pfm bonsai studio ramblings

July 2013 Volume I

HEAT! RAIN! HUMIDITY! So this is the new spring and summer in the great Northeast. The one thing we can be assured of is that everything is growing like crazy. Regrettably that includes the weeds. I often wonder if a percentage of all bonsai growing mediums includes weed seed.

Dealing with heat etc.

Calls are coming in to the studio about how this weather is effecting our bonsai. So some of this is a repeat from last month's June hints but all are worth repeating

Are there benefits to this weather?

Sure:

- the trees are getting plenty of water and growing at an incredible rate
- cuttings development much better in all this humidity
- even though we are getting rain, we are also getting lots of sun so internodal spaces are resasonable
- transplanting of semi-tropicals and tropicals can be done now instead of waiting under the end of the month since the night temperatures are high and the humidity and warmth ensures good new root development
- branches and trunks are developing at a fast rate

Are there problems because of this weather?

Absolutely:

- fungal problems increase so we need to spray to help prevent problems
- some bonsai are in danger of overwatering so be sure to put a brick or stone under one end of flat shallow pots to increase the rate of drainage (remember shallow pots retain water more than than pots)
- time release fertilizers are often released at a higher rate and even washed out of the soil with the rains
- needles and leaves often are larger and longer
- weeds can take over the pots
- days can be too warm/wet to get the work we need to do done

Species of the Month: Scots Pine (Pinus sylvestris L.; family Pinaceae)

The name derives from Latin pinus via French pin (pine); in the past (pre-18th century) this species was more often known as "Scots Fir" or "Scotch Fir" (from Danish fyr), but "fir" is restricted to Abies and Pseudotsuga in modern English.
Other names sometimes used include Riga Pine and Norway Pine, and Mongolian Pine for var. mongolica. "Scotch Pine" is another variant of the common name, used mostly in North America

The Scots Pine is a species of pine native to Europe and Asia, ranging from Great Britain and Spain east to eastern Siberia, south to the Caucasus Mountains, and as far north as Lapland. In the north of its range, it occurs from sea level to 1000 m, while in the south of its range, it is a high altitude mountain tree, growing at 1200-2600 m altitude.
It is adapted to a wide variety of climates as indicated by its extremely large natural range. It grows in areas with an annual precipitation exceeding 1780 mm (70 in) and in areas with an annual precipitation as little as 200 mm (8 in). Scotch pine survives where winter temperatures have been recorded as low as -64° C (-83° F). In some areas it grows where the subsoil is permanently frozen. Scotch pine can also survive high temperatures, and it is found at middle altitudes.
Although this species can grow on soils with pH from 4.0 to 7.0, it grows best on soils in the 4.5 to 6.0 range.

Julian Adams is a strong advocate of Scots pine as the best possible pine for use as bonsai in our area. His well developed bonsai are worth seeing and studying. He gives a long list of reasons we should consider Scots pine for our bonsai. Here a just a few:

- **Readily available**
- **Hardy to -30° F**
- **Fast grower in ground -slow grower in bonsai cultivation** In nature, they can reach up to 25 m in height and 1 m trunk diameter and even to 35-45 m tall and 1.7 m trunk diameter and on very productive sites . Scots Pine usually lives 150 to 300 years, with the oldest recorded specimens (in Sweden) reaching over 700 years.
- **Buds back readily** When you cut back in spring to interior growth and allow the sun to penetrate, buds will easily appear.
- **Needles reduce easily with proper care.** The blue-green needles grow in pairs reaching a length of 5 cm. in nature. With good cultivation in the pot, the needle size can be reduced to about 1.5 cm.

Needles last from two to four years in warmer climates, and up to nine years in subarctic regions, then the old needles turn yellow in September or October before they are shed. The buds are usually covered with drops of sticky resin.

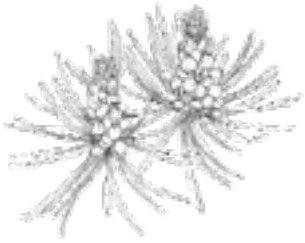
- **Bark assumes a rough, old texture quickly.** When young bark on small branches is extremely thin and can show orange-red color. When adult the bark will vary from grey to reddish-brown forming layered plates or flakes up to 5 cm. thick, with deep fissures between plates.

•**Relatively disease-free.** Watch for attack by saw fly larvae in early spring.
The most serious problem of Scotch pine seedlings is Lophodermium needlecast.

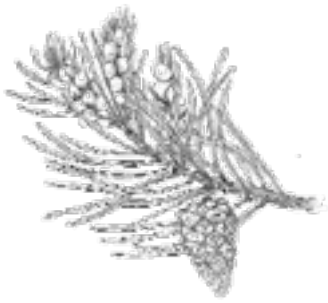
Sexual Reproduction

Scots Pine produce cones in spring with two-year old seed cone (open, brown), one-year old seed cone (green), and new seed cones (red) and pollen cones (yellow).

Male flowers >>>



<<<<<Mature two-year old cone and male flowers



Male and female flowers occur on the same tree. They appear in May with the females on the tips of the higher and more exposed branches and the males clustered together, often en masse, on the branches just below. Pollination is by wind, and fertilized female flowers take two years to become a fully-grown cone. The cones ripen in April, opening while they are still on the tree, and the tiny winged seeds, each weighing 0.005 grams, are dispersed by the wind .
The seeds require a high level of light to germinate and grow, so seedlings are found in open areas and clearings; as a shade-intolerant species, Scots pine does not regenerate under its own canopy. Although germination will occur in various soil types and conditions, the preferred growing situation is on well-drained mineral soil.

Taxonomy

Over history, the Scots or Scotch Pine has been divided into many varieties based on appearance, but genetically, there are but four currently recognized. Differences in appearance within the varieties being caused by environmental rather that genetic differences.

Pinus sylvestris var. sylvestris. The bulk of the range, from Scotland and Spain to central Siberia.

Pinus sylvestris var. hamata Steven. The Balkans, northern Turkey and the Caucasus. Foliage more consistently glaucous all year, not becoming duller in winter; cones more frequently with a pyramidal apophysis.

Pinus sylvestris var. mongolica Litv. Mongolia and adjoining parts of southern Siberia and northwestern China. Foliage duller green, shoots grey-green; leaves occasionally up to 12 cm long.

Pinus sylvestris var. nevadensis D.H.Christ. The Sierra Nevada in southern Spain and possibly other Spanish populations (not considered distinct from var. sylvestris by all authors). Cones often with thicker scales, but doubtfully distinguishable on morphology.

Technique of the Month: Phoenix Grafting----

The incredible age depicted by venerable old trees surviving the decades showing the scars of age in jin and shari has fascinated all of us.
Driftwood styled bonsai depicts the essence of antiquity.
Just as the mythical phoenix bird rises from the ashes of death, a masterpiece bonsai can be created by combining a younger living tree with a beautiful piece of driftwood.

The driftwood may come
-from a once loved bonsai, now in permanent dormancy or
-from a beautiful piece of wood found in the mountains, along a stream or the ocean.
Look for pieces with interesting natural lines.
The piece may be modified with careful sculptural techniques, but the lines must be natural and artistically appealing.
The living tree will be attached to front and sides so select wood that has a pleasing front. Remember that a life line should show in the front of your composition.
The living material should have a flexible trunk and branches to facilitate bending it to the shape of the driftwood.
Ideally, the driftwood and living material are of the **same** species.
Acceptable results can be achieved, however, if both appear similar.
Many species have been used for this treatment.
Among those often used are:

apricot
azalea
birch
cedars
cherry
cypress
juniper
cotoneaster
dwarf honeysuckle
hawthorn
hornbeam
firethorn
jasmine
oak
pines
pomegranate
quince
rhododendrons
rosemary (difficult)
willows (great for beginners)
wisteria

Mike Sullivan's phoenix graft bonsai

This technique should be done in early spring just as dormancy is breaking. The plant will have the best chance of survival when given the longest period of time to grow and recover from "surgery" before winter dormancy.

The Technique

1. Prepare the piece of driftwood and make any design modification desired.
    - Using a wire brush, and perhaps a soap solution, carefully scrub the driftwood clean. Remember to work with the grain as you scrub. Be careful to eliminate any pockets that will hold water later and lead to rot. Remove any remains of bark.
    - Using a hand or motorized carving tool, make design modifications as desired.
    - You may wish to carve a groove into the trunk marking the line to which the living trunk will be applied later. <u>This procedure often allows the resulting graft to look more natural than those applied to a flat surface.</u>
    - Treat the clean wood with a good wood preservative. You may wish to bleach the wood using lime sulfur before using the sealant.
    - Form an anchor for the driftwood by attaching a wire support as a base. Wrap chicken wire around this if the base is very large. (I have also used fiberglass cloth and fiberglass for this part with smaller trees that are not top heavy.) Cover this wire base with plastic body filler or hydraulic cement to act as a counter weight to the driftwood and the living tree. Consider the shape and size of the eventual pot as you do this. Brush the filler up onto the trunk being careful not to go above the proposed soil line. This will protect the base of the driftwood from soil line rot.
    - When the filler is dry, drill at least 1/4inch diameter holes through it to allow for water drainage and the future growth of roots through the base.
    - You may also attach the driftwood to a wood base that has been treated with preservation and is wired into the pot.
    - Drill holes in the base of the driftwood and the base you attached for roots to grow through.
2. Prepare the plant material.
    - Remove the plant material from its pot and clean some of the soil from the roots. Wrap the root ball to keep the roots moist.
    - Using a very sharp knife, cut away a small section of the trunk's bark and cambium layer on the side to be attached to the drift wood. This must run in a line from the trunk base to the upper most point where the trunk will be attached. This will allow the future callus to form attached to the driftwood.
    - Trim any unneeded branches from the tree.
3. Attach the tree to the driftwood.
    - Place the tree along the driftwood and attach it using one or more of these techniques: (Remember it is vital to attach the trunk securely without air spaces. The exposed part of the trunk is placed against the driftwood.)
        - ∇ Use black-root-over rock tape to attach the trunk by winding it around the tree and driftwood. (I prefer this because the tape holds evenly, stretches with time and does not degrade for several years.) Other ways include cable ties.
        - ∇ Strap the tree to the driftwood using raffia that has been soaked in water.
        - ∇ Wind commercial packaging material around the trunk that was first protected by bits of soft sponge.

- ∇ Use plastic cable fasteners to attach the tree. (I find this method is only good for positioning. Scarring results from using these straps as the main securing agent.)
- ∇ Use tiny brass screws to attach the tree trunk first. The tree eventually grows over these screws. Then secure with your choice of wrapping.

- If the method you used left parts of the cut trunk exposed to the air, apply grafting wax to each side of the trunk line to prevent drying out and insect and fungal infestations.

1. Pot the phoenix graft.
   - Soak the root ball in a Superthrive or other transplanting solution.
   - Prepare the pot with wires, drainage screening and a coarse drainage bonsai soil mix. At this stage it should be generously potted.
   - Plant the tree making sure the spread the roots over the base of the driftwood support. Use a compost heavy bonsai soil mix with good drainage properties. Wire the base and roots in well. Dust the roots with rooting hormone to promote new root growth.
2. Grow the tree on.
   - The resulting tree should be grown in sunlight for several seasons using a regular fertilizer and watering schedule.
   - Some trimming may be done, but vigorous growth is needed to promote the growth of the trunk into the driftwood.
   - Watch for scar damage. The black tape method usually prevents this from occurring.
   - After at least three years the taping can be carefully removed. Cut the tape off rather than pulling it off.
3. Style the tree once the graft has taken and is stable.
   - The graft will become more secure with age, but at first be careful of placing stress on it when wiring it.
   - Repot as needed taking care not to destroy roots that have passed through the holes in the driftwood's artificial base.
4. Enjoy!

Comments and suggests are always appreciated. Send your experiences to

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What is Happening in the Bonsai World?

These events were covered in past issues. See their websites for more details.

I hope to see you at the * events.

June International Bonsai Colloquium * http://www.internationalbonsai.com/index.html.

September12-15 ABS Love of Bonsai Learning Seminars * www.loveofbonsai.com

October 31- November 3 **Golden State Bonsai Federation Annual Convention ***

LOVE OF BONSAI

ABS LEARNING SEMINARS

SARATOGA SPRINGS NY

SEPT. 12-15,2013

Courses are closing so register now.

Go to www.loveofbonsai.com for registration forms if you need one.

Please come visit my nursery Sunday Afternoon after the close of the seminars.

Are you ready for something different in a bonsai learning experience? GSBF Convention XXXVI – "Bonsai Artist Studio: OUTSIDE THE BOX" will deliver on October 31 through November 3, 2013, at the Burbank Airport Marriott Hotel & Convention Center. See you there!!

http://www.gsbf-bonsai.org

Lots of new stock has arrived

Come in and find some thing to play with

JULY EVENTS

AT PFM BONSAI STUDIO. Also Available MOST weekdays...call to check before coming out

CALL OR EMAIL TO REGISTER FOR ANY OF THESE

Monday Bonsai Study Group 6 PM or so

Come and play and learn with our Monday study group. There is no charge for this group. We come together and work on a project. Or we simply bring some of our trees to work on. Some join in a shared meal before beginning .we chip in for the food. Bring materials to work on and join in the fun.

Open studios are scheduled throughout the summer. As I see great material development during the summer, I will schedule some defined workshops for them. I would appreciate an email if you are coming out for one of the open workshops. Please bring a lunch if you are coming for the day. IF you have a problem tree to work on, please schedule an appointment to work with Pauline.

Open 10 to 5 each day listed July 5 from 9-3 only

July 5-7: Open workshops all weekend. Celebrate the holiday weekend with a visit. Lots of new material is available to check out and the gardens are green and lush due to all the rain.

July 13-14.Closed. Myron and I are going home for our 50th HS reunion!! Good Grief!!

July 20..closed Pauline at MABS board meeting in NJ

July 21 Open workshop day...come and play!

July 27-28 MABS stand making days for ABS Seminars this fall. Studio is open for shopping.

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August 3 FIELD TRIP TO MARTIN SCHMALENBERG'S Stillwater Studio. Join us for an all day trip by car pool. We will meet at pfm bonsai at 7 AM to group together and travel. Other meeting points may arise depending on location of participants. Martin will offer a program on rock planting and give us a personal tour of his bonsai garden and studio. Fee plus share of fuel and tolls.

pfm bonsai studio supports

Mohawk Hudson Bonsai Society http://mohawkhudsonbonsai.org

MidAtlantic Bonsai Societies - www.midatlanticbonsai.freeservers.com

American Bonsai Society - www.absbonsai.org

Bonsai Clubs International - www.bonsai-bci.com

National Bonsai Foundation - www.bonsai-nbf.org

please visit www.pfmbonsai.com for current happenings at the studio

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