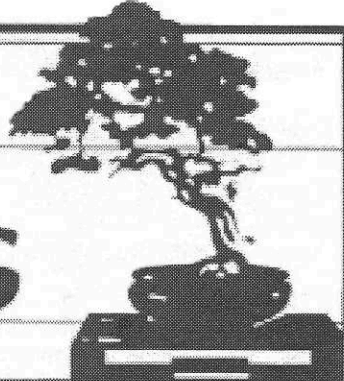
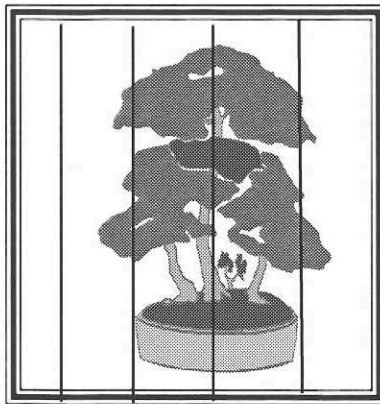


PBA Clippings

NEWSLETTER OF THE POTOMAC BONSAI ASSOCIATION



Volume 29, Number 1
February - March 1999



WHAT?

IN PRISON FOR DOING BONSAI!!

by Jack Cardon

Patuxent Institute in Jessup, Maryland, is a maximum security prison housing several hundred inmates who have been convicted of violating the law.

Not a place where one would like to be, but there I was securely locked behind bars just because I had taught a few high school students about bonsai. Doesn't make sense, does it?

Well, it wasn't all that bad. Doing bonsai is not a crime - although what I have done to some of my trees could be considered an assault on the art of bonsai. Actually, I went to prison as part of a program for the rehabilitation of prisoners.

It happened this way: Our president, Jack Wells, was asked for the name of someone who would be willing to go to the prison and demonstrate bonsai. The request came from a lady who belongs to a group (I think the name is Master Gardeners) doing volunteer work at Patuxent teaching horticulture and landscaping to the inmates. Being my good friend, and knowing I had done some work with high school students as part of the PBA Youth Education Program, Jack gave her my name. She called me, and after some deliberation I consented.

I was told to contact a certain individual on the prison staff and make arrangements for my "incarceration." When I called, he was very pleased to know that I would come and we arranged for a date. He then told me that the warden is very strict about what enters his prison and asked me to describe in detail what I would bring. The trees and soil gave no problem. The wire passed successfully when I told him I would bring just a little bit, but when we came to the tools, we hit a snag. Obviously, scissors and cutters can cause trouble when not used for the purposes for which they are made. For a while it looked like I would have to leave my tools outside and use the equipment provided by the prison. The vision of trimming a small spruce with a large pair of garden pruning shears did not appeal to me. After some discussion of the matter, we came to a reasonable understanding.

continued on page 6



The *PBA Clippings* (ISSN 0160-9521) is published by the Potomac Bonsai Association Inc. (PBA), a nonprofit organization, in the interests of its affiliate member clubs and societies. Copyright 1996 PBA.

Subscriptions: PBA Member Clubs/Societies: Annual subscription is included in the membership dues paid to the PBA club or society of your choice. Telephone numbers of points of contact for information about any member club or society and its annual dues, are listed on the last page of this newsletter.

Non-Member Subscriptions: Individuals residing within the metropolitan areas of our clubs are encouraged to become members of a club to receive the newsletter. Annual subscription for 12 issues of the *PBA Clippings* only is US \$15.00 (US \$35 for international mail) which should be made payable to the Potomac Bonsai Association and sent to Judy Wise, 1259 4th St., SW, Washington, DC 20024.

Advertising Rates: Monthly rates: 1/6 page, \$15.00; 1/3 page, \$30.00; 1/2 page, \$45.00; full-page, \$90.00; 10% discount for 6 consecutive issues prepaid, 20% discount for 12 consecutive issues prepaid. Direct inquiries/payment (make checks payable to Potomac Bonsai Association) to: Jerry Antel, Jr., 6409 Middleburg Lane, Bethesda, MD 20817; (301) 320-5251.

Please send ad copy/articles to the editor:

J. F. Koetsch
6709 Caneel Ct.
Springfield, VA 22152

PBA Officers:

President	Jack Wells
1st Vice-President	Andrew Cook
Educ. Vice-President	Chris Cochrane
Secretary	Julie Walker
Treasurer	Jerry Antel, Jr.
Membership	Judy Wise (202) 554-3045
Newsletter Editor	Jules Koetsch

PBA Clippings staff:

Editor	Jules Koetsch (703) 569-9378
Assoc. /Type Editor, and Art Director	Betty Yeapanis (703) 591-0864 bittenhand@erols.com
Advertising Editor	Jerry Antel, Jr. (301) 320-5251
Calendar Coordinator	Doug French (703) 502-9426 DFrench200@aol.com

Editorial by Jules Koetsch

Once again the staff of *PBA Clippings* has not made the deadline for February which should have been somewhere around mid-January. It's a matter of trying to reestablish a desk-top editing capability using a PBA member. We've been making excellent progress in that respect considering what's involved, but occasionally a problem arises. Scanning photographs, figures and charts onto the computer disc does not always yield the desired results. We, like you, have real lives, too.

Since the time for repotting trees is upon us, we are faced with the aspect of choosing the right pot for a specific tree (or is it the other way around - the right tree for a pot). Two articles in this issue will aid readers in those decisions. One is by Donna Banting, Greater New Orleans Bonsai Society, 1983; and the other is by Phil Tacktil, written for The Bonsai Society of Greater New York, *Bonsai Bulletin*, Spring 1979.

An outstanding write-up on bonsai pots (including a history of bonsai pots, identifying pots and pot makers and seals, and selecting and changing pots) can be found in J. Y. Naka's "Bonsai Techniques II." The article written by Dan Chiplis when he was Assistant Curator of the National Bonsai Collection gives, as its title suggests, a "Chronology of Container Tree Development."

After a few years in bonsai, we usually find ourselves shopping for that perfect pot for the bonsai in training three or more years. The two articles mentioned above will give you some ideas as to what will be appropriate. When faced with selecting the shape and size of a bonsai pot, you can make a full size drawing of the front view of the pot which you feel will be appropriate. Then cut out the silhouette of the pot and juxtapose it with the tree to get a feel for whether the length and depth, as well as the shape of the sides, are what you want.



Nowadays there are enough vendors of bonsai pots that you shouldn't have too much trouble finding something to fit your requirements. Some years back this was not the case, and some people chose to try making their own bonsai pots. This is still an approach which the more venturesome might wish to pursue. I've tried my hand at it with good results. You need only find a craft store or hobby shop that specializes in ceramics - usually a place the ladies frequent to glaze pre-fired bisque ware or throw something on a pottery wheel. There you can usually find the high-firing clay for the pot, and the kiln to fire it in. Or then again, there are some potters who will make a pot in the size and shape you desire on consignment.

You may have a prize-winning bonsai, and may have invested in an expensive pot to display it. Then you may consider doing what the wealthy people in Japan who own highly prized bonsai do - they let the bonsai grow in an attractive but not overly expensive pot. When the time approaches for the bonsai to be entered in a show and possibly even contend for a prize, the bonsai master repots the owner's bonsai in the owner's expensive pot. The bonsai remains in the expensive pot until after the show, whereupon the bonsai goes back into the less costly container. The expensive pot is once again retired to a place in the owner's collection so that if the bonsai is stolen or there is a chance that somehow the pot might be damaged, it is out of harm's way.

As for expensive pots, there are some I have that are expensive for my pocketbook. Forest plantings can require trays with sizes that make the cost go up. Hence to keep the cost down, one can turn to the alternative of using a stone slab available sometimes at one's local stone vendor; or resort to emphasizing smaller group plantings - 5 trees or fewer.

There's the old adage that when starting out in bonsai, you should not rush out and buy any expensive pots lest

In This Issue

	Page
Bonsai Behind Bars	1
Editorial	2
Cook's Corner	4
Untapped PBA Resources	5
Expert Advice	7
Calendar of Local Events	8
Chronology of Container Tree	
Development	10
Poetry Corner	11
Selecting Clay Bonsai	
Containers	12
Guide to Ceramic Bonsai	
Containers	20
Monthly Care Tips	24
.....	

your trees die, leaving you the resigned owner of a pot collection. After trying all these years to master the art of bonsai, I've been amassing a collection of bonsai pots - pots minus trees. At present the number of empty pots does not exceed the number of pots containing plants (which in itself is somewhat rewarding). Hence I can face the reverse of finding a pot for a tree. Then again, how many trees can one accommodate in one's backyard?

Lastly, there's the possibility of finding some calcium deposits or stains of unknown origin on one's pots. There's a product on the market these days which resembles a rectangular eraser embedded with either coarse, medium, or fine grit. I've tried the fine grit block on deposits and it did the job. The blocks will certainly work on deposits inside the pot; but I'm still a little leery about using any on the outside surfaces of a pot, especially a glazed one. In any case, it may be best to try a liquid cleaner before you resort to using the eraser. Bill Merritt gave me the following suggestions: his preference is a product named Lime-Away. Clean Start is another product on the market - in other words any product being sold that removes lime or calcium deposits will probably do.

Using trisodium phosphate (1/4 cup in one gallon of hot water) or muriatic acid is

a more drastic measure. Muriatic acid is hydrochloric acid and is used in a dilute solution to clean rocks and masonry. However, when the bottle is opened, noxious fumes rise out. These are not only harmful to a person, but also if done in an enclosure such as a basement, the fumes will disappear. After a day or more, rust will appear on any steel objects that were nearby. I've found tools in my workshop with thin coats of rust after opening a bottle of muriatic acid. Therefore, open the muriatic bottle outdoors well away from any objects. Bill advised that one should use rubber gloves, eye protection when using any of the above, as well as a mask to protect against any fumes from the muriatic acid.

When preparing for a show, you can wipe some baby oil or vegetable oil on the outer surfaces of an unglazed pot to enhance its appearance. You can do the same thing from time to time to prevent unwanted calcium deposits.

There was a time when hardware cloth was used as screening over the drainage holes in the bonsai pots to keep soil from running out. The steel wire of the hardware cloth rusts and then has a tendency to clog up. The Japanese were the first to market plastic pieces of screening sized for bonsai pots. Nowadays one can go to the local craft store and purchase a plastic mesh similar to the hardware cloth. It comes in a number of colors and goes by the name "plastic canvas."

Someday I may become proficient in twisting the wires which hold the drainage screens in place so that they resemble neat eyeglasses' frames. Most of the time when I twist them into shape, one loop is not the same as the other loop. Also, more than likely, there's not enough wire left to bend over on the bottom of the pot to hold the screen in place.

When you take your bonsai out of winter storage, based on the two articles in this

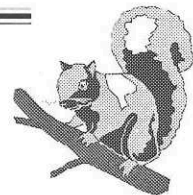
issue of *Clippings*, give a good look at how the trees go with their respective pots. You may even want to follow John Y. Naka's suggestion: "It is nice to have more than one pot for one tree. It is like changing a frame for a picture, a completely different look is achieved."



In the next issue, we'd like to start a column on items PBA members would like to barter, or sell, or pass on to other members. As you're breaking out your supplies for the upcoming season, see what you'd like to move into someone else's storage shed, make a list, and send it to Jules, address in column 1, page 2.

Okay folks. This is your last issue of *Clippings* if you haven't paid your dues for 1999.

Cook's Corner

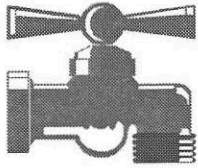


Browsing a collection of cookbooks turned up this recipe from a pressure cooking chapter. Obviously, judging from the steps which merely got a glancing blow of mention, the instruction comes from a time when common sense and cookery training were not ignored in a child's upbringing. It never mentions how to coax the critter from the bonsai display into the kitchen sink for its bath.

Squirrel

Clean, season, and stuff, if desired. Add ½ cup hot water. Cook 15 minutes. Brown under broiler after pressuring at 15 pounds.

(Mary Margaret McBride's *Encyclopedia of Cooking* (c. 1958), Volume 9, *Pressure Cookery*, p. 2111.)



UNTAPPED

PBA RESOURCES

by Arschel Morell

Did you know PBA has a library of video tapes that are yours to use just for the postage?

PBA has accumulated a number of mostly educational video tapes over the years which can be borrowed just by telephoning the request and paying the postage both ways. The way it works is:

1. Telephone Arschel Morell, (410) 744-6478, and give him your request from the list at the end of this article.
2. Arschel will mail you what you requested.
3. When you are finished with the tape or tapes, package the tapes, along with the cost of having them mailed to you, and mail them back to Arschel.

Current Library (Will be increased as funds are allocated):

BONSAI: The Art of Father Paul Bouine; Monastery of the Holy Ghost, Conyers, GA; one tape. This is a biography of the pioneer of bonsai in this country. Good human interest story.

THE ART OF KIMURA: 3 separate tapes or one tape - a condensed version. Good for discussion groups, advanced styling techniques, demonstrations.

MASTERS OF BONSAI TECHNIQUES: each volumn is a single tape

Vol. 1 SHAPING TECHNIQUES by Chase Rosade.

Vol. 2 CARVING DEADWOOD by John Y. Naka.

Vol. 3 ROCK PLANTING by Marion⁵ Gyllenswan.

Vol. 4 GROUP PLANTING by William N. Valvanis.

BONSAI DESIGN: FOREST PLANTING: 2 tapes, Volume 1 and Volume 2, by Warren Hill, the Curator of the National Bonsai and Penjing Museum. Very good demos and good for meetings and study groups. BONSAI: ART AND HORTICULTURE TECHNIQUE, Vol. I Basic Techniques; by William Valvanis. Good meeting tape, covers all the bases.

BONSAI: AN INTRODUCTION TO THE ART OF BONSAI; features Roy Nagatoshi. Good for repeated viewings at a show.

THE GROWING ART OF BONSAI, AN EDUCATIONAL INSTRUCTION VIDEO; by Arthur Scolnik. Excellent for individual or group study of bonsai basics.

THE BONSAI WORKSHOP - 4 tapes. This series, though long, is excellent for showing at a series of club meetings.

Tape A.

No. 1 The Basic Principles of Bonsai

No. 2 The Cultivation of Bonsai # 1

Tape B.

No. 3 The Cultivation of Bonsai # 2

No. 4 Method of Forming Bonsai

Tape C. No. 5 Repotting and Watering

Tape D.

No. 6 Group Plantings

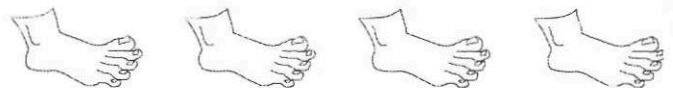
No. 7 Rock Grown Bonsai



Your PBA Spring Show is coming soon to a National Arboretum near you!

April 16, 17, & 18

Be there or be 



Continued from Front Page

At the appointed hour, I appeared at the entrance to the Patuxent Institute with one of my trees for "show and tell," my plant material, approved tools, demonstration table, wire, soil, etc. I doubt that anyone ever attempted to get through the gate carrying such an odd assortment of stuff. The guards were obviously not bonsai fans, nor did they show the slightest interest in becoming such. No one at the gate seemed to know of my coming and for a few minutes I wondered if I would be admitted--and perhaps hoped I would not be. However, the person running the program was finally available and came to vouch for me and my equipment.

After being cleared, my escort took me through four (I counted them) sets of lock gates. It is an eerie feeling to go through one gate and have it close behind you until the next gate opens to let you proceed. Even though I had the experience in my early days of law practice, visiting jail to interview indigent prisoners, I confess I had an uncomfortable feeling at first.

The elevator was not working and so we had to descend the stairs to the lower level. This was no small feat what with a cart full of material and my hands full of my show and tell tree which I did not want to trust to anyone, even a trustee. After walking down a few dimly lit corridors we arrived in a large room in the far corner of the prison where the rehabilitation classes are held. A final gate clanged closed behind us.

The atmosphere was informal and friendly and the inmates were dressed in regular street clothes. They were of various ages from perhaps the twenties to middle age. They were of different races; three were women.

When I was first asked to visit the prison, I had reservations about the worth of a bonsai demonstration to individuals living in such an institution with limited access to the things needed to raise bonsai. Once inside the prison, however,

and facing the people who had signed up for my "dog and pony" show, my doubts disappeared. From the beginning, it was evident that they were really interested in what I had to say and show them. They were attentive--more so than some high school students. I was particularly impressed by one of the ladies who seemed to be taking detailed notes in a manner which reminded me of the more studious coeds in my college days.

The questions were few, but the ones which were asked indicated that they had learned something about horticulture from the class there in the prison. One man was very interested finding out what it would take in money and material to set up a bonsai shop. I hope the demonstration sparked the idea.

After the demonstration, a young man came up to me with a planting in an oval pot consisting of a small juniper of some sort, what appeared to be boxwood, an herb and a piece of driftwood. He had made the arrangement in the prison and, while it was not what one would call classical bonsai, it showed a lot of imagination and actually had a pleasing appearance. I complimented him and urged him to keep at it and let me know if there is anything I could do to help him. So far I have not heard from him; but if he calls, I will have no hesitation in returning to the prison and being locked up again to give him a hand.

All in all, it was a good experience and proved once more that bonsai appeals to people in all walks of life and under different circumstances. Thank you, Jack Wells, for giving me the chance to experience bonsai in a completely different environment.



Quiz Answers from Dec-Jan

A - 2, 4, 1, 5 B - 3, 6

EXPERT ADVICE FOR ALL SEASONS

by Lois Blum

1. To keep bamboo small: a) peel it (majority of bonsai professionals, including Harry Tomlinson); or b) just containerize it--peeling bamboo would kill it (Brendan Earls).

2. a) Evergreens need light even when dormant--if necessary to place in dark location (e.g., windowless garage) during extreme winter conditions, remove to lighted area as soon as possible (minority); or b) evergreens do not need light when dormant; they can spend the entire winter in underground pits with dark covers (majority, including Yuji Yoshimura).

3. To develop a root-over-rock design most quickly in those cases where the roots have already attained sufficient length to reach over the rock into the soil, attach the roots to the rock in the desired configuration and: a) bury the entire assemblage in soil so as to cover rock and all roots or, if planting at a shallower depth, mound moss-covered soil over any exposed roots (majority, including Deborah Koreshoff and Melba Tucker); or b) plant assemblage at desired level for display, leaving roots above that level exposed (Kathy Shaner).

4. When planning to wire a tree: a) don't water it the day before, as limp branches are less likely to break (majority, including Hu Yun Hua); or b) water well before styling, as the techniques are stressful to trees, and you want the tree in peak condition to withstand such stress (Kathy Shaner).

5. When using more than one wire to shape a trunk or branch: a) place the multiple wires as closely together as possible while coiling them up the tree to provide the most strength (majority); or b) space the multiple wires as evenly apart as possible to provide the most support for the tree while providing strength equal to that of wires placed next to each other (Dan Robinson, Mas Imazumi).

6. Before wiring a branch: a) have a definite plan in mind, as the branch should be bent only once at any one spot

(bending back and forth, alternately compressing and stretching the cells will kill a branch) (majority, including Joe Harris); or b) "exercise" the branch along its entire length sufficiently to loosen the bark so that the bark doesn't crack when the branch is bent after wiring (Kathy Shaner).

7. a) Late fall and early winter are the best times to prune many species, especially those such as pines and maples which bleed heavily when cut during the active growing season (majority). b) Never prune any outdoor material during the late fall or early winter. The tree being dormant, the cut areas will not be able to heal, will become desiccated, and will die back (various).

8. Branch placement: a) primary branches should originate around the trunk in a 1-2-3-1-2-3 formation, and should originate on the outside of major curves (if any) (most Western bonsaiists); or b) primary branches should originate in a 1-2-3-4-5-6-7 formation (Marcial Rodriguez); or c) it doesn't matter where the branches originate, so long as the foliage pads are located at the outside of major bends (Jerry Meislik); or d) it doesn't matter where the branches originate, as long as they complement the focal point of the tree (Dan Robinson).

9. When fully wiring a tree: a) never cross wires (majority); or b) it doesn't matter if you cross wires now and then, so long as you're not planning on exhibiting the tree in that condition, and you watch the spot where the wires cross with extra care for signs of cutting (Jerry Meislik).

10. After major branch pruning: a) always use cut paste--it heals as well as seals (most, including Roy Nagatoshi and Chase Rosade); or b) it doesn't matter much to the immediate health of the tree whether or not you use a sealant, and the long-term effects of sealants may be detrimental to trees (Alex Shigo).

11. After you have stripped a branch you wish to carve, you should: a) wire and shape it immediately (if desired), but let it dry a few months before carving (Larry Ragle); or b) plug in your rotary tool and get at it (Mary Madison).

12. In order to have the most strength, wire should be coiled around the tree at a: a) 45-deg angle (practically everyone); b) 60-deg angle (Kathy Shaner).

Are there details missing from at least some of the above rules which could harmonize the apparently disparate opinions? Are the suggestions meant to be specific to: species, climate, material of a certain age and/or development? Are these hoary or modern misquotes? Have some been picked up from an early source and repeated over the years without alternatives ever having been tested by succeeding authors? or is it just that trees grow (well or poorly) and die, and people don't always know exactly why?

If you've been enjoying terrific success following any of the above advice, carry on. If your results from the use of some techniques have been less than wonderful, try something different. An expert somewhere does. Why shouldn't you?



Tips From PBA VOLUNTEERS Working in the Yoshimura Center

Cesar Portocarrero, BBS: I have been a volunteer for two months. I have learned much about styling, pruning, wiring, and repotting bonsai. But the most important thing is the new friends I have made.

Janet Lanman, BBS: I have been a volunteer for twenty years. I have relearned that you must look *closely and from a distance* at the overall tree when pruning.

Bill Orsinger, NVBS: A few years ago, Dan Chiplis gave each of us a bamboo tool for raking soil away from roots while repotting. It was a great improvement over a chopstick, being heavier, wider, and 11 inches long with a strong tapered point. I found it more comfortable to use, giving a better grip than a thin chopstick. (There's more to Bill's tip. We thought it so helpful we're going to make an article out of it for next issue.)

Calendar of Local Events

This compilation is drawn from organizations not all within PBA.

February

Northern Virginia Bonsai Society

13 9 am-12pm Forest Planting with Dr. Joe Gutierrez

Brookside Bonsai Society

10 7 pm "Forest Bonsai" workshop with Bill Spencer, 4 weeks- \$82.

18 Monthly Meeting with Warren Hill

27 1 pm Air layering workshop with Pete Jones. \$8

Rappahannock Bonsai Society

21 Richmond. Invited to attend Valavanis workshop

Richmond Bonsai Society

21 1-4 pm, Imperial Plaza, 1717 Belleview Ave, Forest Plantings with Bill Valavanis

March

Rappahannock Bonsai Society

6 11 am Workshop: Repotting and Styling of a Shimpaku Juniper, \$50 (includes tree from selected nursery stock, pot, soil, and instruction).

Northern Virginia Bonsai Society

13 9 am-12 pm Kyogen Skits (Japanese Comedy) with Jules Koetsch and Bill Merritt

Brookside Bonsai Society

18 Monthly meeting with George, Allica, Will Feldman and Dave Garvin - Pruning deciduous trees.

27 1 pm Repotting/Pruning Novice workshop with Janet Lanman

National Arboretum

20 1-3 pm Sogetsu Ikebana Floral Arranging Workshop

24 10-11:30am Shinto and Bonsai: Film and Tour

Richmond Bonsai Society

13 9 am -12 pm Chinese Elm Workshop

20 9 am-12 pm Shimpaku Workshop with Todd Stewart and Bob Chilton of Gardens Unlimited

22 7pm Monthly Meeting: Randy Clark on conifers

26-28 Spring Home Show at the VA State Fair Grounds

Events at the National Arboretum

Tel: (202)245-4521, FAX (202)245-4275,
Web site: <http://www.ars-grin.gov/na>

* **21** February, 2:00pm-3:30pm, slide-illustrated lecture: History of the Azalea Collection.

* **7, 9-14** March: Philadelphia Flower Show. Motorcoach to and from on the same day. \$60 includes bus ride and admission to show. This show is second only to the prestigious Chelsea show in Great Britain. Chase Rosade usually exhibits bonsai. Buses leave from various locations in Northern Virginia. If at all possible avoid the Saturday and Sunday crowds. For details telephone (703) 222-4664.

* **24** March, 10:00 am-11:30am: Shinto and Bonsai: Film and Tour.

27 March: 10:00 am-2:00pm: Native Plant Sale.

Through March 1999: The Marriage of Tree and Pot in Bonsai.

* **7** March: Philadelphia Flower Show bus trip arranged through Fairfax City Recreation Department (\$42 - adults, \$34 - ages 2-12). Call (703) 385-7978.

* Registration required.

Step up to bat!

Have you called a member of the Spring Show committee to volunteer to learn a new skill or offer to fill an empty slot. Your shows don't just happen.

Help.

This year's show chairman is
Andy Cook, BBC
4408 Buchanan Ave, Baltimore, MD
21211

(410) 889-3296

Moss Collection

Since bonsaiists have difficulty identifying their mosses by comparing them to flat photos in books, we'd like to improve our research abilities. We're envisioning a simple container 2 inches deep, 2 by 3-feet, divided into sections, each of which will contain a different variety of local moss. It might have a weatherproof backboard on which identifying information, growing requirements, and appropriate uses would be scribed.

Does PBA have a "moss expert" willing to put together a permanent display of local moss varieties. We'd put your name on a little brass plaque affixed to said container and probably foot the bill for the necessary materials. We have already scouted a high-use home for the display where other PBA volunteers will be coerced to care for it.



金矢盆栽

Collected wild trees

- * Ponderosa pine
- * Rocky Mtn. juniper
- * Many other species

Specimens from fifty to 300 years old!

Call for catalog info
Golden Arrow Bonsai

Andrew Smith HC 73 Box 1742
Deadwood, SD 57732 605-342-4467

<http://www.netcom.com/~ix2/goldenarrow.html>

CHRONOLOGY OF CONTAINER TREE DEVELOPMENT by *Dan Chiplus*

- 9000 B.C. Some communities at threshold of ability to produce their own food.
- 6000 B.C. In area of fertile crescent, domestication of plants and animals begin. Slightly later, corresponding development occurs in southern Mexico and China.
- 4000 B.C. Egypt supports complex urban civilization with productive agriculture.
- 3000 B.C. Chinese growing pine, apricot, plum and bamboo as potted ornamentals.
- 2500 B.C. India develops Vaamanfanu Vrikshaadi Vidya, "the science of dwarfing trees" to enable Hindu physicians transportability of trees.
- 2000 B.C. Egyptians grow large trees in "containers" cut into rock.
- 1400 B.C. Egypt, Assyria, Greece, and Rome practice pot culture to a high degree of sophistication.
- 50 B.C. Mica panes used on structures by Romans to protect the prized potted citron and orange from cold injury.
- 25 A.D. Chinese legend exists describing Fei Jiang-feng, a "magician" who collected mountains, trees, and living creatures in planters.
- 265 A.D. Chinese artistic pot plants, called punsai, well established in China.
- 600 A.D. Artistic pot plants believed to enter Japanese culture from Korea and China with Buddhism.
- 618 A.D. Chinese artistic pot plants called pun-wan.
- 1180 A.D. Ibn al-'Awwan of Muslim Spain writes horticultural treatise which includes information on container plant culture and soil mixes.
- 1195 A.D. Earliest Japanese documentation depicting artistic pot trees.
- 1280 A.D. Chinese artistic pot plants called Shea tzu ching.
- 1368 A.D. Modern Chinese term punjing first used for artistic pot plants.
- 1400 A.D. Roman orangeries, called stanzone peri cedri, are artificially heated.
- 1500 A.D. In ancient Mexico City, the Aztec chinampas, the so-called "floating gardens," are highly developed. "Chapines" similar to modern peat pots are used to start seed.
- 1500 A.D. Cypress and orange trees grown in large containers by Italians become integral part of French, English, and Danish gardens as Italian Renaissance influence spreads.
- 1775 A.D. Oldest American flower pot company, A.H. Hews and Company, selling hand thrown clay pots.
- 1865 A.D. William Linton of Baltimore invents machinery to manufacture clay pots in molds.
- 1880 A.D. Elegant naturalistic style of Japanese bonsai developed.
- 1900 A.D. Chinese develop linguang, or "clip and grow" method of training punjing. Literati style thus begins.
- 1910 A.D. Bonsai first exhibited in western country at the Japan-Britain Exposition.
- 1946 A.D. Saikei, "living landscapes" using stones and very young trees, developed in Japan. Bonsai popularized to all Japanese classes. Bonsai first goes to America via occupation forces.
- 1960 A.D. "Green Revolution" in nursery industry. Trees and shrubs produced in containers reduce shipping/handling costs and extend planting season to entire year.
- 1965 A.D. Interior Plantscape industry begins, creating an improved business and working environment.

SUGGESTED READING

A History of Garden Art by M.L.Gothen, Dutton, N.Y. 2 vol., 1928.

Penjing: The Chinese Art of Miniature Gardens, Hu Yunhua and The Shanghai Botanic Garden, Timber Press, Portland, OR.

A History of Gardens and Gardening, E.A. Hyams, Praeger, NY, 1971.

Plant Agriculture: Readings from "Scientific American," J. Janick et al., W.H. Freeman & Co., S.F., 1970.

Bonsai: Its Art, Science, History and Philosophy, D. Koreshoff, Timber Press, Portland, OR.

A Short History of the Plant Sciences, H.S. Reed, Chronica Botanica Co., Waltham, MA, 1942.



Poetry Corner

So close, so vast-
winter hailstones rattle
off the brim of my hat.

Basho

A sort of frozen rain this afternoon...which stiffens
your umbrella so that it cannot be shut. Will not the
trees look fine in the morning?

Thoreau

Above are from the book "MORNING MIST, Thoreau and Basho Through the Seasons" by Mary Kullberg; Weatherhill, NY; 1993.

The following appeared in "Metropolitan Diary," The New York Times, Dec. 28, 1998, and was composed by Daniel A. Jenkins; and for those who can't quite remember, here's Joyce Kilmer's, too.

TREES (Forgive me Mr. Kilmer)

I think that I
Shall never see
A stranger creature
Than a tree.
In summer months
It wears warm clothes,
Then stands stripped naked
When it snows.
I understand
Most things I see,
But only God
Can dig a tree.

TREES

I think that I shall never see
A poem lovely as a tree.

A tree whose hungry mouth is prest
Against the earth's sweet flowing breast;

A tree that looks at God all day,
And lifts her leafy arms to pray;

A tree that may in Summer wear
A nest of robins in her hair;

Upon whose bosom snow has lain
Who intimately lives with rain.

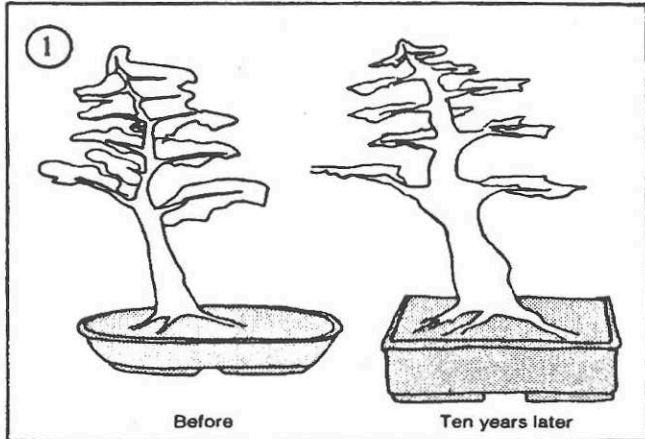
Poems are made by fools like me,
But only God can make a tree.

SELECTING CLAY BONSAI CONTAINERS

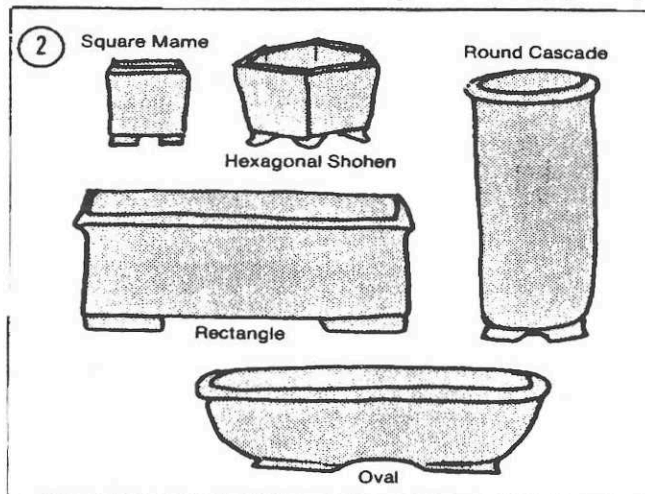
by Donna Banting, Louisiana

A series presented before next potting season to help the grower in choosing the better container.

Soon we will all be busy potting and repotting bonsai, many of which have never had appropriate containers and others which have changed character over the years and require new pots (ill. 1).



Clay containers are available in many colors, sizes and shapes. With such a selection, it is often difficult to determine which to use when potting a bonsai, (ill. 2).

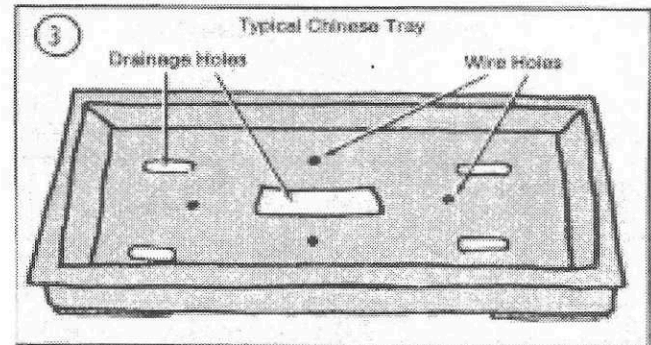


Two general rules are: 1) never select a container before shaping the tree. The bonsai's character may change after it has been pruned and wired and the pot may not complement the bonsai; and 2) never select a container which overpowers the bonsai, in color, size, or shape. A container is to a bonsai what a frame is to

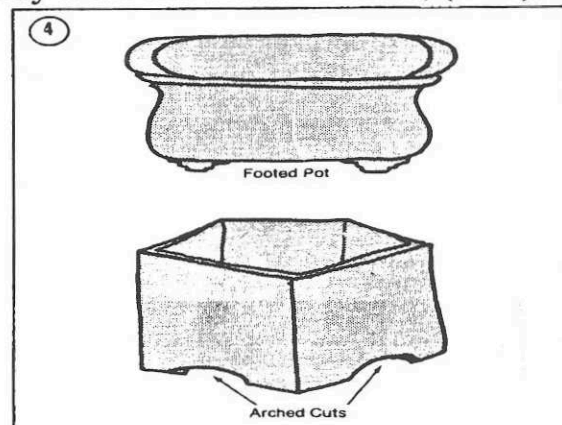
a painting. The container must complement the bonsai.

What are the characteristics of a good clay bonsai container?

A bonsai container must have at least one drainage hole. Chinese containers usually have a rather large drainage hole in the center of the pot's bottom, which I find desirable in our rainy, humid climate. Large containers usually have several drainage holes and include smaller holes for wire to pass through to secure the bonsai in the pot, (ill. 3).

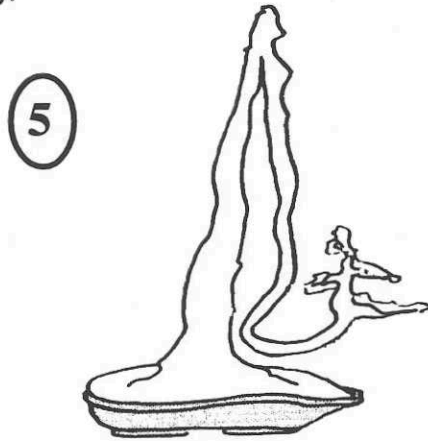


Bonsai containers should have at least three feet, providing additional air circulation and drainage capability. If the container lacks feet, arched cuts at the base are usually made by the potter, providing air circulation. But footed containers are best, lifting the base up so that excess water flows freely out and away from the bonsai's roots, (ill. 4).



There should be a minimum warpage of the clay body. Handmade and antique containers are rarely perfect, and some warpage adds to the interest and beauty of the container. But the feet of containers should sit squarely. If the

container is low on one side, the low side should be used as its front. Some handmade pots are deliberately warped for certain effects, and often the grower selects a warped container for a particular bonsai (ill. 5).



The container should have a solid clay body that is not cracked or chipped. Antique containers are often cracked and chipped, and should not be used for growing the bonsai. John Naka once suggested to me that if I have an antique container for a particular bonsai, I should find a container of the same size and shape and grow the bonsai in it year round. When displaying the bonsai in our exhibits or in the home, I can simply pull the bonsai out of its growing container and place it in the antique container. After exhibiting it, I would then return it to the growing container.

A cracked or chipped bonsai container may distract one from the bonsai. But aside from this consideration, damaged pots may weaken as roots develop or over hard weather months. When this occurs, often the pot will break away from the bonsai's root system, exposing it to bad weather. If the grower doesn't notice it for days, the bonsai may suffer irreparable damage. Never keep your best bonsai in cracked or chipped pots.

Before buying a glazed container, check the insides and bottom of the pot. The glaze should stop just inside the rim of the pot and should not run down the inner

sides. It must never cover the bottom of the pot, inside or out. The glaze inhibits air circulation and water flow.

Each tree has its own personality; the line of its trunk, the color of its bark, foliage, flowers and fruit, its branch placement and foliage shape, determine a tree's special character.

Selecting a container is often a matter of personal taste, as it should be. Bonsai is an art form and in spite of the many rules cited, there is room for individual expression. But basic guidelines regarding color, size and shape assist the grower in his container choice.

Considering the aesthetics of container selection is extremely important. But, more importantly, the grower must consider the horticultural requirements of his bonsai. After all what good is a dead bonsai in a beautiful container?

COLOR

It is important to remember one of the rules cited earlier: when selecting the bonsai pot's color, never select a container which overpowers the bonsai. This rule is difficult to follow, especially for the novice grower, because of the availability of dark and royal blue containers.

Although color selection is dependent on the tastes of individual bonsai growers, I have found the choices indicated in the table (ill. 6.) to be best. It generally follows aesthetic principles set by classic Japanese bonsaiists. However, I can imagine abandoning these principles. For example, the table indicates that all conifers are best possted in brown unglazed containers. Our native swamp cypress, a deciduous conifer, can be potted in a glazed, colored container, and is most attractive, particularly in the fall when leaf colors range from orange to purple.

The table is a guideline. Your personal taste and the bonsai determine pot color.

Bonsai containers are available in a wide range of colors. These can be glazed or unglazed. Sometimes the unglazed container is burnished; that is, the container is rubbed smooth so that when fired in the kiln, the pot has a glossy finish, looking much like a glazed container.

Glazed containers hold water longer than unglazed ones. Therefore, the selection of a glazed or unglazed container is not simply a question of beauty, but one of horticulture. The species from arid environments are best potted in unglazed containers. In the New Orleans area, because of high humidity and heavy rains, it is advisable to use unglazed containers. However, soil size and ingredients can be adjusted to accommodate a tree's horticultural needs should the grower wish to use a glazed container.

Generally, conifers should be potted in unglazed containers.

As mentioned earlier, when buying a glazed container, check the inside and bottom. The glaze should stop just inside the rim of the container and should not run down the inner sides. It must never cover the bottom of the pot, inside or out.

Unglazed brown clay containers are the most common container and can be used when potting any tree species. It

will not compete with the bonsai, as long as the properly sized and shaped container is used. Conifers are almost always best potted in brown unglazed containers.

Unglazed colored clay pots are also used when potting any tree species. Subdued colors in unglazed pots, such as dull greens, brown reds, dull yellows, greys, and blue-greys are best for conifers.

Brightly colored glazed and unglazed containers, in whites and pastels, are used for broadleaf, deciduous, fruiting and flowering bonsai.

Although dark and royal blue glazed containers are the second most common bonsai pots, it is my feeling that great care should be taken in their use. The blue glazes are beautiful, so much so that often, the bonsai loses its importance when potted in a blue container. Therefore, the bonsai should be outstanding in size, age or color of bark, leaves, flowers and fruit at least once a year. Dark and royal blue containers should not be used when potting conifers.

Multiple-colored containers, those with imposing colors, and those with painted decorations are used with truly magnificent bonsai, and rarely used when potting conifers.

UNGLAZED*	CONIFER	BROADLEAF EVERGREEN	DECIDUOUS	FRUITING	FLOWERING
Brown	R	R	R	R	R
Grey	R	R	R	R	R
Dull-colored	R	R	R	R	R
Bright-colored		R	R	R	R
Marbleized**	RWR	RWR	RWR	RWR	RWR
GLAZED					
Brown	RWR	R	R	R	R
Grey	RWR	R	R	R	R
Dull-colored	RWR	R	R	R	R
Bright-colored		R	R	R	R
Dark & royal blue		RWR	RWR	R	R
Multiple-colored		RWR	RWR	R	R
Imposing-colored		RWR	RWR	R	R
Painted decor		RWR	RWR	R	R

* Burnished or rough

** Marbleized containers are not recommended with reservation because of the difficulty in using successfully

R = Recommended selection

RWR = Recommended with reservations (see text)

Of course, there are exceptions to the preceding color recommendations. Mame and Shohen bonsai are often potted in brightly colored, ornately decorated containers. Such pots draw attention to the tiny bonsai which would ordinarily be lost in a display of larger trees. Once the viewer is drawn to the small bonsai, he cannot help but be fascinated by the size, shape and twigging of such a tiny tree. Still, never overpower the bonsai. Take great care when selecting the pot color for a little gem.

Glazed or unglazed pots are both acceptable for Mame or Shohen bonsai, no matter what the species, because the small amount of soil used dries out quickly.

A color can be selected to create a particular environment. A white tray, for instance, can be used to simulate snow and is startling when displaying a grove of deciduous bonsai. A light blue tray holding the same deciduous group is reminiscent of spring, and to me suggests a pond reflecting the blue sky.

Although the browns are the safest and most accessible containers, do not limit your selection to brown containers. Colored containers enhance a bonsai collection. Try some of the green containers, and a bright yellow and/or red, if or when you have the appropriate bonsai.

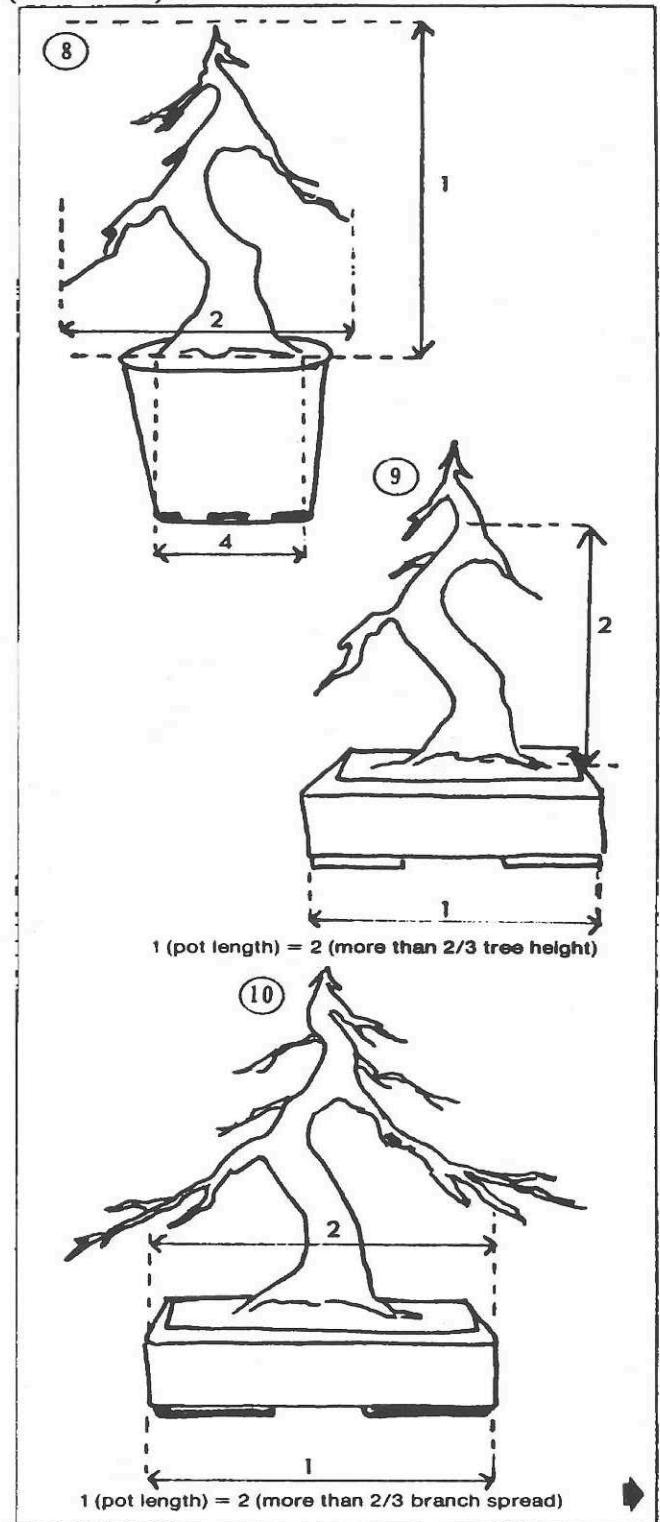
SIZE

Once again we return to that rule cited in the first part of the article: never select a container which overpowers the bonsai. The pot should not be so large as to overpower the bonsai. However, it must not be so small as to appear unstable or to endanger the health of the bonsai.

So, when determining the size of the container, horticultural needs and aesthetics must be considered. The guidelines in this article work very well and may be modified by the grower.

Before ordering or buying a container, you might wish to take the following measurements of the bonsai.

1. Height of bonsai from base to apex;
2. Width at widest spread of branches from front view;
3. Spread of branches from side;
4. Widest portion of trunk base from front (ills. 8-11).



Container length is slightly more than $2/3$ of the tree's height (ill. 9), unless the tree is shorter than it is wide. In this case, the length of the container is slightly more than $2/3$ the width of the spread of branches front view (ill. 10).

Container width is slightly less than the spread of branches from the side view (ill. 11).

Container depth is equal to the diameter of the trunk (ill. 12).

There are exceptions to these guidelines.

Cascade-style bonsai are potted in even-sided or round containers. Therefore, the length or diameter of the cascade container is equal to the measurements of anchor root plus base of trunk plus the distance from the trunk to drop of cascading branch. The cascade bonsai is usually potted in the center of the container, a little towards the back. This, too, must be considered when determining the cascade pot's length or diameter (ill. 13).

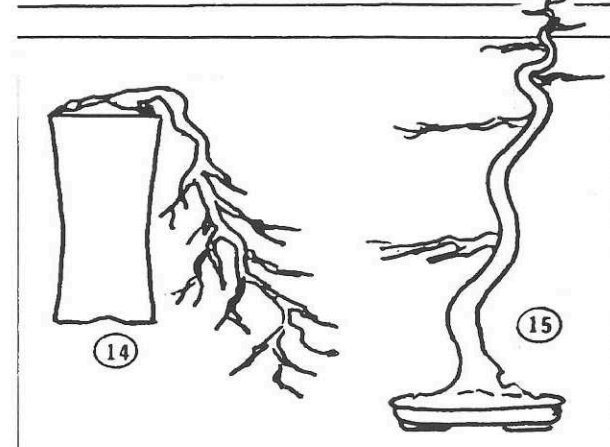
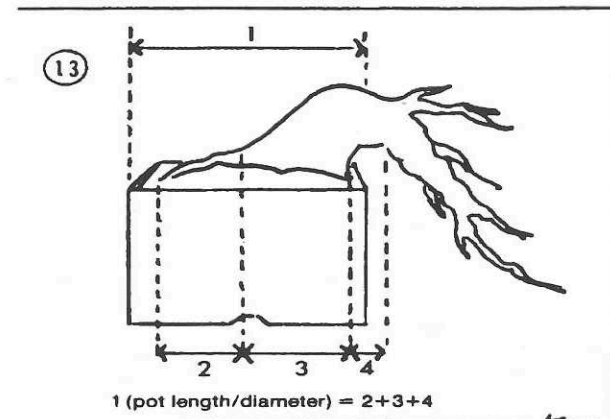
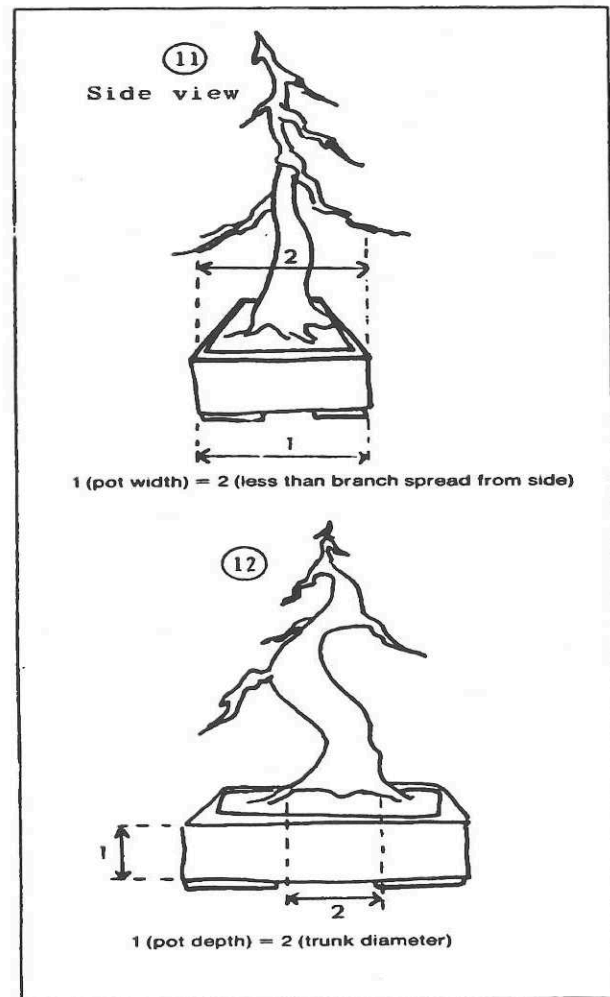
Cascade-style bonsai use deeper containers, but pot depth must not be equal to the drop of the cascading portion of the bonsai, nor equal to the height of the tree from cascade end to apex or from base of trunk to apex.

Old, rugged, large-sized cascade bonsai look best in shorter, substantial containers (ill. 13) and the more graceful, younger cascades look best in tall containers (ill. 14).

The cascading branch must not rest on the lip of the container nor touch the container sides.

Bunjin are also potted in equal-sided or round containers, but are most effective in shallow, small containers (ill. 15). Because Bunjin are generally sparsely foliated, the small, shallow container will not endanger its health.

Mame may be potted in deeper containers, providing space for root growth and moisture retention.



Although slanting-style or windswept bonsai follow proportion rules cited earlier, this style may also use a larger, narrower container, accentuating the tree's movement (ill. 16), or a smaller container to contrast that movement (ill. 17).

Twin-trunk or multiple trunk bonsai may be potted in the size recommended for single-trunk, using the tallest, oldest tree in the group for proportions (ill 18). Any style single- or multiple-trunk bonsai may be potted in a larger, shallow container to simulate a pastoral setting (ill 19), including Bunjin and cascade. But a cascade bonsai potted in a long, shallow container must be planted in or on a rock (ill 20).

SHAPES

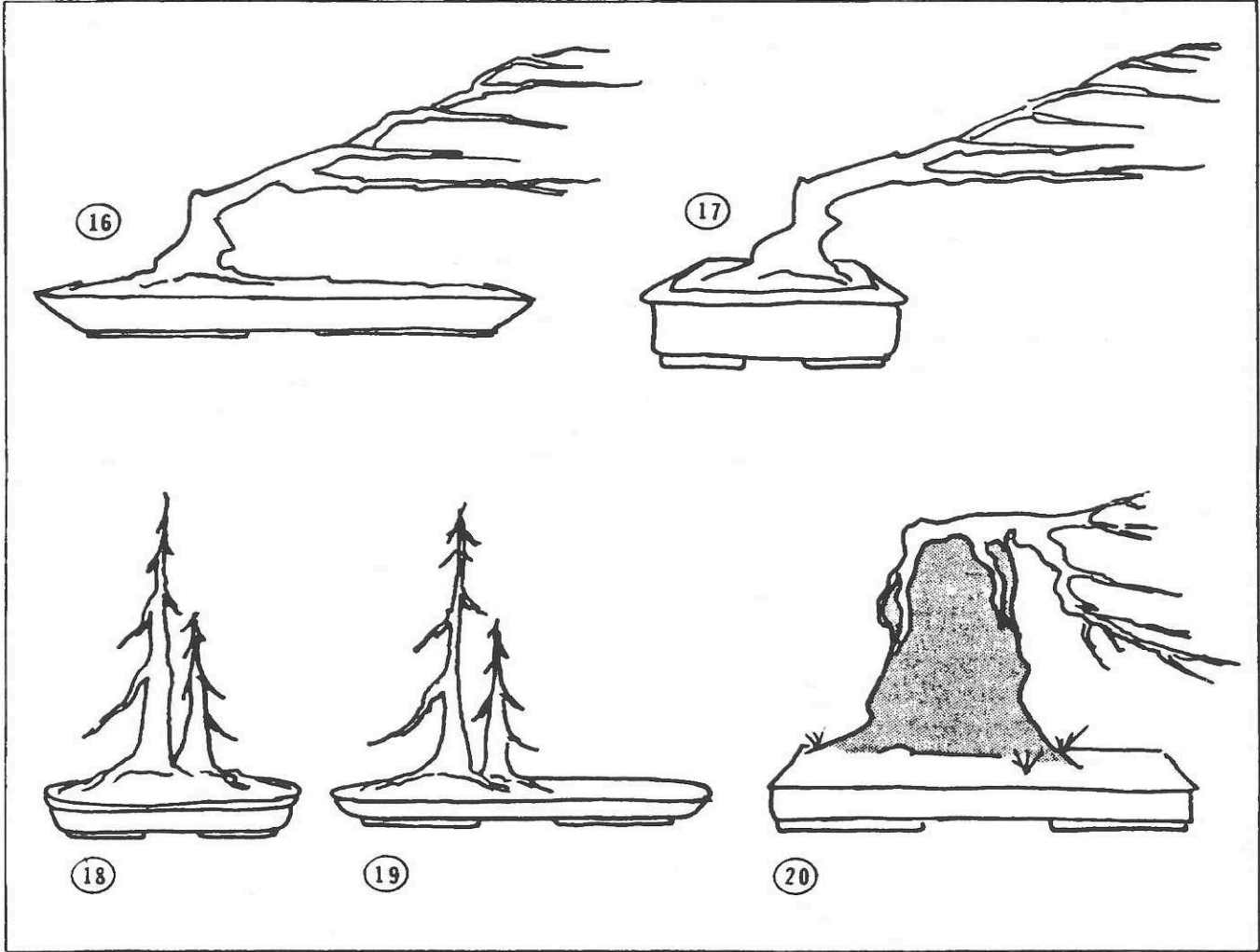
There is as much variation in bonsai container shape as there is in tree shape.

Clay containers can be rectangular, square, round, oval, hexagonal, octagonal or ten sided. There are also "Tub" and flower-shaped bonsai containers.

All shapes are available with or without lips, on the inside (ill. 21) or on the outside (ill. 22). When using a container with an inner lip, keep in mind that the bonsai may be difficult to remove from the container when repotting, and that the inner lip uses up some of the soil surface area, retaining moisture for longer periods.

Most containers have straight sides and/or corners (ill. 21), but some curve and some flare out at the lip (ill. 22). Some corners are cut off, which visually shortens the length of the container. Illustration 23 is the same length as illustration 24.

The front of a rectangular or oval container is the longest side. The front of



an equal-sided or round container can be located with a foot at the center or with feet on both sides of the container. This means that an equal-sided container may have a corner placed as front (ill. 25).

Which of the two long sides of a rectangle or oval, and which of a square, hex, round, etc., do we use as front? If the container sits low on one side, the low side should be front. However, few containers are warped. Therefore, use the front which is most appealing to you.

Of course, when a container displays a design on one side, whether painted or carved, the front is already determined.

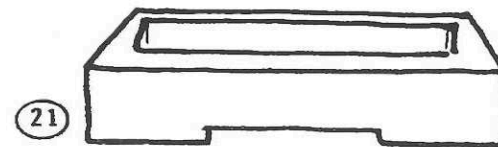
Feet can be simple or decorated; they can be straight, rounded, or they can flare out (ill. 22-25). Some containers are not footed, but rather the container body is cut at the base as in illustration 21.

Some containers are massive while others are fragile, not only in terms of size, but of shape, proportion and color.

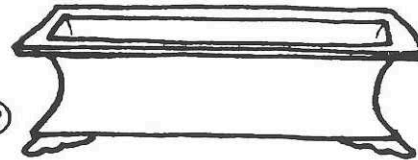
Simply stated, a bonsai of angular appearance is potted in a rectangular or square container, and a bonsai with a curvaceous appearance is potted in a round or oval container. Angles or curves of the tree's trunk, branches and foliage are all considered when selecting a container.

Studying bonsai in one of the Nippon Bonsai Association exhibition books, I found that most formal and informal uprights are potted in rectangular containers; slanting, windswept, and broom styles are potted in ovals; cascades and Bunjins in round; multiple trunk styles in ovals.

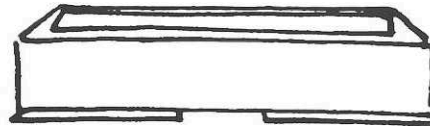
When I surveyed pot usage by genus, I found that most conifers are potted in angular containers and that broadleaf, fruiting, flowering and deciduous bonsai are most often in rounds and ovals. Conifers are generally angular and therefore best in rectangular or square containers while the trunk line, branching,



21



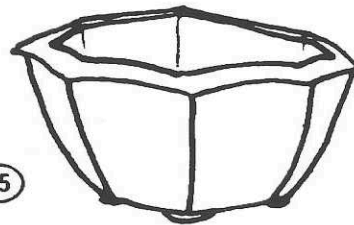
22



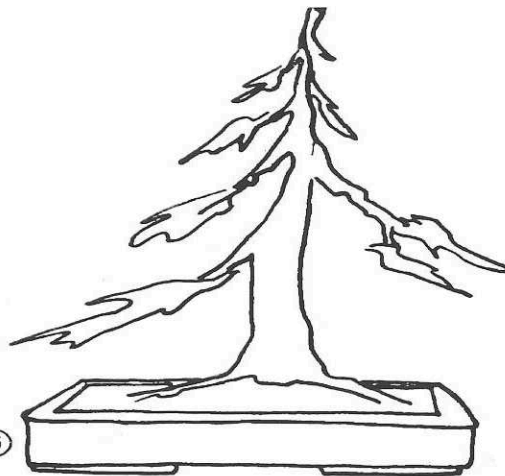
23



24



25

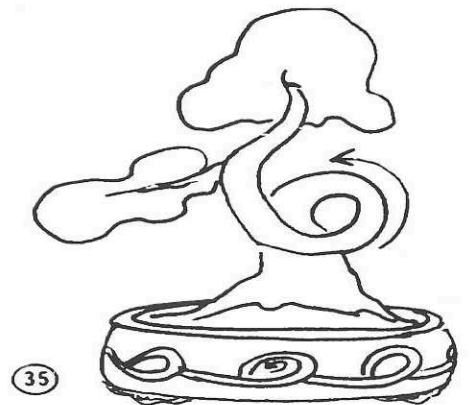
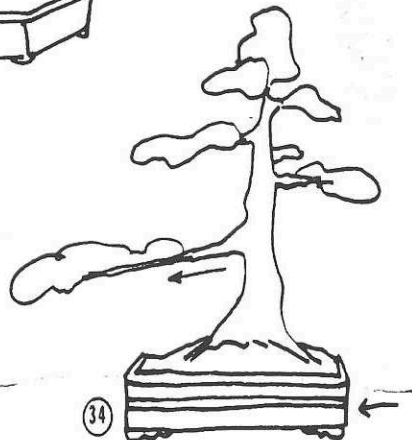
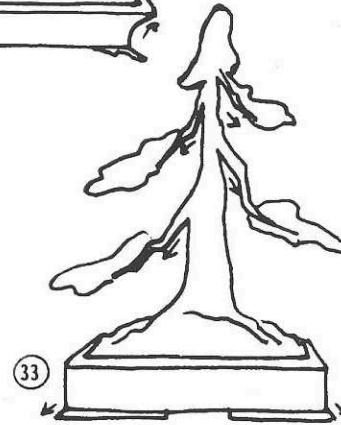
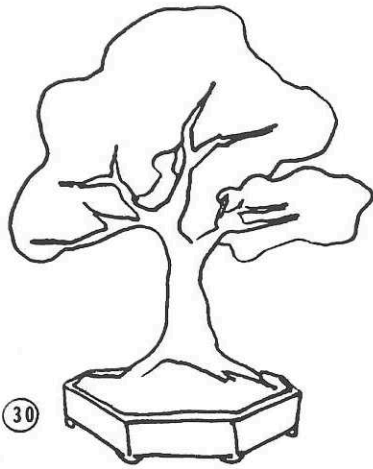
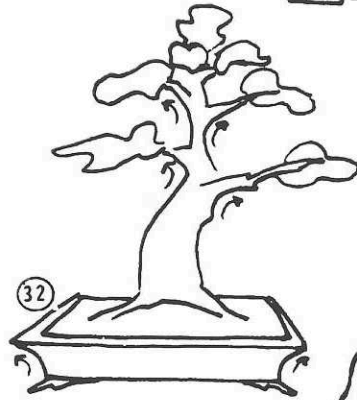
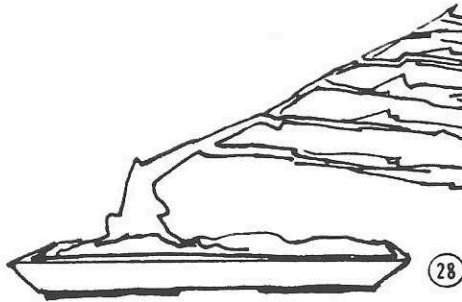
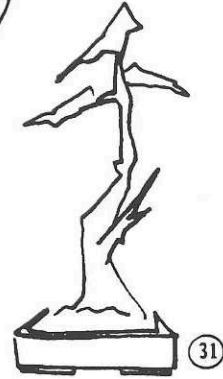
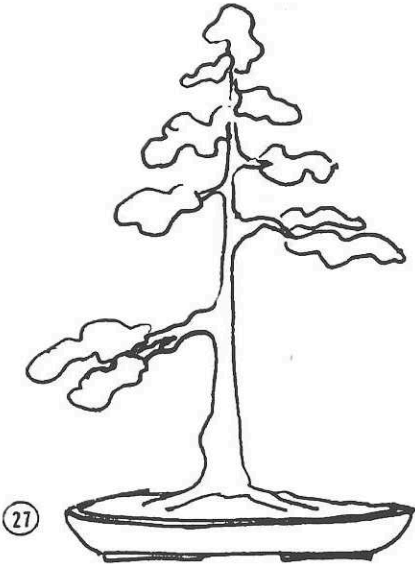


26

and foliage of deciduous, broadleaf, fruiting, and flowering bonsai are generally rounder in appearance and best in round and oval containers.

But the details on a container may alter its real shape. For example, a rectangle with curved sides and corners and "Cloud" feet soften the overall effect of the container. Therefore, such a rectangle can be used for bonsai styles and plant genera considered for oval or round containers.





GUIDE TO CERAMIC BONSAI CONTAINERS *by Phil Tackill*

The author has many years experience behind him. Now proprietor of Jiu San Bonsai in Farmingdale, NY, he is a charter member and past president of the Bonsai Society of Greater NY. In addition, he has been a director of BCI, and a co-chairman of the 1979 I B C.

Bonsai containers are a subject seldom touched upon by authors of bonsai books.

Since we bonsai growers and hobbyists use a great many bonsai containers, we should have some understanding of the vast variety of containers and their prices, styles, colors, and shapes. We will try, with the aid of some illustrations, to indicate what may cause prices to vary. We will also try to indicate which container is best suited for the different styles of trees.

First, some general information that is usually true:

1. Japanese ceramic containers are fired at 2000' F., a higher temperature than is used in other countries.
2. Poured containers are the least expensive.
3. Press-moulded containers are medium to high priced.
4. Thrown containers are medium to high priced.
5. Hand-formed containers are in the high price range. Antique containers are the most expensive and most difficult to identify.

Chart A

TYPE OF CONTAINER	DISTINGUISHING FEATURES						
	SINK MARKS	ANY SHAPE	NORMALLY ROUND	THIN LIGHT	THICK HEAVY	GLAZED	UNGLAZED
poured slip mold A	*Yes	Yes		Yes		Yes	Yes
press mold C		Yes			Yes	Yes	Yes
thrown B			Yes	Yes	Yes	Yes	Yes
hand formed C	Yes	Yes		Yes	Yes	Yes	Yes

All of the above sometimes have potters marks.
 (X) The last two may have artists' signatures.
 (Y) Some fine containers may have no markings at all.

ILLUSTRATION OF CONTAINERS

If you note the illustrations, it becomes obvious that each addition to the basic form of container B adds to the cost. The finer the detail, the more the cost. (Illustration B, shows three views, side, top, bottom); and right side #1 is the simplest, and the left side #2 is the more ornate. The additional details added to the basic containers illustrated are as follows: #3 is a cloud leg, #4 is a bottom rim, #5 is a window panel recess, #6 are drawings and designs on the body, (a right side drawing is shown), #7 is an upper lip, #8 is a notch in the corner of container with a rim. Add a glaze and you have just run the price of a simple container way up. Some of these details can be molded in a poured container, but are usually not in sharp detail. The illustration on Chart B, #9 shows construction of a container design that can be poured or press molded. Its design is such that it can easily be withdrawn from the mold. Note the top of design indents and the bottom protrudes so it can be slid from mold.

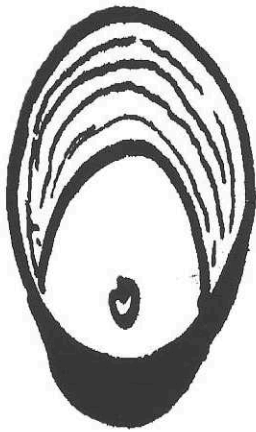
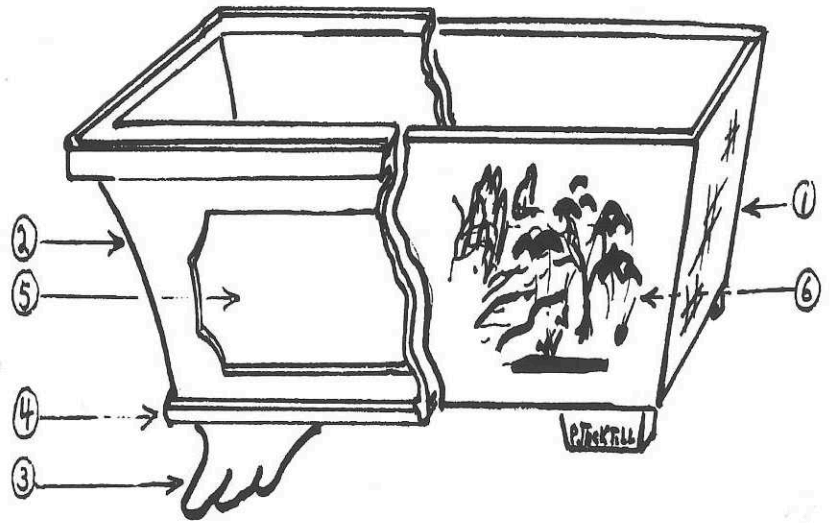
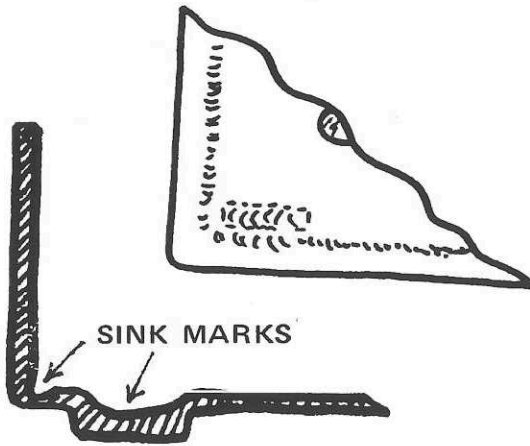
Irregular forms, if used properly, should be an asset, and in Japan they are prized possessions. They are what makes one container different from all that are produced. Much can be said for individuality of containers.

*See Chart B for X and Y; and for examples of all styles and details.

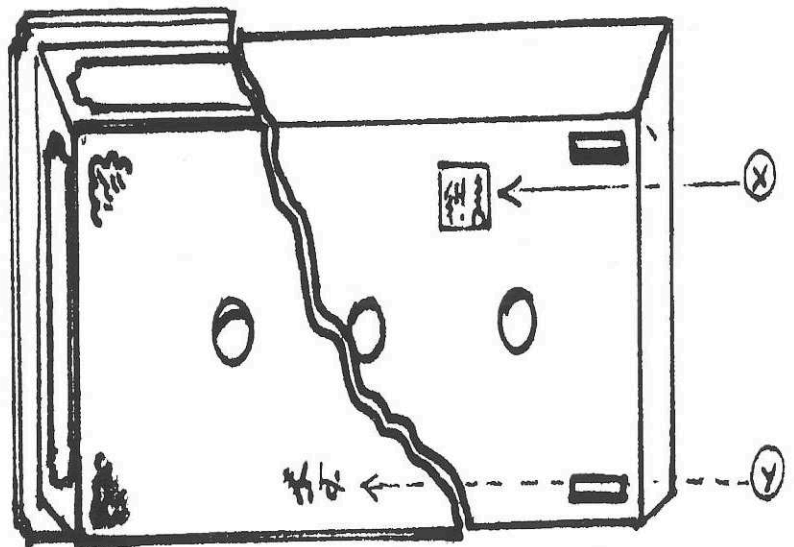
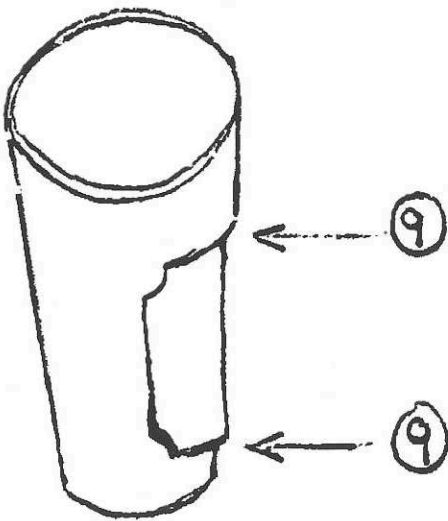
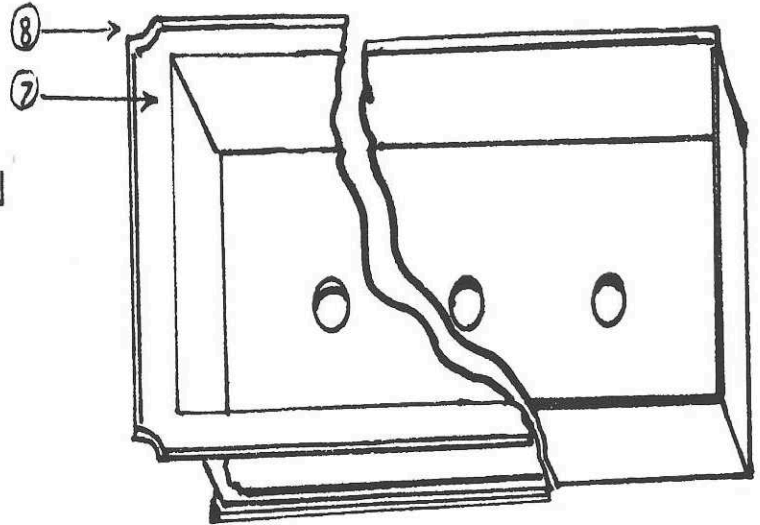
Each additional operation in manufacture will add to cost

Chart B

MOLD "A" POURED SLIP



"B" THROWN



MATCHING TREE STYLE AND CONTAINER FORMS

Generally speaking, straight lines on a container go best with a straight (upright) tree or trees. Curved lines go best with informal trees. Chart C shows suggested combinations of tree styles with container styles.

The black dot in the illustration on Chart C indicates the recommended placement of the tree in the container. The more ornate the bonsai container, the more powerful or dramatic a tree is required. The container should harmonize and compliment the tree. Color of the container is most important. With evergreens, red (terracotta), brown, and green body colors are recommended. With fruiting and flowering bonsai and/or trees with bright fall colors, one should choose a container with a color that compliments the most colorful phase of the tree.

Thought should be given when you use bright colored containers and one should consider the effect of looking at a blue glazed container, 4" or 6" deep by 20" long. This long panel of color would require a tree that can contrast with such a large colored area. On the other hand, the area of a mame bonsai container 2" x 2" that is bright red would not be offensive, since the colored area is so small.

Trees should be displayed at their time of maximum color.

There are many rules on how long and wide a container should be. I find that one's eye would be a good judge in that determination, and that there is a wide latitude in that selection. However, I find the depth of the container (as it pertains to the thickness at the base of the trunk) is of major importance. The formula I use for that is the depth of the container should be from 1/2 the thickness of the base of trunk to 2 1/2 times its thickness.

An obvious exception would be semi-cascade and cascade trees, where the depth of the container is an important counter balance to the mass of foliage outside the container. Other helpful items or facts:

A. If you display a square container with its point forward, you double the length of the container.

B. Vive la difference. I, like many people welcome a container that differs; what Americans refer to as an irregular (warped) container, I would look at as a one-of-a-kind or the thing that makes my container different.

C. Containers should be stored outside and aged like the bonsai. This will achieve a patina and soften the colors of the containers.

Chart D

Color of Fruit, Flower, & Foliage	Red	Blue	Green	Yellow	Violet	Brown	White	Orange	Black
White	●	●	●		●		●		●
Violet		●			●				●
Pink		●		●	●		●		●
Red		●		●			●		●
Yellow	●	●	●			●	●		●
Blue	●			●			●	●	●
Orange		●	●	●	●	●	●		●
Green	●			●		●	●	●	●

Allowance should be made for the vast range of shades within the color bands. This chart suggests combinations, but should not limit your choice.

MONTHLY CARE TIPS for FEBRUARY and MARCH

The following tips have been compiled from 4 Japanese bonsai magazines and Yuji Yoshimura's book. A major portion of the following schedules are from a Japanese book which cites the various tasks one can perform during each of 12 months for each of 5 climate zones of Japan extending from the coldest parts of northern Hokaido to the warmest southernmost parts of Kyushu. The average temperatures for the region wherein Tokyo lies correspond closely to the average temperatures for the area around Washington, DC. Weather patterns everywhere in the world change from year to year and those changes play an important role in selecting the dates for doing the various tasks relative to the styling and maintenance of bonsai. For example, the dates to remove plants from winter storage can vary from year to year, as well when to put them in winter storage. The following listing gives the reader suggested periods of time during a year when to consider doing various bonsai-associated tasks. With experience, you can establish your own schedule. For the neophytes, it is suggested they check with the experienced members of their respective clubs when there is any doubt about the timing of any task. Nothing in bonsai is inflexible.

For some species listed below, wiring is indicated as a task in periods when the foliage is present. There is nothing wrong with wiring a plant when the foliage is mature. But it should not be done with any new buds or growth present because of the high possibility that the wiring will destroy them.

Most practitioners of bonsai in this country have a general rule that in the summer months they do not fertilize their bonsai. The reasoning is that the plants get too stressed and burn out trying to

grow after they consume the fertilizer. Those practitioners resume fertilizing in September/October and discontinue fertilizing of any kind during the winter months.

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. Hence, you will have to make up your own schedule for applying your fertilizer during those 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, one should hold back on applying any fertilizer during that time period. As for fertilizing in the summer months, you will note in the summer schedules that for some species the application of fertilizer balls is called for in June or July. It has been alleged that some Japanese bonsai growers think we do not fertilize enough. You must decide for yourself when to fertilize.

As for time to repot, where the words "as needed" appear, it is because the Japanese books do not give any more precise time of the year. In any case, repot when the plant's roots are about to become potbound.

Heads up Members: The preceding paragraphs are not going to be repeated with the next issue's care tips. You'd best memorize them.

FEBRUARY

CONIFERS

Black Pine: Water once per day. The following activities can commence some

time after mid-February. Remove any wire digging into the bark and wire/rewire where needed. Remove any unwanted branches and branchlets.

Cryptomeria: Keep in a polyhouse or coldframe for as long as temperatures will go below 32 degrees Fahrenheit. Water once per day including the leaves. During the last week in the month one can begin removing unwanted branches and needles.

Hemlock: Water as needed.

Hinoki: Water as needed. At the end of the month thin out the foliage.

Larch: Water as needed.

Needle Juniper: Water once per day including the leaves.

Sawara Cypress: Water as needed.

Shimpaku (Sargent juniper): Water once per day. Weather permitting or if the plant is in a coldframe one can consider rewiring and repotting anytime after the 20th of January. Remove the old wire before rewiring. Repotting can be done during this month but it need only be done every 3 years unless plant is rootbound.

Spruce: Keep the spruce in a coldframe or polyhouse until temperatures stabilize above 32 degrees Fahrenheit. Wiring can be done after removal from winter protection. Water once per day.

White Pine: Water once per day. Unwanted branches can be pruned. Wiring can be done but once the tree has been wired it should be placed in a coldframe or polyhouse. Repotting can be done when plant is out of winter protection during this month. Repotting need only be done every 3 years unless plant is rootbound.

Yew: Water as needed. Apply fertilizer balls at the end of the month.

WARNING: From the USDA Integrated Pest Management Avoid using shredded hardwood bark mulch on yews. As it decays, it often releases toxic quantities of copper and manganese. Yews are very sensitive to these metals; affected plants

are stunted, may turn yellow, and in severe cases, small branches may die.

DECIDUOUS (Non-fruiting/non-flowering)

Keep all of the following bonsai in a polyhouse or coldframe until temperatures stabilize above 32 degrees Fahrenheit.

Beech: Water once per day. It is natural for beech trees to keep the old, brown leaves through the fall and winter and one can remove them during this month.

Chinese Elm: Water as needed.

Ginkgo: Water as needed. During the middle of February you can remove unwanted branches.

Hornbeam: Water as needed. Wiring can be done in early part of the month. Unnecessary branches and sprouts can be removed.

Japanese Maple: Water once per day. Unnecessary branches and sprouts can be removed.

Trident Maple: Water once per day. Unnecessary branches and sprouts can be removed. Repotting can be done after the 20th of the month. New leaf buds may appear so keep the maple where frost wont hit it.

Weeping Willow: Water once per day. When the temperature remains above 40 degrees Fahrenheit one can apply insecticide such as dormant oil. Prune branches that survived the winter.

Winged Euonymous: Water as needed. Wiring can be done. When the temperature remains above 40 degrees Fahrenheit one can apply insecticide such as dormant oil.

Flowering/Fruiting Plants

Keep all of the following bonsai in a polyhouse or coldframe until temperatures stabilize above 32 degrees Fahrenheit.

CHERRY: Water once every 2 to 3 days.

CRAB APPLE: Water every other day.

GARDENIA: Water as needed. Spray with Malathion. A one-time winter feeding of fertilizer can be done.

HOLLY: Water once every 2 days. A one-time winter feeding of fertilizer can be done.

PYRACANTHA: Water once every 2 days. A one-time reduced winter feeding of fertilizer can be done.

QUINCE: Water once every 2 days.

SATSUKI (azalea): Water once every 2 days.

UME (Japanese flowering plum or apricot): Water once every 2 days. Enjoy the blossoms.

WISTERIA: Water as needed.

MARCH

CONIFERS

BLACK PINE: Water once per day. Remove any wire digging into the bark and wire/rewire where needed. Remove any unwanted branches and branchlets. Grafting can be done during the middle of the month. Apply fertilizer balls during the last week of the month.

CRYPTOMERIA: Keep in a polyhouse or coldframe for as long as the temperature will go below 32 degrees Fahrenheit. Water once per day including the leaves. Remove unwanted branches and needles. Apply fertilizer balls during the last week of the month.

HEMLOCK: Water as needed. Wire tree. (Avoid placing more than two wires side by side.) Apply fertilizer balls during the middle of the month. Remove unwanted branches unless repotting. Repot every 3 to 4 years.

HINOKI: Water as needed. At the beginning of the month thin out the foliage and apply fertilizer balls. Wire during mid-month. Make certain no existing wire is biting into bark. Repotting can be done in mid-month every 3 years.

LARCH: Water as needed. Apply fertilizer balls at the beginning of the month. Wiring can be done during last part of the month.

NEEDLE JUNIPER: Water once per day including the leaves.

SAWARA CYPRESS: Water as needed. Wire during the middle of the month. (Wire that has remained on the tree for 3 years should be removed before rewiring.) Repot after any rewiring that is needed. Repot every 3 years. Fertilize during the middle of the month unless the tree has been repotted.

SHIMPAKU (Sargent juniper): Water once per day. Wire/rewiring can be done anytime during this month. Apply fertilizer balls during the last week of the month.

SPRUCE: Water once per day. Keep the spruce in a coldframe or polyhouse until temperatures stabilize above 32 degrees Fahrenheit. Wiring can be done after removal from winter protection. Repotting can be done after removal from winter protection. Repot every 3 to 5 years. Apply fertilizer balls during the last week of the month unless the plant has been repotted.

WHITE PINE: Water once per day. Unwanted branches can be pruned. Wiring can and repotting can be done when plant is out of winter protection during this month. Repotting need only be done every 3 years unless plant is rootbound. Apply fertilizer balls during the first week of the month unless plant has been repotted. During the last week of the month begin watering twice per day.

YEW: Water as needed. At the beginning of the month pinch off excess growth of branchlets and prune others. Wire at the end of the month and remove wire that has been on for 3 years.

DECIDUOUS

(Non-fruiting/non-flowering) Keep all of the following bonsai in a polyhouse or coldframe until temperatures stabilize above 32 degrees Fahrenheit.

BEECH: Water once per day. It is natural for beech trees to keep the old, brown leaves through the fall and winter.

One can remove them during this month. Good time to start seeds or select tree for converting to bonsai. Repot anytime after removal from winter protection. Repot every 3 years unless plant is rootbound.

CHINESE ELM: Water as needed. Repot every 2 years. Good time to select tree and make a bonsai.

GINGKO: Water as needed. After removing from winter protection repot if necessary.

HORNBEAM: Water once per day. Then repot. Repotting can be done each year. Time to plant seeds or obtain a plant for bonsai. In the middle of the month begin watering 2 times per day.

JAPANESE MAPLE: Water once per day. Unnecessary branches and sprouts can be removed. Then repot. Repotting can be done each year. Time to plant seeds or obtain a plant for bonsai. In the middle of the month begin watering 2 times per day.

TRIDENT MAPLE: Water once per day. New leaf buds may appear so keep the maple where frost wont hit it. Unnecessary branches and sprouts should be removed at the very beginning of the month. Repotting can be done up to the 20th of the month. Remove wire during the last week of the month. Time to plant seeds or obtain a plant for bonsai.

WEeping WILLOW: Water once per day. Repot if necessary.

WINGED EUONYMOUS: Water as needed. Wiring can be done.

Flowering/Fruiting Plants Keep all of the following bonsai in a polyhouse or coldframe until temperatures stabilize above 32 degrees Fahrenheit.

CHERRY: Water once every 1 or 2 days depending on plant's intake during the first 20 days of the month. After that water once every day for the remainder of the month. Cherry blossoms appear - enjoy them. Time to collect a tree for bonsai.

Repot during the last 10 days of the month.

CRAB APPLE: Water every other day until the bonsai is out of winter storage and once per day thereafter. Flower buds appear during first part of the month and the tree is in bloom during the last part of the month - enjoy the apple blossoms. Repot the tree if needed after the blossoms have faded. Repot every 3 to 4 years.

GARDENIA: Water as needed.

HOLLY: At the beginning of the month start watering once per day. Grafting can be done during the middle of the month. When needed - repotting can be done during the last week of the month.

PYRACANTHA: At the beginning of the month start watering once per day. Repot after the 10th of the month.

QUINCE: Water once every 2 days until the last week in the month then begin watering once per day. Repotting can be done during the last week of the month. Repot every 2 years.

SATSUKI (azalea): Water once every 2 days until the 10th of the month - then water once per day.

UME (Japanese flowering plum or apricot): Water once every 2 days until the 10th of the month - then water once per day. Remove the spent flowers. After flowering is complete, prune to leave 2 sprouts remaining on the branchlets. Repot after the middle of the month. Repot every 2 years. Protect against frost.

WISTERIA: Water often. Repot as soon as possible, and repot once every year.



Club Presidents: Please remind your club secretaries to send in your rosters of club officers. Judy Wise is acting PBA Secretary, 1259 4th St, SW, Wash, D.C., 20024.