



# The Tree Shrinker

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A MONTHLY BULLETIN

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## East Bay Bonsai Society

**Meeting:** December 13, 2017 6:30 PM

### December Meeting



The December meeting is the annual event where we celebrate the holiday season with a potluck dinner in place of our usual meeting agenda. Do plan to come and make this part of your festive season. We begin the festivities at 6:30 pm with beverages and appetizers. Note that we start one hour earlier than usual. Doors open at 6:00 pm and we could use help in setting up for the event.

The club will furnish ham and turkey as well as beverages. The rest is provided by attendees as follows:

Last name A-F Side dish  
Last name G-L Dessert  
Last name M-R Appetizer  
Last name S-Z Salad

The appetizer-people should plan to arrive early so food is available at the beginning of the evening. Please supply an appropriate serving utensil for the dish you are furnishing. Also, be sure to bring your own plate and eating utensils. A decorative place mat would make a festive setting for the meal.

In past years the dinners have been memorable due to the delicious offerings of the many fine cooks in

the club. Yes, we collectively have talents besides just growing trees, and these are on full display at the holiday dinner.

People are also encouraged to bring small bonsai decorated for the holiday season as table center pieces. This greatly add to the ambiance of the evening.

The special highlight of the evening will be another slide show presented by Michael Hylton, featuring the club activities during the past year, and focusing particularly on our recent show. Those of you who attended the holiday party last year were amazed and delighted by the splendid program that Michael put together, and we are eagerly looking forward to another superb program to cap off the evening.

### January Meeting



The January meeting will feature Kathy Shaner demonstrating how to further refine a hornbeam into a fine bonsai from challenging material.

A standard fixture of bonsai club meetings is a bonsai artist who attacks a bush and, with much huffing and puffing, turns the bush into a tree with fine bonsai potential. This is only a snapshot into the life of the bonsai, and totally misses the element of how a tree changes over time. Sadly, we only rarely get to see the

tree again, to see how it has developed since we last saw it at the demonstration. On a longer view, trees are living creations, and as they grow, opportunities for managing their growth both open and close as branches either grow or don't grow as expected. The look of the tree necessarily changes, and sometimes dramatically over time.

The January meeting will offer a rare glimpse into how a tree can change over time. The subject of the demonstration is a hornbeam which was initially very challenging material. The tree was the subject of a demonstration by Kathy three years ago, where an overall plan for its development was presented. During the ensuing year, the tree had been radically changed, and returned for a second demonstration by Kathy to show how the tree responded to styling decisions. This year the tree returns for yet another demonstration, and we are eager to see what changes another year has wrought.

Kathy Shaner has served a five-year apprenticeship in Japan, and has been a mover and shaker in the bonsai world ever since her return. She has a nationwide reputation as a workshop leader and demonstrator, and is also the curator of the collection of trees at the Bonsai Garden at Lake Merritt.

### **November meeting**

The November meeting featured Randall Lee showing us how to make a grove of trees on a slab. Actually, this was a twofer because single trees are shown on a slab, and groves are frequently planted in a pot. Randall commented that a grove of trees could be quickly created from inexpensive starting material.

The first thing to consider in making a slab planting is the slab itself. Important criteria for the slab is that it should be more or less oval in shape, should not be shiny nor pink in color, and should not be too heavy. The slab should not have sharp points, particularly facing the front. Once a likely candidate has been found, Randall commented that three holes should be drilled in the stone in a triangular pattern. He uses these holes to firmly wire a piece of wire mesh (hardware cloth) onto the slab. He then places many wires on the mesh which serve to anchor the trees. This is a vital trick. Firmly wiring a large number of trees, complete with roots, all at the same time, is like shoveling fleas, and requires many wires to complete the task. With the wire mesh you can have as many tie-down wires as you want and wherever you want them.

With all the wires in place, the next step is to create a wall of muck at the edge of the slab. Muck is an equal mixture of clay and long fibered sphagnum moss. Randall uses dirt at gopher holes as his source of clay. Potter's clay also works, as well as a shovel of dirt from the Oakland hills which is pretty much clay in composition. The wall is about 2½ inches high. He sprinkled some coarse material inside the wall, and then placed on the slab seven inexpensive trees which had been growing in four-inch pots.

Before planting, he reduced the root ball by about one half. The biggest tree was placed first since that

was the most dominant one, and then he placed the remainder of the trees in decreasing order of size. The smallest trees were placed in the back of the grove, giving the illusion of depth and distance. Usually, there should be an odd number of trees. An important feature of positioning the trees is that no tree should shield another from view, either from the front or from the side.



After the trees had been firmly wired in place, regular bonsai soil was added to complete the planting. Randall said that for a grove on a horizontal slab, no special soil was needed. But if one were planting trees on a rock that was not flat, he would use muck for the soil. You can use rocks in the composition, but they should be of the same material as the slab.

The next step was to cover the soil and the muck wall with moss. The composition was completed by trimming some of the branches of the trees. Heavy branches were removed as well as multiple branches emerging from the same place. Lastly, branches were trimmed to allow light to reach the center of the grove, otherwise the interior branches eventually would die if totally shaded.



Randall clearly delivered what he promised at the outset of his demonstration, that a grove on a slab could be quickly assembled from inexpensive trees, and could give immediately rewarding results. The trick of wiring

mesh to the slab and then adding wires to the mesh to tie down the trees was particularly noteworthy.

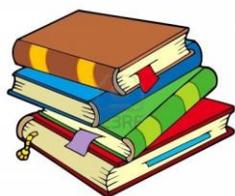
### **Bonsai Garden**

The garden was closed early in November to reconfigure the pathways as well as to complete some of the other necessary improvements, but it is now open. If you haven't seen what has been going on, by all means, the garden is worth a visit. The funding for all the improvements, the GRO fund, is now at fifty per cent of the goal, one hundred thousand dollars. A new feature has been added to the fund. You can order a brick with your name engraved on it (or whatever else you would like) for a contribution to the fund. The bricks are available in three sizes and the required contributions are \$150, \$250 and \$500, depending on the size of the bricks. If you have not yet contributed to the GRO fund, consider the option of ordering a brick.

### **Please! Please!**



At the base of the Statue of Liberty there is a plaque which says something like "send me your poor and huddled masses". Not to be outdone, our very own John Nackley is pleading for your poor and huddled used copper and aluminum wire. It will be passed on to the bonsai garden where used wire is collected and sold as scrap metal. Over the course of a year, this can add up to several hundred dollars which is a nice benefit to the garden. Most donations cost you something. But here is a different kind of donation, so you can participate enthusiastically. You get rid of waste wire at no cost to you, and the garden benefits. John will collect wire at each meeting. Be sure to separate the aluminum from the copper.



On another front, Bev Martinez is making a plea for books on bonsai to upgrade the library. If you haven't taken advantage of our library, you have been missing out on one of the benefits of being an EBBS member. Each meeting, Bev brings out the books in the library and displays them attractively. If you have quality books on bonsai that are gathering dust on your shelves, donate them to the library so others may enjoy them. If you want to refer to them in the future, they will always be there for you.

Bev has done a lot of work to make the library a wonderful and accessible source of bonsai information, and she deserves your support as well as a big thank you.

### **End of an Era**

John Nackley has elected to retire from the EBBS board of directors at the end of this year. John has served with distinction as a director, president and secretary of the board. He does a lot of things behind the scenes which benefit the club. For example, he is responsible for instituting board retreats; meetings where the board can consider long range items and ideas for the betterment of the club. These are items that would be outside of the more normal cares of the day at the regular board meetings. The litany of John's contributions to the club is long, but misses the point of his biggest contribution which is his willingness to quickly shoulder responsibility for issues as they arise. John will be sorely missed on the board. Thanks for all you have done for EBBS John. You have made EBBS a better club.



### **Wire Workshop with John Doig**

EBBS sponsored a wire workshop in which six enthusiastic members studied the essential art of how to wire a tree. The second Saturday of November found these members improving their skills by learning how to wire bonsai at a workshop with our own "Wire Guy", John Doig.



John started the session with encouraging thoughts that the practice of wiring a bonsai for styling can be quite rewarding to your tree's appearance, and also for the satisfaction of getting the job done. The more you practice wiring, the sooner the ease and pleasure will arrive. He expressed that he could find himself in a "Zen" like state at times as he works his trees.

For this workshop, and usually for novice wireers, John encouraged the use of aluminum wire instead of copper. It is easier to undo and reuse aluminum wire, and it is cheaper than copper.

There are three wiring patterns that he demonstrated which the bonsai novice could use to deal with the majority of their tree's need:

- The trunk wire – to create trunk movement in young trees whose trunks are still pliable.
- The branch to branch wire – to create movement in non-opposing branches where the wire is wrapped around the trunk for stability.
- The opposing branch wire - to create movement in opposing branches.

Important techniques to remember for good wiring are:

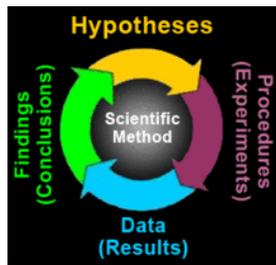
- Always have the branch pointing at you. Hold the wire with one thumb and forefinger while using the index finger of the opposite hand to guide the wire in a spiral fashion around the branch without compressing the branch.
- The angle of the curving wire spiral should be 45 degrees. The spiral should be *clockwise* if you want the branch to curve to the left, and spiral *counterclockwise* if you desire the branch curve to be to the right.
- *Do not overlap or crisscross wires*, though John said he has rarely done so if he was not showing a tree. For several reasons, wires should not cross over each other.

Over the 3-hour session, John spent time with each student as they applied wire to the tree each had brought.

Once again, John Doig did a masterful job as the workshop leader. The participants agreed that the workshop was a great success. In case you missed out, EBS is planning to hold another wire workshop sometime next year.



### Fairy tales



Scientists do their thing by first proposing a hypothesis and then collecting data to confirm or refute the hypothesis. If there are positive data to support the hypothesis, the result then joins our body of knowledge as a fact about how the world works.

Bonsai growers are generally lousy scientists because they skip the data collection bit and go directly from hypothesis to fact. This leads to a lot of lore about bonsai that is either wrong, or only a small part of the total story. In all fairness to bonsai growers, data to

confirm some hypotheses require experimental procedures and analyses that are beyond what we can accomplish in our garages, and others require growing a large number of plants, some of which serve as test subjects and the remainder as controls. Another factor working against bonsai artists is that we grow our plants for fun, and collecting data just doesn't seem like fun. As a result of these barriers, there is a lot of folklore associated with the culture of bonsai. Incidentally, this is also prevalent throughout all horticulture so it is not just us bonsai artists.

A case in point is the commonly heard idea that you need components of your soil which have sharp edges. As the growing roots approach the sharp edges, they divide, and this process produces a healthy and bushy root ball which is needed to support a fine bonsai tree. The thought is espoused by none less than one of the finest contemporary Japanese masters. He tailors his soil compositions to what he perceives that the tree needs, but always includes a scoop of sharp gravel for the roots. He grows some of the finest trees in Japan, so he must be doing a lot of the things right, but is part of his success due to the presence of sharp gravel in his soil composition?



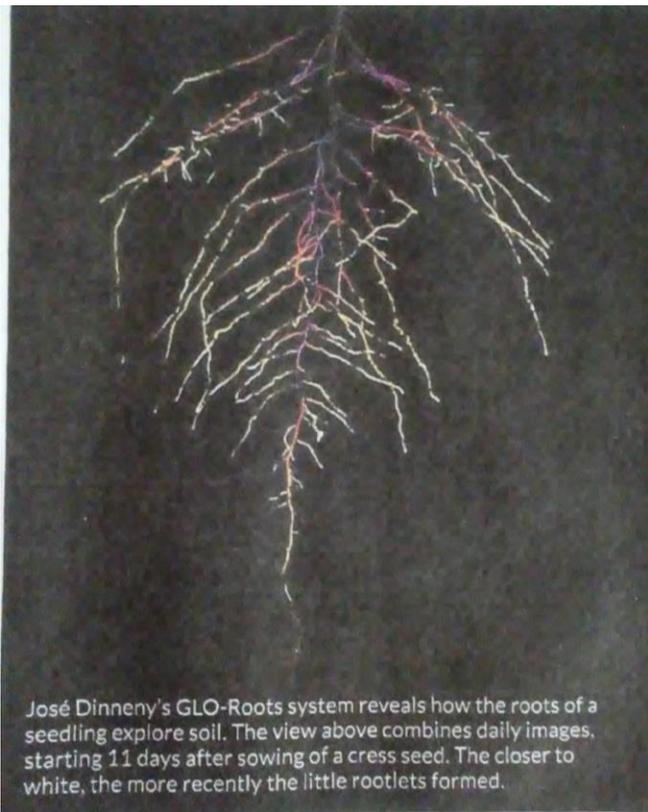
Let's look at this in detail and see if the available data supports the root hypothesis. The first place to look as a test for this, as well as many other hypotheses, is simply, does it seem reasonable? We don't know a lot about what goes on under the soil we plant our tree in, so it does seem reasonable that this could be an important process in making a fine bonsai tree. The next place to look is at all the fine bonsai shown at a local show. These trees are grown under a wide variety of cultural conditions. You will see many beautifully grown bonsai, and these have not all been grown in soil compositions which contain components of sharp edged rocks. The implication is that you may not need the sharp edges to grow lovely root systems, although it is possible that some trees would grow even better with sharp soil components. This observation introduces a note of skepticism in the hypothesis

Next, let's select a particularly fine dandelion growing in our lawn and carefully dig it up. When we wash the dirt away from the root ball, we see the structure of the roots consists of long roots which have shorter side branches. None of the longer roots show any signs of dividing at the tips of the roots. This type of growth is what we are familiar with when we observe our junipers. The junipers send out strong shoots in the spring which show no signs of dividing at



the tip. Each new branch has a lot of buds along its length which produce side branches and which eventually grow to form a pad. Our inspection of our dandelion tells us that roots do not divide when root tips encounter a sharp-edged soil particle, but something else must be going on to initiate branching of the roots.

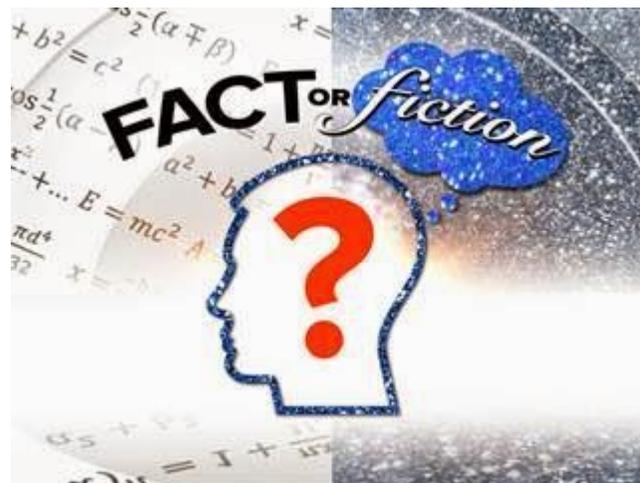
A recent article in Science News (October 14 issue) discusses work by a researcher who is attempting to answer two questions: what causes roots to grow and what are the cellular mechanisms for this growth. He uses an elaborate experimental procedure. The plants are grown in a very thin layer of soil sandwiched between two plates of glass. The plants are treated with exotic chemicals which cause the roots to glow with visible light wherever active growth is taking place. His system is called GLO-Roots, and you can find more about it through google, but be prepared for some heavy reading.



The glowing roots are monitored by a sophisticated computer program. The study also uses micro cat scans on the growing roots to further interpret the visual observations. Yes, this is all a bit outside of our capability. The result of his work so far is that the root can sense a tiny source of water in the soil somewhere along its length, and this sets in motion the mechanism for growing a side root.

We will leave him busy at work in his laboratory answering how the roots sense the presence of water, and all the good things that happen in the root's cells that makes generation of the new root happen. For our purposes, he has pretty well shot down what sharp edges do for root propagation in a soil mixture.

As collateral damage, he also shot down another hypothesis one occasionally hears, that roots take up water as vapor in the void spaces in the soil. He conclusively shows that the roots look for liquid water adhering to the components of the soil.



Some hypotheses can be rather quickly filed in the fake news folder. As an example, on page 92 of the book entitled The Bonsai Workshop by Herb Gustafson, the author is discussing the practice of using coarse material on the bottom of the pot ostensibly to enhance drainage. He comments "recent research in soils science indicates this might be doing more harm than good. Water tends to move from a large particle to a smaller one. This results in an upward migration of moisture, creating a shortage of water for the deeper roots and causing a buildup of salts."

Does the hypothesis that coarse drainage material in the bottom of the soil in the pot has bad effects sound reasonable? Next, do a lot of the trees in a local show that have coarse material as a lower layer in the pot (you have to ask the growers about this), and if so, does this affect the trees in a bad way? The hypothesis doesn't pass either test with flying colors. The migration of water is suspect and there sure are a lot of fine bonsai trees grown with a lower layer of coarse material at the bottom. If one wished to apply a little data to definitively confirm or reject the hypothesis, one could grow some trees with drainage material and compare the results with similar trees grown without drainage material.

So where does this leave us? What do we really need to know about how to grow our trees? Let's go back to the first and probably best source of data, bonsai shows. What are the common things that we can draw from all the trees in the show? Trees are grown in a wide variety of soil mixtures so composition of the soil is not important as long as it is well draining. Trees are grown in good light so light is important. Finally, a wide variety of fertilizers are used so the particular type of fertilizer is not important.

Notably absent are trees that have been allowed to completely dry out, so consistent attention to watering is important. First and foremost, we need to recognize that the trees really want to grow for us and look their very best. We need to focus on growing and enjoying our

trees and to avoid messing them up by micromanaging how to grow them and attempting to deduce how they grow using fuzzy "facts".

### **Bonsai Calendar**

- Sun – Move all trees into full sun.
- Watering – Adjust watering for winter.
- Fertilizing – Use low or zero nitrogen fertilizers.
- Repotting – Generally, not the time for repotting.
- Styling/Pruning – Trimming should be minimal. Prune maples before cold weather to minimize bleeding.
- Insect and disease control – Remove dead plant material. Apply dormant spray. Watch for and treat insect infestations.

*Refer to the EBBS Bonsai Calendar for more details on seasonal care.*

### **Instruction on Bonsai – December 11**

Instruction is in the form of workshops and is a splendid opportunity to learn how to develop your trees into first class bonsai. In these workshops you work on your own tree under the guidance of an experienced bonsai artist. The workshops are open to all experience levels and are usually held at 7:00 pm on

the fourth Monday of each month when the college is in session.

***Because of the holidays, the December workshop will be on the second Monday, December 11.***

The meetings are in the Landscape Horticulture Building at Merritt College which is located in the Oakland hills off Redwood Road. The workshops are free. There is a gate across the road leading to the parking lot that will automatically open when you pull up close to it. Leading the workshops are two members of EBBS, Bill Castellon and Randal Lee. You can contact Bill at 510-569-8003 or Randall at 510-846-0841.

### **Events by Others**

GSBF's Bonsai and Suiseki Garden: open Tues. - Fri. 11:00 am – 3:00 pm, Sat. 10:00 am – 4:00 pm, Sun. 12:00 noon – 4:00 pm Enter at gate across from Boat House

### **Wanted to Buy (or for free)**

Each membership household, free of charge, may place a five-line ad related to bonsai in two newsletters each year. Send a copy of ads to your editor by the fourth Monday of the month to appear in the next publication. To place an add call (925) 458-3845.

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## **East Bay Bonsai Society—Schedule for 2017 - 2018**

**Regular Meetings:** Second Wednesday, every month (except August and October) @ 7:30 pm

Place: Lakeside Garden Center, 666 Bellevue Avenue, Oakland.

Visitors welcome.

Website for Bonsai Garden Lake Merritt: [www.gsbf-lakemerritt.org/](http://www.gsbf-lakemerritt.org/)

### **Meeting Program**

Dec	13	Holiday Dinner
Jan	10	Styling Raft Hornbeam - Part 3 – Kathy Shaner
Jan	28	Introduction to Bonsai at BGLM – Tom Colby
Feb	14	Plant Biology and Development – Lisa Harper
Feb	25	Introduction to Bonsai at BGLM – Bob Gould
Mar	14	Tool Sharpening and Grafting – Gordon Deeg
Mar	25	Introduction to Bonsai at BGLM – John Nackley
Apr	11	Redwoods – Bob Shimon
Apr	22	Introduction to Bonsai at BLM – Janet Nelson
May	9	Trident Maple – Peter Tea
May	27	Introduction to Bonsai at BGLM – Linda Soliven
June	13	Carving – Tim Kong
June	24	Introduction to Bonsai at BGLM – Tom Colby
July	11	Auction

### **Special Events**

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