based on your soil mixes' abilities to hold water, and weather conditions. Needle removal continues as prescribed last month. The new needles in

the mid-third of the tree, except for those needles at the tips of the branches, are removed. Ten days later, repeat the process for the branches in the upper third of the tree. Wire during the last 20 days of the month after old wire has been removed.

CRYPTOMERIA: Water three times per day, including the leaves. In the last 20 days of the month, trim new growth to desired lengths. Also apply fertilizer balls. Wiring can be done any time during the month.

HEMLOCK: Water whenever the top of the soil appears dry.

HINOKI: Water whenever the top of the soil appears dry. Wiring can be done in the middle of the month. Make certain no existing wire is biting into bark. Repotting can be done any time during the month. Repotting is done every 3 years. Pluck the edges of the foliage to reduce the lengths of the new growth when it gets too leggy.

LARCH: Water whenever the top of the soil appears dry.

NEEDLE JUNIPER: Water three times per day including the leaves. Wiring can be done any time after the old wire which might be digging into the bark has been removed. Pluck to reduce length of new growth and prevent legginess. Apply fertilizer balls during the last 10 days of the month.

SAWARA CYPRESS: Water whenever the top of the soil appears dry. Pluck new growth to keep it from getting too leggy. Wire can be applied during the middle of the month.

SHIMPAKU (Sargent juniper): Water twice per day, and at the same time water the foliage. Repotting can be done up to the 10th of the month. Repot every 3 years. Pluck, push back new growth and remove dead growth and unwanted branches before the 20th of the month.

SPRUCE: Water 3 times per day.

WHITE PINE: Water 3 times per day.

YEW: Water as needed.

DECIDUOUS

(Non-fruiting/non-flowering)

BEECH: Water twice per day up to the middle of the month; and then start watering 2 to 3 times per day. Wire any time during the month. Give plant ½ day of shade.

CHINESE ELM: Water as needed. Push back new growth by reducing the lengths of branchlets to 4 leaves. Remove any wire digging into bark. Apply fertilizer balls in the first 10 days of the month.

GINGKO: Water as needed. Remove unwanted lengths of branches in the beginning of the month. Also apply fertilizer balls during that time frame. Remove wire digging into the bark during this month.

HORNBEAM: Water 2 to 3 times per day. Prune unwanted branches and push back new growth. Wire any time during the month. Apply fertilizer balls during the middle of the month.

JAPANESE MAPLE: Water 3 times per day. Pluck or cut off unwanted leaves until the middle of the month. Wire any time during the month. Remove unwanted growth (branches) starting on the 20th of the month. Give plant ½ day of shade.

TRIDENT MAPLE: Water 3 times per day. Remove unwanted branches, sprouts and leaves. Wire any time during the month. Apply fertilizer balls during the middle of the month.

WEeping WILLOW: Water once per day. Keep the pot in a dish of water during the month. Apply fertilizer balls once some

time during the last 20 days of the month. Remove unwanted lengths of branches and wire them to conform to the desired pendulous shape.

WINGED EUONYMOUS: Water as needed. Prune unwanted branches and push back new growth. During the middle of the month, remove any wire that is digging into the bark. Apply fertilizer balls once during the last 10 days of the month.

Flowering/Fruiting Plants

CHERRY: Water 3 times per day up to about the 10th of the month and then drop back to 2 times per day. Give plant ½ day of shade.

CRAB APPLE: Water 3 times per day.

GARDENIA: Water as needed. Remove spent blossoms. Reduce lengths of branches where desired to 3 leaf pairs. Apply fertilizer balls during the last 10 days of the month.

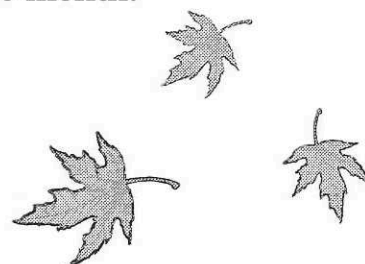
PYRACANTHA: Water 2 times per day during the first half of the month and then go to watering 3 times per day. Prune branches and unwanted growth up to the 10th of the month. Apply fertilizer balls once during the last 10 days of the month.

QUINCE: Water 2 to 3 times per day and go to 3 times per day after about the 10th of the month. Apply fertilizer balls once during the last 10 days of the month.

SATSUKI (azalea): Water 3 times per day. Sometime during the middle of the month apply fertilizer balls.

UME (Japanese flowering plum or apricot): Water 3 times per day.

WISTERIA: Water often. Likes full sun. Trim back branches so that 2 leaf pairs remain. Apply fertilizer balls during the last 10 days of the month.



POTOMAC BONSAI ASSOCIATION

Presents

The 25th Annual PBA Fall Symposium*Rocky Mountain High*

September 18 & 19, 1999

U.S. National Arboretum

Washington, DC

Featuring two demonstrations, a tree critique, and an advanced workshop by HAROLD SASAKI of Wheat Ridge, Colorado. The demonstrations and workshop will feature conifers collected in the Rockies. There will also be workshops by two of PBA's favorite vendors, Jim Doyle of Nature's Way Nursery and Todd Stewart of Gardens Unlimited. Jim Doyle's workshop will feature English Yews already established in mica pots and Todd's workshop will feature Shimpaku, pot, and soil.

Harold Sasaki first started working with bonsai in 1955 in Hawaii. He studied forestry in California and Colorado. He later left forestry to become a stockbroker, but continued with his hobby of bonsai. In 1977, Harold started teaching bonsai at the Denver Botanical Gardens. He currently teaches in the Denver area and often conducts workshops and demonstrations across the United States and Canada. In 1985, Harold expanded his hobby to a full-time business. His mission is to "demystify" the art of bonsai so more people can be successful and enjoy this fascinating hobby.

Jim Doyle started Nature's Way Nursery in 1973 and developed an early interest in Asian culture and plants. By 1980, through the influence of Chase Rosade, bonsai passed from being a hobby to a business/life-style. Jim attends many symposia, teaches year round to both adults and children at his studio, and travels extensively. As time goes by, Jim continues to enjoy the benefits of knowledge through bonsai. He has discovered a caring and understanding friendship with plants and with people.

Todd Stewart is co-owner of Gardens Unlimited in King George, VA. Todd has been involved with bonsai for (Yeah, well, see this space next month.)

Our vendor tent will offer for sale many fairly priced bonsai related items. The symposium will feature a silent auction of bonsai items donated by the vendors and PBA members. **Two major items in the Silent Auction will be the 2 trees styled by Harold Sasaki in his demonstrations.**

For registration information please write: PBA Symposium
c/o Jerry Antel
6409 Middleburg Lane
Bethesda, MD 20817

PBA 25th Fall Symposium Registration Form

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip: _____

Please indicate your club affiliation: _____

Full Registration Includes both days, Sat. Lunch, Sat & Sun. Coffee Breaks

PBA Member	\$60.00	\$ _____
Non-PBA Member.....	\$80.00	\$ _____
Includes a PBA Corresponding Membership for one year.		
Saturday Registration.....	\$50.00	\$ _____
Includes Lunch & 1 Coffee Break		
Sunday Registration.....	\$25.00	\$ _____
Extra Lunch.....	...\$ 8.00	\$ _____
Sasaki Workshop*.....	\$175.00	\$ _____
Doyle Workshop*.....	\$75.00	\$ _____
Stewart Workshop*.....	\$60.00	\$ _____
Total Enclosed.....		\$ _____

Check If Vegetarian Lunch is required.

..Check If interested in a Tour of the National Bonsai Collection Sunday 1:30-2:30 p.m.

...Check if interested in Saturday night banquet (Cost - \$20 or less)

* Workshop attendees must supply tools & wire. Observers are welcomed.

Please mail your registration to:

PBA Symposium
c/o Jerry Antel
6409 Middleburg Lane
Bethesda, MD 20817

Program

Rocky Mountain High

Saturday, September 18, 1999

8:00 a.m. Vendor Tent Open
 8:30 a.m. Registration
 9:00 a.m. Welcome and Introduction
 9:10 a.m. Harold Sasaki Demonstration
 10:00 a.m. Coffee Break
 12:00 p.m. Lunch
 1:00 p.m. Harold Sasaki Demonstration
 4:00 p.m. End of Day
 6:00 p.m. Possible Banquet

Sunday, September 19, 1999

8:00 a.m. Vendor Tent Open
 8:30 a.m. Registration
 9:00 a.m. Welcome and Introduction
 9:10 a.m. Harold Sasaki Critique
 10:00 a.m. Coffee Break
 12:00 p.m. Lunch on Your Own
 1:00 p.m. Sasaki Workshop-Auditorium
 1:00 p.m. Doyle Workshop - Yoshimura
 1:00 p.m. Stewart Workshop-Yoshimura
 4:00 p.m. End of Symposium

STORE YOUR CHEMICALS PROPERLY! *by Marty Klajnowski*

There are some interests that almost everyone who grows plants has in common. They all share a general interest in things that grow, and they all must fight the same battles against insects and plant diseases. Because of that, another thing most gardeners have in common is a shelf full of chemicals in the house or garage.

Typically, this shelf will be filled with a large assortment of bottles, sacks, and cans full of powders and liquids. At least half of their labels are probably missing, and you certainly have no idea how long the majority have been on the shelf. Then you have an insect or disease problem, and one of two things may occur. You either use an old product which has lost most of its effectiveness (potency), so consequently it does not work. Or, you go out and buy a new chemical to use and then add to your shelf, only to discover you already had a product that would have worked well. Either way, this is a problem that can be avoided fairly easily.

Storing all types of chemicals properly is wise for many reasons. Proper storage protects the chemicals and keeps them usable for the longest possible period of time. It also protects you, your family and friends from the chemicals themselves. Poisonous chemicals should always be kept closed up in a closet, preferably locked up if children could possibly get to them.

The first step in storing chemicals begins with the day you first open a container. Write the date on the container with a permanent marker. Add a piece of tape with the date on it to bottles that have paper labels, since the paper may gradually wear away or become unreadable. This date will be your reference to determine if the chemical is likely to be effective after you have had it for some time.

The second step lies in keeping the chemical in a proper container. Chemicals should always be left in the original container, since the label contains both instructions and precautions for use.

Bottles can usually be left the way they are, provided the caps close tightly; but powders, dusts and fertilizers which are not in bottles should be placed inside another airtight container once they are opened. If there is any moisture in the air (and when is this ever not the case in Louisiana!), dusts and powders tend to clump, making them hard to use. Some also lose their effectiveness much more quickly. It is especially important to keep fertilizers sealed up well, because they actually attract water particles out of the air when they are left exposed. When small amounts of chemicals are involved, you can simply place the container inside a plastic ziplock bag and seal it. Large sacks can be placed inside a garbage can or similar container with a tight fitting lid. Stored in this manner, fertilizers will keep indefinitely, and the life of other chemicals will be greatly prolonged.

Finally, where you actually store the chemicals is very important. Most products should be stored in a dark, dry place that is protected from extreme heat or cold. Many chemicals are inactivated by long exposures to sunlight. (Brown bottles are best for these.) Water-soluble products may freeze and break the bottles, while other chemicals are destroyed chemically by exposure to cold. Temperatures over 85° F will shorten the shelf lives of almost all products, so pay attention to the temperature of your storage area. A temperature range of 50° to 80° F is ideal.

All products have shelf lives determined by the nature of the chemicals themselves. It has long been my contention that

manufacturers should be mandated to provide this information on the label, so consumers could use them effectively. Keep up with the age of your chemical products. It will save you money, provide you with a safer environment, allow you to

have less cluttered shelves and make you a more effective environmental user. Below is a list showing how long many common pesticides will remain effective if stored under proper conditions.

INSECTICIDES	Length of Effectiveness	FUNGICIDES	Length of Effectiveness
Diazinon liquid	3-4 years (bottle)	Benomyl	Indefinitely
	6 months (can)	Captan	5-6 years
Diazinon granules	2-3 years	Daconil	6-7 years
Dursban	4-5 years	Green Light Systemic Fungicide	Indefinitely
Bug Bait	2-3 years		
Chlordane	Indefinitely	HERBICIDES	
Kelthane	4-5 years	Roundup	20 years
Isotox	2-3 years	Wipe Out	6-7 years
Malathion	8-10 years	Vapam	4-5 years
Orthene	4-5 years		
Sevin liquid	5-6 years		
Sevin powder	2-3 years		

Now that we have all this knowledge, let's start checking our shelves, especially in the garage and greenhouse.

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Reprinted with permission from *SNIPS 'N CLIPS*, newsletter of the San Antonio Bonsai Society, Inc., Vol. 20, No. 6, June 1997, pp. 3-4.

Editor's note: Buy insecticides, fungicides and herbicides in small quantities--what you may use in the year of purchase. This may not save you money by making one-time purchases of larger quantities, but you do avoid the question of whether or not they are still effective in subsequent years.

If all went well, the first meeting of a **new suiseki club** (to be affiliated with the North American Viewing Stone Society) took place 1-4 p.m. on 26 June in the Yoshimura Center of the US National Arboretum. If you have an interest in being part of this group, contact Chris J. Yeapanis by e-mail at ibonsai@erols.com or phone after noon (703) 591-0864.