

Successful Wine Grape Growing in Cooler Climates

This handout is designed to give you some basic parameters in successful grape growing in Western Washington. There are many varieties that will perform well in our cool climate. We encourage you to become familiar with the important aspects of grape growing before you get started. Most of the training information in this pdf is suitable for wine grapes. Some table grapes also can be grown in this fashion, but some require a different pruning system.



Site- For the best ripening potential, choose the sunniest place in your yard, favoring southern and western exposures. **This one factor is going to give you the greatest benefits down the road in well-ripened grapes.** A western exposure is going to give you the benefit of the warmest part of the day. The hotter the site, the better. There are ways to mitigate a less than perfect site and still be successful.

Soils- Grapes prefer well-drained, sandy or gravelly soils. In generating the heat that grapes need to be productive, air temperature is not the only factor. Soil heat retention ability plays a major part in the ripening process. As a general rule, heavier soils are colder soils, and it is well worth the effort to increase your soil's heat retention ability if you can.. To **maximize your soil's heat retention ability**, mound up the soil for each plant, 4"-6" in elevation; either in a 3' mound or down the grape row in a domed raised bed 4"-6" tall and 2'-3' wide. If your only choice is to plant in heavy clay soil, choose early ripening varieties such as Canadice, Lynden Blue and Siegerrebe. Our catalog lists the general ripening order. Remember, the later ripening varieties will require the warmer sites. **Planting grafted grapes can promote earlier ripening.**

Mulches- Grapevines will not compete with grass or heavy weed pressure in their early years. If you want to mulch your vines here are a few things to consider. **Organic mulches are unsuitable for grapes**, as they cool the soil. Dark colored poly mulches will help warm your soil up as well as keep weeds down. Dark gravel mulches will also work. If you have rocky ground, piling the rocks under the plants will help hold the heat throughout the growing season. Do not underplant grapes with groundcovers, as they also will cool the soil.

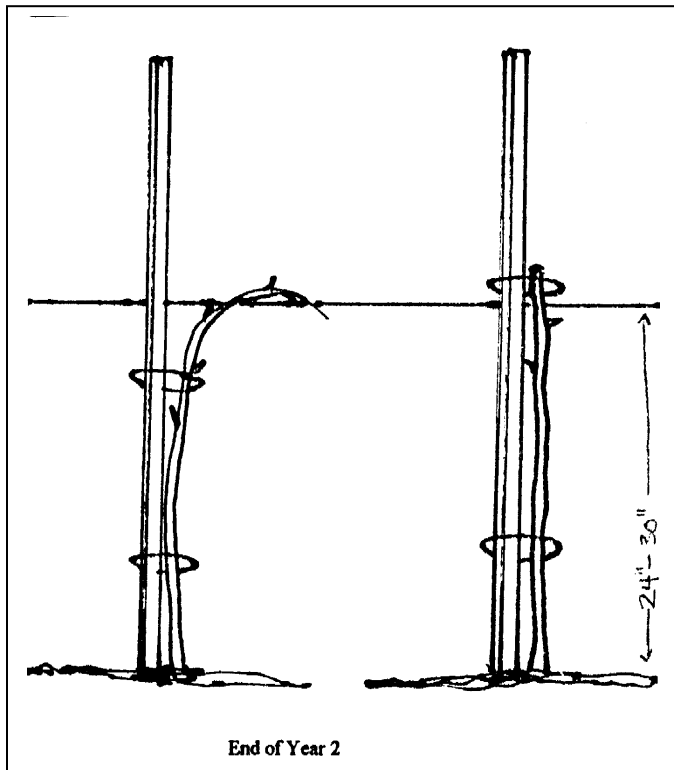
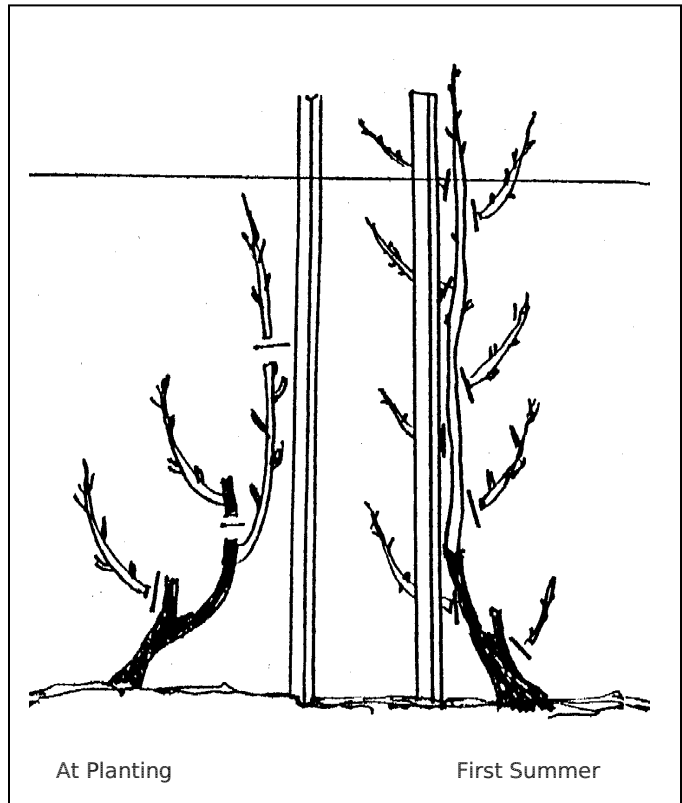
Nutrition- Grape plants will grow very aggressively in our climate. **Use only very low rates of nitrogen fertilizers after the first year.** Because of their aggressive growth habits, grapes will create nutrient demands on the soil. Annual applications of lime and Sul-po-mag with micronutrients are going to be important for successful cropping. Irrigation is important mainly in the first year. Most sites do not need irrigation after the first year. If terminals (tips of shoots) are actively growing, the plants do not need water.

Training Wine Grapes in Cooler Climates (Vertical Shoot System)

Year 1- Planting- Space the plants 4'-5' in the rows. See planting handout for general planting instructions. Keep in mind the special soil requirements for grapes. **You will need a trellis** or an arbor to support the vines. Arbors are a less productive than trellis systems.

Staking- After planting, pound a small but permanent 1"x1"x 36"-48" stake, 3"-4" from the plant. Make sure the stake is tall enough to be tied to the bottom wire of your trellis or arbor.

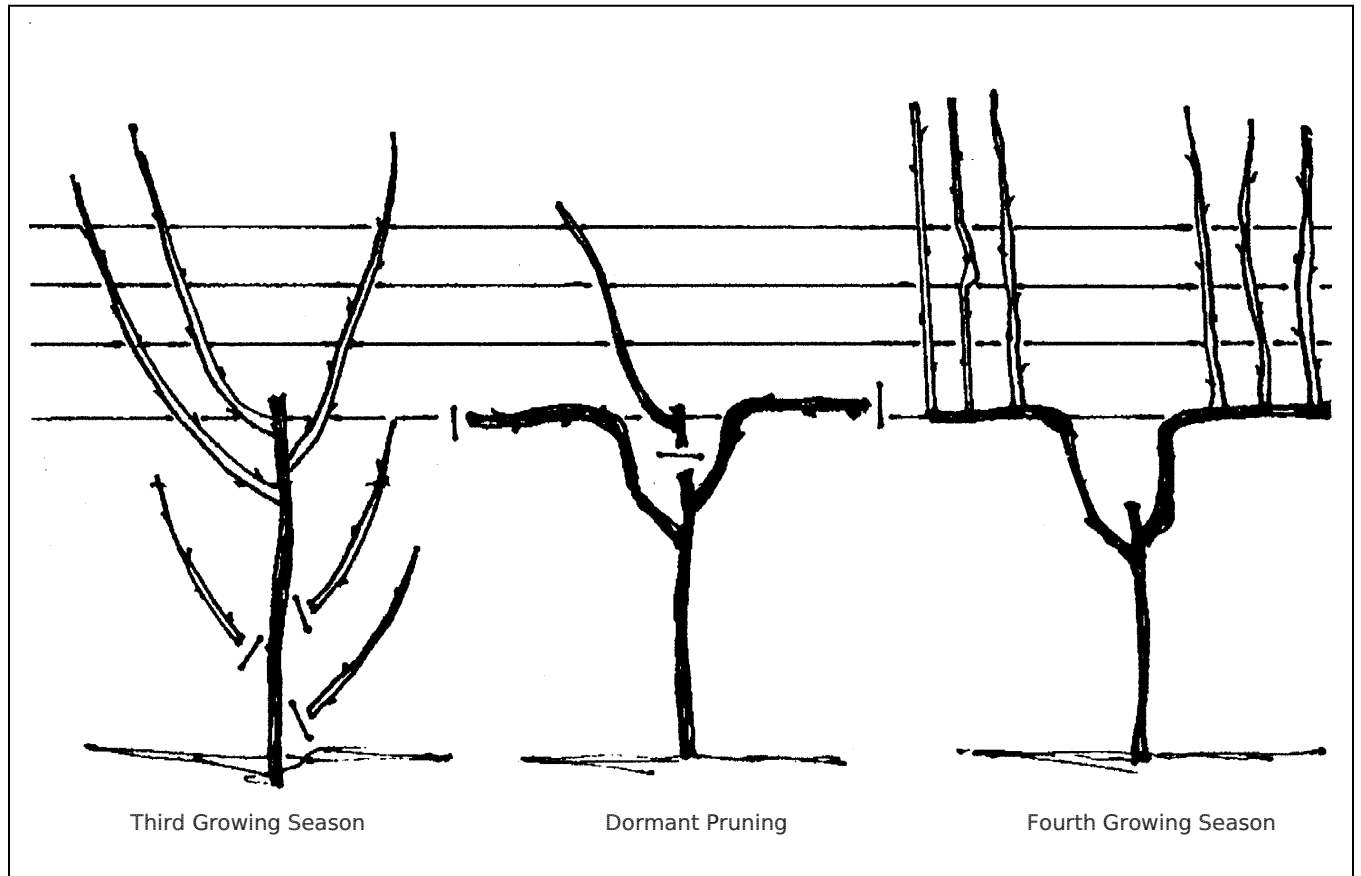
At planting, prune your plants back to one shoot. Choose the strongest and/or straightest shoot. Then prune that remaining shoot back to 4 buds. This will focus all the plant's spring energy into these buds. **When these first shoots get to 4"-5" long, pinch off the two weakest shoots.** This may seem like your plants keep getting smaller, however the net effect will be much stronger growth where you want it.



Year 2- For best results, prune your plant to the straightest single shoot. Then **prune that remaining cane back to 2 buds.** This will give the plant an extra year to establish a root system. You will also get a healthy vigorous cane to develop, which will become the plant's trunk. (This is the time to build your trellis or arbor.) Midway through the season select the strongest/straightest shoot and prune off any competing shoots or side branches, focusing on maximizing the growth of the primary shoot. **Tie this shoot with stretch tie to the stake; keep it as straight as possible.** In the winter dormant season, tie the shoot along the load wire. The bend in the cane should occur approx. 6" below the load wire. This shoot should be tied every 12-15" tightly to the wire. Prune this cane so it is long enough to reach half way to the next plant, or 8-10 buds. The following year you will have enough growth to train a cane in each direction on the wire.

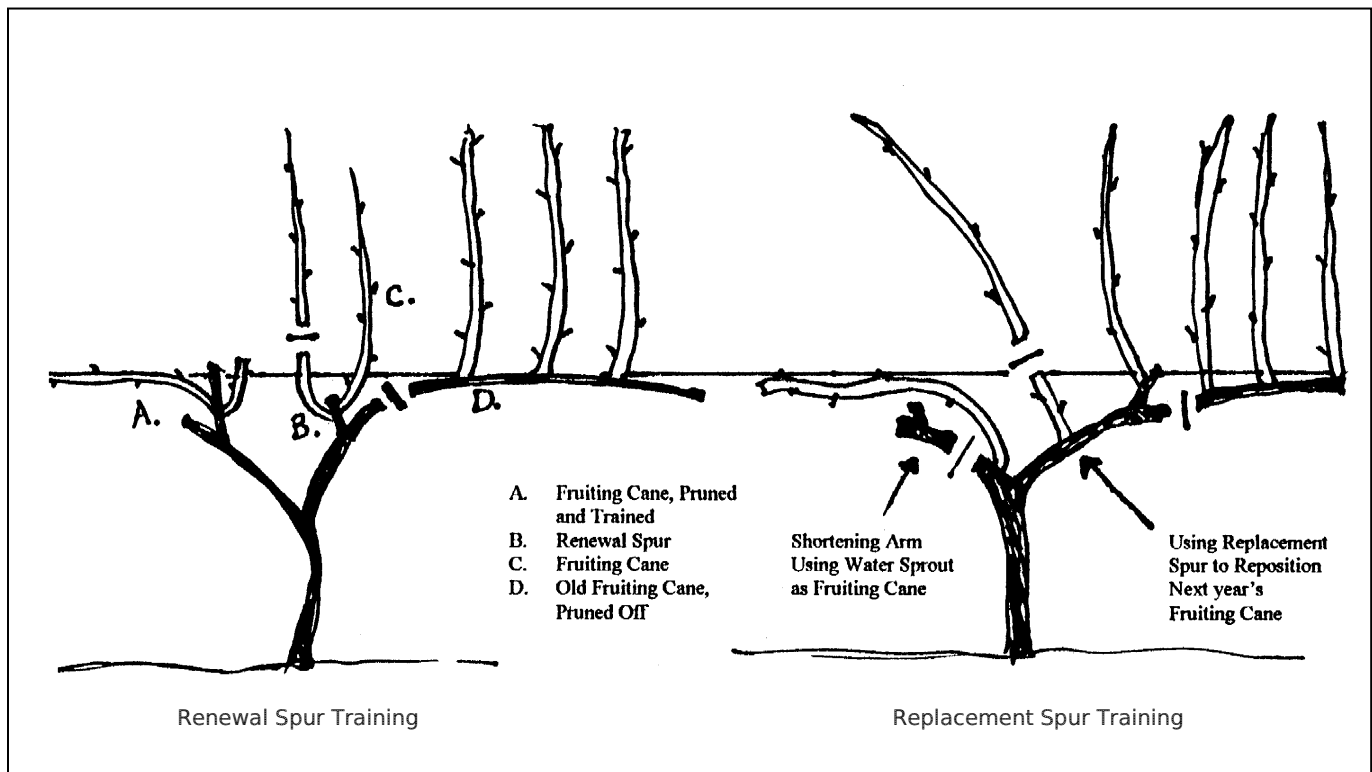


Year 3+- Every year you are going to **prune your vines back to two canes of last year's growth**. There are several issues to consider before you begin your winter pruning. First, you will **select one cane to train in each direction on the trellis**. These canes should originate as close to the trunk as possible. Choose canes of good vigor, not giant canes, but healthy ones. **The most productive one year canes need to originate off of two year wood**. This is important to remember when pruning. A new cane originating off an old trunk will not be very productive. **Prune the canes so they are long enough to reach half way to the next vine**. Tie the vine to the wire tightly in several places.



Training tips:

- Don't be afraid to cut off canes. Every year you need to cut off 90% of last year's growth.
- You don't have to leave renewal spurs with this type of training system.
- Summer prune off foliage that grows past the top of the trellis, or out into the row.
- Always leave an extra cane till you are done pruning, in case you break one.
- Canes that grow in a direction other than where you want them to grow can be bent slowly into position. If the canes crack but do not break, they will still be fine.
- Weave vertical new growth through the wires so it maintains its upright position.



Renewal For Older Plants:

After four or five fruiting seasons, it may be necessary to leave a spur to produce a fruiting cane for the following year. This can be done by leaving a renewal spur on a cane from last year (left diagram), or by using a water sprout from the trunk as a fruiting cane or a replacement spur (right diagram).

Harvesting Tips:

Birds will consume most of your fruit if they are not netted. We offer a commercial quality netting that is much easier to use and longer lasting than the black poly netting. Check with us on availability.

Harvesting Grapes- Grapes ripen all at the same time.

Best quality berries are harvested following 2-3 days with no rain.

Don't leave ripe grapes on the vine. They will begin to lose quality rapidly.

Advantages of Grafted Grapes-

- Grafted grapes are more compact and need less summer pruning
- Grafted grapes can ripen earlier than the same variety on its own roots
- Grafted grapes are more resistant to root diseases that have been problematic in grape growing regions of the world.