

PRUNING GUIDE

GOALS OF PRUNING

- Increase fruit production
- Develop strong branches to support fruit load
- Maintain accessible tree size (5-10 feet for a home orchard)
- Improve light penetration and airflow

TERMS TO KNOW

- Branch collar (a): the raised tissue between the trunk and the base of each branch. Contains specialized cells that seal off the wood from rot and disease → try to prune at this area when possible
- <u>Crotch angle (b):</u> the angle between the trunk and the branch (45-60 degree angle is ideal)
- Scaffold (c): main branches from the trunk
- <u>Watersprout (d):</u> a fast-growing vertical shoot sprouted from a dormant bud
- <u>Sucker (e):</u> a fast-growing vertical shoot sprouted from the roots or base of the tree
- <u>Spur (f):</u> A short twig on apples, pears, plums, and apricots that grow on older branches and will produce buds and fruit. Don't remove them.

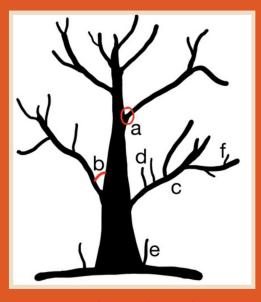


DIAGRAM A

THINNING CUT

Removing an undesirable branch to redirect energy to remaining branches.

- Remove overly tall leaders, crossing branches, and limbs growing towards the center of the tree
- Make these cuts where the branch meets the parent limb

VS

HEADING CUT

Cutting across the branch mid-way to promote denser foliage and bud development.

 Prune to the bud that will produce the future branch you want. The placement of the bud on the branch will predict the direction of the new branch.

GENERAL PRUNING RULES

- Start by removing:
 - No more than 1/3 of new growth each growing season
 - All dead, diseased, or damaged limbs
 - Limbs that are growing downward, inward, or crossing with other limbs
 - Suckers & Watersprouts (see Diagram A on page 1)
- Make pruning cuts at 45-degree angles.
- Try to leave the smallest wound possible by pruning smaller branches before they have the chance to grow to larger diameters. This will minimize the chance of disease.
- Consider how the sunlight will reach into your tree when leaves are present. At least 30% of the available sunlight should be able to reach the inner canopy of the tree.
- AVOID PRUNING IN SPRING AND FALL
- Make heading cuts 1/4" above the bud that you want to produce a future branch.
- Only use clean, disinfected tools to prevent the spread of disease.



ESSENTIAL TOOLS

- Long-handled (18-inch) loppers
- Hand pruners
- Hand saw
- Isopropyl Alcohol
- Pole pruner (optional)
- Orchard ladder (optional)



WHEN TO PRUNE

WINTER/DORMANT

- January-March before buds begin to swell
- Invigorates the tree and encourages future growth
- · Best time for dramatic pruning
- Easier to view the branching structure without leaves
- Tree is less vulnerable to stress and damage during this period



LATE-SUMMER

- Late-August
- Slows growth/ decreases vigor and size
- Minor pruning cuts for training branches
- Thinning tops of fast-growing varieties such as apples and pears
- Remove all suckers and watersprouts

PRUNING SHAPES

The goal of pruning should be to complement the natural shape/ growing pattern of the tree and to improve light penetration and airflow.

CENTRAL LEADER

Fruit Types: Apples, pears, pecans

<u>Target Shape:</u> One main trunk with 3 tiers (also called "scaffolds").

A scaffold consists of 3-5 branches and each scaffold should be 3 feet from one another. The 1st level should be at least 3 feet above the ground.

This leads to the tallest trees with the most fruit production, but it can be difficult to reach the top.



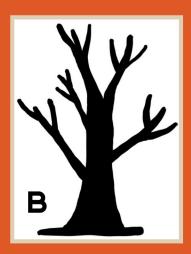
MODIFIED CENTRAL LEADER (B)

Fruit Types: Figs, persimmons, pomegranates

<u>Target Shape</u>: One main trunk that splits towards the top of the tree.

As you reach the top of the tree, the leader loses its dominance and is allowed to develop similar to the lateral branches.

This leads to a shorter tree with accessible fruit heights and more light penetration.



OPEN CENTER/ VASE (C)

<u>Fruit Types:</u> Stone fruits (plums, peaches, cherries)

<u>Target Shape</u>: No central leader with main branches at roughly the same height. Branches extend horizontally.

This leads to shorter trees with the most light penetration and airflow. This is especially important for disease-prone fruits.



PRUNING MUSCADINES

MUSCADINE FRUIT IS
PRODUCED ON NEW
GROWTH. BY PRUNING THE
VINES, YOU ENSURE THAT
THE BLOOMS AND FRUIT
ARE CLOSER TO THE
TRELLIS. THIS WILL HELP
PRODUCE LARGER, BETTER
SUPPORTED FRUIT.

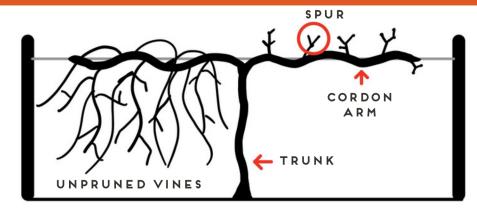
WHEN TO PRUNE YOUR MUSCADINES

The safest time to prune muscadines in Georgia is
February-late March. This ensures that the muscadines are still dormant while also having a lower chance of severe cold damage.

THE BASICS

- On each trunk of the vine, there should be 2 cordons. These cordons will stay on the trellis. Fruiting spurs will grow from the cordons. The buds on these cordons will become future fruit.
- When pruning, leave 1-2 buds of the previous season's growth. By avoiding making the same cut in the same spot year after year, there will be less vegetative vine production and more fruit.
- Begin thinning cordons and spurs in Year 3. Aim for 1 hand-width (6 inchese) between each fruiting spur. This allows for airflow and prevents overproduction of fruit or overcrowding.
- Remove and spurs on the bottom of the arm of the plant.





PRUNING BLUEBERRIES

THE BEST BLUEBERRIES ARE PRODUCED ON 2-4 YEAR OLD CANES. PRUNING SHOULD BE DONE TO PROMOTE NEW, UPRIGHT GROWTH FOR BETTER BERRIES.

WHEN TO PRUNE YOUR MUSCADINES

The safest time to prune blueberries is in the winter when they are dormant.

THE BASICS

- Do not let blueberries bear more than a few clusters of fruit in the first 3 years of its life. this will ensure that you get a large harvest starting in year 4.
- Blueberries do not need to be pruned in the 1st year.
- In years 2 & 3, remove fruit buds and prune the canes back moderately.
- In year 4 and beyond, light pruning is recommended to promote strong, upright canes and to prevent overcrowding.
- Remove:
 - low-spreading branches
 - diseased and broken canes
 - o canes over 7 years old
 - shorter, thinner shoots with lots of blooms
- Identify the strongest, most upright canes with the largest flower buds and retain them.
- Every few years, dramatic pruning is recommended to extend the lifetime of your bush.
- After pruning, your bush should be:
 - o narrow at the base
 - open in the center
 - free of crowded vegetation







AFTER PRUNING

BEFORE PRUNING

ADDITIONAL RESOURCES:

- The Giving Grove: Dormant Pruning Guide
- The Giving Grove: Summer Pruning Guide
- <u>UGA Extension Home Orchard Pruning Techniques</u>
- Pruning Fruit Trees: Open Center
- Pruning Fruit Trees: Central Leader
- Fruit Tree Care: Removing Tree Suckers & Watersprouts
- <u>UGA Extension: Blackberries & Raspberries</u>