

Pine Bonsai Basics

Although there are major differences in how we need to prune and style the different Pine species, there are also a number of similarities across the Genus which provide us with the following basics of care.

- Get to know the growth patterns of your individual tree. As well as each Pine species having different growth characteristics, each individual tree of the same species will behave slightly differently. Carefully observe your Pine over a few growing seasons to get to know its growth habits. Exact timings of techniques cannot be expressed with Pines. It cannot be said- do this in May, do this in June, do this in September etc. Only by knowing how your Pine grows can you perform the correct techniques at the correct time.

Repotting

- Only repot when required. Larger trees require repotting less frequently than trees in smaller pots and older, more developed trees even less frequently. Only repot when it is necessary for the health of the tree, not just because 2 years has gone by. Shohin pine may need repotting after 2-3 years, however larger Pines may not need repotting for 5 or more years.
- Most Pines dislike having permanently wet soil, although some species are more tolerant to this than others. Japanese White Pine are one of the most sensitive to this, whereas Scots Pine can often be seen growing in Peat bogs (although very leggy) and so are more tolerant.
- So- a very free-draining potting mix is required. Something like Kaizen Bonsai's No.3 Potting mix is very suitable for larger Pines. This is their most free-draining mix and is recommended for Pines. This mix however would be unsuitable for smaller or Shohin Pines as the particle sizes are too large for trees in smaller pots. For this, I suggest using Kaizen's Shohin potting mix, but making it even more free draining by adding some more inorganic element such as Akadama or molar clay. You can of course experiment with your own potting mixes.
- Do not repot Pines early in the season. Wait until mid to late spring when growth is well underway and any candles have extended. Summer repotting is also tolerable, especially for mugo Pines, which have been observed to respond to Summer-repotting even better than Spring.
- Retain some of the beneficial Mycorrhizal fungi in and around the root system when repotting.

Position

- Give Pines as much full sun as you can. In their natural environment, Pines thrive in mountainous and arid conditions where they receive lots of light. It is this which encourages shorter needles and back-budding.

Feeding

- Use a balanced, organic granular feed throughout the year. Feed sparingly, or even not at all during early spring until any candles have extended. Certainly, **DO NOT** be tempted to use a high nitrogen feed early in the year. Too much feed early on and especially high nitrogen will produce large candles and long needles, which you will then have to work hard to reduce.

- Pines prefer their soil Ph to be slightly on the acidic side. A dose of the gardening product Miracid at half strength 2 or 3 three times a year is said to be beneficial. Also, water with rainwater where possible.

Pruning

- It is in this area of work where there is the most variation in techniques across the different species of Pine. Using the same technique on different species will result in different outcomes. Ensure that the work observed being done on Pines by others, the advice you are given and the research you do is specific and relevant to your own species of Pine.

That said, there are 4 main techniques which you will need to use in order to prune, develop and style your Pine. Note that it is the techniques of Candle Pinching and Needle Plucking/cutting which will produce different results on different species.

These are in the order in which you would generally use them throughout the calendar year.

1. Bud Selection Used to reduce the number of buds at each branch terminal to just 2 buds. (Done in Mid to Late Spring)
2. Candle Pinching Used to control the length of future branches and balance the energy distribution throughout the tree. (Done in Late Spring to Early Summer)
3. Needle Plucking/cutting Used to allow air and light to reach the inner parts of the tree, increasing the health and vigour of weaker branches and shoots. Also promotes back-budding. (Done in Late Summer to Early Autumn)
4. Branch Pruning Used to reduce the length of a branch. Done late in the year when the sap flow in the tree has slowed. As like most coniferous species, some green must be left on the branch in order for it to survive. Be wary of cutting back to leave only weak or advantageous shoots as these may not be strong enough to support the branch on their own. Be cautious with weaker species such as Japanese White Pine. More vigorous species such as Japanese Black Pine and Scots Pine can be cut back harder. (Done in Early Autumn to Winter)

- Never rush the development of a Pine Bonsai. It is unlikely that you would use all of the above techniques in a single year and perhaps none of them if the tree has just been re-potted. Older specimens should be limited to just one major working per growing season. That means, if the tree is re-potted in late Spring, no other work should be undertaken until the following spring, which also includes wiring. Younger trees can be worked on more frequently but be cautious of over-working newly acquired nursery stock. As with most things in Bonsai-patience is the key.

Pests and Diseases

- Nothing too out of the ordinary. Aphids, sawfly larvae, caterpillars, needle cast diseases, white pine needle rust. Can be treated with a good quality insecticide and fungicide spray such as RoseClear Ultra. A healthy tree is likely to resist most problems on its own.

Diagram showing vigour areas of a Pine tree

Area 1 is the most vigorous.

Area 2 has medium vigour.

Area 3 is the least vigorous area.

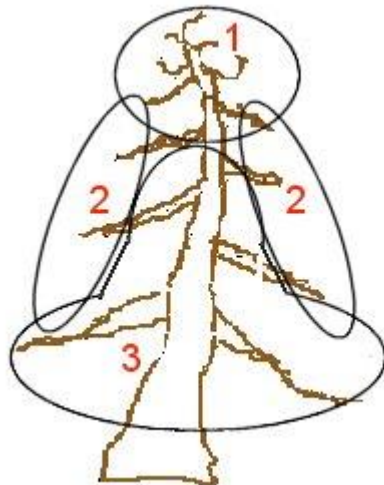
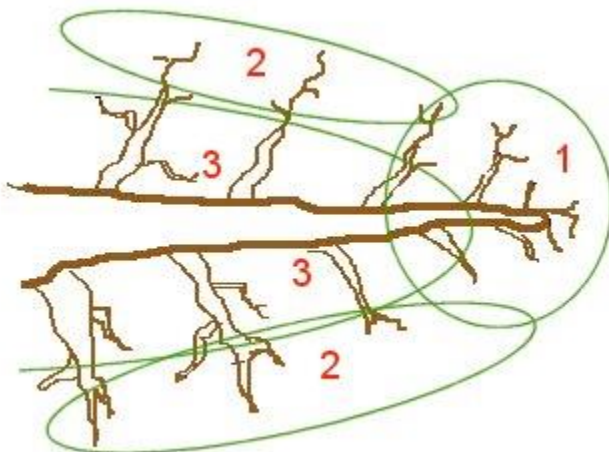


Diagram showing vigour areas of a Pine branch

Area 1 is the most vigorous.

Area 2 is of medium vigour.

Area 3 has the least vigour.



When using any of the aforementioned pruning and styling techniques, always keep in mind these differing areas of vigour on the tree or branch and adjust the severity of the technique accordingly. Areas of the most vigour should be worked the hardest. Areas of least vigour should be worked with caution or even left alone.

Bud Selection

(Mid To Late Spring)



From Left to Right;

Image 1: Example of a typical bud-cluster

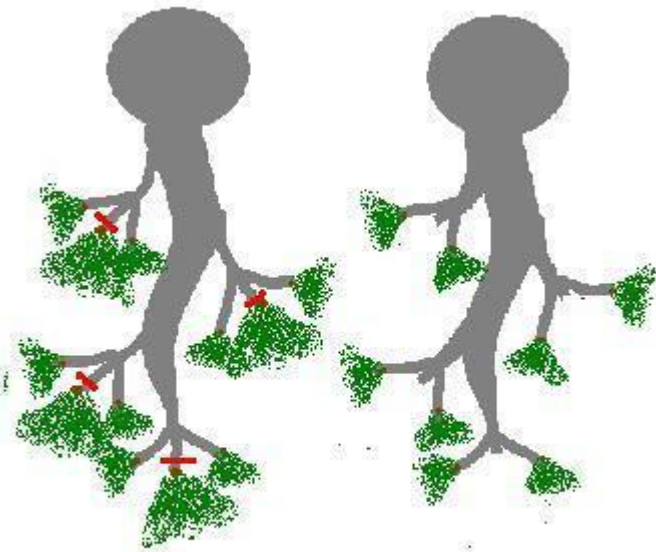
Image 2: A cluster in a dominant area should be reduced to two weak buds

Image 3: A cluster in a weaker area should be reduced to 2 or 3 stronger buds. (The branch can be reduced to a fork of 2 later, when the branch has strengthened)

Branch Pruning

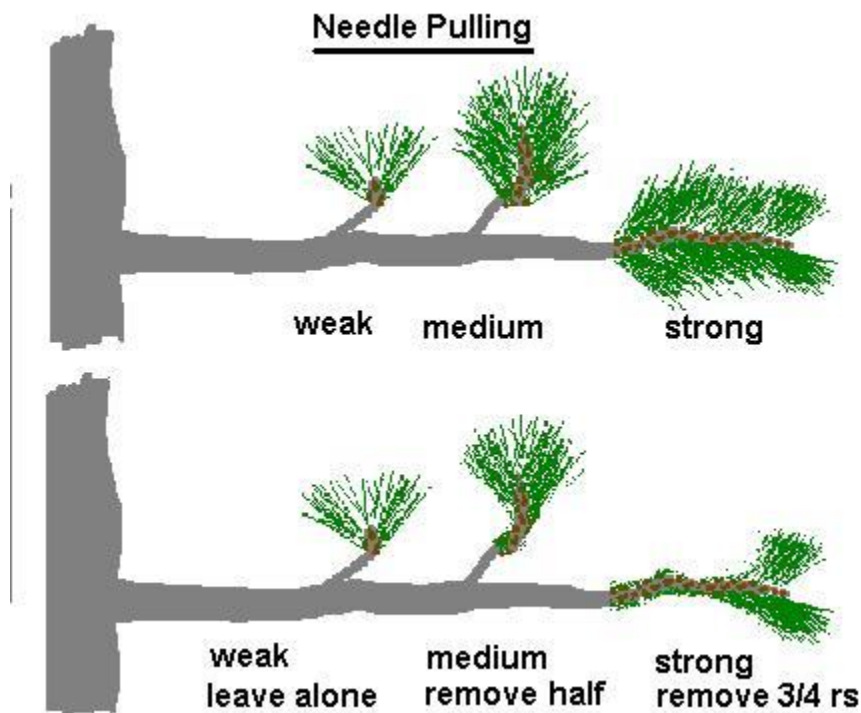
(Early To Late Autumn)

Note- when pruning, leave a short stub on the cut branch. This ensures that the sap flow to the adjacent branches which are left is not disrupted. This should be tidied up the following Spring.



Pruning -Top View

The following diagram only applies to Japanese White and Black Pines



Nowadays, needles are cut rather than "pulled" or "plucked", leaving a short stub approximately 2mm in length. This stub will later dry out and drop off. Pulling needles off can damage the section of branch right at the point where you are hoping that new buds will emerge.

On Japanese White and Black Pines, it is the areas where needles have been removed where new buds will hopefully emerge.

However, the opposite is true of Mugo pines which back-bud from where old needles **remain** on a branch not where they have been removed. So, the older needles of a Mugo are **kept** in areas where back-budding is required and most, but not all, of the newest needles are cut.