

December 8, 2016 Meeting

Our December meeting will be a Mulligan Stew of sorts. We will have some videos from Bill Valavanis' 5th National U.S. Bonsai Exhibition held in Rochester, New York this last September. Over 200 trees were on display – most of them spectacular, and only a handful that were *only* 'good'. Secondly, Derek N was in Japan last month and will have some photos of his trip. It is always interesting to see and compare the Japanese esthetic to our western version. Thirdly, I hope to be able to offer some seeds for members to try to propagate. (See article about how to 'stratify' seeds elsewhere in the newsletter). Elections – no, not *those* elections – are supposed to be held in November. Anyone wishing to hold a club office may self-nominate. Be sure to attend this meeting to guard against being nominated and elected against your wishes. ;-)
Lastly, we need your suggestions for activities in 2017. This is your club, let us know what you want to see and do. Please give this some thought prior to the meeting so you don't have to come up with suggestions instantly. Hope to see you all on December 8.

Wintering Your Trees

To say the least, it's been a weird fall weather-wise. November was the warmest on record. The first three weeks had temperatures all above normal, and sometimes double-digits above normal. Upon returning from Australia and New Zealand I was mentally prepared to encounter snow and cold, but instead had to cut the grass! And the last two weeks have been very wet and rainy, with temperatures closer to 'normal'. So, as I write this, all of my temperate trees are still sitting their benches in my back yard. Historically, I generally put them into winter storage sometime between Halloween and Thanksgiving, usually closer to Thanksgiving than Halloween. I don't worry about temperatures in the 20's F, but if the temperature goes into the teens I generally spring into action. Not everything is equally hardy so if I can't get them all put away, the larch, Siberian elm, and most of the conifers can take colder temperatures and are the last to go into the bomb shelter. For the trees that I own, the trident maples are probably the most tender. I don't have any Chinese elm for that reason, and after this year I might not have any rosemary, either. Rosemary is such a beautiful plant, but I don't have much luck with it. At Olbrich's spring show there were two very nice specimens, and the curator said they get wintered in a cold greenhouse. Duplicating a Mediterranean climate doesn't seem possible for me. So, however you winter your trees, be ready. It probably won't be this nice much longer!

Stratifying seeds

“In horticulture, **stratification** is the process of treating stored or collected seed prior to sowing to simulate natural winter conditions that a seed must endure before germination. Some seed species undergo an embryonic dormancy phase, and generally will not sprout until this dormancy is broken. The time taken to stratify seeds depends on species and conditions; though in many cases two months is sufficient.

Process

Stratification is the process of subjecting seeds to both cold and moist conditions.

Typically, temperatures must be between 1°C and 5°C (34°F and 41°F). The term can be traced to at least 1664 in *Sylva, or A Discourse of Forest-Trees and the Propagation of Timber*, Vol. II. where seeds were layered (stratified) between layers of moist soil and exposing these strata to winter conditions. Thus, stratification became the process by which seeds were artificially exposed to cold-moist conditions between layers of soil or peat to encourage subsequent germination in spring. Seed of many trees, shrubs and perennials require these conditions before germination will ensue.

In its most basic form, when the stratification process is controlled, the pretreatment amounts to nothing more than subjecting the seeds to storage in a cool (ideally +1° to +3° C; not freezing) and moist environment for a period found to be sufficient for the species in question. This period of time may vary from one to three months.

To accomplish this you merely place the seeds in a sealed plastic bag with moistened vermiculite (or sand or even a moistened paper towel) and refrigerate it. Use three times the amount of vermiculite as seeds. It is important to only slightly dampen the vermiculite, as excessive moisture can cause the seeds to grow moldy in the bag.

After undergoing the recommended period of stratification, the seeds are ready to be removed and sown in the nursery bed for germination. Alternatively, the seed may be sown in small pots filled with moist soil and then the whole thing enclosed inside a plastic bag before placing inside a common refrigerator.

Preparing a stratifying medium

The seeds should be cleaned of any additional material (fruit pulp, leaf and seed-pod fragments, cone scales, etc.), but the shells of nuts should not be removed.

Many sources recommend using peat, a combination of peat and sand, or vermiculite as the medium for cold stratifying seeds. The medium must be sterile to prevent harm to the seed by pathogens including fungi.

Soaking the seeds in cold water for 6–12 hours immediately before placing them in cold stratification can cut down on the amount of time needed for stratification, as the seed needs to absorb some moisture to enable the chemical changes that take place.

Any seeds that are indicated as needing a period of warm stratification followed by cold stratification should be subjected to the same measures, but the seeds should additionally be stratified in a warm area first, followed by the cold period in a refrigerator later. Warm stratification requires temperatures of 15-20°C (59-68°F). In many instances, warm stratification followed by cold stratification requirements can also be met by planting the seeds in summer in a mulched bed for expected germination the following spring. Some seeds may not germinate until the second spring.”

From Wikipedia

This spring I found a bag of ginkgo seeds that had been in the frig for about 16 months. They had gotten shoved into the back and I had forgotten about them. Not wanting to throw them out I tested them by placing them in a jar of water. Seeds that float aren't viable. Those that sink, are – usually. I planted them this spring. Many of them sprouted. I didn't keep track of percentage germination, and it would have been higher if the darn squirrels hadn't dug many of them up, but it was good enough to be satisfying.

In general, when I have not had luck with stratification, it was because the paper towels were too wet, and the seeds succumbed to mold.

“You mean they are not all pine trees?”

When I was growing up I naively referred to everything with needles as a ‘pine’ tree. It didn’t matter if it was a spruce, or fir, or larch, or cedar, or really a pine – to me, they were all pine trees. I’m not sure how this glaring gap in my arboreal knowledge came about. I’m quite sure my parents must have known the difference, but somehow I never got the memo. They never took me aside and said, “Look kid – stop calling all those trees pine trees. You’re making us look like bad parents!” Or, maybe they did and I have just forgotten. To me – if it had needles – it was a pine. So, if you are like me and suffer from conifer dyslexia here is a little help to aide in your identification.

If the needles are in clusters of 2,3, or 5 – it is a pine. A few pines have only a single needle in a ‘cluster’. In the southwest US there exists the Pinon Pine - *Pinus monophylla*, the single-leaf pinyon, (alternatively spelled piñon). One source I looked at claimed this was the *only* single-needle pine species in the world. So clusters of 2,3, or 5 needles makes it a pine. Larch, also called tamarack, also have needles in a cluster or tuff, but almost always have way more than five needles in a cluster. And the needles are much softer and usually much shorter. So it is easy to distinguish pine from larch.

The most likely place for confusion is distinguishing spruce from fir. Pull off a needle. Try rolling it between your fingers. If it is flat, the needle will be hard to roll and the tree is a fir. If it rolls readily, it is because the needle is a four-sided square, and the tree is a spruce. This is easy to remember – **f**ir needles are **f**lat. Now, gently grab a branch that has needles. If the needles aren’t sharp and prickly, it is fir. If the needles are sharp and prickly, it is a spruce. Again, easy to remember – **f**irs and **f**riendly, **s**pruce are **s**harp. Lastly, if the tree has cones hanging downwards, the tree is a spruce. If the cones point upwards, it is a fir. I remember this because the most letters go together (spruce-down) and the fewest letters go together (fir-up).

I hope this helps. Now if I can just get my younger brother to stop calling all conifers ‘pines’ ...