

APPLE, PEAR TREES CAN SURVIVE AND THRIVE IN WYOMING

Match varieties with conditions, proper maintenance critical

Chris Hilgert

Growing fruit trees can be rewarding but takes know-how.

Here's what we know. Plant selection is critical. Many apple and pear varieties can produce consistently for decades in most of Wyoming. Sour cherries and bush cherries can also do well; however, not all fruit trees are able to survive and produce in Wyoming's growing environment. Some sweet cherries, plums, and peaches may grow well in the lower elevation areas of Wyoming, but winter temperatures and spring freezes during the bloom period often cause inconsistent yields.

Fruit Tree Varieties for Wyoming

Consider cold-hardy varieties as well as dwarf, semi-dwarf, or standard rootstocks. Choose the right rootstock for a space. As noted above, apple and pear trees do well in many places throughout Wyoming. The sweet cherry, plum, and peach varieties provided

in the table are some of the most cold-hardy varieties.

From my observations, even the best locations in Wyoming will yield only a light cherry, plum, or peach crop once every four to five years. Lower elevations, wind protection, and good luck increase survival rates and production.

The apple and pear varieties listed have been observed to survive and produce in Wyoming.

Rootstock and Tree Size

Trees with dwarf rootstock may grow 8-10 feet tall, which is ideal if space is limited, and no ladders are needed to prune, treat pests, and harvest; however, dwarf trees typically



Apple	Pear	Cherries	Peach	Plum
Snowsweet	Summercrisp	Montmorency (sour)	Contender	Bubblemum
Zestar	Ure	North star (sour)		Superior
Honeycrisp	Gourmet	Nanking (bush)		Waneta
Frostbite	Luscious	Sand cherry (bush)		Ember
Honeygold	Parker	Black gold (Sweet)		Underwood
Lodi	Patten	White gold (Sweet)		
McIntosh				

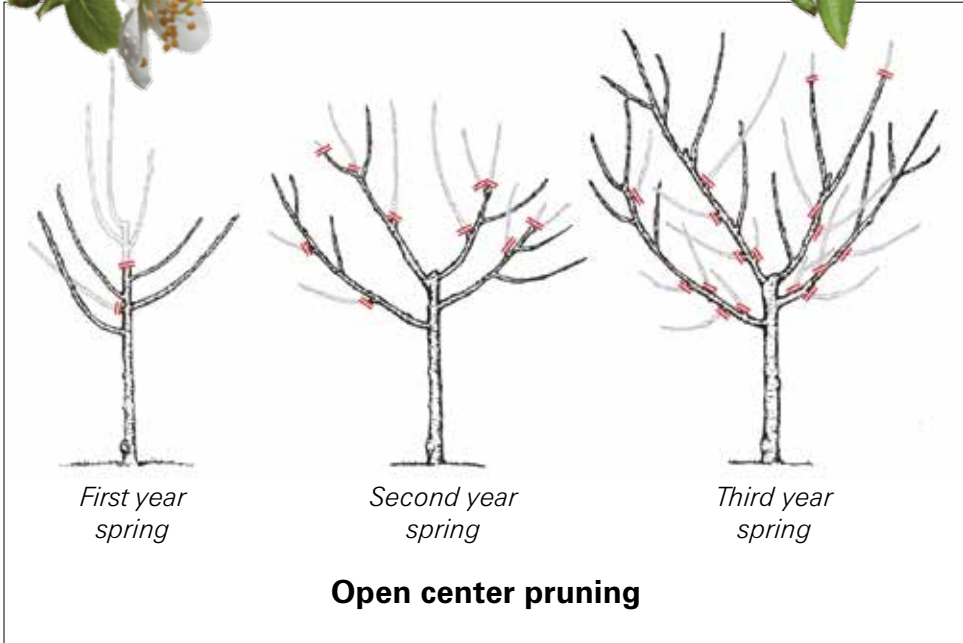
* must grow at least 2 different varieties for cross-pollination

* must grow at least 2 different varieties for cross-pollination

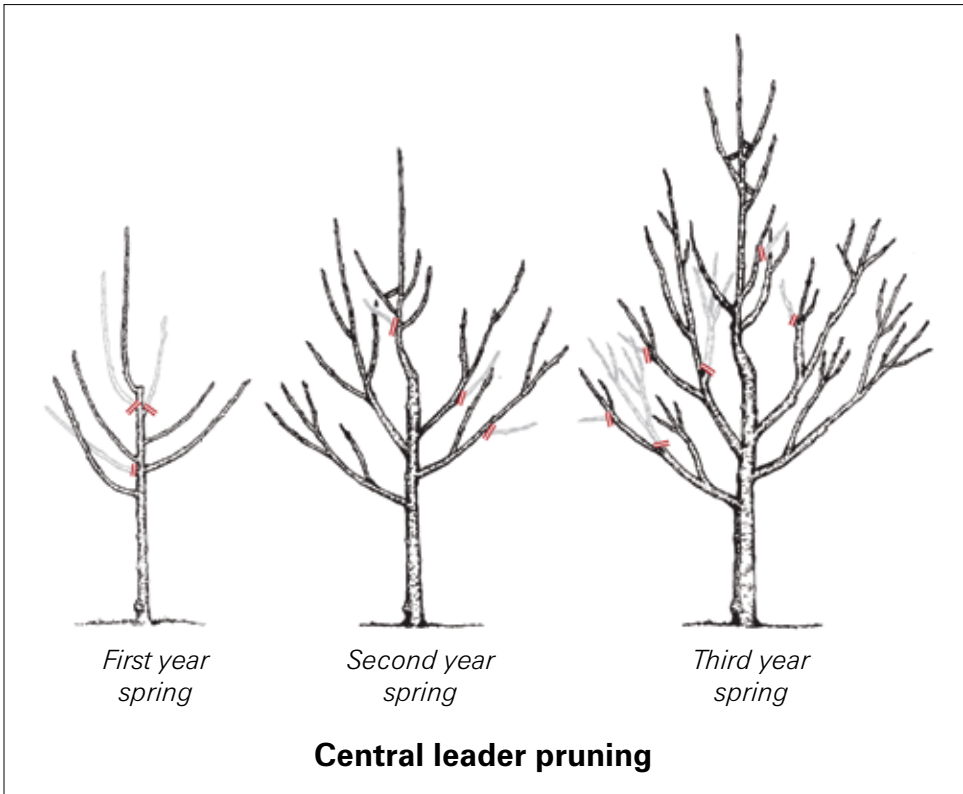
* some are self fertile, others require another variety for cross-pollination

* only 1 variety listed as zone 4. All others are zone 5 or higher

* some self fertile, other require another variety for cross-pollination



Used with permission. University of Wisconsin Extension.



Used with permission. University of Wisconsin Extension.

require staking or trellising to support. Unfortunately, dwarf fruit trees will struggle in Wyoming unless protected from the wind.

Semi-dwarf trees may grow to 15 feet tall and wide. While only slightly larger than dwarf trees, semi-dwarf trees do not require staking, can yield up to twice the fruit compared to a dwarf tree, and allow most adults to harvest the fruit without a ladder. Pruning can reduce tree height making harvesting easier. Semi-dwarf trees are good choices for residential landscapes, home gardens, and commercial production.

Standard size trees may grow 25-plus feet tall and wide. While standard size trees will produce the most fruit overall, large trees can be difficult to harvest. With proper care, adequate yields can be harvested from lower portions of a tree for fresh consumption and fallen fruit collected later to make cider and apple sauce. Standard size trees need more space but can be incorporated as shade trees in residential landscapes.

Pruning and Training

Start training fruit trees at planting time, but prune young trees lightly. Pruning young trees manages tree height and form. As fruit trees mature, pruning is one of the most important maintenance practices required for good yields, disease management, and ease of harvest. Fruit trees tend to produce smaller, lower-quality fruit without proper pruning.

Training and Pruning Cherries, Plums, and Peaches: Open Center System

Prune cherries and peaches to create a tree with an open center (see left). The tree trunk grows up to 3-4 feet where the young tree is topped (usually the day the tree is planted).

Next, three to five lateral branches growing out from the trunk are selected to remain as scaffold branches. Those branches will grow up and out forming a vase-shaped tree form. The open center allows sunlight into the tree, improving fruit quality and ripening.

Training and Pruning Apples and Pears: Central Leader System

Apples and pears are trained to a central leader with properly spaced lateral branches off the main trunk (central leader). See diagram page 6. A mature tree will have one main trunk extending from the base to the top of a tree. Pruning is done to space lateral branches, manage the height and spread of the tree, reduce fruit load, and manage some diseases.

Young trees should be pruned lightly at planting to begin training the tree into the desired form. If few or no lateral branches are present at planting, top the tree at a bud 2-3 feet above the ground. This will encourage branching below the pruning cut. During the first growing season, select an upright growing branch to become the central leader and remove other vigorous, upward growing branches that compete with the central leader.



The author samples the fruits of his labors.

Ideally, also select three to five lateral branches spaced evenly around the trunk. This is known as a scaffold whorl. These scaffold branches will remain throughout the life of the tree. As the tree grows, select three to five lateral branches 24-36 inches above

the scaffold branches to develop the second scaffold whorl. A mature, well-managed semi-dwarf tree will have three scaffold whorls with the lower branches the longest and the upper branches the shortest, giving the tree a pyramidal form.



PRUNING THE RIGHT WAY

Chris Hilgert shows how to trim apple (or pear) trees in this short video in the University of Wyoming Extension's "From the Ground Up" series bit.ly/applepruning. More than 197 videos at bit.ly/uwgardeningtips explain subjects ranging from storing seeds and pruning junipers after a hard winter to tips for improving herbicide use success and drought tolerant lawns.

*Years of experience working in the commercial fruit and vegetable industry and university horticulture research and training grew our **Chris Hilgert**. He's the University of Wyoming Extension Master Gardener coordinator and extension horticulture specialist. He can be reached at (307) 766-6870 or at chilgert@uwyo.edu.*