Spring Projects: Bonsai Soil

by Bob

With Spring around the corner, there are a number of things we can do to help prepare for that time of year which is likely the busiest season for Bonsai enthusiasts.

- We should make sure our tools are sharp and ready to prune and transplant.
- That our pots are clean and have been sanitized.
- We have a stockpile of Bonsai soil ready to do whatever transplanting is required.

Bonsai soil:

The basic requirements for good Bonsai soil consist of an ability to provide stability to the plant, be open and sufficiently porous to provide good drainage and prevent roots from rotting in waterlogged soils. However, they must retain nutrients along with sufficient moisture to adequately supply the tree's requirements and allow for the circulation of oxygen.

While individuals, when preparing soils, may have slight variations to their own mixtures, and for specific plant varieties, all mixtures contain three basic components, which are thoroughly blended together in a ratio of approximately one part each.

In sieving components use 3 screens - one whose mesh size is 3/32", another that is 3/16" and the final one is 1/4". Stack the 3 screens, with the largest holes on top. Screen each component separately. Retain for your soil mixture the Grit and Peat contents of the top 1/4" screen and possibly in some cases the middle one. Discard or use elsewhere the remainder. For the loam portion discard into your compost that which is on the top screen and utilize the balance of your blend.

1. Grit ~ "Turface", a baked clay product, is the most commonly used grit source. However, when available, a Japanese granule called 'Akadama", or a slate based material called 'Haydite' are the preferred form of grit. Sometimes also a granule obtained from a crushed volcanic source or one from granite is used. Besides providing drainage and keeping the mixture porous, the sharp angular configuration of grit helps produce splitting of small roots as they grow and develop. This helps in the proliferation of fine roots. However, because of this feature be careful when transplanting - be gentle so as not to damage the retained roots by re-potting too vigorously. Because my plants require good drainage and I seem to have success with coarser granules. I sieve the Turface - retaining the larger particles for my mixture and keep the fine for use on the sidewalk and driveway for winter ice protection. *Do not, under any circumstances, use a limestone based product*.

2. Peat Moss ~ This organic material is sieved so as to retain the coarser portion for Bonsai potting while utilizing the fines in your compost or garden. Other sources of organic materials often used are the commercial product sold as "Orchid Bark", as well as rotted leaf mould or composted forest bark.

3. Loam ~ Some growers will use sieved and well rotted sheep manure instead. Using manure or garden compost does increase the possibility of introducing soil borne diseases and weed seeds. (These can be sterilized by placing in a microwave oven for a few minutes.) Regardless, it is important that all three components should be sieved prior to mixing them together so as to retain the courser parts of grit and peat moss, and to screen out and remove the very fine particles of loam so as not to impede drainage, clog the soil and to maintain oxygen movement. The coarser mixture will also help eliminate air spaces when re-potting. Sieving works best when all components are dry.