

POTOMAC
BONSAI
ASSOCIATION

Newsletter

ISSN 0160-9521



Bonsai Tools and Techniques By: Jules Koetsch

Note: This is the last article on TOOLS and TECHNIQUES.

Annealed wire is soft when applied but the water from rainstorms promotes unforeseen hardening of copper wire. Please use paper wrapped wire so that chafing will not wound the bark on trees with thin bark.

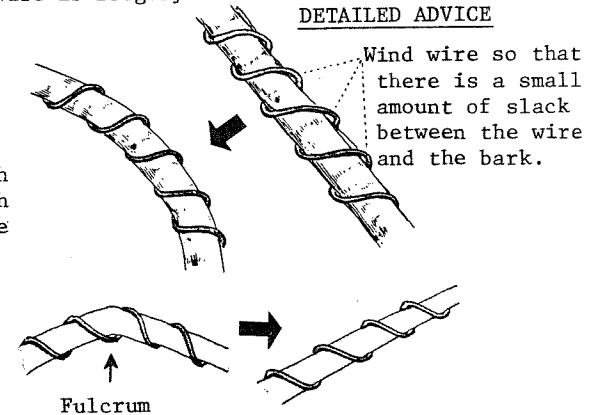
The appropriate length of the wire is roughly 1-1/2 (one and one-half) times the distance measured from the tip or end of the section to be wired to the other end.

Using a thicker wire has the advantage of being strong enough as well as being resilient enough to keep the windings loose enough although twisting the wire may be somewhat difficult.

ADVICE ON TWISTING WIRE

Growth in bonsai over any length of time involves thickening of the trunk and branches and because they are exposed to the attached wire, at just the right time or a few days earlier, remove the wire before it bites into the bark.

When wrapping the wire, there should be a small space between the bark and the wire so that approximately one thin sheet of paper can be inserted.



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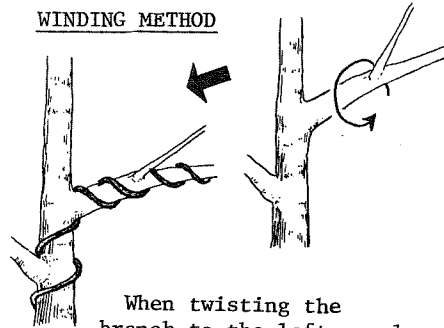
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In starting a wire, wind it around 2 to 3 times in the desired direction outside of the section where the bend is to be made.

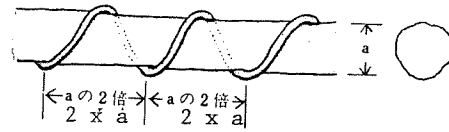
If after wiring a section where a sharp bend in the trunk is to take place, there is no fulcrum, - before straightening the bend, remove the

WINDING METHOD



When twisting the branch to the left, apply the wire in a counterclockwise direction.

SPACING DETAILS



wire and rewire to obtain a fulcrum.

Finally, having decided upon the direction in which the branch is to be bent, use two hands to twist the wire onto the branch so that if the branch is to be bent to the right, wind-on the wire in a clockwise direction (the direction in which the hands of a clock advance) when the branch is pointing directly at you. If the branch is to be bent to the left, the wire is wound in a counterclockwise direction when the branch is viewed end-on.

Please heed this advice, that winding-on the wire in directions opposite to those described above will yield poor-looking results.

One should obey the following criterion that the space between each turn of the wire should be approximately 2 times the thickness of the branch on which the wire is being applied. The spacing just described should be adequate and any closer spacing is not necessary.

SEASONS GREETINGS



Engleman Spruce
Pen and Ink Drawing
by Ramona
P. Hommerly.
From
Northwest Trees.
Text by
Stephen Head

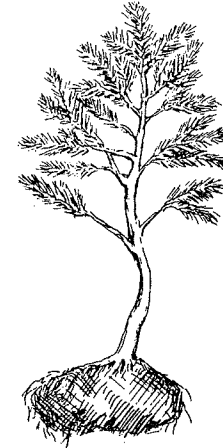
CORRECTING THE MAIN TRUNK

"The straight trunk style" is the natural shape for common cryptomeria and ezo spruce in the wild and that straight trunk appearance should be captured in bonsai of the same material.

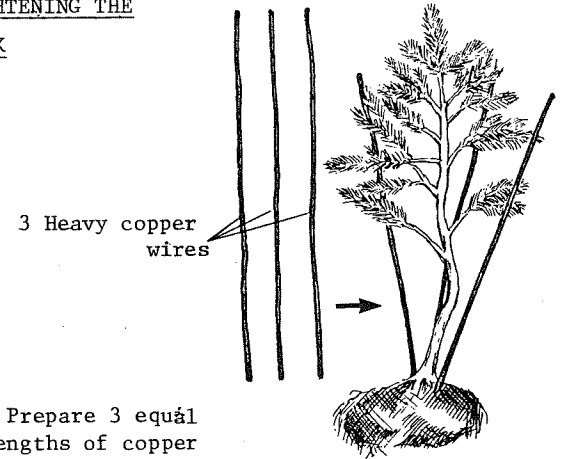
A young tree may not be obedient in growing straight. The method for straightening the trunk is shown in the following sketches with the wire avoiding the branches.

Straightening the trunk is very simple, - referring to the diagrams, (1) start with the tree and 3 heavy copper wires, (2) Place the heavy

STRAIGHTENING THE TRUNK



A tree whose trunk at its base is 2 thumb widths across and gently curves upward

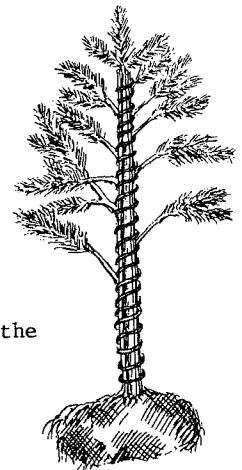


Prepare 3 equal lengths of copper wire.

3 copper wires placed in the soil



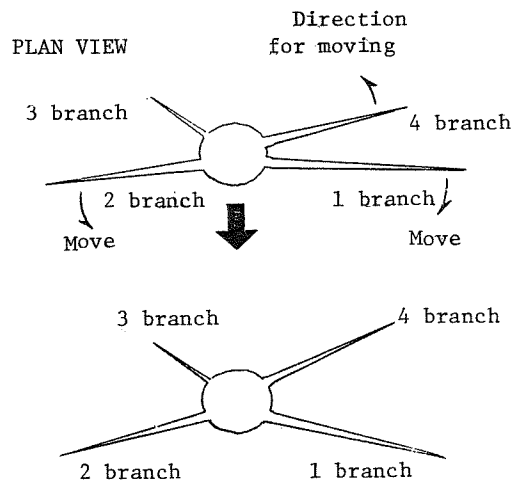
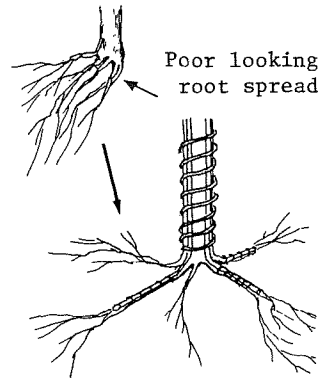
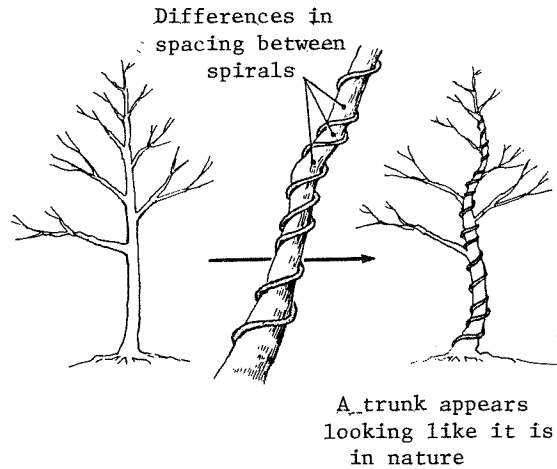
Finished appearance with equal spacing between the wires



Spiral wire in place which does the straightening.

wires in the soil and (3) wrap the wire around the three heavy wires.

MAKING AN INFORMAL UPRIGHT



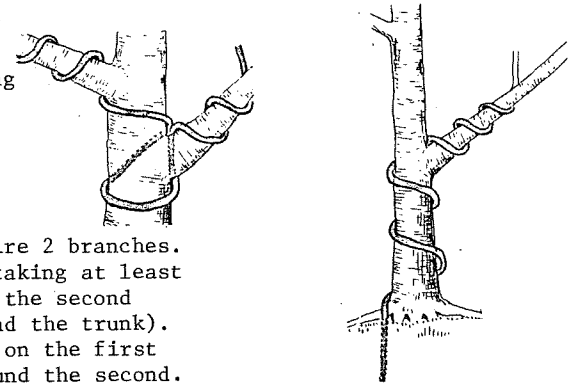
POSITIONING BRANCHES

Arrangement of the branch positions is extremely important. One of the branches can be turned to become the new apex or "wick" to provide a gradual tapering-off to the top. Often the balance between the front and back branches is controlled in the way they emerge from the trunk to give the perception of depth. If branch position is controlled, the disadvantage of a solid appearance also can be removed. (As John Naka says, "Make space or two where birds can fly through.") Also one can eradicate a weak appearance by controlling the growth of a single or combination of branches of 2 branches and 4 branches in accordance

with the way they are distributed front and back. The positioning should

impart the desired impression.

Too often the branches are too thick and cannot be positioned to achieve the desired result. Emerging branches may not be interesting but only on young trees can they be wired to consolidate the arrangement.



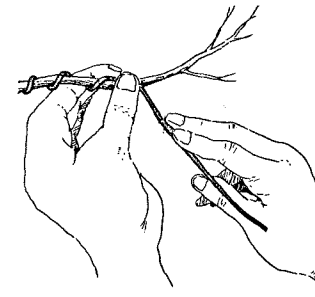
Use one wire to wire 2 branches. First anchor it by taking at least 2 turns (one around the second branch and one around the trunk). After that twist it on the first branch and then around the second.

For a single branch, push the wire into the soil at the point where the trunk and soil meet. Then twist the wire up and around the trunk and onto the branch.

On small branches it is expensive to remove the wire by hand for re-use.

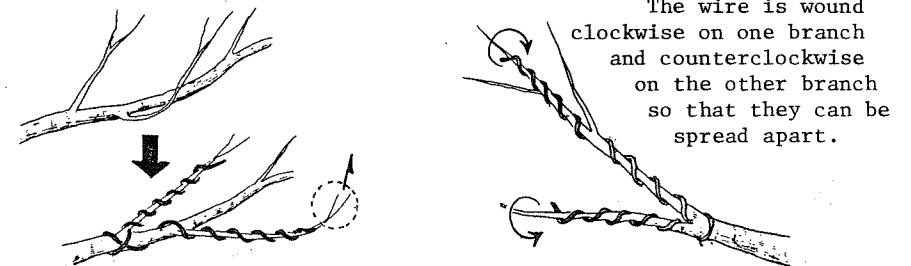
WIRING SMALL BRANCHES

When the positioning of branches is almost complete, one can expect to find a number of undeveloped ends which cannot be wired.



The regular course of events is for the growth to be in the upper parts of the tree. The growth, especially of new branches, is naturally a characteristic of the tree species, and for many young trees it is a one-time event. Therefore it is important to decide which branches are to be wired and which won't be needed.

One benefits from promoting the sideways growth of branches and suppressing those growing vertically.



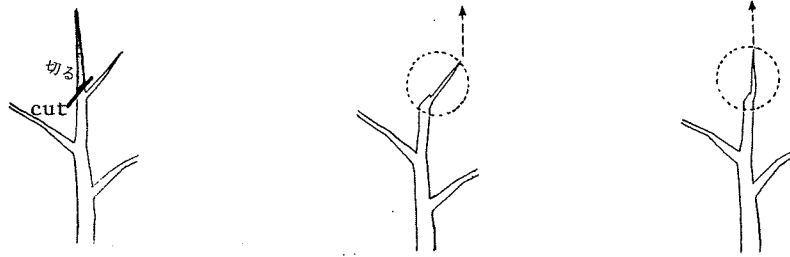
The wire is wound clockwise on one branch and counterclockwise on the other branch so that they can be spread apart.

On the lower parts of the tree spread apart the young branches to promote growth. Allow only the tips of the branches to grow upward otherwise there is a tendency for them to wither and die.

MAKING OVER THE APEX

The size of the root-ball is defined by the size of the pot and one arranges to pluck sprouts and year by year limit the height of the tree to conform to the size of the pot.

For a tree such as that shown in the accompanying diagram, it has been decided to maintain the same height of the tree by cutting off the "wick" and

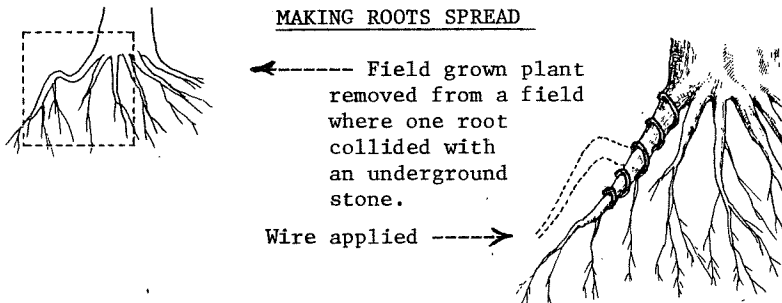


Part to be cut and part to be retained.

The correction has been made, - the cut is prominent and the tree top is unsightly.

Wire the best branch near the cut top, wire it and bend it upward to correct the poor appearance.

use a "replacement wick".

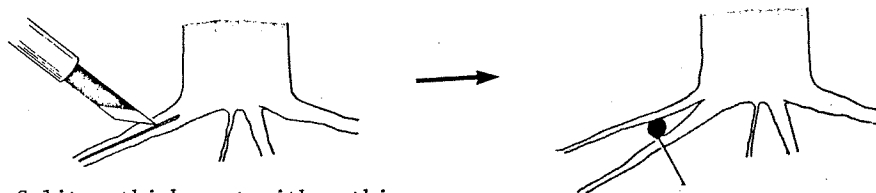


MAKING ROOTS SPREAD

Field grown plant removed from a field where one root collided with an underground stone.

Wire applied

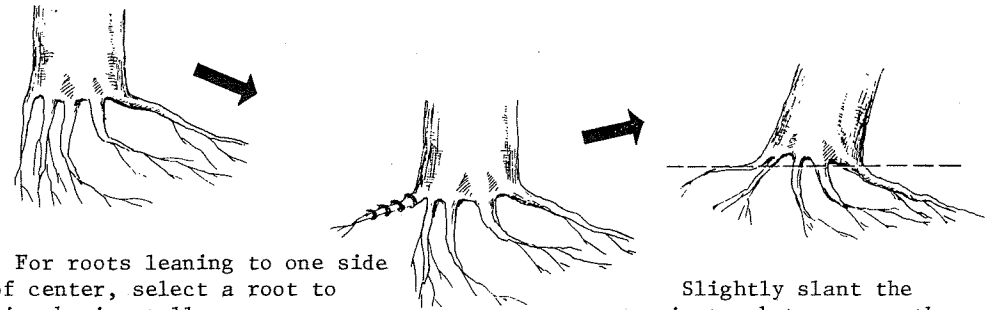
MODIFICATION TO INCREASE NUMBER OF ROOTS



Split a thick root with a thin knife-cut.

Put a small stone between the split sections of the root.

CORRECTION OF ONE-SIDED ROOTAGE



For roots leaning to one side of center, select a root to wire horizontally.

Slightly slant the main trunk to expose the wired root so that it thickens more rapidly.

It is desirable to have a tree's roots appear as if they are grasping the earth's surface. Hence it is to one's advantage to use the above techniques where applicable.

A root system that is evenly distributed to give a stable appearance is one wherein one side of the roots on the surface are not thicker than others which are very thin nor do the roots meander. In addition to that, the shape and bark on the trunk of the tree may be very nice and the branch arrangement may be splendid, while the root system spread on the surface may be a defect and detract from the tree's appearance.

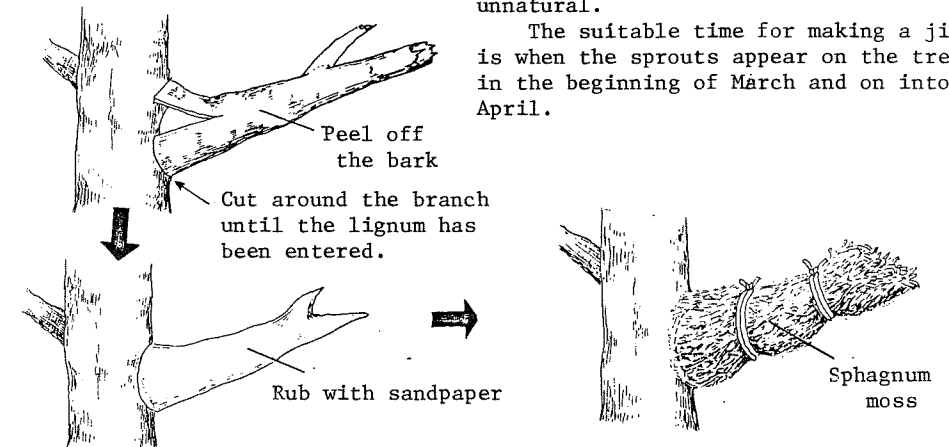
Such root problems can be quickly corrected when necessary.

PROCEDURE FOR JINNING A BRANCH

When a tree's energy has left a branch and it dies, that branch can be retained by making a jin on the branch. A dead branch is jinned when the void left by its removal would demolish the balance of the tree.

All in all it is best to make a jinjin no more than two places and avoid the locations where the result appears unnatural.

The suitable time for making a jin is when the sprouts appear on the tree in the beginning of March and on into April.



Protect against decay with lime sulfur. Use a mixture of 1/10 lime sulfur in water. (Apply the liquid 5 times.)

Leave covering of sphagnum on for a period of about one month.

Continued On Page 10

by Nancy Eaton

Proficiency in bonsai, as in any art form, requires the accumulated mastery of many skills. Thus, novices learn to grow plants in pots and to use wire and specialized tools. Later they learn how to "see" the various traditional styles in untrained material and how to reveal and enhance these visions. Next they gain an appreciation of the roles played by containers and stands; then for refinement techniques such as grooming, carving, and fine wiring. But there is still one more area in which the bonsaiculturist needs to acquire knowledge and experience. It could be called the ultimate refinement technique: the art of bonsai display.

KHAN KOMAI is a gifted bonsaiculturist and teacher who has made bonsai display a special study. The first part of this article is based primarily on his lecture on sekikazari bonsai display and his workshop on accessory plantings given at the 1982 GSBF Convention in San Jose. The second part of the article reports on a visit to "Winter Silhouettes", an exhibition sponsored by Baikoen Bonsai Kenkyukai, January 29 and 30, 1983 in Arcadia. The exhibition, an annual memorial tribute to FRANK NAGATA, Khan Komai's father-in-law and teacher, follows the sekikazari principles of bonsai arrangement.

I. REPORT FROM THE CONVENTION

SEKIKAZARI is a system of bonsai display derived from traditional tokonoma arrangements. A tokonoma is the alcove found in Japanese-style homes, a special place of honor where a landscape or calligraphic scroll is hung on the wall and a flower arrangement or bonsai is placed before it on the floor. The scroll and other objects are carefully chosen to complement one another and work together to evoke a mood, an awareness of season or of geographic locale.

The earliest formal displays of bonsai followed tokonoma arrangement principles. However, it proved impractical to provide scrolls and a place to hang them for each tree displayed, so the requirement of a scroll was set aside. The standard then became a main tree, a secondary tree of a different character from the first, and an accessory object, often a planting of grasses or other herbs or a suiseki (viewing stone).

But today, in the space generally allotted to each exhibitor - a 6-8 foot table - three elements may prove too many: a main tree and an accessory may be all that can be accommodated successfully. As in sumi-e or ink paintings, the empty space around the objects is important to the design. There will always be one, and only one principle tree. Everything else on the display table complements it and helps to develop the theme or mood it suggests. The background should be non-distracting. Ideally no part of the display will project above the background. Carefully chosen and placed, the elements in a sekikazari arrangement will have together a far greater effect than would the random arrangement of two or three plants and stones, however beautiful they are individually.

PLACEMENT OF THE ELEMENTS

In display, as in planting a group bonsai, spacing and proportion are of the greatest importance. As in so many other Japanese art forms, a scalene triangle is the underlying organizing principle used to produce asymmetrically balanced designs. Not all arrangements will be alike, but generally speaking, the main tree is placed slightly off center, either to the left or right, and slightly behind the center line, while the accessory, where two elements only are used, is somewhat off center to the side opposite the main tree and in front of the center line.

The apex of the main tree constitutes one point of the triangle and the accessory a second. Viewed from the

front, the third point of the triangle (where there is no actual third element in the design) is determined by the extension of the main tree's branch line on the side opposite that of the accessory to the point where this line intersects the table. A triangle will also be apparent if the display is viewed from the side.

STANDS

Each element in the display will have its own stand, the top of which should always be wide and deep enough to allow a generous area to show all around the pot placed on it. The main tree's apex will be the highest point in the display; the stand chosen for the main tree may need to have legs to give the proper elevation. In most cases, simple stands are best. They should always be unobtrusive. Stands made of slices of trunks or branches are beautiful but of limited use for main trees: if they are thick enough to give the necessary height, they are usually too massive. Experiment using various stands with different trees. Most often, a tall tree will look best on a relatively low stand, a low tree on a higher one, a cascade on a tall one.

The accessory forms another point of the scalene triangle. The word for accessory in Japanese, *shita gusa*, translates as "undergrowth": the accessory's stand should not have legs.

CHOOSING ACCESSORIES

Most frequently the accessory is plant material or a viewing stone; but it could also be a small artifact (product of human art). It is not used just to brighten up a display, but makes a real contribution to the overall effect. It can actually make or break a display. Often the accessories one sees at exhibitions are too small for the role they are asked to play. A large main tree requires a substantial accessory. The bonsaiculturist needs to have a variety on hand to use at different seasons and with different trees; plant

material is only displayed when it looks its best. Experiment with accessories of various sizes seeking always for the one that has the best proportions relative to the main tree you are considering.

In choosing a stone to complement a principal tree, consider its shape, color, and texture. The same attention should be given the container if the accessory is a planting. Here a simple freeform pot or one made from or to resemble stone can be interesting and versatile. If the container is large enough, it may contain rocks as well as plants. Mixed plantings make very nice accessories. Sometimes they can be dug up in the woods and used just as nature arranged them. They should look natural together in any case. Mixed plantings often have seasonal interest. Bland material such as grasses, if used alone and too often, can be rather uninteresting. Visit nurseries specializing in rock garden plants to see a variety of candidates for possible inclusion in your accessory collection.

Also experiment using plants different from those usually seen - those native to your own locale, perhaps. However, keep in mind there may be a good reason that other people are not growing a particular plant: it may not be suited to the conditions you can provide. Try to find out about any special care that a new plant you acquire may need.

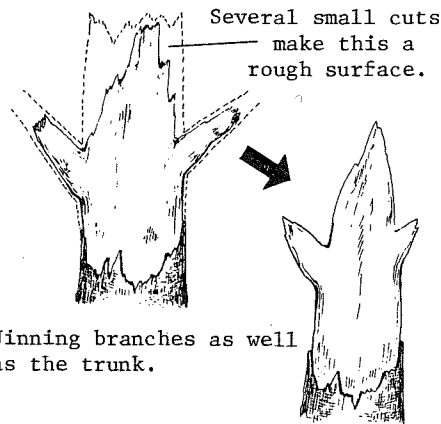
Contrast enlivens an exhibit. If the main tree is a conifer, for example, the best accessory is likely to be broad-leaved.

THEME

The most satisfactory display will be built around a theme such as a particular geographic location, for example, the Sierra or the seashore. In these cases the plants and rocks used should be typical for the chosen ecological province. Seasonal themes are often

PROCEDURE FOR JINNING A TRUNK

Nearly almost always the enjoyment value of a bonsai is lost if the top or "wick" is broken-off.



Continued From Page 7

There always is a good possibility that the bonsai will recover a wick. On a needle juniper and cryptomeria, jinning the trunk may not be desirable since it does give a good impression for those tree species. However, even in those circumstances one might resort to making a jin to consolidate the appearance of the tree.

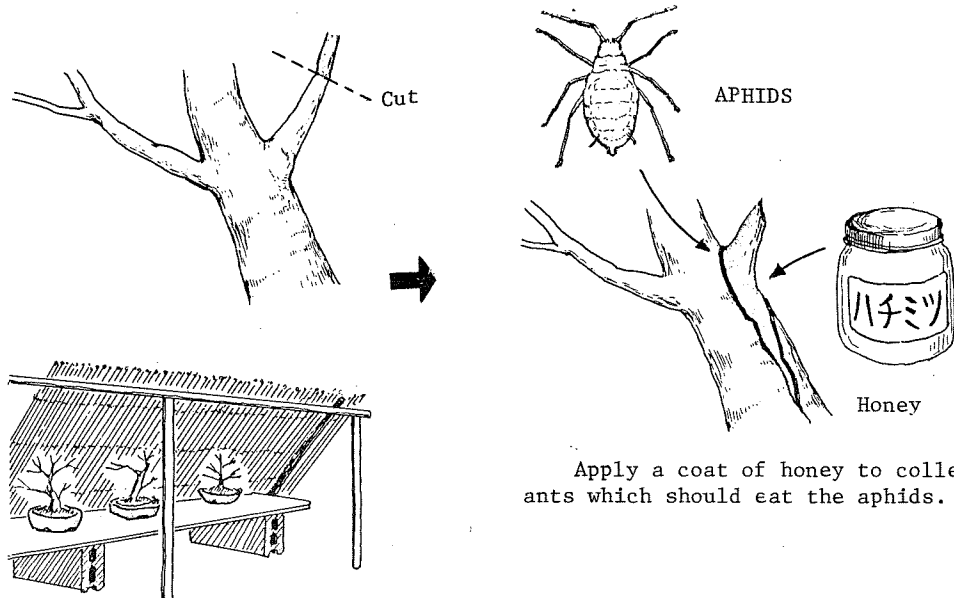
Jinning branches as well as the trunk.

A suitable period for making a jin on the trunk is March 20 - 31.

PROCEDURE FOR MAKING SHARI ON A TRUNK

Not often nowadays are trees procured in the mountains. When this done, one is left with the work of consolidating the branches and removing the dead branches. Once the branch has been removed, a shari can be made. The possibility of subsequent decay should be checked.

The use of shari on an ume (Japanese flowering apricot) frequently brings about a charming effect. It is significant to have the shari harmonize with the tree.

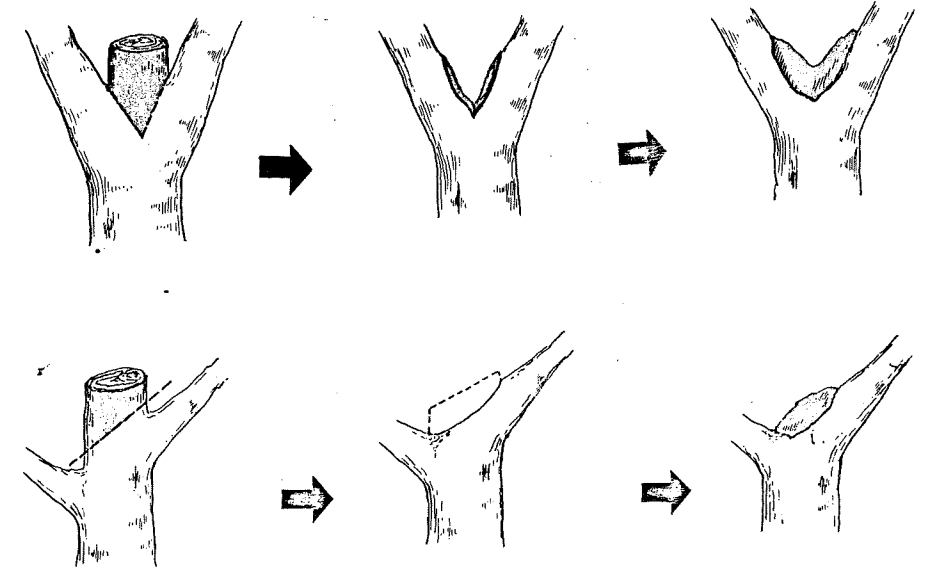


Keep under a lattice in the shade for about one month.

RULES FOR FINISHING A CUT-END

After removing a branch, there is some unevenness and that is not desirable, especially the removal of thick branch which leaves a terribly bad looking, open wound.

Based on the tree species adhesion of the bark around the cut will vary. Please follow the few tricks shown to let adhesion take place.



Cut-off stub with a sawer.

Shave-off the bark with a sharp knife and hollow out the wound with a chisel

Affix chewing gum to the wound.

A good time to do the above is March-April when transplanting is to take place. Do the work before transplanting.

Anyone interested in stores that handle Japanese tools such as saws and chisels, the following may be of help:

O-zora, 238 East Sixth Street, New York, N.Y., 10003, 212-228-1325. Stocks tools and traditional carpenters' clothes.

Mahogany Masterpieces, R.F.D. 1, Wing Road, Suncook, N.H. 03275, 603-736-8227. Free catalog and newsletter.

Garrett Wade, 161 Avenue of the Americas (Spring Street), New York, N.Y. 10013, 212-807-1155. Catalogue, \$3.

delightful. Coolness is a nice adjunct to a summer theme. Water-loving trees such as willows or alders with equisetum could be used. The arrival of spring is always pleasant to contemplate on cold winter days. Here a suitable accessory to a dormant tree might be a pot of young grass coming up through last year's withered stalks. Deciduous trees in the flush of new growth combined with a pot of flowering weeds is an obvious celebration of spring, while colored leaves and colorful fruits combined with conifers symbolize fall. Don't tidy-up a fall display too much; a few fallen leaves, seed pods and dried grasses are natural to the season.

PUTTING IT ALL TOGETHER

Even though the elements are carefully chosen, of the proper proportions, and well-spaced, the display may still not hold together. Step back and examine the lines of the overall composition. Note how the directions of flow inherent in the various elements relate to one another. The lines should direct the eye into the composition or at the most lead the eye to sweep across it. In no case should the elements face away from one another and out of the composition. Simply reversing the positions of the elements may correct this serious fault.

The above article is from "GOLDEN STATEMENTS", Golden State Bonsai Federation, Vol VI No.4 April '83

WATER MOLD ROOT ROT - Ralph Green

Many plants suffer from water mold (pythium) root rot which can be a severe disease that is capable of killing the affected tree.

Excessive soil moisture is a major factor in the development of Pythium root rot. Pythium root rot is a chronic problem in container grown plants. Frequent irrigation necessitated by the small volume of soil in pots creates conditions especially favorable for Pythium. Drought stress can also predispose the roots to infection by Pythium. So, the trick is not to overwater or underwater.

There are several control measures available.

1. Water Management. Take care not to water log the soil or to let it dry excessively.
2. Fungicides. Truban fungicide soil treatment is most effective. This is available to the home gardener in Dexol Tropical Plant Fungicide or Science Truban Fungicide. Follow label directions.
3. Sanitation. Your pots should be clean. Wash, soak in strong bleach solution, and wash and dry again. Buy soil mixes that have been sterilized. Use a potting mix that affords fast water drainage. Keep containers off the ground. Pythium is a very common soil fungus. It could get into containers left setting on the ground.

Pythium is a difficult disease to control. Don't depend on the fungicide to do the whole job for you. Water management is probably the most important factor.

The above was in part enclosed in a letter from Luellen Pierce, Plant Pathology Department, University of California.

The above article is from "GOLDEN STATEMENTS", Golden State Bonsai Federation, Vol 4 No 11 Nov. '81

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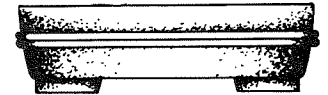
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December and January Schedule

Key:

- | | | |
|-----------------------|-------------------------|------------------------------------|
| B - Buy tree | OB - Open branches | Sp - Spray foliage |
| C - Cut-off leaves | ON - Remove old needles | V - Best viewing time |
| D - Leaves fall off | PB - Prune branches | W1 - Return to once a day watering |
| F - Fertilize | PS - Prune sprouts | W2 - Water 2 times per day |
| I - Use insecticide | R - Repot | W3 - Water 3 times per day |
| HS - Half a day shade | RW - Remove wire | Wi - Wire |

- Bl - Flowers bloom
 F* - Small quantity of fertilizer
 G - Put in greenhouse or under shelter
 W1* - Water but mainly mist
 2W - Water every other day

CONIFERS	DECEMBER	JANUARY	DECIDUOUS	DECEMBER	JANUARY
Cypress			Beech, white	G,I,PB,Wi,W1	G,I,Wi,W
Hinoki	I,Wi	- - - -	Elm, Chinese	G,I	I,Wi
Sawara	I	- - - -	Ginkgo	G,I,PB	- - - -
Hemlock	I	- - - -	Hackberry	G,I	G,I
Juniper			Ivy, Boston	G,I	G,I
Needle	I,W1*	Wi*	Hornbeam	I,PB,Wi,W1	G,I,PB,Wi,W1
Shimpaku	I,Wi	R,Wi,W1		G	W1
Larch	I	- - - -	Maple		
Pine: Black	I,ON,Wi	W1	Japanese	G,I,PB,Wi,W1	G,PB,Wi,W1
Corkbark	I,R	W1		W1	
Red	I,Wi	W1	Trident	G,I,PB,Wi,W1	G,PB,Wi,W1
White	I,PB,PS,Wi,W1	G,PB,PS,Wi,W1	Weeping willow	G,I	G,I
Spruce	G	G,W1			
Yew	I	- - - -			
			FRUIT BEARING		
FLOWERING			Cotoneaster	G	F*,G,I
Andromeda	G	G	Gardenia	G	F,G,I
Apple, crab	G,I,2W	G,2W	Holly	G,2W	F,G,I,2W
Apricot,			Ilex, dwarf	G,2W	F*,G,I
Japanese	Bl,G	G	Pomegranite	G,PB	F,G
Azalea	G,I,	G,2W	Pyracantha	G,I,PB,2W	F*,G,2W
Cherry	G,I,2W	G,2W			
Forsythia	G,I,PB	G			
Quince	G,I,2W	Bl,G			
Tea,bohea	G	G			
Winter jasmine	G,I,W1 to 2W	G,2W			
Wisteria	G	- - - -			

CALENDAR OF EVENTS

- 4 December Sunday KIYOMIZU (301) 423-8230: Potluck Christmas dinner in a member's house. Members will be notified concerning all particulars.
- 8 December Thursday ANNAPOLIS (301) 263-3995: Annapolis Library on West Street at 7:30 p.m. Bring indoor bonsai for discussion on care and styling.
- 10 December Saturday NORTHERN VIRGINIA (703) 256-4615: Green Spring Farm Park Horticultural Center, 10:00 a.m. This will be a holidays party. Members will be contacted to bring different dishes for the noontime lunch. Bob Sitnick will show slides of bonsai in Japan. Jules Koetsch will show movies of bonsai in Japan.
- 11 December Sunday BOWIE (301) 262-8578: Bowie Community Center at 2:00 p.m. Slides by Fred Mies on Japan and Japanese Bonsai. Bring inexpensive gifts for a Christmas grab-bag.
- 18 December Sunday BALTIMORE (301) 669-1847: Cylbutn Natur Center at 2:00 p.m. BBC holiday fun fest - a covered dish dinner - a chance to share bonsai stories and have a good time with your fellow club members. A guest speaker will provide the afternoon's entertainment. The hospitality committee will be in touch with everyone.
- 22 December Thursday BROOKSIDE CHRISTMAS PARTY (301) 593-4681: Argyle Community Center, 7:30 p.m. As happened last year, there will first class refreshments. There will also be a bonsai grab-bag. So plan now to bring a modest gift.
- 21 January Saturday WASHINGTON (202) 583-2676: National Arboretum at 2:00 p.m. Suiseki Vince Covello will be our guest. Bring your own viewing stones for viewing and critiquing.
- 26 January Thursday BROOKSIDE (301) 593-4681: Argyle Community Center at 7:30 p.m. Winter Activities. Bill Merritt will visit and give us ideas for Winter activities. Tool sharpening and soil preparation are two of the many activities that can be done when you cant work on plants. So if Spring always catches you by surprise, plan to attend and get some vabuable pointers. **RAFFLE !!!**
- 29 January Sunday KIYOMIZU (301) 423-8230: At 2:00 p.m. at the home of Joan Stevens, - Annual Planning Meeting.

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The Commerce Department recently awarded its highest honors, the gold and silver medals, to National Bureau of Standards employees. Gold medals were presented to the following for "rare and outstanding contributions of major significance to the department, the nation or the world": Robert P. Blanc, David Garvin.