Caring For Bare Root Fruit Trees

CARE BEFORE PLANTING

Realize that all bareroot stock, though dormant, is also in a state of shock. They have been dug up from the field with an inevitable loss of roots, and need special care even before planting. The most important thing to remember is KEEP THE ROOTS MOIST. Even for brief periods, i.e. while transporting them to the planting site. If you have not pre dug the holes for your trees and must keep them for more than a few days, they should be HEELED IN (buried in a moist medium), in a shady spot and watered thoroughly. Keep the roots packed in sand, peat moss, potting mix or aged sawdust (avoid fresh sawdust or wood shavings as they may contain compounds that inhibit root formation). Trees can be kept like this for several weeks if necessary, but should always be permanently planted before showing any signs of bud swell or growth. Protect trees from freezing before planting. Prior to planting, SOAK TREES IN WATER FOR 12 TO 24 HOURS. This will afford them a good long drink to compensate for any moisture loss in storage and shipping.

SITE SELECTION

Each plant has specific needs such as drainage, soil type, soil fertility, exposure and moisture. Generally, a moderately fertile and well drained site is best. Do some research to find out the requirements of your plants (see references below). When choosing a site, pay attention to microclimates. Cold air, which may cause damaging spring frosts, drains away from slopes and ridges, making them good sites for planting. Planting near a south facing wall can help late fruits to ripen in colder climates. On the other hand, trees such as Apricots, which are susceptible to early blooming, sometimes benefit from a colder site, say on a north side of a building, to keep them from blooming to early and losing their blossoms to winter rains. After choosing the site and spacing desired, lay out the orchard by putting 5 foot stakes at each tree location to line up and visually determine the planting sites. Remember that pollenizers, when required, should be within 50 feet of each other, the closer the better.

DIGGING THE HOLE

The old rule of thumb is to dig a ten dollar hole for a one dollar tree. Dig the hole twice the diameter and twice the root mass of the tree, at least 3’ by 3’ for grafted trees. When digging keep the topsoil and subsoil separate. Loosen the sides and the bottom of the hole. Note that the shovel may “glaze” the sides of the hole, especially in clay soils, leaving a hard, compact surface that is impenetrable to young roots. For this reason it is always advisable to fracture the sides of the hole when filling in. AMENDMENTS – Placing too many goodies in the hole, such as manure or compost, can create an environment that the tree roots never venture out of. The best amendments are low bulk sources of minerals, such as bone meal, soft rock phosphate, kelp meal etc. Mix these with the topsoil, to be placed in the bottom of the hole, where most active root growth will occur.

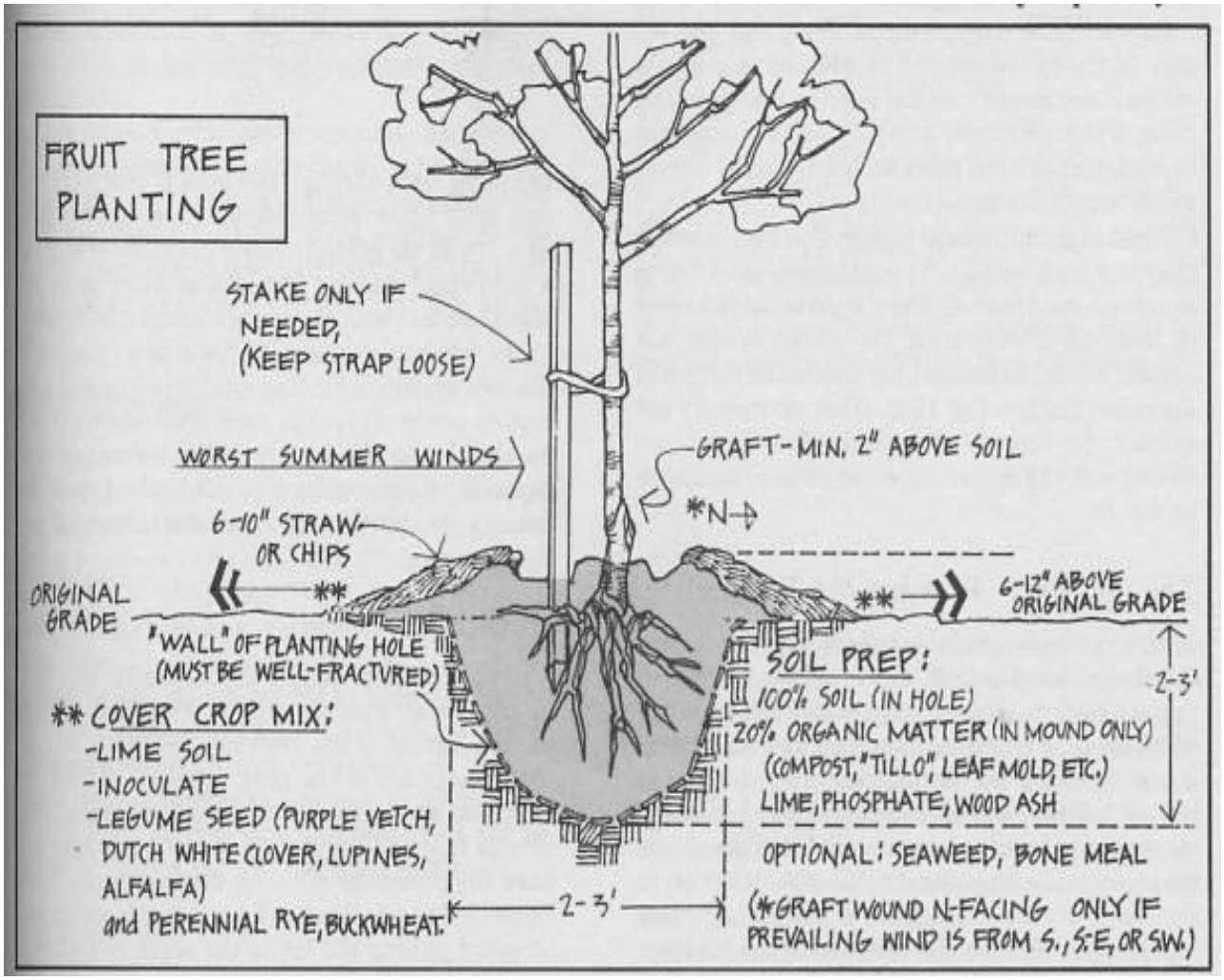

Diagram: Robert Kourik "Designing and Maintaining Your Edible Landscape Naturally"

PRUNING AND PLANTING

If your tree has a bud union, face it north, or on the opposite side of strong prevailing winds. Carefully note where the soil line was o the plant so that you can plant it a t the same depth as it was grown, or slightly deeper. With grafted trees it is important that the graft union be 3"-6" above the soil. Prune off any damaged roots just above the break, as well as crossing roots or unusually long roots. If there is a definite taproot (typical of nuts) leave this longer than the side roots. Remember that the tree lost several roots when dug, and this must be balanced by top pruning, so that the roots can feed the branched without strain. Trees under four feet are usually cut back to a three foot single whip, cutting back any side branches and about a third of the top. Be sure to leave a healthy, plump bud at the top of the tree, cutting 1/2 inch above it. A rule of thumb: branched trees and multi-stem shrubs should have 50% of each twig pruned off.

When ready for planting, put about 1/3 of the topsoil mix in the hole and place the tree in, spreading the roots. Often a mound of soil at the bottom is useful for keeping the roots spread out. Avoid placing any weeds or green plant material in the hole – they emit methane gas when decomposing, which does not agree with young roots. Put the rest of the topsoil in and tamp lightly. It is important to eliminate air pockets and ensure that the roots are in good contact with the soil. This can be achieved by puddling the tree roots with large quantities of water. Fill the hole and let it soak in, gently wiggling the tree and poking the mud with a stick to eliminate air bubbles. After the water has soaked in, fill the rest of the hole with the subsoil and tamp it firmly with your feet, keeping the stem upright.

CARE OF YOUNG TREES

Proper care is essential during the first few years of a tree's life, with the first season being the most crucial. A healthy soil and vigorous growth is the best insurance against pests and diseases. Be sure you can weed and irrigate regularly during the summer, at least 1" of water per week (drip works great). Note that standard and semi-standard trees can usually be weaned to dry framing as they mature, but supplemental water is necessary to get them established. Top dress in the spring with compost or aged manure at the dripline. Paint the trunk of all young trees from an inch or two below the soil level up to the first branches with white or light colored interior latex paint that has been thinned with equal parts water. This is especially important in hot summer areas, to protect the tree's young sensitive bark from sunburn and flathead bark borers. During the growing season, remove any sprouts from the rootstock. Cultivating or mulching the ground in a minimum 2 foot circle around the tree will greatly help the growth. Keep mulch and organic matter away from the tree collar (where the trunk meets the soil) to avoid collar rot. When necessary, use screening to protect tree roots from rodents.

RECOMMENDED RESOURCES

Backyard Berry Book, The, by Stella Otto. The companion volume to Backyard Orchardist, this indispensable book has a similar format and is also packed with useful charts, tables and practical advice based on first hand experience. You'd have to thumb through a lot of different references in order to find the information in this one book. Otto Graphics. Maple City, Michigan. 1995.

Backyard Orchardist, The. by Stella Otto. This is the owner's manual for fruit trees. A highly informative, extremely practical book packed with useful tips on successful fruit tree growing. Otto starts from the beginning, how to plant and care for young fruit trees, and walks you through the season, from fertilizing to pruning to thinning fruit to managing pests, even proper harvest and storage techniques. One chapter is devoted to each of the major temperate fruits, apples, pears, sweet cherries, pie cherries, peaches and nectarines, plums and apricots. We keep it handy on the shelf and refer to it often. Highly recommended. Otto Graphics. Maple City, Michigan. 1993.

Designing and Maintaining Your Edible Landscape Naturally, by Robert Kourick, distributed by the Edible Landscape Book Project, PO Box 1841, Santa Rosa, CA (707) 874-2606. Without a doubt, the most useful gardening book available. It has a wealth of information on garden design and methods, tree crops, peat control and soil health. Lavishly illustrated, with easy to read charts and tables that you will use for years. Excellent information on fruit tree selection, rootstocks, pollination, planting, pruning and care. Highly recommended.

Fruit (the Simon and Schuster Step-by-Step Encyclopedia of Practical Gardening). New York, Simon & Schuster, 1980. From the British horticultural tradition, lots of good information for beginners and veterans alike. Step by step illustrations, good information on pruning and special effects such as espalier and cordon.

Gaia's Garden; A Guide to Home-Scale Permaculture by Toby Hemenway. Chelsea Green Publishing Co., White River Junction, VT. 2001. Perhaps it's occurred to you during a hike in the woods that the forest flourishes without any human intervention at all, no weeding, watering, pruning, fertilizing or composting. This book shows how to design home landscapes, gardens and orchards to function more like natural ecosystems, which means less work and more productivity. Starting with the basics of ecology Toby discusses how to build soil using sheet mulch, how to catch and store water using swales, ponds and grey-water systems, how to design gardens that attract beneficial insects and how to combine species into plant guilds. The culmination of the book will be of particular interest to tree lovers as the final chapter is on how to plant a food forest. This book is both practical and inspiring, filled with useful charts, tables and diagrams that you're sure to refer to for many years. Chelsea Green Publishing Co., White River Junction, VT. 2001.