



Factsheet #3: Apple Tree Pruning
updated April 2020

Context

Yukon fruit trees usually don't look like those that populate the orchards we might envision from another time and another place – no broad canopies overshadowing thick trunks perfect for hiding adventurous children. Grown here, fruit trees often develop multi-stemmed shrub forms, echoing their wild ancestors, in response to winter-kill and the occasional browse by a moose or intentional forming by the gardener. Those grown in shelters need to be kept small with the possibility of a second canopy extending above the ceiling. A happy Yukon fruit tree can have a variety of forms.

Before you start

When approaching pruning, it is important to understand your goals and how the tree or shrub grows and fruits. In the juvenile years, pruning is about developing basic form. Later on when plants are becoming productive, it is about maintenance of form and sometimes control of size, depending on your site, and about productivity. Plants split their resources between vegetative growth (new shoots) and fruit. Growing a heavy crop on a tree slows its growth, desirable to keep a tree from outgrowing a small space; conversely, overcropping can have a negative effect on the development of a young tree in stunting it and/or causing a tree to fail to produce new fruit buds for the following year. Different species and varieties of fruit bear in different spots: on new wood or old, on spurs along branches or at the tips. Understanding the fruiting of your trees and shrubs will make sure you prune for productivity. The apples we sell are spur-bearing or semi-spur-bearing and generally fruit on wood two years and older.

Form

The initial couple of years of an apple tree's life should be devoted to developing form. Good options for the north include the apple bush, with 8-10 strong branches radiating from a short trunk, a modified standard (not as tall as down south!) and the pyramid for dwarf varieties, or even more elaborate trained forms grown on a strong trellis or against a wall. The basic principles remain the same: strong, low branches can be encouraged by heading back (shortening) the leader of a one or two-year old tree; stronger lateral shoots should be pruned less hard than weaker ones to promote even regrowth; branches with a narrow crotch angle are weak and should be removed, as should branches that cross each other or rub. Most good general gardening guides have pruning sections that show details on proper cuts and descriptions of various forms. Whichever form you choose, keeping some productive branches low to the ground (as long as they can be protected from hares) will give them the advantage of snow cover in the winter. In June, trim unwanted upright shoots, or bend them and direct their growth into desired locations. For very vigorous trees, growth can be channeled into upward-facing shoots left alone in the spring, then removed in July.



Fruit

Once your tree is three or four, management can shift to a balance of fruit as well as form. Learn to recognize fruit buds; they are fatter than vegetative buds (prominence varies with cultivar). For spur-fruiting trees, fruit buds will develop on short spurs off of lateral branches. Promote the development of spurs by cutting back horizontal or downward-facing secondary shoots (short branches on branches) to single buds and heading back strong laterals by 1/4 to 1/3. Usually upwards facing secondary shoots are pruned off entirely. Ultimately, you want many short fruiting branches evenly located throughout the tree and fruit (fruit clusters in the case of apple-crabs) dispersed at a spacing of no less than 4” on average – for trees under five we recommend twice that spacing. This can be achieved through a combination of pruning, blossom thinning and fruit thinning. Earlier thinning of fruit means less wasted energy; later thinning means less vulnerability to mistakes and things like frost damage.

Dwarf forms (some cultivars, or induced by a dwarfing rootstock or interstem) naturally remain smaller while maturing into full productivity.



This Rescue applecrab shows a classic 'Yukon apple bush' form.



Prairie Sun is a natural semi-dwarf, perfect for a shelter. Modified dwarf pyramid.



Developing form early is important to a healthy tree. We won't let all the blooms become fruit!



We keep our September Ruby heavily cropped so she doesn't outgrow her space. Modified standard.

Take-aways

- ✓ Prune young trees to develop a strong form with evenly-spaced lateral branches
- ✓ Once fruiting, allow no more than 1 fruit (or cluster for applecrabs) every 4”
- ✓ Apple bushes are perfectly acceptable forms in cold climates
- ✓ Prune trees annually in March or April, while trees are dormant