



## Skagway Fruit and Nut Tree Planting Initiative Basic Tree Information and Early Care guide

4th Edition

by Kim Burnham, 2012 (Revised January 2015)

This is intended to be a very basic guide to selecting and planting fruit and nut trees. Following these instructions should help your tree(s) get off to a good start, but there is a lot more detailed information available elsewhere to help beginning fruit/nut tree growers care for their trees beyond the planting stage. A short list of additional resources is provided at the end of this guide, as are several tree nursery/suppliers.

### Why plant fruit or nut trees?

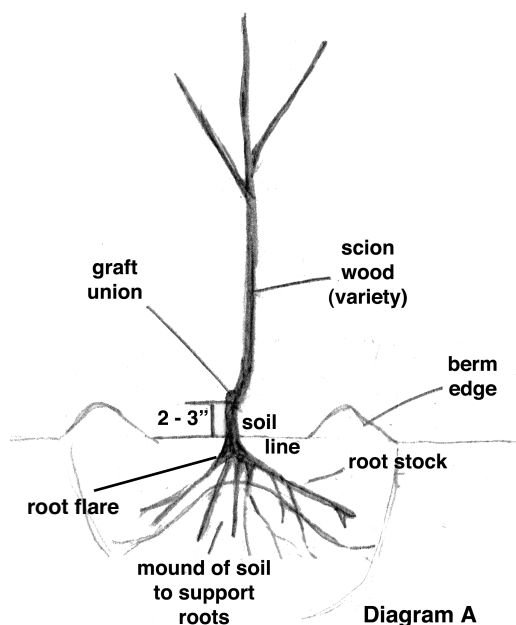
The main reason to plant fruit trees, of course, is for the flavorful, nutritious fruit they will provide, for many years, once they become established. Essential nutrients (especially vitamin C) in fresh fruit can degrade quickly during the time fruit is transported from elsewhere, even when shipping conditions are optimal. Fresh, locally harvested fruit will not only taste better, but also may be more nutritious. Most nut trees are not cold-climate tolerant, but there are a couple of varieties (bush hazelnuts, dwarf Korean pine nut) that can tolerate cold winters, and could potentially provide a good source of protein. Any local food production will also help reduce Skagway's carbon footprint and improve our food security. Fruit trees will also sequester small amounts of carbon while they add to the beauty of our "Garden City" with springtime blossoms and colorful fruit-laden branches throughout the summer and into fall. Due to their longevity, many fruit and nut trees can also serve as heritage or memorial trees. Finally, if you take part in this initiative you may be eligible to receive a \$20 subsidy per tree (see initiative application for full details).

### Step 1 - Selecting a site:

To do well, fruit/nut trees require a few conditions that should be considered before deciding to purchase a tree. The planned planting location must have **good drainage, at least 6 hours of full sun** per day (preferably 8 or more), and somewhat decent soil. Good soil drainage can be determined by digging a hole about 8-10" deep and filling it with water. If the water has drained in 3 hours or less, drainage should be sufficient. Fruit trees grown in our climate also prefer having a **location sheltered from the North wind**. Additionally, it is important to consider the anticipated size of the mature tree, and make sure that there is enough space for it to grow to maturity without impediments. Be sure to consider, for example, the tree's projected height with regard to such things as overhead power lines, as well as root span/depth in relation to house foundations, underground power lines and water or sewer lines.

### Step 2 - Selecting a size:

Fruit trees come in 3 general size categories, which are related to the type of rootstock to which the fruiting wood (scion) has been grafted. Standard-sized fruit trees are the largest and can grow to 25 feet (height/width) or more (probably too big to have more than one on a 5,000 square-foot residential lot); trees on semi-dwarfing root stock can average between 15-18 feet; and a dwarfing rootstock will keep a tree at a manageable size of



about 8-12 feet (considering all other conditions are adequate). It is possible to keep a tree on a standard rootstock smaller with heavy regular pruning, but to avoid a lot of pruning it is probably better to get a fruit tree on a semi-dwarf or dwarfing rootstock. The advantage of trees on standard rootstocks is that they are usually more hardy and establish stronger, more vigorous root systems making them sturdier trees overall. Trees on semi-dwarfing rootstocks seem to be a good middle ground--requiring less maintenance pruning, but being relatively sturdy and of a more harvest-friendly size. The smallest type, the dwarf trees, might need staking [see diagram B] as their root systems tend to be the least vigorous of the three types, but still can be good producers of fruit for smaller gardens. In general, dwarfed trees will mature to fruit-bearing stage before standard size trees. **If you are considering getting several trees, the spacing between the trees should at least equal the projected height of the trees.**

### Step 3 - Selecting a variety

#### **Suggested Fruit Tree Varieties for Southeast Alaska:**

These varieties should be hardy enough for our region (but there are no guarantees with nature!), and the fruit is likely to ripen during our short, cool summers.

If choosing varieties other than the following, it is best to look for early-maturing cultivars—especially in the case of apples and pears—so that they will reach maturity before the first fall frost.

Varieties with an Asterisk (\*) have been recommended for southeast Alaska by the University of Alaska Cooperative Extension Service, the other varieties were suggested by nursery professionals, or home gardeners who have reported fairly consistent success in growing the trees here in southeast Alaska.

**Apples:** (note: most apples are not self-fertile, which means: two different but compatible varieties are needed for good pollination and fruit production; see an apple pollination chart)

Yellow Transparent\*, Pristine\*, Gravenstein\*, Lodi\*, Sansa\*, Silken\*, Akane\*, Discovery, Duchess of Oldenburg, Goodland, William's Pride\*, Wynooche, Zestar, Tydeman's early\*

**Crab Apples:** (may be able to serve as a pollinator to regular apples)

Centennial\*, Oregon (western) Malus fusca\*, Dolgo

**Pie (Tart) Cherries:** (most are self-fertile)

Montmorency\*, Republic\*, Telephone Hill, North Star, Surefire, Mesabi, Evan's Bush Cherry

**Sweet Cherries:** Lapins\* (self-fertile), Hartland\* (not self-fertile), Stella (self-fertile), Early Burlat (not self-fertile), Black Gold (self-fertile)\*, White Gold (self-fertile)\*

**Others fruit types to experiment with (may survive in sheltered spots, but not yet proven to be consistently productive in our area):**

**Plums:** Asian varieties such as: Shiro\* (partially self-fertile), Hollywood\* (self-fertile), Beauty\* (self-fertile), Methley (self-fertile); European varieties: Early Laxton\* (not self-fertile), Imperial Epineuse\* (not self-fertile), Green gage (self-fertile), Mount Royal (self-fertile)

**Pears:** Eastern European varieties: Ubileen (not self-fertile), Bella de Giugno (not self-fertile); Parker (not self-fertile), and possibly some hardy Asian pear varieties.

**Nuts:** Bush Hazelnuts (*Corylus americana*) need 2 or more, Dwarf Korean Nut Pine (*Pinus koraiensis*) (for pine nuts; hardy to zone 3, slow-growing dwarf variety)

There are several fruit tree nurseries/suppliers, as well as charts that detail varieties that have been successful in the area, listed at the end of this guide. It is best to order as early in the season as possible to ensure the widest variety of stock to choose from.

### Step 4 - Pre-planting info/ When to plant:

After determining a good location for your tree, and deciding/purchasing the type of tree(s) you want, the next step will be getting the tree(s) in the ground! You will have to wait until the ground has thawed enough to dig a hole a couple of feet deep--in Skagway, this usually occurs around mid-late May. Usually, if you are ordering

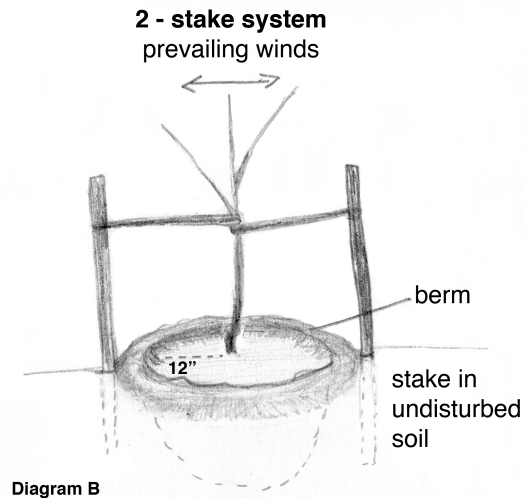
trees, you can specify when you would like them shipped, so they arrive at or close to the right time for your area. **If you have ordered bare root (not potted) trees, and they arrive before it is possible to dig a hole, then it is very important to keep the bare roots from drying out.** Covering roots in damp shredded paper or wrapping in an old damp towel and placing in a plastic bag that fits around the whole root system will suffice for a few days wait. If it will be longer, the tree might need to be “heeled in” which basically means covering the root system with moist soil; if the ground soil is frozen, use potting soil and a large pot. For either type (potted or bare root), the trees should be kept in a cool, shady spot to help prolong dormancy until planting day arrives. All fruit trees should be planted as early as possible after the ground thaws, to give them ample time to get their root systems established before fall. The 2015 initiative sets a planting deadline date for June 8th, but planting sooner, if possible, is preferable (the initiative application is due on May 29th, and can be filled out once you have the trees, even if they are not yet planted).

### Step 5 - Planting Day

You will need: a bucket large enough for the root system of each tree, water, sharp pruners, diluted rubbing alcohol (to sterilize pruners), and a shovel.

If possible, try to plant on a day that is overcast, especially if the tree has come out of dormancy and the buds have started to swell or leaf out. It is beneficial to soak the roots of bare root trees in a bucket of water at for least 2 - 6 hours prior to planting. While the roots are soaking, you can begin preparing the planting hole.

1. Dig the hole. The hole should be only slightly (4-6”) deeper than the root system, and at least a foot or so wider. It is helpful to save the soil from the hole on a tarp or in a wheelbarrow. Don’t improve the soil with any amendments, but do remove large stones. Score the edge of the planting hole with your shovel.
2. After the allotted soaking time, remove the tree from the bucket and inspect the roots. Trim off any broken or frayed roots with clean cuts, using sterilized pruners.
3. Create a center mound at the bottom of the hole to spread the tree roots over. Make the mound high enough so that when the tree is placed on it, the tree is at the right level--look for the soil line from when the tree was last planted, and plant the tree so that line is even with the existing ground level. Alternately, if no soil line is visible, look for the root flare--the top of the root flare should be just at ground level. The graft union should be at least 2” above ground level. [see diagram A]
4. Once the correct height of the center mound is determined, remove the tree momentarily and firm bottom of hole around the mound with your foot.
5. Place the tree in the hole, with the graft union facing north, and spread its roots over the center mound, making sure they all are pointing downward. If a couple of roots are overly long, it is better to prune them back slightly, than to bend them to fit in the hole.
6. Holding the tree as vertical as possible, fill the hole in with soil, firmly tamp the soil flat with the back of the shovel or your hand (not your foot, to avoid braking any roots) to make sure there are no air pockets.
7. Once the tree is planted and the hole is full, make a circular berm around it to hold water like a basin. The berm should be equal to the circumference of the spread of trees limbs. If the tree is a “whip” (has no limbs yet), make the berm at about a 12” radius from the tree trunk.
8. Water well and add mulch, but keep the mulch from touching the tree trunk to prevent decay, insect damage, and disease.
9. If the tree is still dormant at planting time, you can prune it to establish the basic structure for the tree. A good book on pruning is listed at the end of this guide.
10. Stake the tree, to keep it straight, using a two-stake system (especially in high wind areas, and for trees on dwarfing root stocks). [see diagram B]



## **Step 6: Fill out and turn in the initiative application by the May 29th, 2015 deadline!**

Applications are available at City Hall and the Skagway Public Library.

### **A few more important tips for a tree's first years of life:**

Water well (soak deeply) at least once a week during the summer, more if it is hot and dry. Young trees need about 10 gallons of water per week.

Do **not** allow the tree to bear fruit the first season or two. Prevent fruit from developing by removing all of the immature fruit shortly after flowering. This helps the tree direct energy into developing a strong root system and limb structure, instead of using it to produce fruit. It can be disappointing, but will pay off in the long run.

Keep weeds from growing from within a 2-3' circumference around the tree.

In a few years, when your tree is in production mode, be sure to follow **bear country protocol** which includes harvesting all fruit as soon as it is ready, not allowing fruit to hang on the trees once ripe, and cleaning up any fallen fruit which might attract bears. (For more information, see the related handout: **Recommendation for Fruit Growers in Bear Country**)

Winter care includes wrapping or painting the lower trunk of the tree to prevent sun scald. It is also a good idea to not let heavy snow accumulate on young branches (shake the branches before they get too heavy).

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### **Nurseries/ suppliers**

Pine Country Yard & Garden; 1989 State St. Skagway, AK 99840; phone: 907-983-2408

Ed's Edible Landscaping; PO Box 33077 Juneau, AK (by appointment)  
phone: 907-789-2299 email: [edbuyarski@hotmail.com](mailto:edbuyarski@hotmail.com)

Raintree Nursery; 391 Butts Rd., Morton, WA 98356  
phone: 1-800-391-8892 website: [www.raintreenursery.com](http://www.raintreenursery.com)

Burnt Ridge Nursery & Orchards  
432 Burnt Ridge Road, Onalaska, WA, 98570  
website: [www.burntridgenursery.com](http://www.burntridgenursery.com) email: [mail@burntridgenursery.com](mailto:mail@burntridgenursery.com) phone: 360-985-2873

Yukon Gardens; 913.76 Alaska Highway, Whitehorse, Yukon, Y1A 6E4  
phone: 867-668-7972 email: [ytgardens@klondiker.com](mailto:ytgardens@klondiker.com)  
This nursery carries potted, very hardy apple varieties, and possibly some pie cherries.  
Call in advance to ask about details on bringing fruit trees through US customs.

### **Resources**

The Backyard Orchardist: A Complete Guide to Growing Fruit Trees in the Home Garden, Stella Otto, Chelsea Green Publishing Co. 1993

The Pruning Book, Lee Reich, The Taunton Press 2010

Growing Tree and Bush Fruits in Alaska: Publication HGA-00038, Robert Gorman, University of Alaska Cooperative Extension Service

UAF Cooperative Extension Service - Juneau District; 1108 F St; Suite 213; Juneau, AK  
99801-1844 Phone 907-796-6221

For specific questions try asking the local online gardening group: Skagway Organic Gardening Society (SOGS) [www.facebook.com/groups/skagsogs](http://www.facebook.com/groups/skagsogs) (a request needs to be made to join the group, before questions can be posted). Not on Facebook? Contact Kim Burnham [frilosite@gmail.com](mailto:frilosite@gmail.com) with questions.

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**See charts that detail varieties that have been successful in the area, on the next page! →**

**As reported by the first survey (2014) conducted about trees planted during the 2012-2013 years of the Initiative:**

***Varieties that have survived one or more winters:***

Tart Cherry	Sweet Cherry	Apple	Pear	Plum	Nuts
Montmorency	Stella	Summer Mac	Ubileen	Mt. Royal	Jefferson Hazelnut
Surefire	Black Gold	Honey Gold	Bella di guino	Early Laxton	Theta Hazelnut
North Star	White Gold	William's Pride	Shipova		Buartnut (walnut)
Evan's Dwarf	Kristin	Red Astrachan			
Danube	Kansas Sweet	Duchess			
		Liberty			
		Zestar!			

***Varieties that have survived one or more winters, and flowered:***

Tart Cherry	Sweet Cherry	Apple
Montmorency	Stella	Summer Mac
Surefire	Black Gold	Honey Gold
North Star	White Gold	William's Pride
Evan's Dwarf	Kristin	Sunrise
Danube	Kansas Sweet	

***Varieties that have survived one or more winters, flowered, and set fruit:***

Tart Cherry*	Sweet Cherry*	Apple
Montmorency	Stella	Honey Gold
Evan's Dwarf	White Gold	William's Pride
	Kristin	
	Kansas Sweet	

\*Cherries typically take less time to reach fruit-bearing age.