



## Grape Pruning 101

by Michelle Le Strange, Master Gardener

Winter weather is perfect for pruning grapes. All the leaves are off and the canes are exposed, making it easy to see where to cut. Before we start here are a few useful definitions.

**Grapevine spurs** are long canes that are pruned to the size of short twigs, each with at least two buds.

A **grapevine cane** is an elongated, woody, flowering or fruiting stem arising from the main trunk or cordon.

A **cordon** is the upper woody portion (permanent arm) of a grapevine trunk that is trained to a trellis.

Grapes need to be trained onto a trellis in order to spread the vine and provide light to the leaves and fruit clusters. There are two general systems for training vines and two different pruning methods. 1) In the “head-trained” system, a trunk is established and 4-6 short cordons are developed. Cane pruning is typically practiced. 2) In the “cordon-trained” system, a trunk and two or more permanent long cordons (horizontal arms) are established. Spur pruning is typically practiced.

The difference in training systems and pruning techniques is due to variability in fruitfulness of different grape varieties. Some varieties are extremely fruitful, which is detrimental if not pruned to encourage less fruiting. Yes, some varieties can actually produce too many grape clusters on a vine, which is undesirable for human consumption because the clusters bear small amounts of tiny grapes. However the birds love it!

**Spur Pruning of Grapevines:** To prevent “over-cropping” vigorous fruitful varieties are “spur pruned.” Here’s how it’s done. In winter, grapevine canes that grew and fruited in the past season are pruned out or selected to remain on the vine’s main permanent arms. The selected canes are pruned down to spur size and spaced along the cordon at 6 to 8–inch intervals. In the San Joaquin Valley, a bilateral cordon (a trunk with two opposite arms at the top) is common. The result is a series of spurs (each with 2-4 buds) along two cordons. Each cordon would have 6 or 7 spur positions. Buds on the spurs will grow new canes and produce fruit in the summer or early fall. Some common spur-pruned varieties are ‘Flame Seedless’, Ribier, and “Tokay”.

**Cane Pruning of Grapevines:** In some varieties the basal (lower) buds that normally produce fruit on spur-pruned varieties often are not fruitful, so cane pruning is the preferred method. Cane-pruned varieties start bearing fruit further out on the cane, on buds numbered 4 to 12. In winter, on head-trained vines, 4 to 6 canes that grew and fruited in the past season are selected

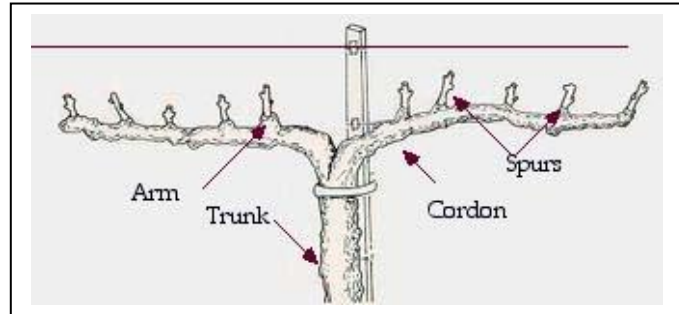
for next season's fruit. Strong canes that are round, well-matured, and developed on top of the vine with plenty of light exposure during the last growing season are chosen because the buds are more likely to be fruitful. Each fruiting cane should have about 10 to 14 regularly spaced buds, cutting off excess length if necessary. After selecting the fruiting canes, an additional strong cane arising near the base of each fruiting cane is selected to become a renewal spur. This second set of canes is cut down to spur size and used next winter for the fruiting canes. The more vigorous the vine the more spurs or canes you can leave. Examples of cane pruned varieties are 'Thompson Seedless' and 'Concord'.

### **Trellising and Training Vines**

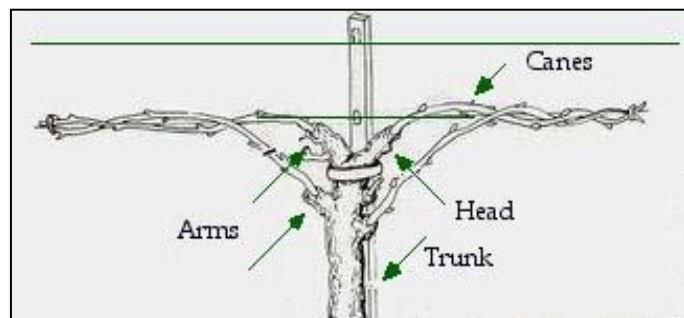
When the buds of the canes or the spurs start to grow they are tied and trained along the trellis, arbor, or other support system. Grapevine trellises can be of many configurations. Wine grapes are trellised at a 40-inch height, which is convenient for harvesting and pruning. A higher height (5 feet) is common in table grape production, while patio arbors or structures are often 7 feet or taller. Be sure to build a strong trellis with horizontal cross arms that can support the weight of the canes, foliage, and grape clusters and survive the long life of the grapevine. Make it big enough so vines have enough room to spread with good sunlight exposure and air circulation. You want to keep the vines fruitful.

With all that said, it is now time for a glass of wine!

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A bilateral cordon grapevine that is spur pruned.



A head-trained grapevine that is cane pruned.