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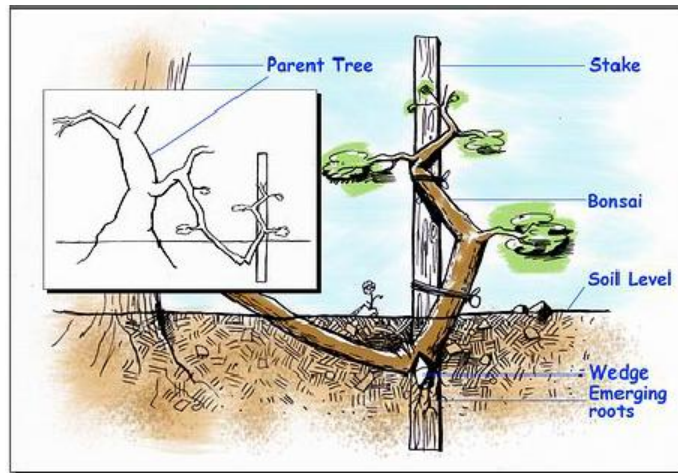
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Ground Layering

Last month's article introduced Air Layering as a method of removing a potential bonsai from a parent tree over a period of a few growing seasons in such a way that new roots are grown on the bonsai while it is still attached to the parent tree. Ground Layering can achieve a similar result, the main difference being that instead of surrounding the exposed heartwood with moss enclosed in plastic, the branch being manipulated is a low branch that is bent down so that the 'damaged' area is below the soil level and then covered with soil.

Ground layering simulates the way many trees reproduce naturally. Low branches will grow downwards because of the weight of leaves (and snow). Branches also grow towards moisture and this enforces the tendency for low branches to grow downwards. Where the branches touch the ground they will more often than not sprout new roots and eventually become a separate tree.

The process, from a bonsai point of view, is fairly simple. Prepare the area of soil where the roots are going to form with some compost so that the new roots will have some rich food. Then 'damage' the area on the branch where you wish the new roots to form. With Air Layering we cut a complete ring around the branch, but with ground layering it is not necessary. Root will only develop on the underside of the branch, so simply split the branch about halfway through on the under side. This enables one to bend the new bonsai upwards and also exposes the damaged cambium to the soil causing both sides to put out roots. Applying rooting hormone to the cambium will greatly increase your chances of success.



I like to drive one or two small wedges made from small dowel rods into the split to hold the split open and also to prevent the split healing instead of shooting roots. The new bonsai must be held as firmly as possible while the new roots develop so tie it to a sturdy stake.

It will take at least a couple of seasons for the roots to develop properly so be patient and give them a good period of time before gently removing a bit of the soil to judge progress. Regular trimming of the bonsai will stimulate root growth so, after a few months, feel free to begin shaping your new tree.

A raft is a bonsai method that employs similar tactics to ground layering. The entire side of a sapling is removed. The whole plant is wired and then bent down with the remaining trunk buried under the soil. What were side branches are now numerous upright trunks of smaller trees. The result can become a stunning forest or the trees can later be separated into individual units.

Lastly, the term Ground Layering is also applied to techniques used for thickening up the lower trunk and surface roots of a tree. I will write about this in a future article.