

## Spring Pruning of Grapes

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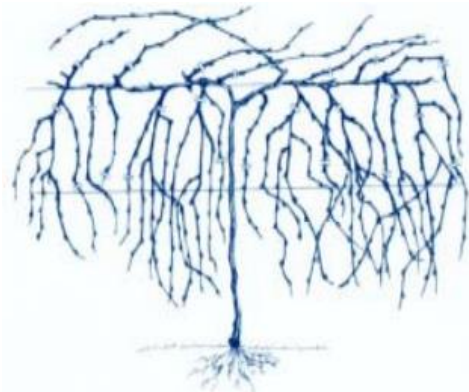
March and April are generally good times to prune all your woody plants. It is recommended that you get pruning completed before sap starts flowing into branches so that all the root energy goes only where you want it – it doesn't get wasted in the parts you cut off and throw away. After a hard winter though, sometimes it's good to wait until the grape buds swell because you are trying to save a certain number of live buds each year. Try to get it done before the buds break open.

First you might say: "Why should I prune those grapes? I've never done it before!" Well, the answer is that you don't need to prune if you just want an ornamental plant. But if you want fruit, you'll have to prune because only one-year-old wood produces fruit buds. Pruning creates fewer but sweeter and riper grapes and a balance between woody growth and fruit. Because more air can now move in the canopy, pruning will also help prevent fungal diseases during a wet year. Pruning will remove 85-90% of the previous year's growth. Don't freak out! All the energy a plant needs to grow the next season is stored in the roots. Be ruthless – it's kind of fun. Grapes produce way more growth than they need each year.

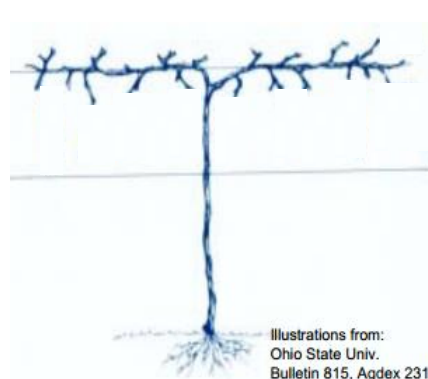
**Basic Plant Structure:** The preferred structure of a bearing grape plant in northern climates is with the plant raised onto a trellis with structural growth in the shape of a 'T'. The 'T' shape means that there is one main **trunk** that branches off into a horizontal **cordon** in either direction. The height of the horizontal arms is around 5 feet, depending how you build the trellis. This way the fruit will be up where you can watch it and the new shoots will hang downward. The trunk and cordon are considered to be the 'permanent' structures of the managed grape plant.

Don't train your plants to have cordons on both the upper wire and the lower wire. The upper leaves will shade the lower fruit and it won't mature well here in the north.

Unpruned Grape Plant



Ideally-Pruned Grape Plant



Ohio State University, Bulletin 815, Agdex 231. Out of print.

**Renewable Plant Parts:** After pruning, green **shoots** should grow from the ‘**count nodes**’ (buds) that were saved. They will have the flowers and fruit and will turn brown and woody in the fall – when they are then called **canes**. One-year-old canes are a reddish- or tannish-brown in winter and have smooth bark.

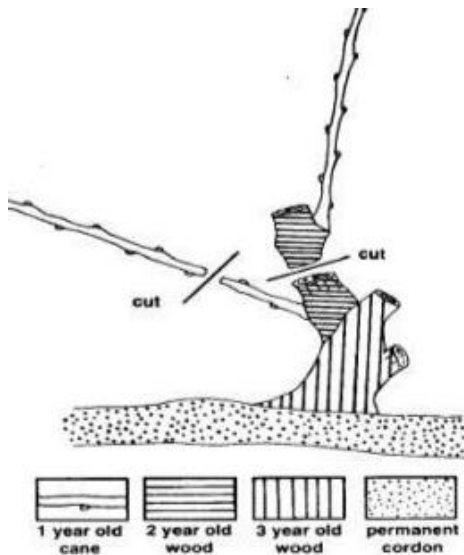
When you prune this spring, you want to keep the upper 2-4 inches of sturdy, young, red or tan canes that are closest to the cordon. You will cut off the long, unneeded parts of the cane that grew last year. The complex where you prune to renew the canes each year is called the **spur**. You need to leave just 2-3 live, fruiting buds, or **count nodes**, on that spur so that the plants don’t overproduce either fruit or heavy leaf cover. The **base bud** usually does not have fruit and is not counted among the fruitful buds. Each count node will produce a new cane that will have 2-4 clusters of fruit.

Older canes and vines have grey and shedding bark – get rid of these. Remember: Pruning will remove 85-90% of the previous year’s growth.

Here is the advice I look at every year when I head out to the vineyard:

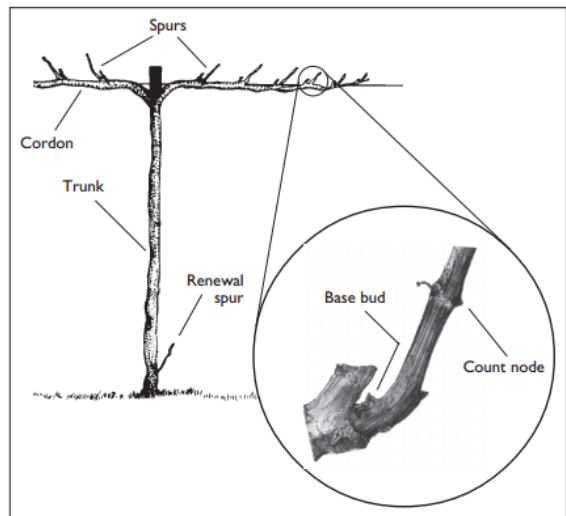
- Leave 4-6 spurs per foot of cordon
  - ✓ The spurs each have 2- to 3-buds (count nodes)
  - ✓ The wood is pencil-sized
- Aim for 30-40 fruiting buds per plant

**Spur Pruning – Keep 1-year-old wood closest to cordons. Two buds are left.**



Penn State Extension

**Spur close up, base bud and count node are shown**



Poling, Barclay, and Sara Spayd. *The North Carolina Winegrape Grower’s Guide*. "Chapter 6: Pruning and Training, p.75-90." <http://content.ces.ncsu.edu/chapter-6-pruning-and-training.pdf>

**Overgrown vines:**

Perhaps you are saying: “But my plant’s a mess! I don’t know where to start.” Don’t worry. You aren’t alone and the grape will forgive you. Usually. They grow as weeds in wild areas! If the plant hasn’t ever been pruned, you have a lot to think about. First, look for some structure – Are there a couple of trunks coming up out of the ground? If the plant is huge, you need to shape it over several years and perhaps save 3 or 4 trunks and respective cordons right now. After you get a year of fruit, you can reduce the number of trunks and cordons.

Identify the trunks you are keeping and mark them with some bright tape or paint. Now mark 1-year-old canes growing out of these trunks that could become the new horizontal cordons. Or if there aren't any, mark some older, branched canes that move away from the trunks. After marking the trunks and canes you want to keep, start cutting away and pulling out lots of other old grey-colored canes and vines that are twisting around, just to thin the plant out. Keep going.

After all the 'junk' is cleared out, try to bring the trunk(s) up to a vertical position where you want it to grow and tie it there. It may not be possible to make it vertical until you replace it with a new trunk, later. Then tie the new cordons to the wire in a horizontal position and cut any side branches back to 2 or 3 count nodes as in the pictures above. You may not get fruit this summer, but you should get growth that you could train into proper cordons with fruit next year.

You are done! Well, until next year. In the future, every year in early spring, remove anything that isn't part of the main structure (the trunk and cordons) or retained spurs and buds. Everything else can and should be cut back every year to promote year-old wood and fruiting buds. If the plant is suited for our area, the buds will be alive and the canes will grow back in the coming summer with a nice crop of fruit.

#### Pruning Neglected Vines over 2 Seasons

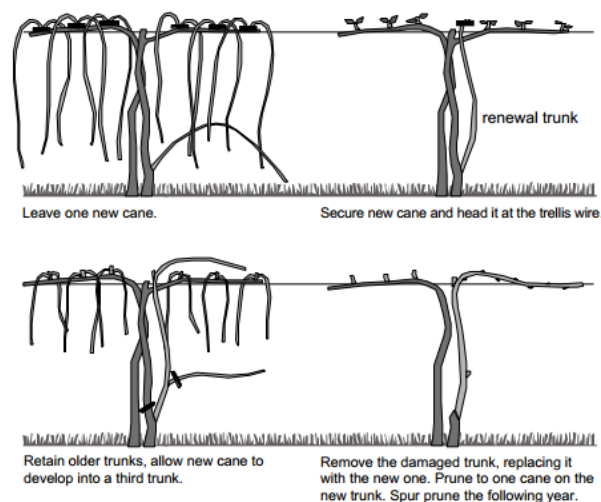


Diagram 22. Trunk Renewal

Lockwood, David W. and Darren K. Robinson. *Grape Growing in Tennessee*. "Pruning Neglected Vines, Page 19" <https://utextension.tennessee.edu/publications/document/s/PB1475.pdf>

#### Helpful videos:

- Part of this general pruning video talks about "Balanced Pruning" which involves weighing your prunings. This is not very necessary at home.
  - ✓ [www.youtube.com/watch?v=9a-B6cA-Po&src\\_vid=o8pVzZM7w4&feature=iv&annotation\\_id=annotation\\_889642613](http://www.youtube.com/watch?v=9a-B6cA-Po&src_vid=o8pVzZM7w4&feature=iv&annotation_id=annotation_889642613)
- Specifically, how to prune with top wire cordons.
  - ✓ [www.youtube.com/watch?v=o8pVzZM7w4&src\\_vid=9a-B6cA-Po&feature=iv&annotation\\_id=annotation\\_1600217377](http://www.youtube.com/watch?v=o8pVzZM7w4&src_vid=9a-B6cA-Po&feature=iv&annotation_id=annotation_1600217377)
- Dormant pruning for spur pruning. These cordons are at thigh height, but it works exactly the same for top-wire training.
  - ✓ [www.youtube.com/watch?v=um9p1eiGiwI](http://www.youtube.com/watch?v=um9p1eiGiwI)
- Looking at spur pruning during summer so that you can see what happens after pruning.
  - ✓ [www.youtube.com/watch?v=ISMLIZpH7so](http://www.youtube.com/watch?v=ISMLIZpH7so)
- A blog with some pictures of an overgrown vine. (This gentleman is selling pruning info and grows grapes in a warm climate. Sorry. The pictures of the overgrown plant are the only ones I found.)
  - ✓ [www.my-grape-vine.com/blog/pruning-an-overgrown-or-never-before-pruned-vine-part-2/](http://www.my-grape-vine.com/blog/pruning-an-overgrown-or-never-before-pruned-vine-part-2/)

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