THE BONSAI Wire

The Newsletter of The Greater New Orleans Bonsai Society

November 2019

FROM THE President

I hope everyone enjoyed the October program. My sincere thanks goes out to Kirk Vaughn, who designed a chokkan style Chinese Elm, Robert Reed for creating a bunjin style Shimpaku juniper, and Kathy Barbazon who designed a moyogi style Kingsville boxwood. And congratulations to the three individuals who won each of the finished pieces at the end of the demonstrations.

Robert Reed, Kathy Barbazon and Kirk Vaughn designing three different species at the same time

President *cont. pg 8*

MEETINGS & Events

Tuesday, November 12, 2019

Intermediate Study Group (Among topics for discussion - Caring for your pine in the Fall) 6:00pm-7:15pm

Program: Guy Guidry Lecture/Demo 7:30pm

Nationally renowned bonsai expert Guy Guidry (and longtime GNOBS member) will be visiting us to do a lecture demo. Guy will demo three junipers with an emphasis on creating deadwood, jin and shari. Guy is always an entertaining presenter and a artist at doing original bonsai designs.

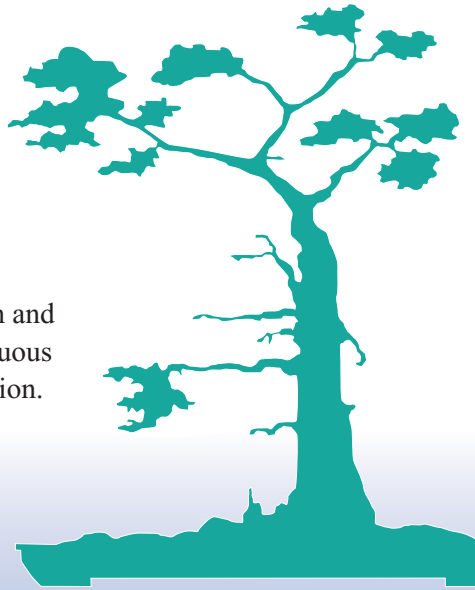
GNOBS Board elections will be held at the meeting. See more details page 7.

Note: There will be a sign up sheet at the meeting to note what dish you are bringing to the Christmas Party.

Tuesday, December 10, 2019

Program: Annual GNOBS Christmas Party 7:30pm

Bring your spouse or plus one and your favorite covered dish (side dishes, entrées, desserts) for our annual potluck Christmas party. The club will supply a ham, beverages and plates/utensils. Everyone attending gets a free raffle ticket for some great door prizes.



Tuesday, January 14, 2020

Intermediate Study Group 6:00pm-7:15pm

Program: Silhouette Show 7:30pm

The Silhouette Program is a study of branch ramification and evaluation of plans for further development of our deciduous bonsai. Bring in a deciduous tree for display and discussion. If you don't have a deciduous tree, you are welcome to bring in any tree. Advanced members will make suggestions to further refine your trees.

Meetings take place at the **Marine Corps League Hall, 2708 Delaware St., Kenner, LA**. For more information, articles and everything bonsai, check us out on our website at www.gnobs.org

SPECIES **Spotlight**

Bald Cypress as Bonsai (Part 9)

(Creation of Knees on Bald Cypress)

by Randy Bennett

The following is the ninth in a series of articles on bald cypress as bonsai

I am not the only one who has been successful growing knees on bald cypress in bonsai culture. I know that Felix Famularo has as well. But as far as I know, no one else has written about it. One thing that I have seen bonsai practitioners do to try and create knees is to take small roots, pull them above the soil surface and wire them together to form a loop. Cypress knees do not form in this fashion in nature and they will not form by doing this in pot culture. There are several tree species, native to swampy areas that naturally form these "looping roots".

Naturally occurring "looping root"

However, a looping root is not the same thing as a knee, nor can you form knees in that manner. Before we get into the method that I use to develop knees on bald cypress bonsai, let's talk about a couple of topics relating to knees.

There are two areas of discussion: first, the purpose or function of knees and second, what causes them to form. Now it may seem like the two are synonymous, but in truth, they are very different. The first area for discussion; the purpose or function of cypress knees, is one that is still up for debate. Various hypothesis have been postulated on the purpose or function of cypress knees: oxygen intake for the tree during extended periods of high water, increased structural support in unstable soil, vegetative reproduction, a means of releasing methane, a means of accumulating nutrients from the water, and finally, as a mechanism for storing carbohydrates. A few of these have clearly been disproved, such as a means of releasing methane and that their function is for vegetative reproduction. As for the others, there is still no definitive explanation for their purpose. Some will argue one theory or another and cite this text or that as evidence to support their idea.

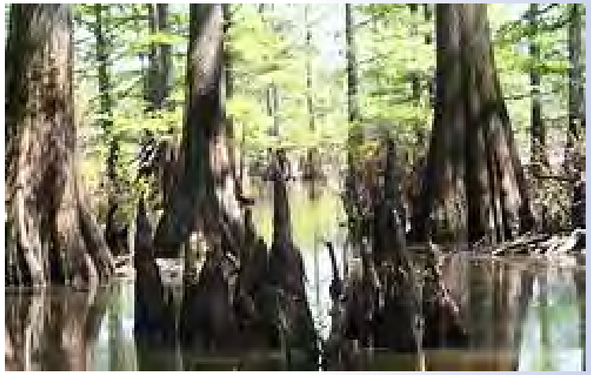
However, there have been a number of research studies conducted on this topic and several books written. And like so many other topics of research and study, one can find studies to support or disprove just about everything. The fact is, that after 200 years of research, there is still no universally agreed upon purpose for cypress knees.

Whether their function is aeration of the root system, storage of carbohydrates or something else entirely, is not as important for us as bonsai artists as to know how to create knees, keep them in scale with our bonsai and keep them alive. I will talk about all three. This brings us to the second area for discussion: what causes knees to form in bald cypress. There are a couple of pieces to the puzzle that you first must have. First, research has confirmed that, in the appropriate wet environment, bald cypress trees will begin to form knees when they are about 12 years old. So, first and foremost, you have to secure a cypress that is at least that old, if not older to grow your own knees in bonsai culture. Second, cypress knees only develop from surface roots.

Erosion along this slow moving river has exposed the knees and surface roots of this bald cypress

They do not form from roots that are deeper in the soil, but strictly from the topmost roots. This is great news for bonsai artists in that it means that we can develop knees while growing our cypress in bonsai containers. Third, I have observed that knees tend to form 'en masse' when a tree is in pot culture. That is to say that, if a tree develops 10 knees, they all tend to form in a single growing season and will grow quite rapidly.

Let's think about when we see and, more importantly, when we do not see, cypress knees developing. Most obviously, we see cypress knees developing in the swamps, along the banks of slow moving rivers and bayous. In this type of environment, knees will average between 6 to 36 inches in height, although they have been seen in some areas growing 8 to 10 feet. The record is 14 feet. It was discovered next to a mature bald cypress growing along the banks of the Suannee River, which flows through portions of Georgia and Florida.



We see them develop on dry land where the water-table is within a few feet of the soil surface. In this type of environment, we will typically see knees that range from 2 to 12 inches on average.

On higher ground, knees do not grow as tall as when they grow in water

We do not see knees develop on cypress growing in deep water.

We do not see knees develop on cypress growing on high ground.

And we do not see knees develop in pot culture. The one mitigating factor that results in the formation of knees is … water. And water at the right depth in relation to the roots.

Bear with me while I share a few observations regarding bald cypress bonsai. There have been many of my students, peers, teachers and mentors, during the past 40+ years that have developed excellent bald cypress bonsai. But to my knowledge, Only Felix and myself have been successful developing a cypress bonsai and growing knees while in bonsai pot culture (at least that has written about it). There have been cypress that were collected from the swamp that already had knees attached to the collected root structure and that were incorporated into the design aesthetic, but the problem with most of the knees collected with those trees is that they are out of scale with the bonsai. Because they are at least several years old and growing on a cypress that is at least older than 12 years, they are typically already too tall. They were in scale with trees 12 to 20 feet in height, but not 3-4 feet in height.

The tree at right is a well-known specimen that belonged to Vaughn Banting and is now on display in Washington D.C. While the protrusion to the right of the trunk looks like a knee, it is actually a

"looping root", though the root evokes the feeling of a knee. It served as a model for all future flat-top designs in cypress and I was recently told that the "looping root" on this cypress died. The tree is in good health, but the looping root died. Aside from such news being very disappointing, I found it very interesting and feel that it confirms a theory I have incorporated into the care of my own cypress to help ensure the health of my tree's knees. I will share this philosophy a little later in this article.

A couple of my former bonsai students and I began experimenting on developing cypress knees in pot culture about 26 years ago. Felix Famularo grew his own knees on a collected bald cypress using the simple technique described in this article. That tree is currently being maintained in a private collection. Wayne Greenleaf began a longitudinal study in the late 90's to try and create buttressing on young bald cypress by duplicating the rise and fall of water levels that naturally occurs in swamps, where the soil surface is completely submerged for months at a time. Sadly, Wayne moved away and I was unable to hear about his findings. It is my understanding that Bill Butler, a fellow member of the Greater New Orleans Bonsai Society, has taken up the experiment. I look forward to hearing about his results in the years ahead.

The following practice for developing cypress knees in bonsai culture is a result of that effort. There certainly may be others who have achieved success by using variations on this theme, this is simply the method I use.

AGE – Make sure that you collect a tree that is at least 12 years of age. Here in the New Orleans area, we collect our cypress in January. Cypress tend to leaf out early in our climate and may already be leafed out by February. I had planned to go collecting last year on January 6th, 2018. However, it was 72 degrees outside that weekend, so I postponed it another week. So here in New Orleans, you really have to give some thought as to when you go collecting and choose your weekend wisely.

It is not possible to know the exact age of a collected cypress, but if you talk to people in the nursery trade, they will tell you that bald cypress in the ground grow 1 to 2 feet a year. So I recommend collecting a stump-cut specimen that is at least 12 to 18 feet tall, just to be on the safe side. You will have two to three years of growing in a container before knees will develop anyway, so you are pretty safe going with that height. If you are collecting a blunt and fluted variant, which typically grow in more open areas, it will be impossible to know the age. But if you have a buttressed or fluted base, you can be pretty sure that it is older than 12 years.

SOIL - All of the artists I know pot their cypress in bonsai soil (with the exception of my former students). There is nothing wrong with that. Bald cypress is an extremely adaptable species and will maintain vigor and excellent health in bonsai soil with routine care and maintenance. However, bonsai soil is not conducive to developing knees. Let me correct that; it is not necessarily counter-productive to developing knees, but it IS counter- productive to maintaining their health and keeping the knees alive.

When I pot a newly collected cypress, I do so using Miracle Grow Potting Mix with Moisture Control. The moisture control components keep more moisture in the soil than other potting mixes. I use it during the knee development stage and at every repotting, to maintain as much moisture in the soil as possible for the health of the knees and the tree as a whole. Remember, their native environment is in standing water.

Cypress like an acid soil and you certainly get that with the vast organic composition of the Miracle Grow. You may certainly pot your cypress in bonsai soil and still develop knees through water inundation. It is soil inundation with water that causes knee development, not soil composition. However, once knees are created and you remove your bonsai from the water reservoir, bonsai soil will not retain sufficient moisture to ensure that the root mass remains wet throughout the day. Consequently, the tree will have a tendency to sacrifice some, or possibly all of the knees you developed. This can happen over a long period of time or quite rapidly, depending on the amount of moisture in the soil and the age of the knees. In other words, by removing the catalyst for creating the knees, you remove the need for the tree to keep them as a viable structure.

This photo was taken in May of 2016. The 23 knees that developed all pushed up at the same time. The tree had been growing in a large bonsai pot for three years.

WATER – I developed a bald cypress bonsai with knees a few years ago that yielded 23 knees in the bonsai pot, all of which emerged during a single growing season. A couple were 3 inches in height and the rest were one to two inches. What I have discovered is that the height of cypress knees depends on three things: first, the proximity of the water table to the surface of the soil, second, whether or not the water level rises above the soil level and third, the depth and duration water reaches during periods when the soil surface is inundated.

Water absorption into the woody tissue that is submerged for months at a time is the reason cypress trunks develop a buttressed base. Where the depth of the water only varies a few inches to a few feet during the course of a year, the buttressing on bald cypress occurs only on the lower portion of the trunk and is the most typical type of buttressing seen. However, in areas where extreme variations in water depth occur, buttressing increases proportionate to periodic, sustained water depth.

The cypress pictured below were found growing about a hundred feet apart in Catahoula Lake, in central Louisiana. The water in this lake is controlled with flood control dams installed by the Corps of Engineers in the early 50's. The lake is drained every summer and the subsequent water depth changes more than 20 feet during the course of each year.

The result is the development of extremely high buttressing. These photographs were taken in August when the lake levels were at their lowest. The buttressing extends up some 15-18 feet as a result of high water for extended lengths of time. Close examination revealed small roots 6 to 7 feet above the ground that sprout each year when the water is high, then dry out when the water recedes.

Teresa Bennett by one of the "bottle" shaped buttresses

Dennis Burke by a more typical elongated buttress

In addition, you will note that there are very few knees that have developed compared to what one normally sees in the swamps. The bottom of Catahoula Lake is very sandy and retains little water when the levels are down in the summer months. Moreover, a number of the cypress knees that were examined were found to be dead, even though the trees were very healthy.

I found this to be a very interesting phenomenon. In my experience, this does not occur in more typical swamp- like conditions. Cypress knees do not randomly die. It raised a couple of questions for me. What was so different about Catahoula Lake that could impact the development and health of cypress knees? Was a pathogen or insect unique to Catahoula Lake attacking the knees? If so, why would the knees be infected and not the trees themselves? Were the knees being impacted as a result of chemical spraying? Or was it environmental?

There was no evidence of borers or other similar insect that would attack and kill a cypress tree. If there were some sort of disease, it was not readily apparent in the parent tree. Although at one time the Department of Wildlife and Fisheries was on a campaign to eradicate water elm on the lake bed of Catahoula Lake through chemical herbicides, that practice ceased years ago. Clearly, I am no botanist and there may be some explanation that eludes me. However, it is my opinion that the cause is environmental.

Follow my logic and see if this makes sense to you. We already know that knees do not form at all when the water table is well below the soil surface (6 feet and more). The average depth of Catahoula Lake, as measured by a gauge monitored by the Corps of Engineers, is 46 feet during the winter months after closing the flood-control gates in September. In July and August, that depth is recorded at around 22 feet. That means that the water level drops some 20 feet or more during the hottest months of summer.

The lake bed is very sandy. When the water level drops, water is not retained in the soil. This is also evident when we collect cypress and water elm in August from the lake bed. A lot of the soil falls away from the roots when collected and the soil is quite dry.

So let's look at what we know: We know that a cypress tree must be at least 12 years old before it can produce knees. We know that cypress knees only develop from surface roots. We know that cypress knees do not develop in water that remains deep. We know that cypress knees will grow best in water that is a few inches to a foot deep. We also know that cypress knees will grow taller in areas where the depth of water fluctuates during the course of the year, but still remains above the soil surface. And we know that cypress knees will remain short when the water table is close to the surface of the soil but does not inundate it. We also know that cypress knees will not develop when the water table is far beneath the soil surface.

That knowledge brings up several questions: Why do cypress knees not develop on trees growing in deeper water, when we know that knees can grow up to 14 feet in height? Just because they need exposure to light and air to form bark, does that mean cypress knees need exposure to light and air to develop? If not, why do they not form and remain beneath the surface when cypress trees are growing in deep water? How close to the soil surface does the water table have to be in order to trigger the formation of knees?

What causes some knees to die on cypress growing on the Catahoula Lake bed? Is it because the water level, which triggers knees to form in the first place, dropped to a such a level below the soil surface that the tree abandoned the knees because they were no longer needed? If such is the case, then why are some knees abandoned and others not? Or, is it because the water level remains too high for an extended period and the knees cannot survive? If high water is the cause, then why do some knees survive and others live? I cannot tell you the answer to these questions. They still perplex me. I can only tell you what I have come to believe as a result of my own experience. I have grown a number of cypress over the years in tubs of water as described in this article and grown my own knees. However, when I have permanently removed the bonsai container from the tub of water, I have experienced the death of some of the knees that were developed.

It is my contention that the withdrawal of water from the surface root structures is responsible for the death of knees in bald cypress. In the same way that excessive water absorption helps to form the buttressing of bases on bald cypress, it also contributes to the formation of knees in the surface root tissue. And while there are plenty of roots below the surface to supply a cypress with water, if there is insufficient water in the soil to sustain the swollen tissue of the knees, (which only develop from surface roots) they will eventually abandon that root structure because the reason for its initial development no longer exists. This is why you do not see knees develop in routine pot culture. And this is what I believe happened to the looping root on Vaughn's cypress in the national collection. If you are determined to keep your cypress in bonsai soil, then you will need to ensure that the soil retains excessive moisture throughout the day or place the bonsai pot in a water reservoir in order to keep knees healthy.

POTTING – I immediately pot newly collected cypress into a bonsai container appropriate to the trunk size and estimated finished height. I use a chainsaw to achieve a flat base in order to get it into a pot. I determine the front based on the nebari or buttress and anchor it into the container. Once the tree has been properly potted in Miracle-Grow Potting Mix, the tree and bonsai pot are placed in a plastic mortar tub which serves as a water reservoir. If you are using a bonsai pot that is significantly smaller than the mortar tub, you will need to place a sufficient amount of pea gravel in the water reservoir to insure that the soil surface is about an inch higher than the highest possible water level.

What works equally well is to pot the newly collected piece in a smaller mortar tub or restaurant bussing tub and place that container in a larger mortar tub. If you use a smaller tub within a larger tub, I recommend that you make sure that the smaller tub, serving as the potting container, has adequate drainage holes and use pea gravel to raise the smaller container as described above.

One word of caution; if you choose to do your initial potting in a plastic tub, be prepared to do one of two things: either pot the tree in a bonsai container that is significantly larger than the mortar tub, or accept the fact that you will have to cut away some of the knees when you repot it into a bonsai container. Invariably, some of the knees will form against the side of the container you use to develop your knees. So if you don't want to risk having to cut some of them away and risk losing others that may be nearer the trunk (since some surface roots may double back toward the interior of the pot), plant your newly collected specimen in a suitably sized bonsai container on day 1.

WATER – The mortar tub is filled with water up to, but not above, the rim of the bonsai pot. The water level is maintained daily throughout the year(s). It is essential to check the water level daily in the heat of summer. Between evaporation and the trees' uptake of water and transpiration, the level may drop several inches in a single day. Remember that water is the catalyst for developing knees. Once the knees develop to the desired height, remove the bonsai pot from the mortar tub or water reservoir for repotting, since it will have been about three to four years since initially collecting the tree.

At this point, you have a couple of options: repot the tree into a soil that retains as much water as possible or place it back into a water reservoir of a lesser depth and more aesthetically pleasing than the mortar tub – especially during the heat of summer (or both). Even if you do not use a water reservoir and opt for a soil with high water retention, you may find yourself losing a couple of knees over the years due to the artificial water table you created disappearing.

FERTILIZING – Following the emergence of new growth, follow whatever fertilizing regimen you normally use. I use organic fertilizer as soon as leaves begin to emerge.

PRUNING – With the front of the tree established and potted in a bonsai container, I carve the trunk in back of the apex into an elongated convex shape. This facilitates the formation of callous tissue in such a way that there is no unsightly ridge along the edge of the large cut. The cut, once healed over, will maintain the curved contour of the trunk. Once shoots emerge, I determine which one will be my apical shoot relative to the front of the tree and rub off those that emerge in the immediate vicinity, to avoid competition for growth.

Next winter, I may have to come back and readjust the carving at the back of the apex, depending on where my apical shoot emerged. However, from my experience, that is seldom necessary since they tend to pop at numerous locations along the edge of the angled convex cut I carve when the tree is first potted. You can select shoots that pop on the trunk for the future branch structure as described earlier in this article, but do not prune the apical shoot. It must be allowed to grow unchecked. This will facilitate healing of the large cut, but more importantly will begin to generate a lot of roots due to all the new growth.

KNEE DEVELOPMENT – It is important to understand the following component of knee development: your tree must become root-bound. On a collected trunk, such as I have described, this usually takes 3-4 years. It is the combination of water inundation in the soil and unrestrained growth that facilitates the formation of knees.

Leave the tree in the water reservoir until the knees have reached a size that is proportionate to the tree. The knees will tend to grow quickly and may shoot up several inches in a single growing season.

Remember this as well; your knees are formed from roots. Roots continue to grow. Your knees will continue to grow as well. However, they will not grow to the size that you see in nature and will tend to remain in proportion to the tree as long as you do not keep the soil surface submerged for years after knees have formed.

As a side note, pond cypress rarely develop knees and when they do, they tend to be very short and have a very round top as opposed to bald cypress knees which can grow much taller and are often more pointed or conical in shape. And while pond cypress will develop buttressed bases, they rarely develop the fluting that characterize bald cypress.

My observations would indicate that knee growth is slowed when the bonsai container is removed from the water reservoir. You will be able to tell when the tree is becoming root-bound when you see roots growing from the drainage hole in the bottom of the bonsai container and they begin to cover the bottom of the water reservoir. But maintaining the health of the knees is critical. Do not deprive them of the source of their creation – excessive water in the soil. In the heat of summer, you may find it necessary to place the tree back into a water reservoir, but if you use a potting mix that maintains moisture in the soil throughout the day, it will not be necessary.

I want to thank and give credit to Vaughn Banting, for serving as my guide and mentor into the study of bald cypress as bonsai. It was he who first began studying their growth patterns and first proposed that the flat- topped cypress should be considered as a legitimate bonsai style. No one stands alone as a bonsai artist. Any success or skill that we possess is built upon the successes and skills that others have initiated.

I hope that my efforts, in some small way have contributed to Vaughn's work. There is still much work to be done and many questions yet to be answered relative to bald cypress. I hope that there will be other bonsai enthusiasts that will continue to add to our growing reservoir of knowledge on bald cypress.

GNOBS Elections

Elections for the 2020 Board will be held in November.

Current Nominations are:
Randy Bennett - President
Dennis Burke - Vice President
Dawn Koetting - Treasurer
Cheryl Mechler - Hall Manager
Kathy Barbazon - Newsletter/Website Editor
Jim Osborne - Masters Program Director
Peggy Howard - Secretary

All members are welcome to run for any board position with the exception of President. Any nominees for President must have served on the board previously. If you would like to run for a position please let Randy know so he may announce it.

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Past President:
Peggy Howard

President *cont. from pg 1*

Kingsville Boxwood before styling

Kathy Barbazons' finished design

Shimpaku Juniper before styling began

Robert Reeds completed bunjin design

Chinese Elm before styling began

Kirks' elm after making some major cuts

GNOBS has acquired a club discount with American Bonsai Tool & Supply Co. (AmericanBonsai.com). All club members can receive a 10% discount by using the discount code GNOBS10 on the checkout page. There is no minimum purchase required to receive the discount and shipping is FREE on orders over $99.

American Bonsai is known for their high quality stainless steel tools. They also sell pots, supplies, soil, wire etc.

Tips for November

The weather has finally begun to change. We have actually had a couple of nights in the upper 60's! And with cooler temperatures come adjustments to what you need to be doing for your bonsai.

1. First and foremost, you should be cutting back on your watering. Check for dampness in the soil with your finger. If you feel moisture, don't water.
2. Continue applying fertilizer with little or no nitrogen. This is especially important if you want to help ensure that shoots and twigs that formed late in summer have the nutrients they need to build stronger cell walls to prevent dieback. This is especially true of re-leafed Japanese maples, swamp maples, bald cypress and hackberry.
3. As trees begin to lose their leaves and sugars and starches are sent into twigs, limbs, the trunk and the roots, there is a tendency for branches to swell considerably. So check any wire that remains. You want to avoid any unnecessary scarring.
4. This is a good time to start thinking about what pots you are going to need for the spring. Order them soon.
5. Continue with insecticide applications. This is the time of year that a lot of insects begin laying eggs in the cracks and fissures in the bark of trees.
6. Also, start getting together ingredients for soil mix that you will need for repotting
7. Take inventory. Don't forget about ordering any wire you might need.

November Program

You won't want to miss the November program! Our own Guy Guidry will design 3 junipers! His program will focus on creating deadwood, jin and shari.

Guy with his famous bald cypress "Twister"

Guy is an internationally known bonsai artist. He has taught bonsai on several continents and we are indeed fortunate to have him come do a program for us. Don't miss it!

December – CHRISTMAS PARTY!

Our meeting in December will be the GNOBS Christmas Party. We would like for everyone to bring a dish. The club will provide a ham, but we will need vegetable and casserole dishes as well as salad dishes. And did I forget to mention desserts? So put it on your calendar and plan on preparing your signature dish to share. In addition to the food, fun and fellowship, we will be giving away a bonsai tree from Brussels' Bonsai Nursery, a nice bonsai pot and a $100 dollar gift certificate from American Bonsai Tool and Supply Co!

Japanese black Pine Study Group

The next meeting of the Japanese Black Pine Study Group will be held on Sunday, November 17. The meeting will be at Randy Bennett's house from 9:00 to noon or until the coffee and doughnuts run out! The focus will be on needle thinning and light pruning. Even if you have not been a regular attendee, you are still welcome.

Randy Bennett - GNOBS President

BONSAI **Basics**

Bonsai Myth: Continually Trimming Your Bonsai

by Harry Harrington (bonsai4me.com)

Bonsai are pruned on a regular basis so they keep their diminutive size. Without pruning, their natural apically dominant growth habit will take over; the upper and outer branches and shoots will extend strongly at the expense of the inner and lower growth, that could eventually dieback.

Without the restriction at the roots in the confines of a bonsai pot, the tree would theoretically grow to a natural height.

It is therefore important that growth is restrained. Unpruned upper branches can quickly lose their taper and delicacy, and in time, can become coarse and too thick for their position at the top of the trunk.

However, there is a balance that must be struck. **A bonsai must be allowed to grow.** New growth is not only a sign of a healthy plant (and therefore a healthy bonsai) but in turn it generates a refreshing of the tree's structure, new root growth and vitality. Therefore a bonsai must be allowed periods of growth, periods of time where it is allowed to grow; enough to revitalise its energy but not so much that growth becomes coarse or the shape of the tree is completely lost and apical dominance is allowed to take over.

A bonsai that is continually trimmed without respite will be continually regenerating new buds and shoots; the repeated production of these new buds deplete the energy reserves of a tree when it is unable to recoup its lost energy levels by means of photosynthesis.

It must be realised that it is a myth to think that bonsai should and must be trimmed on a daily or weekly basis. It is also a myth to think that great bonsai look perfect all year round. Most bonsai are exhibited, photographed and displayed in perfect condition but this state is only temporary.

These same trees are allowed (or should be allowed) periods of the necessary free growth to allow shoot extension and therefore re-energise the tree; the perfect image is temporarily lost.

A balance must be struck. Free, unrestricted growth will result in the loss of refinement, shape and taper but this only happens after a certain amount of time (largely dependant on the vigour of individual tree species and individual trees). Allowing new growth does no damage to the bonsai, its shape or refinement. Any well-developed bonsai can easily be trimmed back to shape even after 3 or 4 months (or in many cases even longer) free growth, whichever tree species they are.

The practicalities of allowing growth or not continually pruning your bonsai

It is very easy to fall into the trap of continually trimming and pinching new growth throughout the growing season; particularly for enthusiastic beginners with smaller collections. However, it is far better to get into a habit of allowing new shoots to extend before trimming back the new shoots after they have hardened off. (The shoot becomes woody).

As a failsafe, it is worth trimming back any new vigorous a shoot in the upper branches before this time to ensure that there is no over-thickening in this area but otherwise, middle and lower branches can be left to extend.

As well as keeping the tree in good health and vigour, when the new growth is finally pruned back, the branches will create new buds and shoots along the length of the branch rather than just clusters of leaves that would otherwise be prompted at the very tips of regularly trimmed branches.

During dormancy in the Winter, don't just trim the tree to your ideal shape/silhouette. Any further growth the following year will need removing to bring the branches back to within your ideal silhouette.

Instead during the late Winter, prune the branching back hard so that the new growth can grow outwards, toward the silhouette of the tree. Again, removing the necessity to remove so much of the new, fine growth of the following season.

Knowing exactly how much new growth to allow, how hard to prune back in the Winter to allow new shoots to extend the following year and exactly how often to prune during the Spring and Summer is difficult to anticipate for the beginner and for experienced enthusiasts using an unfamiliar species. Much of this knowledge is gained from experience. However, the most important point is to understand the need for you to allow your bonsai to grow.