



PRUNING YOUR GRAPEVINES

Learning how to properly prune grape vines can yield great benefits

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Why prune?

Proper pruning results in higher quality grape production and larger yields. Pruning helps create these benefits by balancing the amount of vegetative growth on a vine.

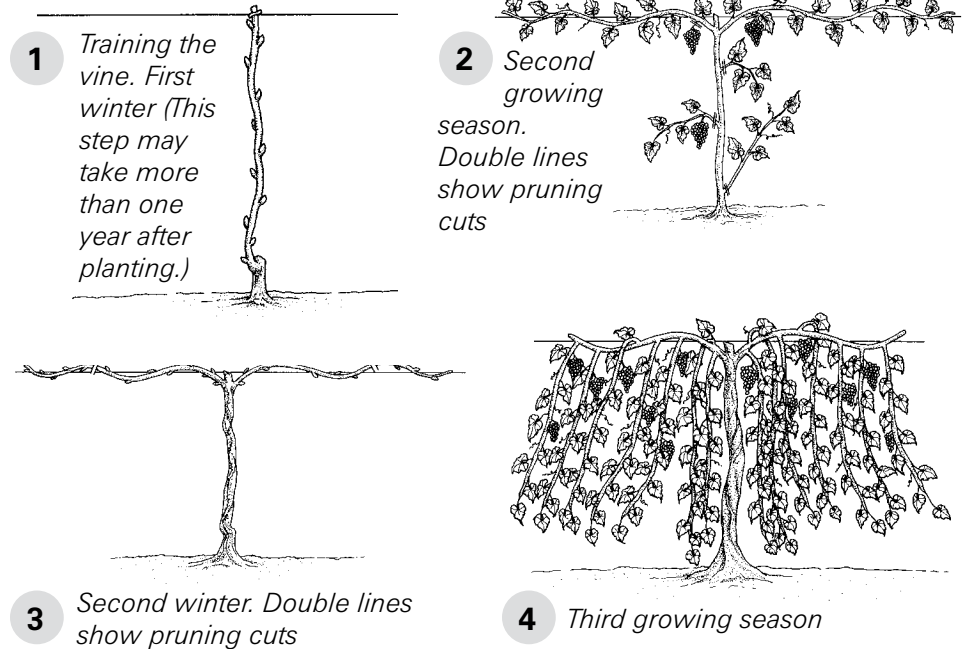
Knowing how grapevines set fruit is the key to good pruning. Grapevines only produce fruit on the first-year wood.

First-year wood is the portion of a vine that grows from the bud throughout the current growing season. That first-year growth hardens into mature wood and goes dormant at the end of the growing season, then the next season is considered second year's growth or just wood. Since first-year wood is the only portion of a vine that produces fruit, there is little benefit to keeping all canes past the first year.

Pruning grapevines yearly removes older (nonproductive) wood, removes diseased or damaged vines, encourages new growth, opens the canopy to sunlight and air flow, and keeps the vine size to a manageable level.

There are two pruning techniques, cane pruning and spur pruning.

Spur pruning is the most common technique because it is considered less labor intensive than cane pruning. However, research has shown that vine training systems are more important for productivity and



reducing cold damage than pruning techniques in northern climates.

The high wire cordon (the grapevine branches) training system is the preferred trellis in northern climates because the trellis holds the vine higher (5 to 6 feet) off the ground than any other trellis, which allows the cold air to sink below the vines and minimizes potential of cold damage.

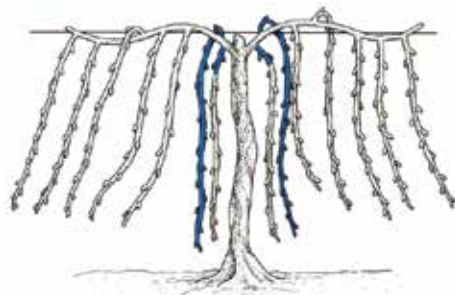
Cane pruning

1. Train and tie the grapevine to the top wire of training system. In Wyoming, this step can take a few years, because enough root reserves need to be developed to keep the aboveground growth alive through the winter.

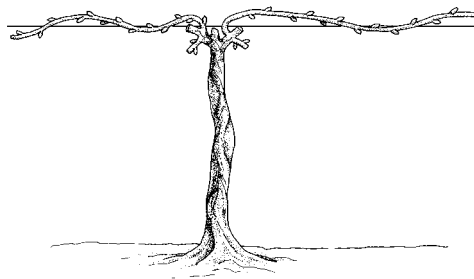
2. After step one is accomplished, the following growing season's canes that emerge from the head of the vine, which is the point on the vine tied to the trellis system in step 1, are trained/tied to the trellis to form the cordons.
3. The next winter and prior to bud break, prune back the cordons to 15-20 buds and prune all other canes from the trunk of the vine.
4. Allow as much growth as possible the subsequent growing season.
5. The following winter prior to bud break, select four canes that have a good diameter near the

head of the vine. These will be retained for next year's cordons and renewal spurs. Remove all other canes and the portion of the cordon past the selected canes.

6. After pruning, from the four canes chosen, select the two healthiest canes on either side of the head and prune to 15-20 buds and tie to trellis for next year's cordons. Prune the remaining two canes to 2-4 buds for renewal spurs.
7. Repeat steps 4-6 every calendar year for the life of the grapevine.



5 *Third winter before pruning. Shaded canes will be retained for next season's fruiting wood.*

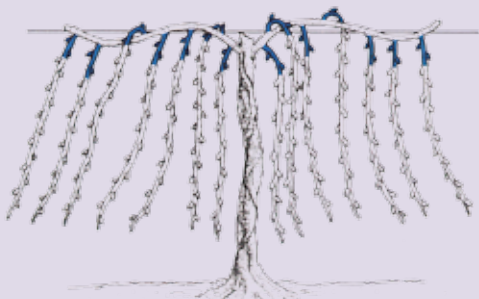


6 *Third winter after pruning.*

NIPPING THEM IN THE BUD

Did you know that a non-pruned mature grapevine can have over 400 buds?

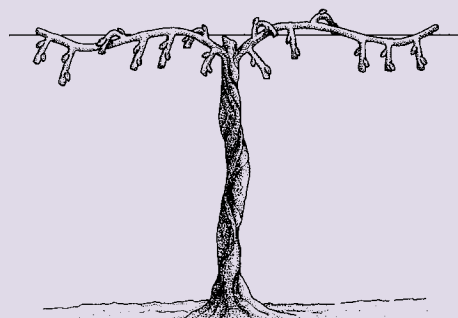
Allowing all the buds to grow creates overcropping, which results in smaller berries, reduced sugar accumulations, reduced pigmentation in the berry, and increased susceptibility to cold damage.



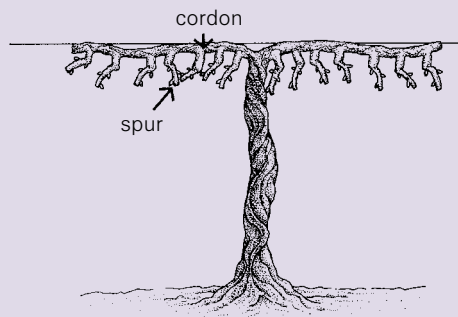
Third winter before pruning (shading indicates fruiting spurs that will be retained for next season).



Fourth winter before pruning (shading indicates fruiting spurs that will be retained for next season).



Third winter after pruning



Fourth winter after pruning

Spur Pruning

1. Pruning is identical to cane pruning (steps 1-4) for the first few seasons.
2. After step four is accomplished and prior to the next bud break, prune back the canes to 2-6 buds, which is called a spur.
3. Every winter prior to bud break, prune back the canes to a spur of 2-6 buds.