

Organic Grower's School 2018

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Elements of a Site

wooded/clear

aspect and slope — seasonal light saturation

sun and water interactions and their movement through the landscape

Site Preparation - essential for success

depending on scale, you can do work by hand or with equipment.

Larger fields should be plowed prior to planting, then harrowed and amended with organic material (*leaf mold, manure, wood mulch, and micronutrients*)

Planning Trees

To prevent loss of spring blooms to freeze, best is a S or E slope, or mid-slope

Measure your field, and start small, making small mistakes in out of the way places.

Spacing, *in-row* and *between-row*. Depends on speciation and design

Multi-specie plantings encourages resilience, disease resistance, good pollination, diverse diet

Planting trees -

Better high than low. Planting too low is a common mistake. *soil drainage is essential for all fruit and nut trees*. With potted trees the top of the rootball should be 1/2" to 1" above the ground level. For bare-root, look for the change of color to figure out how deep to plant. loosen deeper layers of soil, and mix *just a little* bit of rich soil in the hole. more on top.

Trim roots if necessary (to prevent curling inside hole), also tops.

ROOT DIP: *Fish hydrolysate, Sea 90 and Kelp, soak for 15 minutes prior to planting* — enables

— always protect bare-roots from direct sunlight (!). UV light can destroy them. Some people face the graft union to the North, on grafted fruits.

Fertilizing

Addition of heavy organic matter mainly *from-the-top* down benefits all trees, and feeds the mycorrhizal networks essential to their success.

Macro: NPK plus Carbon: wood ashes (applied in early spring), leaf, mold, cow and chicken manure, old hay or straw and wood mulch — *can be a problem in heavy bermuda sod*.

Micro: Thorium (KELP) Lime, Azomite (volcanic ash), Sea-90

Compost teas: check out a simple compost tea recipe at www.soilfoodweb.com, spray in the evening when the stomata are closing. Micronutrients and sugars will be absorbed directly by the leaf.

Root drenches can also be applied with sea-90, fish emulsion or hydrolysate

Gravel Rings: 3/4 washed— laid down around apples, pears and stone fruits help prevent burrowing mammals destroying roots and stunting growth. Check how well rooted your tree is before you prune by gripping it's trunk and pulling firmly but gently around in a circle. After one or two years the tree should be very well established

Where to obtain orchard stock

Potted, from local retail nurseries. *Advantage*: you can purchase and plant any time of year, normally larger trees available, \$\$\$

Bare-root Dormant: plan ahead and order high quality 'field-grown' trees by mail.

Advantage: encourages more careful planning and planting at certain times of year. More varieties are available this way, available from wholesale \$.

Pruning, anytime december to march/april

For young apples, pears: you will be pruning to train what will become the trees primary branches. early on you will leave lower branches, but as they grow, you will cut them to favor those up higher. favor branches with a 40-60 degree angle, think about how children will climb the tree to collect fruit. Trim last years growth (indicated by color and whorl) down to keep the tree small and *face the new terminal bud* away from the main stem and other branches.

Bigger apples: be prepared to trim at least 30%-50% of last years buds once the tree is established. This keeps the tree from growing into itself, reducing air-flow and thus rotten fruit. It also tricks the tree to remain in reproductive stages for longer periods of time and favor the 'spurs' on older growth that yield flower, and fruit.

A list of my favorite nurseries with associated information about my favorite tree crops:

Bare-root Dormant Wholesale:

Burnt Ridge Nursery: offers a huge variety of high quality & unique edible trees, shrubs and vines. Grafted cultivars of persimmon, good place for currants, gooseberries and Goumi. *Make sure your selections are suitable for your growing zone.*

Forest AG: the go-to place for HYBRID HAZELNUTS. get a bundle of 25 and set-out all of them. space 3' apart for a tight hedge, 6-7' for easy walk around or in between apples. 12-15' tall multi-stemmed shrub, good for wildlife. Plant in a long row, roadside or garden border, property line or creekside. Wind-pollinated, so maximum specimens lead to more nuts. *\$125/bundle of 25*

Willamette Nursery: for rootstock of apple, pear, stone fruits

New Farm Supply: best place for SELECT chinese chestnut, \$90 for 10 trees or \$297 for 100

Finch Blueberries: wholesale prices on high-quality high-bush blueberries. Order early for bigger bushes, ask nursery manager for variety of adapted varieties to your area. \$1-\$12 for 1yr to 8yr

Missouri Trees: <https://mdc.mo.gov/trees-plants/tree-seedlings>. Lots of edibles from \$0.10/each

TNtrees.com: <https://agriculture.tn.gov/OnlineSeedlingSales/default.aspx>. second best to MO

Retail potted nurseries ~

Ask around! nurseries are everywhere in the southeast (esp TN) and they typically offer a variety of edible stuff that may come with a good story and lead to meeting other orcharding enthusiasts.

Thanks for attending, contact me anytime by email ~ ravenridgefarm@gmail.com

