Chilkat Valley Orchard Project
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Chilkat Valley Historical Society

Before You Order Fruit Trees

By Burl Sheldon and Blythe Carter

Growing fruit trees is a long-term endeavor involving years of effort. Plan and order early for the coming spring. Outlined below are key considerations.

Agricultural Zone 4 or Zone 5—Coastal Haines is Zone 5. A winter temperature of -20F defines USDA Zone 4, and that chilly transition is reached around 15-mile on the Haines Highway.

The dormant buds of most varieties of sweet cherries are damaged around -20F; planting sweet cherries up the highway in Zone 4 is, therefore, questionable. Sour cherries do fine at -20F and colder.

Apples do great in Zones 4 and 5. The story for plums is complex, but they can thrive and ripen in our zones. Practically speaking, however, only a few varieties are known to be productive in our area, and consistent productivity is not a guarantee. Requirements for plum success include: selecting the very early-ripening varieties, a FULL-sun location, and cultivars with high chill-hours, *not* low. Early ripening, European plums are the best bet. There are myriad hybridized stone fruits, and some of these might work out, but it's an experiment.

Plan for Cross-Pollination—You'll get better fruit-setting where there are multiple cross-pollinating varieties of the same species, all blooming simultaneously, which is an ideal, planned outcome. Even the "self-fruitful" varieties set more fruit when there are crossing genetics. A lonely fruit tree with no fruitful friends of the same species may produce ZERO fruit.

The Meaning of "Early-Ripening"—Full, sweet ripeness in our region is only possible with EARLY RIPENING cultivars. The catalog says "ripens in September"—that is NOT early for our biome, with exceptions granted for crazy-good solar sites, or where fruit trees are growing in a hoop-house/green-house—and indeed that is an option.

Locally, Rob Goldberg and Kate Saunders grow fruit trees indoors, as does Rob Bishop of Hoonah, AK. The added heat lengthens the growing season by perhaps 3-months, *with much more heat all summer*

Sweet cherries must be harvested as early as possible, because August rains will cause them to split. Popular varieties, like Bing, Rainer, Royal Ann, Lapins, etc. are not early ripening; they will pollinate, produce and taste great, *but split like crazy with the August rains.* Blythe points out that a few very early varieties can be harvested before those dependable rain events saturate the soils and cause cracking. **Early varieties better suited to our area, include: Stella, Early Burlat, Harrelson and Kristin.**

Some Early-Ripening Varieties

Desert Apples (better keepers):
Akane, Discovery, Pristine, Prima, Sansa, Queen-Lubsk, Wm's Pride, Zestar

Sauce Apples (very early, not great keepers):
Lodi, Yellow Transparent, Norland, Parkland, Goodland.

Sweet Cherries:
Early Burlat, Harrelson, Kristin, Stella

Know Thy Site—Understand your water table and how your soil handles water. Start by digging a righteous hole and pouring in a big bucket of water. Does it drain in an hour? Now, pour in another bucket and check back again in hour or two. Does the second bucket percolate and drain away? Conversely, is it sandy/rocky alluvial material that won't hold water?

The extremes are problematic—soils that: a) won't hold water or b) won't drain--staying soaked for months on end--is a waste of time and money, but practical work-arounds may exist, like planting on a mound or in a large raised bed or irrigation.

Get your soil tested for $20 and a Priority mailer. The *Chilkat Valley Orchard Project*, and Alaska's agronomists, use Brookside Lab, New Bremen, OH—process S001AN. You'll learn about the 14-crucial nutrients, the pH, organic matter and much more. Understanding the soil's nutritional *limiting factors* allows you to begin nudging these parameters towards the "sweet zone" **early,** rather than starting 10-14 years into

the project. Similarly, the USDA Jar Test helps you understand the "soil texture"—its fraction of clay, silt and sand. Help is available to interpret your soil test results: info@cvorchardproject.org.

Through the miracle of photosynthesis, all woody growth and sweet fruit come from solar radiation. If your site doesn't have crazy-good, full-day insolation, ***think about planting something other than fruit trees.*** A half-sun site will halve the woody growth, sugar production and fruitfulness. And vigorous, upright woody growth is initially all that matter—*not fruit.* Again, experimenting with a seasonal hoop-house enclosure can dramatically change the calculus.

Plan for a Dwarfing Tendency—Choose the rootstock with MORE care than you do the fruit stock! You can change the cultivar by grafting, *but you're stuck with the rootstock*. The underground, clonal rootstock is analogous to the engine of a car, powering woody development and tree-size, which is referred to as "***vigor*.**" Our observation is that the online and catalog growth expectations (tree-size) don't match-up with the reality of our northern biome—or it's much slower because of our short growing season.

At latitude 59N, with our shallow soils, fruit trees develop more slowly and stay smaller than in Oregon or Washington—what we regard as a "dwarfing tendency." Rootstocks with greater vigor can offset this inclination and handle deep snow better.

Instead of purchasing Dwarf, choose Semi-Dwarf. Instead of selecting Semi-Dwarf, choose larger, Semi-Standard or a Standard rootstock (most vigor/largest tree-size).

The down-side of greater vigor is that trees require years longer to bear first-fruit. The up-side is long living, Legacy Trees that survive and feed people nutritious fruit into the future, long after you are dust.

With that caveat, there are terrific, local "dwarf orchard" examples. Blythe Carter, with the help of small live-stock, is nurturing a significant dwarf orchard on Comstock Rd—apples, cherries, plums and others. Gobs of seaweed, and poopy ducks, helped Betsy and Dana Vanburg develop a productive, dwarf orchard on the shore of Mud Bay. These examples show us that dwarf trees can work—provided they are given protection, nutrition, pampering, and a good fence. We suggest choosing greater vigor if your site gets deep snow

Consider Disease Resistance—Apple varieties that resistant Apple Scab are better suited to wet climates (ours). Sweet cherry rootstocks that resist Bacterial Canker are important here; however, sweet cherry trees are generally short-lived critters, perhaps 30-years max. A Standard apple tree in good soil can live for generations. Do not select an apple cultivar that is prone to Apple Scab!

Plan for Fencing—Individual, unprotected fruit trees will cause you grief, in time. Close your eyes and imagine your beautiful orchard broken in pieces on the ground, or stripped of bark and fruiting spurs. Trees left unprotected from moose and bear are a roll of the dice, every year. Meaning: a barrier fence that is electrified seasonally—taller is better.

The Transplanted Sour Cherries—The so called "Haines Sour Cherry" is, in fact, the result of multiple folks over many years importing different rootstocks and varieties. It's not "a thing." As with all fruit trees, when you dig up and replant a suckering sour cherry whip, you are getting the fruit variety associated with the rootstock genetics, *not necessarily the fruit variety of the parent tree.* Is it a dwarf or is it standard? It's a fruitful mystery!

Digging up and transplanting a sour cherry whip works great, and it's free, but unless you order from a nursery you won't know exactly which sour cherry variety or rootstock you're getting. The nursery-sourced, grafted products are likely to produce fruit several years earlier. Mulch them and—as with all fruit trees—keep after the weed/sod competitors.