General Growing Conditions in Northern Idaho for Fruit Trees

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Hardiness – Refers to tree wood. Select varieties hardy to zone 4. The USDA Hardiness Zone Map places Kootenai County in zone 5, (hardy from minus 20 to minus 10 degrees Fahrenheit). Certain protected areas might have **microclimates** that could be considered zone 6, (hardy from minus 10 to zero degrees Fahrenheit). Most zone 6 plants are not reliably hardy here, and even those recommended to zone 5 may experience winter injury, depending on other factors. An example of a microclimate could be a location near a large body of water (lake or river). On a smaller scale in individual yards, microclimates are determined by the placement of buildings, fences, shrubbery, pavement, topography etc.

To be safe, we recommend choosing plants that are reliable to at least one zone hardier in Zone 4. Zone 4 plants are the most reliably hardy for our area (hardy from minus 30 to minus 20 degrees Fahrenheit) when late frosts hit or drastic temperature changes in winder affect our region. You can also purchase to zone 3. Any more than that and other factors such as day length enter in. Sunset Publications has a different mapping system and places North Idaho in zone 2b. Again, it is recommended to plant according to one or more zones colder and use zone 2a as a guide. Be sure to note which mapping system you are using to avoid costly mistakes.

Frost free days – The estimated "frost free" period for our area is around 120 days (mid to late-May to mid-September). Most **fruit trees require 150 frost free days**. For the purpose of fruit trees, temperatures over 28°F are considered frost free. The frost free period must start early enough in the spring so that blossoms are not damaged and continue long enough into autumn so that the fruit can mature. Time must also be allowed so that twigs, leaves, and branches can acclimate (harden off) before winter.

A physiological or hormonal change brought on by shorter days and cooler temperatures initiates dormancy. A cool winter (below freezing temperatures) will keep trees dormant. Longer days and warmer temperatures cause trees to break dormancy. A cold snap before they are completely dormant can damage trees. A late frost after trees have broken dormancy can also cause damage. Fluctuating temperatures do not affect trees in complete dormancy.

Choosing the site – If there is property sloping, do not plant trees in low places. Cold air is heavier than warm air and low areas become frost pockets. If planting on a hillside, do not put a fence or hedge around the tree as it will impede air flow and cause frost damage. If possible, plant on the north side of the house out of the shade. This will delay bud break until later as the north side of the house warms up later.

Usual order of bloom in fruit trees: Apricot, Japanese Plums, Peaches, Oriental Pears, Italian Plums, Pears, Cherries and Apples.

Chilling requirements: This refers to the number of hours of cool temperature of usually less than 45°F that a tree needs **to break dormancy and bloom**. Apricots: 300-900 hours; Peaches: 350-1200 hours; Sweet Cherries: 500-1300 hours; Sour Cherries 600-1400 hours; Pears: 200-1500 hours; Walnuts: 400-1500 hours; Plums 300-1700 hours; Apples 250-1700 hours.

In the 2013/2014 season, Coeur d'Alene had:
Below 45° - 2682 Chill Hours
Between 45° and 32° - 1347 Chill Hours
Utah Model - 1163 Chill Units

Winter and Southwest damage: Winter and Southwest damage can occur regardless of hardiness. Winter sun is low and south and warms up the southwest side of trees. This starts cellular action, then nightly temperatures drop/freeze and cells rupture, causing a split on the southwest side of trees. Painting the trunks of susceptible trees up to the lower limbs with white, interior, latex, water-based paint will help reflect the sun's rays. Mix the paint with water in a 50:50 ratio. You can use tree wrap or snap polyurethane protectors. Remove the wrap very early the following spring. *Rodents can get inside protectors and chew on tree bark causing damage.*

Choose disease resistant varieties of fruit trees. Refer to our list of recommended varieties for this area. Some varieties of fruit are available year around at super markets, *i.e. Golden Delicious, Red Delicious*, Granny Smith*. Choose varieties of trees that produce fruit that is not so readily available.*

Pruning: We suggest growing and pruning fruit trees to only produce what you wish to consume. Otherwise, you will have unused fruit falling from the tree inviting wildlife, insects and disease into your landscape. Purchase bare root trees in order to prune into smaller fruit trees. This takes time but pays off in the end. A 5' tall tree can easily produce enough fruit for a family, and you will not have to purchase costly harvesting equipment or run into storage issues for the excess fruit. The rootstock does not matter when pruning to a small-sized fruit tree. Refer to the book *Grow a Little Fruit Tree: Simple Pruning Techniques for Small-Space, Easy-Harvest Fruit Trees* by Ann Ralph.

*(*trees not recommended for this area).*