Blueberry Pruning

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Reasons to Prune Blueberries

- Manage bush height
- Stimulate growth of young, productive shoots
- Increase berry size
- Remove diseased and dead canes
- Prevent over-cropping
- Replace older canes
- Maintain the desired shape and flexibility of canes
- Alter ripening period
- Extend bush life
Blueberry Basics

• Multi-trunked bush
• Long-lived, deciduous woody perennial
• Flower buds form in late Summer/early Fall
• Bloom occurs in Spring
• Fruit is produced in late Spring or Summer
• Not grafted
FLOWER BUDS that will produce the next crop are formed in late summer and early fall on the current season’s growth. In winter, flower buds are easily visible on fruiting twigs, and can be counted to estimate crop potential for the coming year (expect 3-7 berries per bud).
FOR BIGGER BERRIES -- Remove thin, twiggy “matchstick” wood while keeping thicker, healthier fruit-bearing shoots or “laterals”

We will review stepwise pruning techniques for doing this quickly and economically
Pruning tools – loppers and hand pruners
Pneumatic (air-powered) Loppers
Electric pruning shears/loppers
Pruning Young Bushes (0-3 yrs)

- Removal of flower buds to prevent overcropping
- Winter pruning to shape the bush
- Removal of succulent fall shoots to avoid stem blight infection
**Setting out new plants** -- Always prune or rub off all flower buds and cut back 1/2 to 2/3 of the height at the time of planting. For potted plants, gently separate and spread out the roots so that the root mass is no longer in the shape of a pot.

Remove all flower buds
In Year One – the goal is to avoid fruit production entirely. With removal of all flower buds at the beginning of year one, the bush grows vegetatively, and by Fall of the first year has increased in size and produced more flower buds.

[Diagram showing February of year one after pruning and February of year two]
Young bushes -- In year two, remove low-lying or weak shoots and cross-overs, keeping the healthiest, large upright canes. Some flower buds may be allowed to produce fruit in year two if the bush grew vigorously in year one.
**First crop?** – the bush may be allowed to produce a few berries in year two, however the goal is still to promote vegetative growth that will build the structure of the bush for years to come.
Year Three – the bush is well established and capable of producing a significant crop. However, routine pruning should still remove 40 to 50% of the flower buds. Begin selecting new basal shoots that will replace older canes.
Pruning 3-4 yr-old bushes
Winter pruning of mature bushes
Stepwise pruning – start at the bottom and work up

- Narrow the base
- Remove crossovers and low-angled canes
- Remove 1-3 of the oldest canes, or even more depending on cultivar and vigor
- Head back and thin selectively to remove old “brushy” canes in the upper part of the bush
Both “before” and “after” have canes of varying ages emerging from the ground.
Reshaping an older bush with just a few large basal cuts
Cut #4
Different bush, same idea – remove crossovers
Stimulates new upright shoots from cut
OK, we have shaped the bush by making large basal cuts. What’s NEXT?

• Reduce # of flower buds if needed to avoid overloading individual branches

• Remove old, highly-branched canes in favor of younger, thicker fruiting laterals

Over-cropped -- should have been pruned at the yellow mark in the previous winter
Head back to remove some fruiting twigs if needed to prevent over-cropping.
Stem age and berry size
FIRST fruiting year of a blueberry stem = large berries
The SECOND year, same blueberry fruiting twig has produced lateral twigs with smaller berries
THIRD year – lateral twigs have produced more laterals, small berries, production drops
Berry size decreases over time as the shoot branches repeatedly

Year 1  Year 2  Year 3
SUMMARY -- WINTER PRUNING

• Start at the ground, and narrow the base
• Remove crossovers and low-angled canes
• Remove 1-3 of the oldest canes, or even more depending on cultivar and vigor.
• Head back and thin selectively to adjust crop load and remove old “brushy” canes in the upper part of the bush
Summer Hedging
mowing/topping in JUNE, JULY
Immediately after harvest

Only for early cultivars and sites that have time to re-grow in the same season

MOSTLY limited to USDA Hardiness Zone 8 or higher
Summer Hedging
Immediately after Harvest on Southern Highbush

36-48 inches “Housetop” angled cut
Summer topping or hedging removes much of the twiggy growth that would otherwise have to be removed by hand in winter, and greatly reduces pruning costs.
Regrowth above the mow cut has time to produce new flower buds before winter; bloom/ripening delayed next yr
Summer mow cuts can be quite severe if needed.

Older “gray wood to be phased out during winter pruning.
Summary of Pruning Strategies

- **Prune every year** to manage crop load and maintain consistent berry size
- **Pruning is a disease management tool** (stem blight, leaf spots, overwintering fungi in dead/infected twigs)
- **Use winter pruning** to maintain a narrow base with multiple canes of varying ages
- **Summer hedging is used every year in COASTAL North Carolina (Zone 8)** to manage bush height and reduce pruning costs -- will also delay bloom