

PRUNING OF MUSCADINES



Dr. Patrick Conner
University of Georgia – Tifton Campus



THE UNIVERSITY OF GEORGIA
COLLEGE OF AGRICULTURAL &
ENVIRONMENTAL SCIENCES



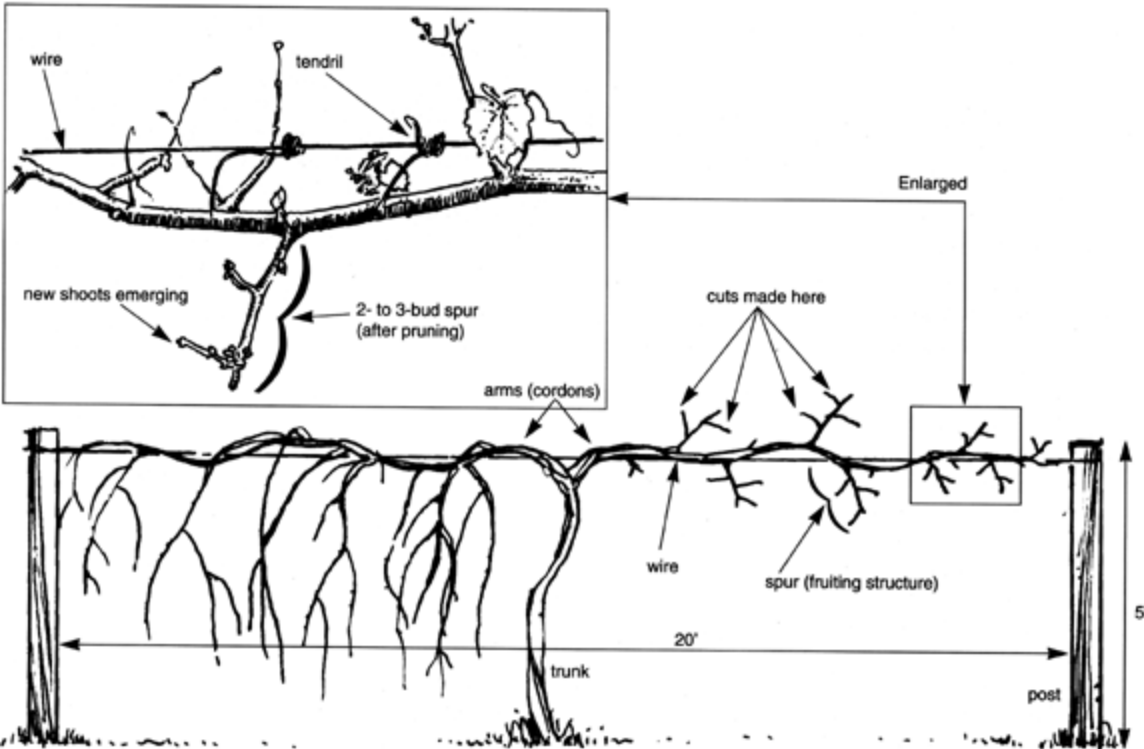
Why prune?

- 1. To produce productive shoots.
 - Flowers are borne on the 2-3 nodes towards the base of the new growing shoots.
 - Shoots that grow from wood older than 1 year typically do not flower.
- 2. To keep the vine under control.
 - Unpruned vines quickly produce a large mass of growth.





Terminology



- Trunk - Stem from the roots to the wire.
- Cordon – Horizontal stem from the trunk to the end of the wire.
- Cane – Current seasons growth, most of which is pruned off.
- Spur – Short section of vine branching off the cordon that produces next years canes.



Job #1 Establish the Vine

- Want to reach the wire and span the wire as quickly as possible.
- May want to develop two trunks so that you have a backup.
- If the vine doesn't reach the wire in the first year, cut it back and start anew from the base the next year.
- Need to be worked as often as possible.
- Remove all side shoots from the trunk.
- Cut back side shoots from the cordon to 4-6 inches until the cordon fills in the entire length of the wire.



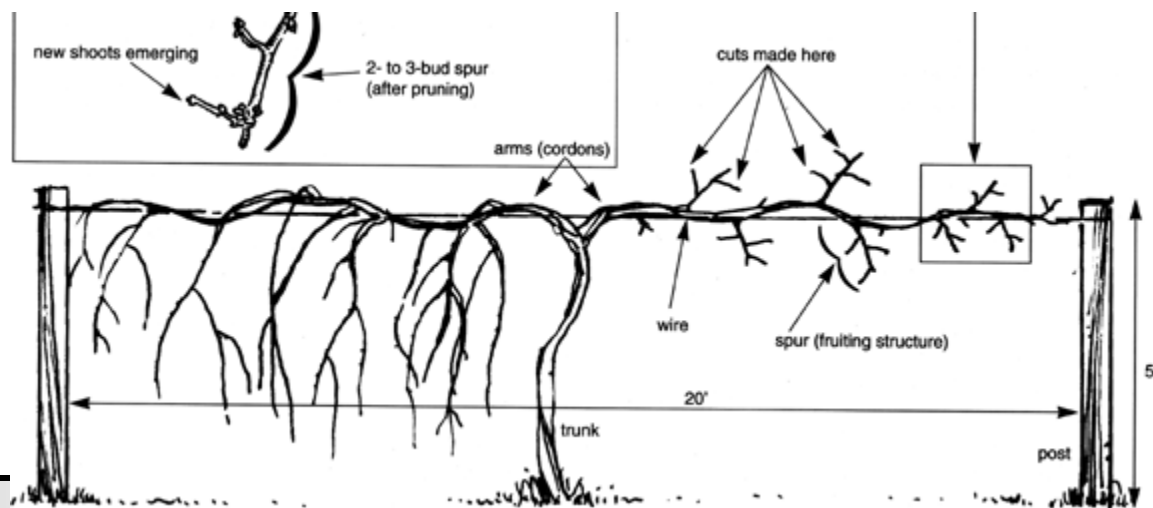
Job #2 Establish the bearing surface.

*Make the first pruning cuts 10 inches away from the cordon. This move the fruit away from the center of the vine making it easier to pick and spray.

Prefer shoots that are at a 45 degree angle up and out from the cordon.

Will this make it easier to remove/renew fruiting spurs?

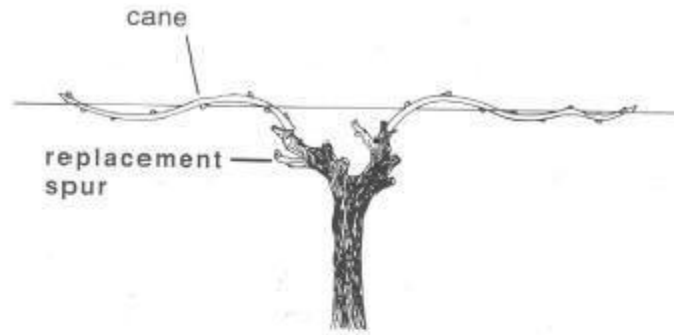
Adaptable for mechanical hedging?



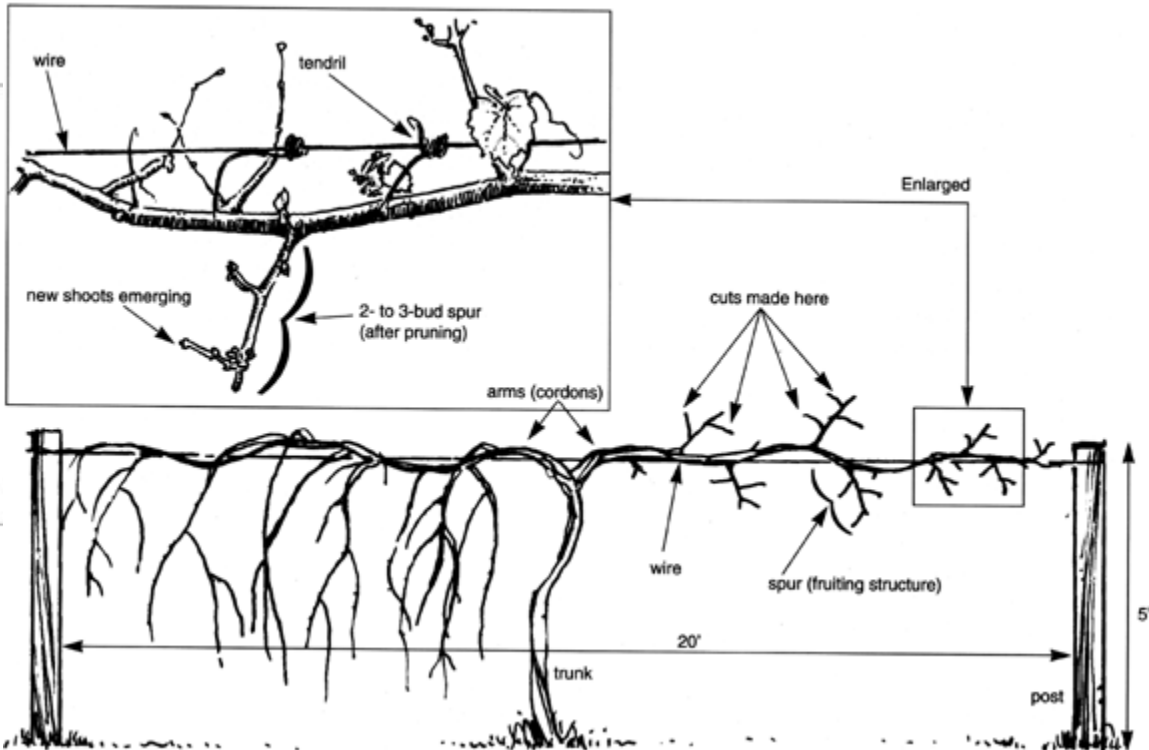
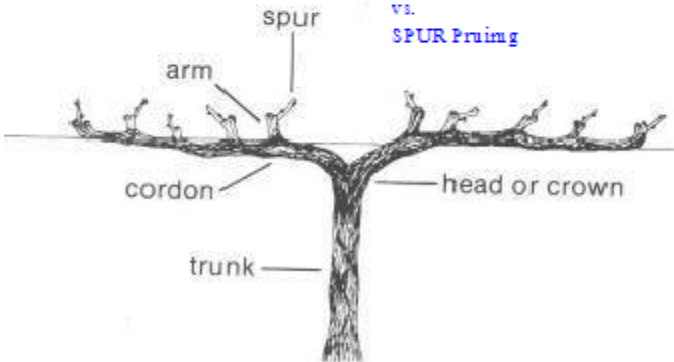


Maintaining the bearing surface.

- Remove all shoots originating from the trunk to keep the cordons healthy.
- Leave 2-4 buds per spur.
- Leave spurs 4-6 inches apart on young vines.
- As the vine gets older, space spurs further apart.
- Gradually remove spurs until they are 12 inches apart using loppers.



CANE Pruning
vs.
SPUR Pruning





Thinning of Spurs.

- Remove spurs near the trunk or in the bend to the wire as these tend to outcompete spurs on the main cordon.





Thinning of Spurs.

- Preferably remove spurs pointing downward.
- Continually remove older spurs to force new spurs close to the fruiting wood to take their place.



Pruning neglected vines.

- Tend to have a mass of dead unproductive wood at center of the vine.
- Option #1 – Prune away most of the cordon arm and leave a stub at the head of the vine. Train a new cordon from a shoot arising from this stub. Will lose a year of production, but you don't have to do all the vines at once.
- Option #2 – Cut back all the growth on one side of the vine and leave 2-4 buds on the other side. The next year renew the other side.



Other Notes

- Clip off tendrils that are girdling cordons.
- Remove old fruit clusters and stems. They are a source of disease.
- Remove weak or diseased cordons and train a new cane as a replacement cordon.
- Freeze damage – Usually best to cut back below the damaged area and allow new growth to replace damaged trunk or cordon.





When to prune.

- Recommended to prune as late as possible and not to prune Nov.-January.
- Probably more important in the more northern growing regions.
- If you must prune early, prune most cold hardy cultivars first.
- No evidence that stem bleeding is harmful to the vine.





Mechanical Pruning

- Prune to an 8 inch square centered around the cordon.
- Still need touch up pruning to thin out the spurs at some point.



From Dr. Barclay Poling

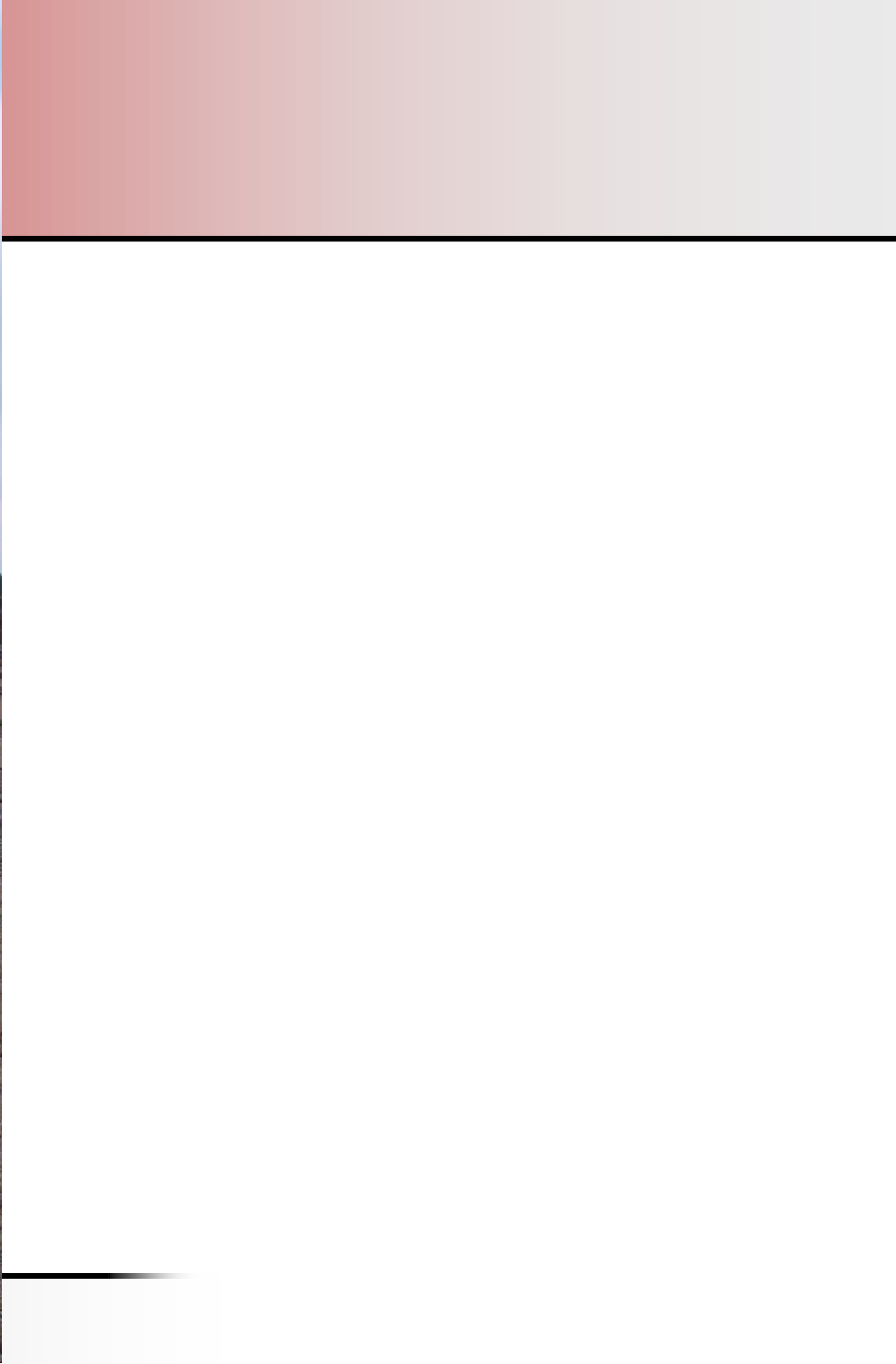


- Gas powered hand hedgers are an intermediate route that may be useful to thin down the canes initially.



From Dr. Barclay Poling













From Dr. Barclay Poling



G07-5
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Pruning to produce a normal crop.

A normal crop is the maximum yield the vine can produce without a delay in ripening.

Too much fruit leads to:

- Delayed maturity
- More disease
- Small berries
- Low sugar
- Uneven ripening
- Vine death





Pruning to produce a normal crop.

- Self-fertile cultivars often set too much fruit.
 - Granny Val
 - Lane
 - Nesbitt
 - Delicious
 - Supreme (female)
- Most pruning guidelines were made for female cultivars or small fruited cultivars, and may need to be adjusted large fruited self-fertile cultivars.
- Vine vigor and shoot number are important in determining yield capacity.



Adjustments to make for overbearing.

- Thin out more spurs so they are spaced further apart.
- Remove more buds, leave 1-2 buds instead of 3-4.
- Spur thinning likely needs to take place in younger vines for heavily fruitful cultivars than it does for female vines.
- What to do with mechanically pruned vines?



Rule of thumb for adjusting crop load via pruning.

- If the crop was good, keep doing what you are doing.
- If you had low fruit load, and long vigorous canes, leave more buds (longer spurs or more spurs).
- Weak canes with too much crop should be pruned to have fewer buds (shorter spurs or fewer spurs).