



Blueberry Pruning

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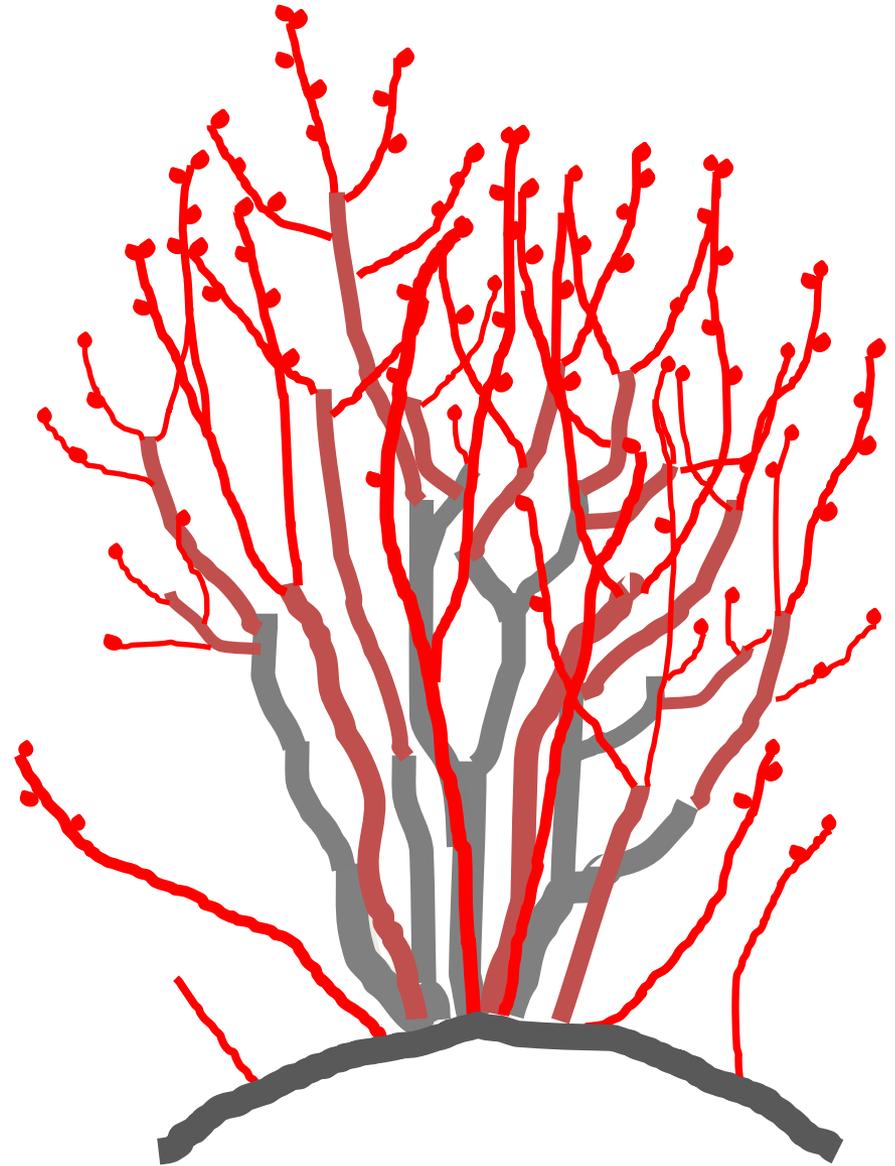


Reasons to Prune Blueberries

- 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

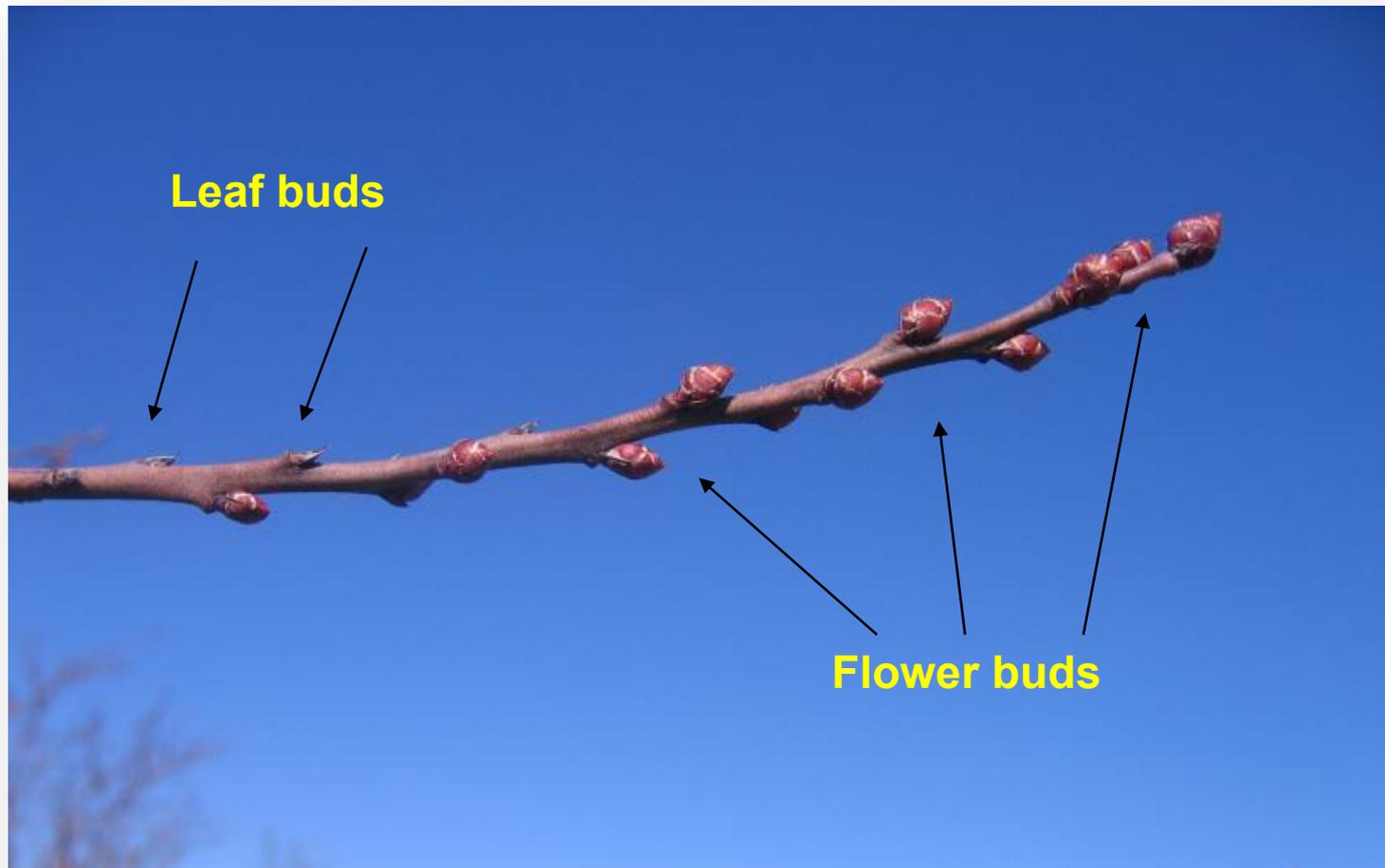
Blueberry Basics

- 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

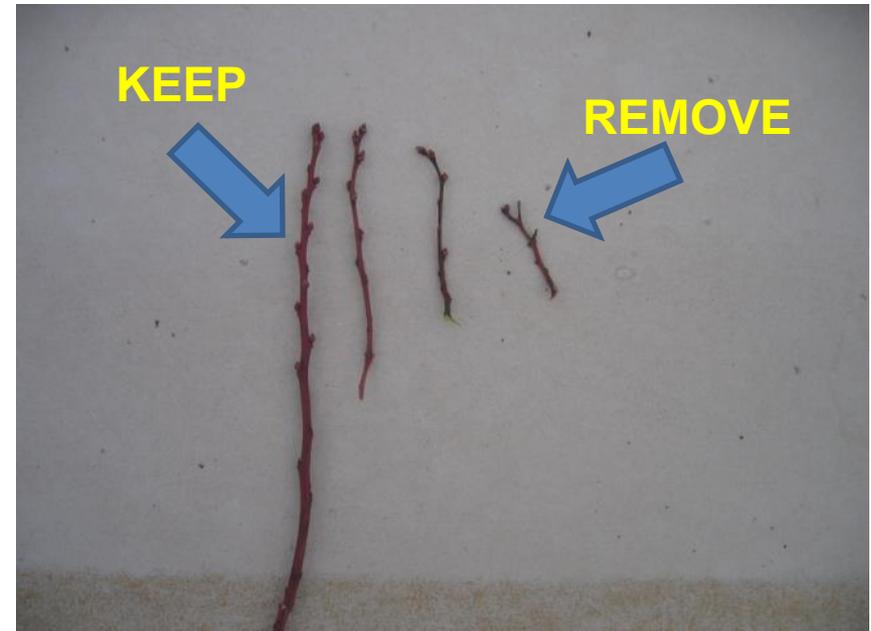
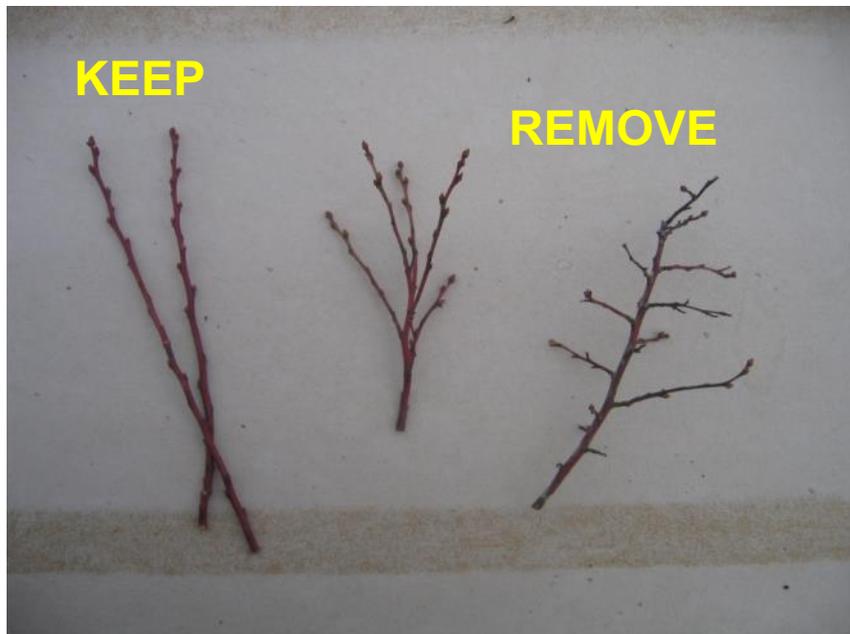


FLOWER BUDS that will produce the next crop are formed in late summer and early fall on the current season's growth.

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



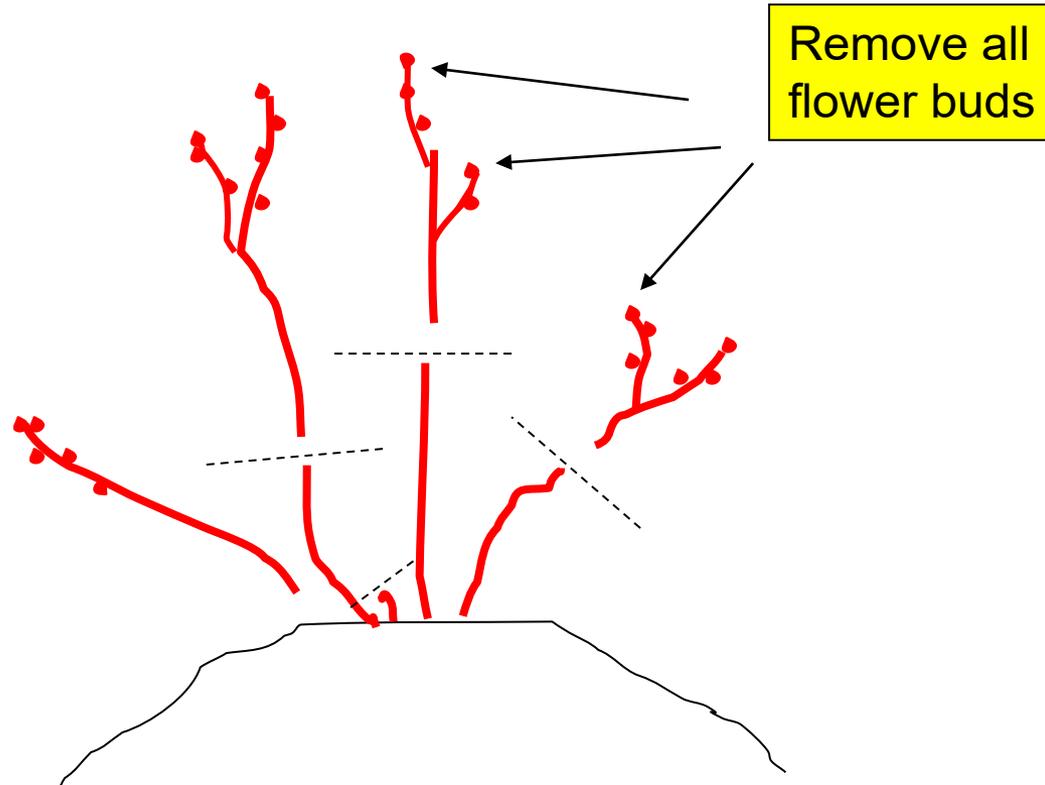
Pruning Young Bushes (0-3 yrs)

- Removal of flower buds to prevent overcropping
- Winter pruning to shape the bush
- Removal of succulent fall shoots to avoid stem blight infection

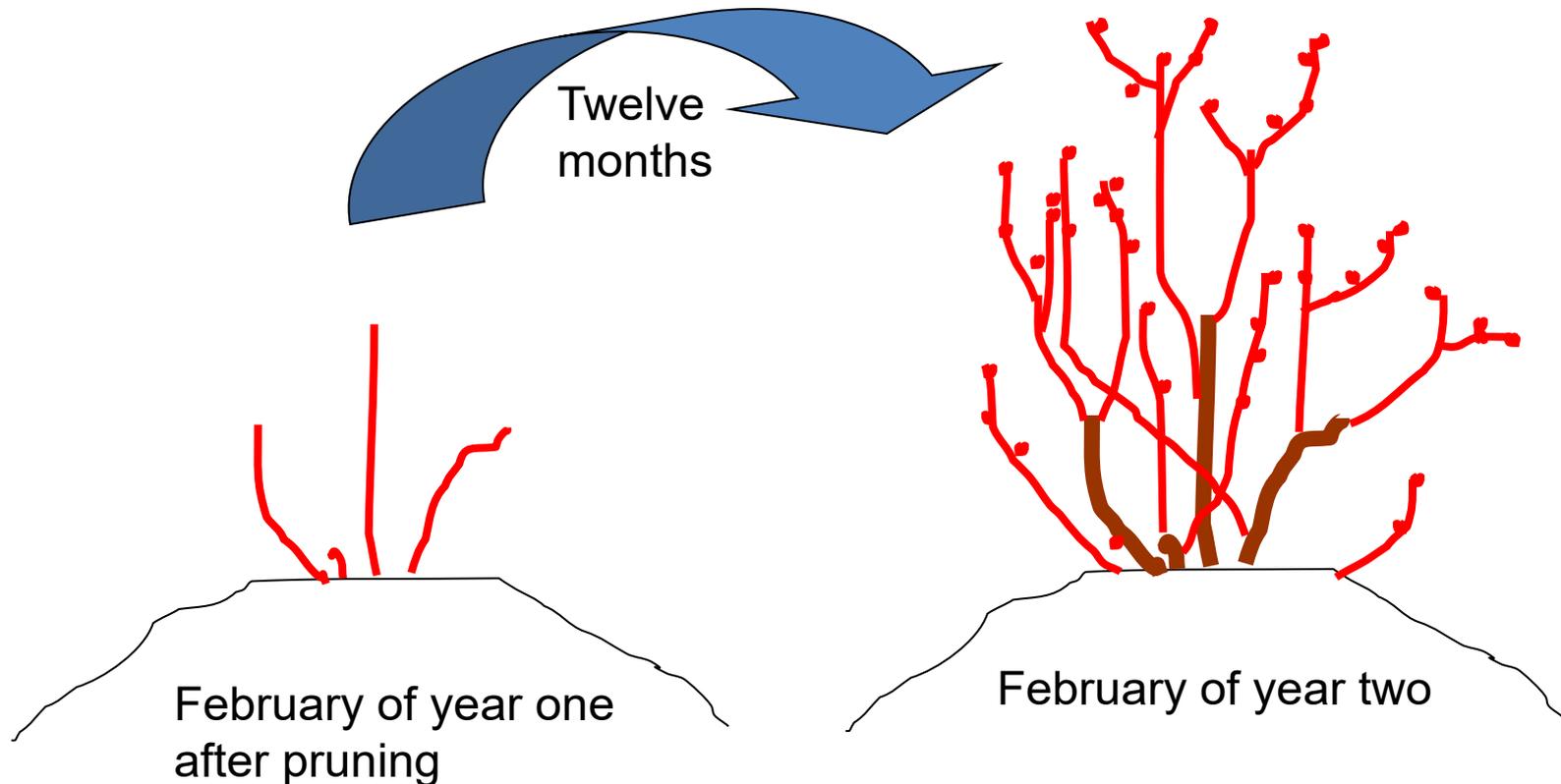




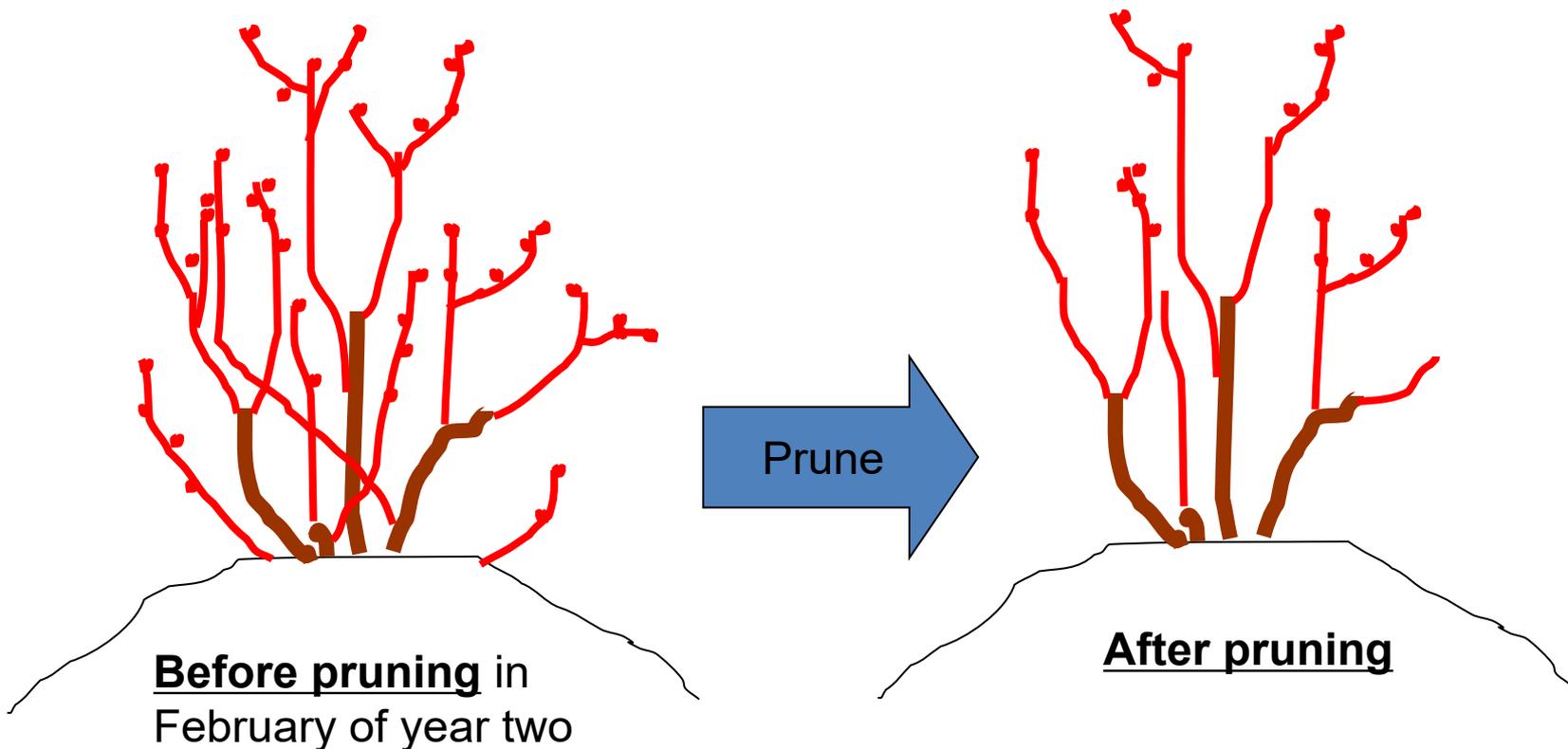
Setting out new plants -- Always prune or rub off all flower buds and cut back 1/2 to 2/3 of the height at the time of planting. For potted plants, gently separate and spread out the roots so that the root mass is no longer in the shape of a pot.



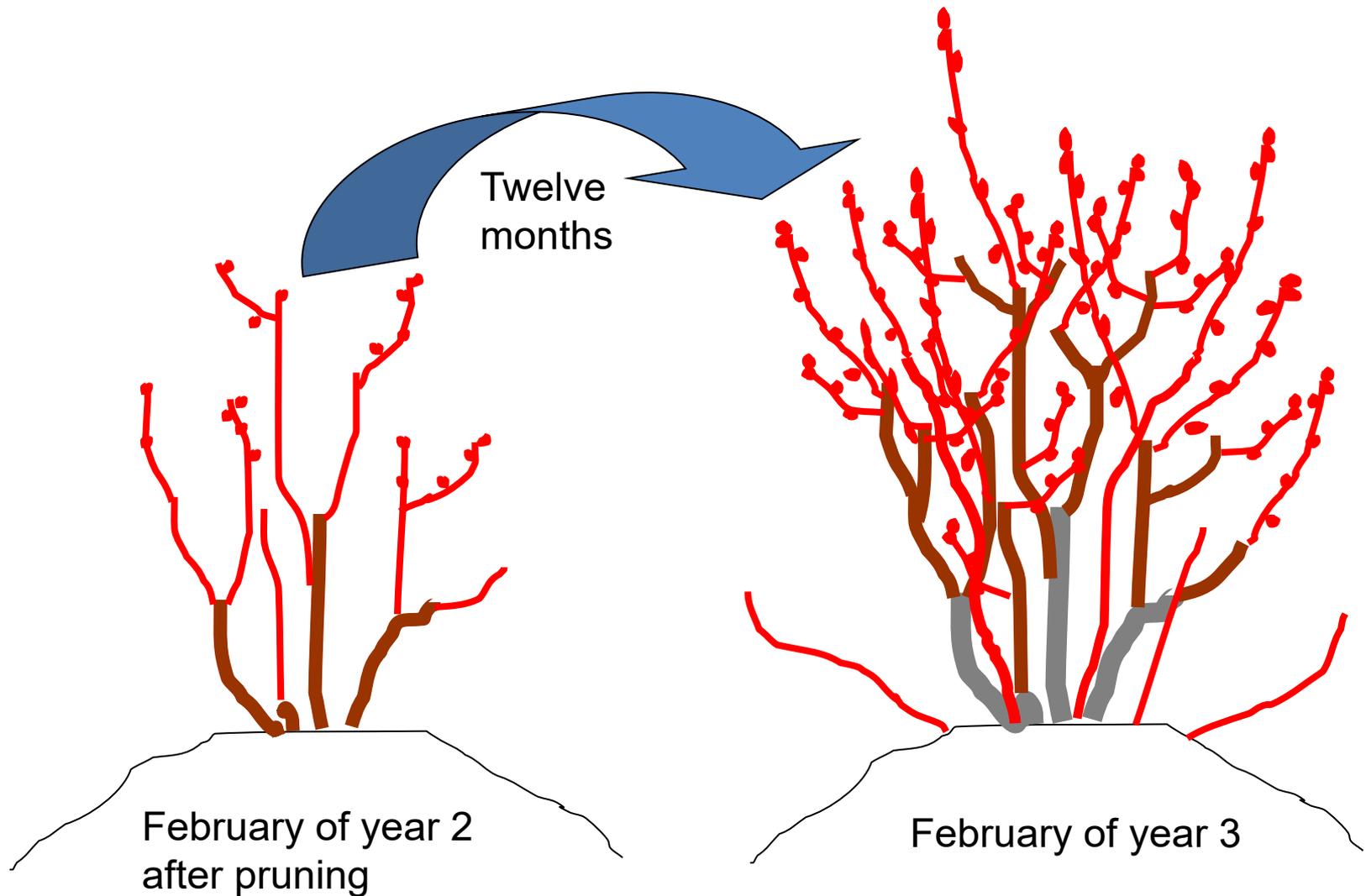
In Year One – the goal is to avoid fruit production entirely. With removal of all flower buds at the beginning of year one, the bush grows vegetatively, and by Fall of the first year has increased in size and produced more flower buds.



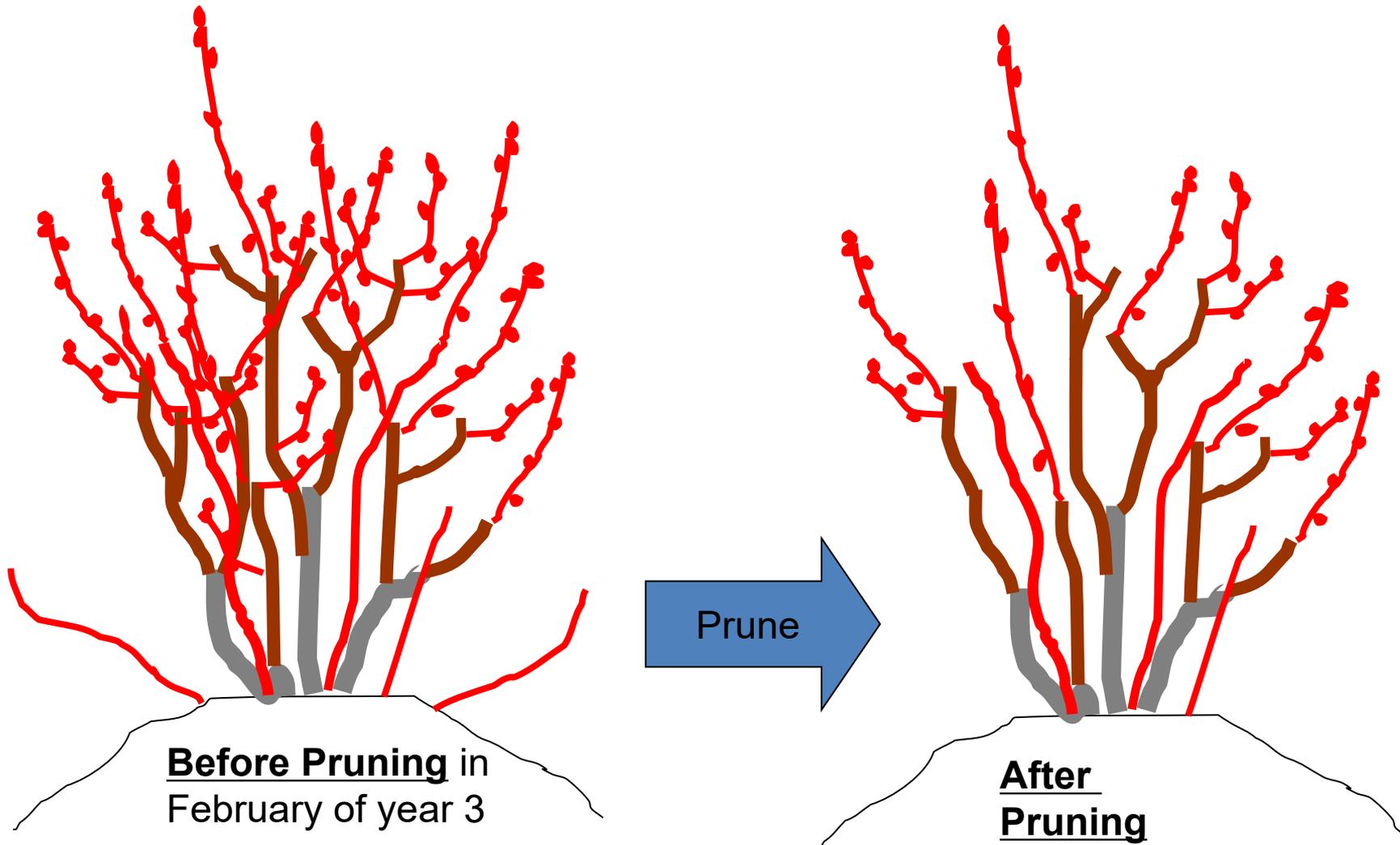
Young bushes -- In year two, remove low-lying or weak shoots and cross-overs, keeping the healthiest, large upright canes. Some flower buds may be allowed to produce fruit in year two if the bush grew vigorously in year one.



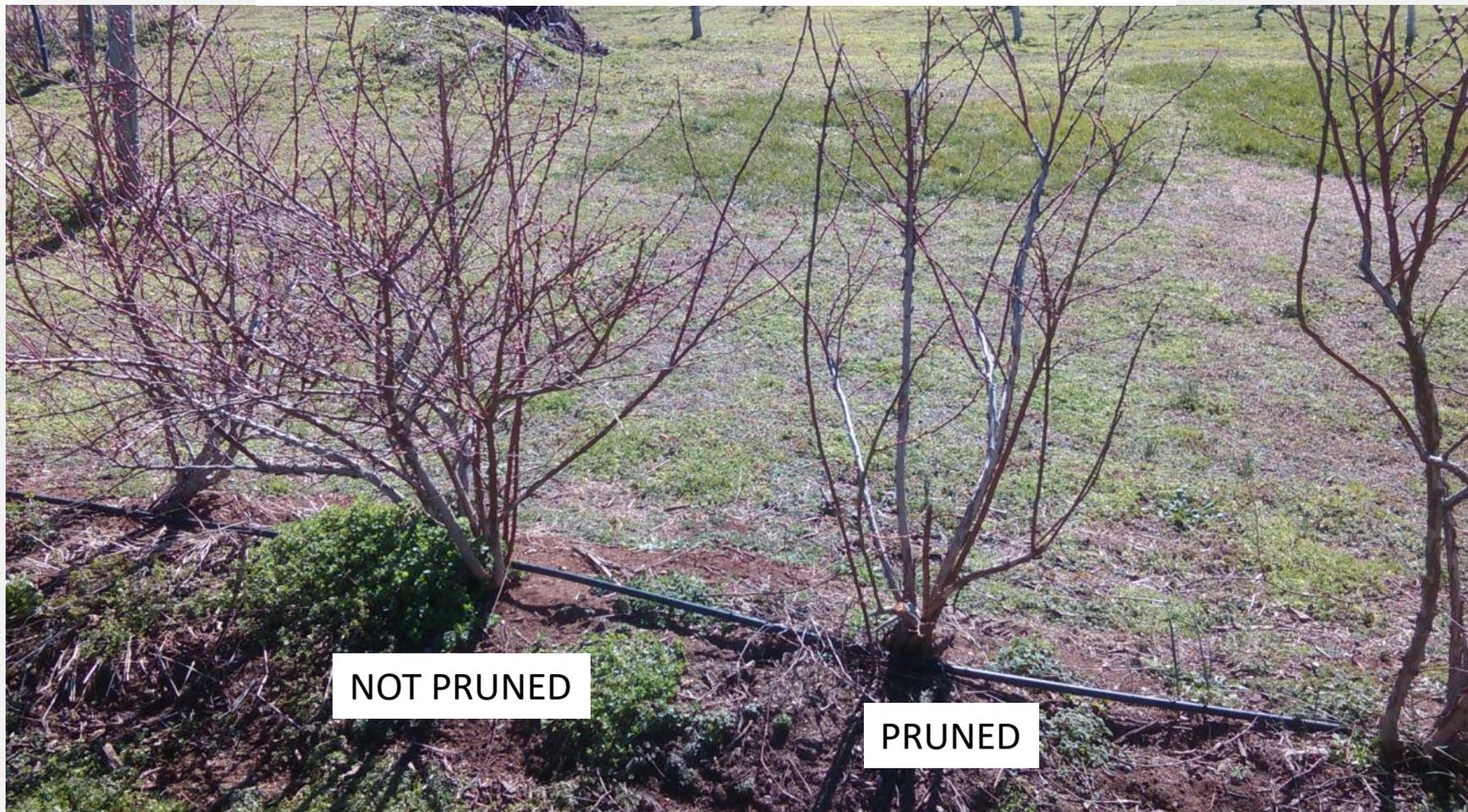
First crop? – the bush may be allowed to produce a few berries in year two, however the goal is still to promote vegetative growth that will build the structure of the bush for years to come.



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



NOT PRUNED

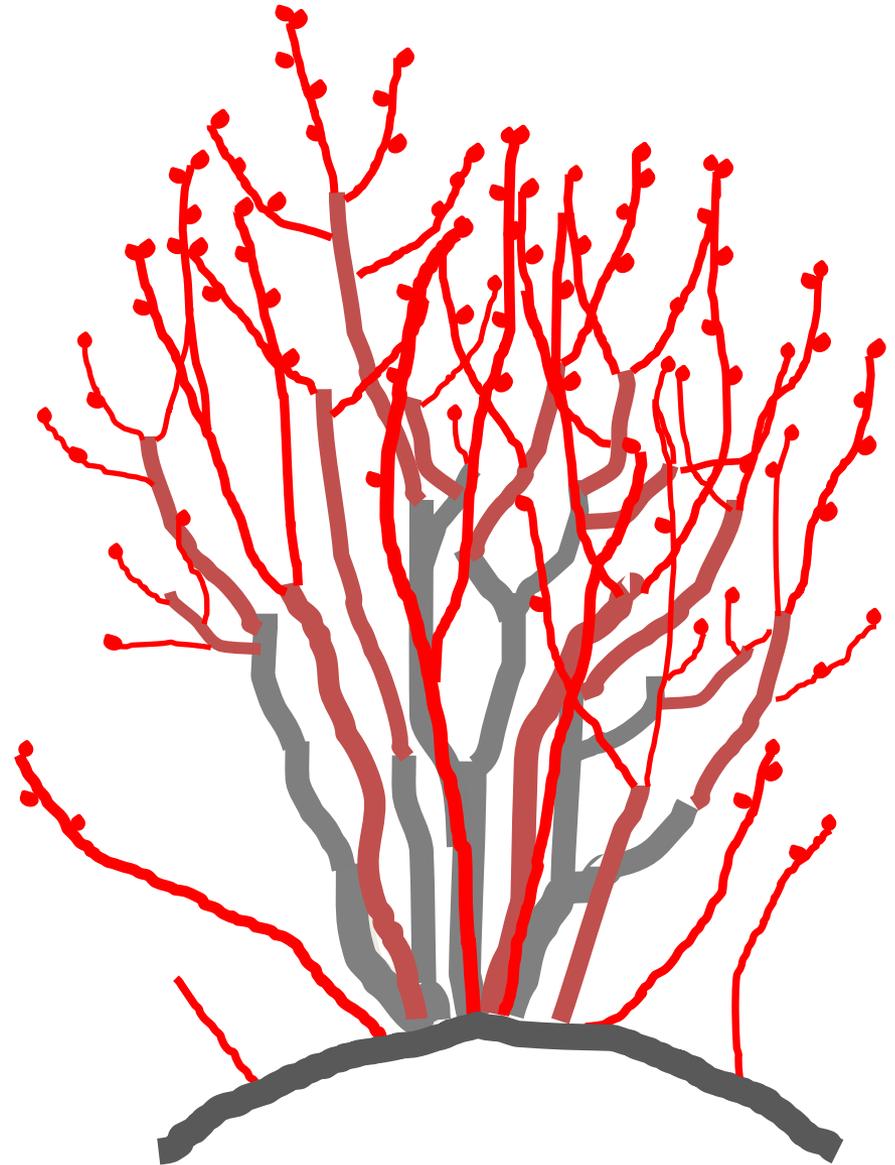
PRUNED

Winter pruning of mature bushes

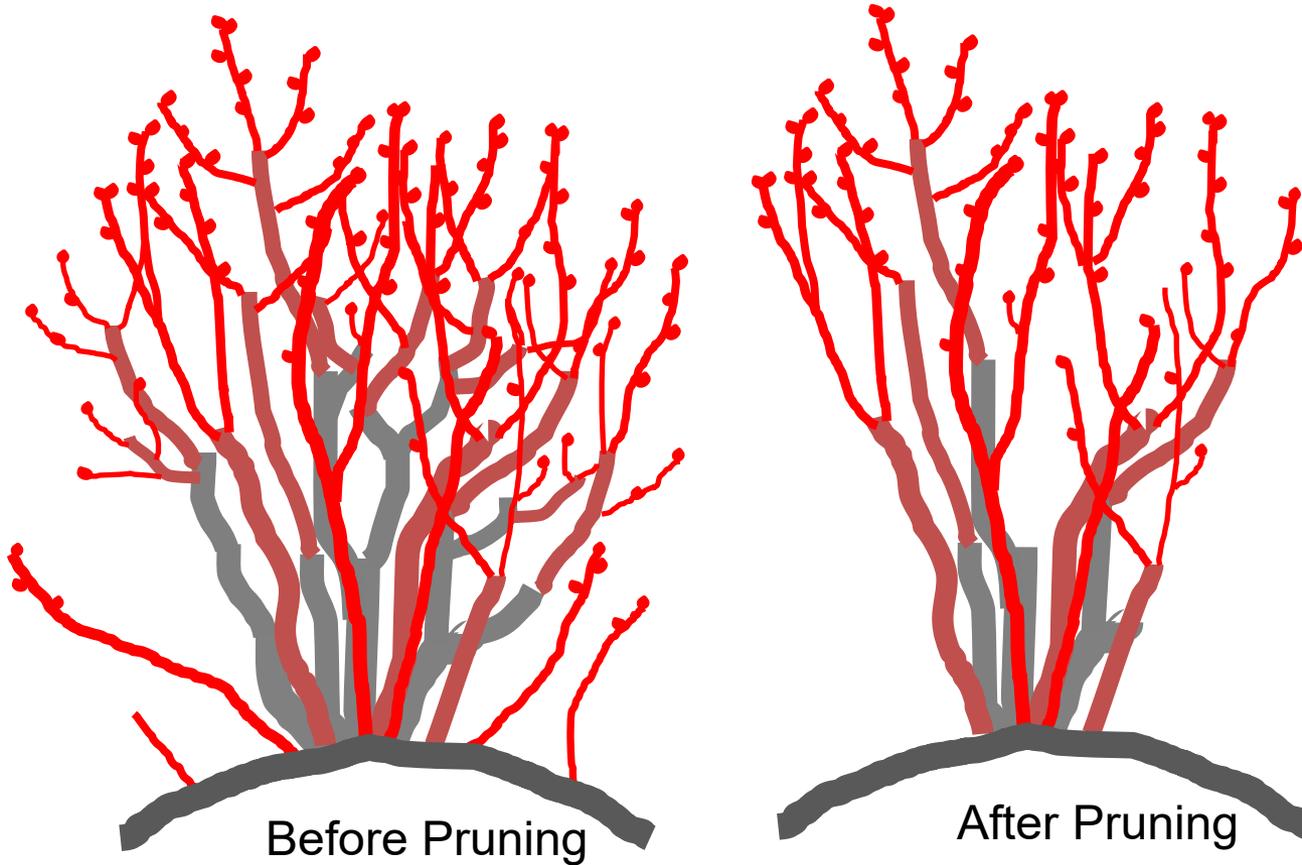


Stepwise pruning – start at the bottom and work up

- 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





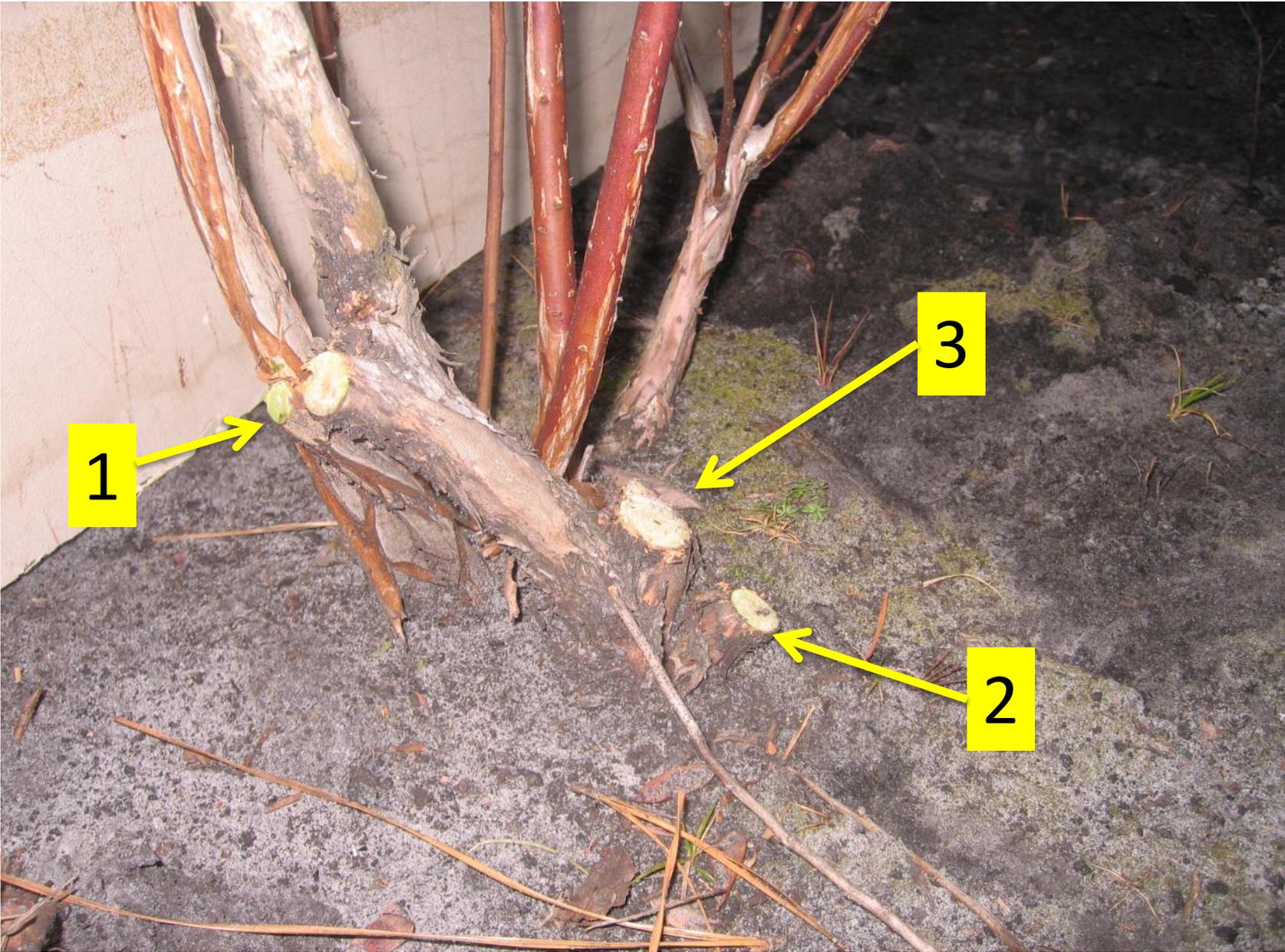
Cut #1



Cut #2



Cut #3



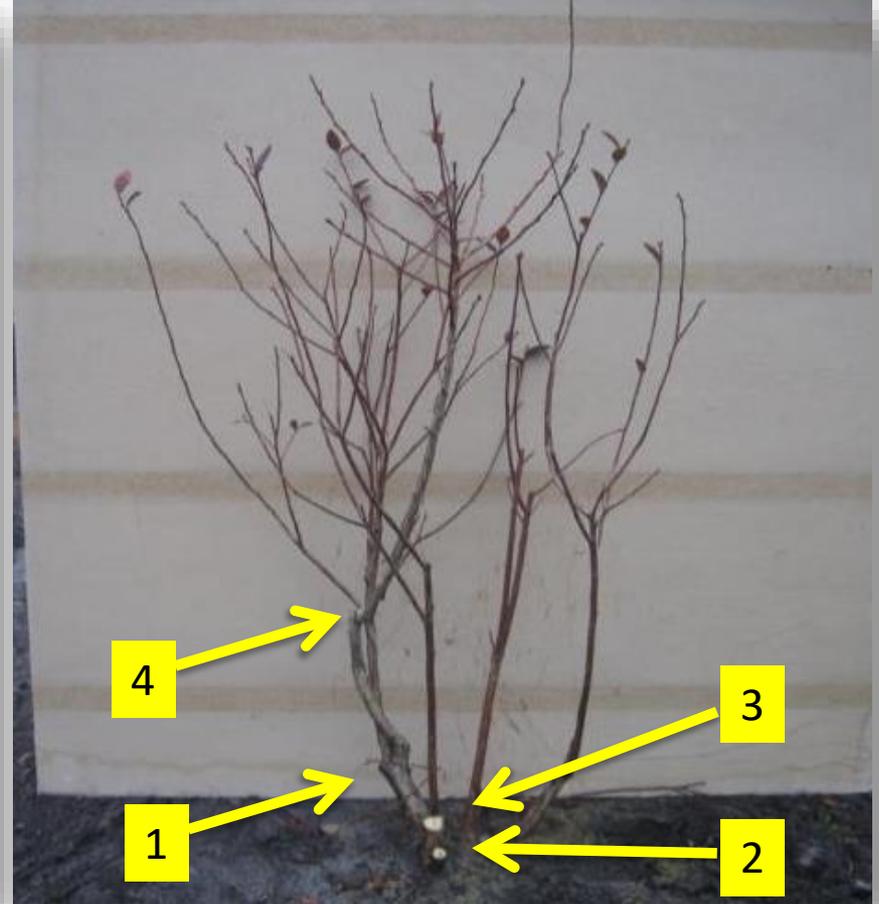


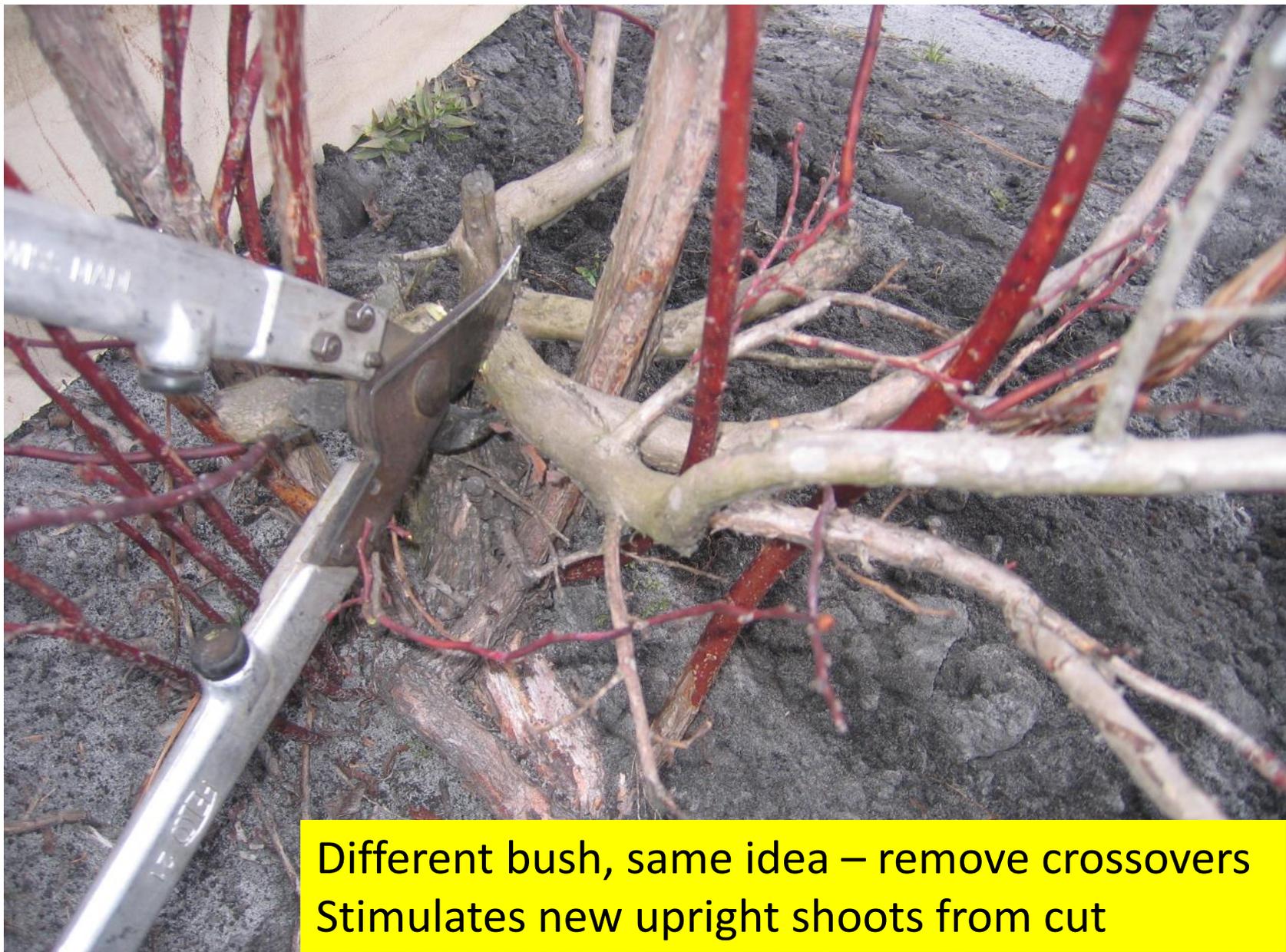
Cut #4

Before



After

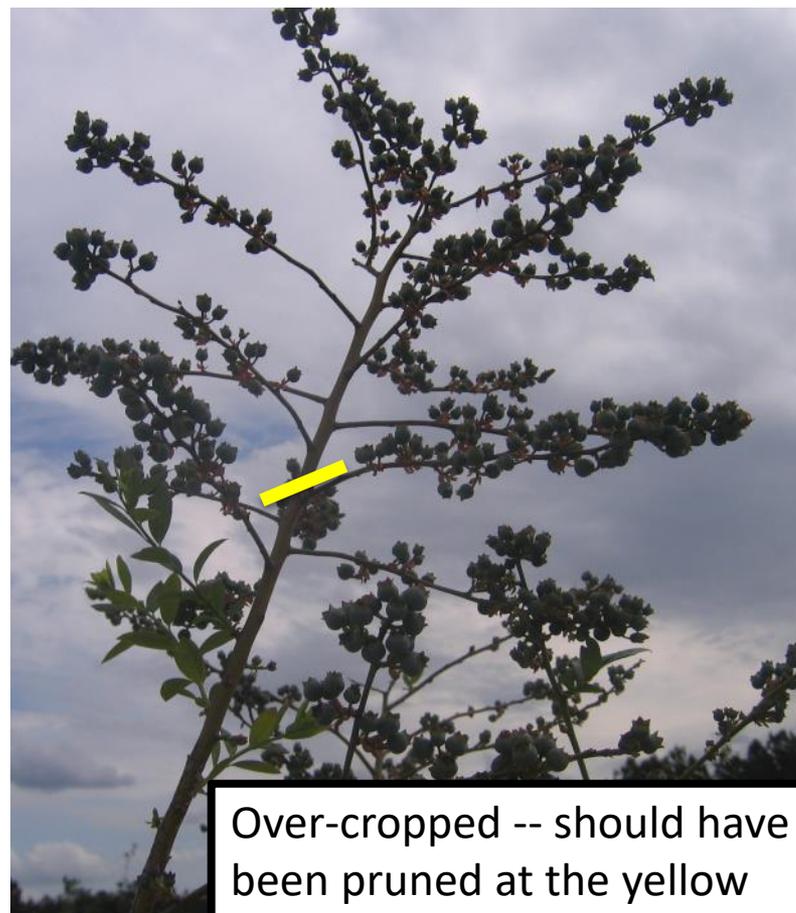




Different bush, same idea – remove crossovers
Stimulates new upright shoots from cut

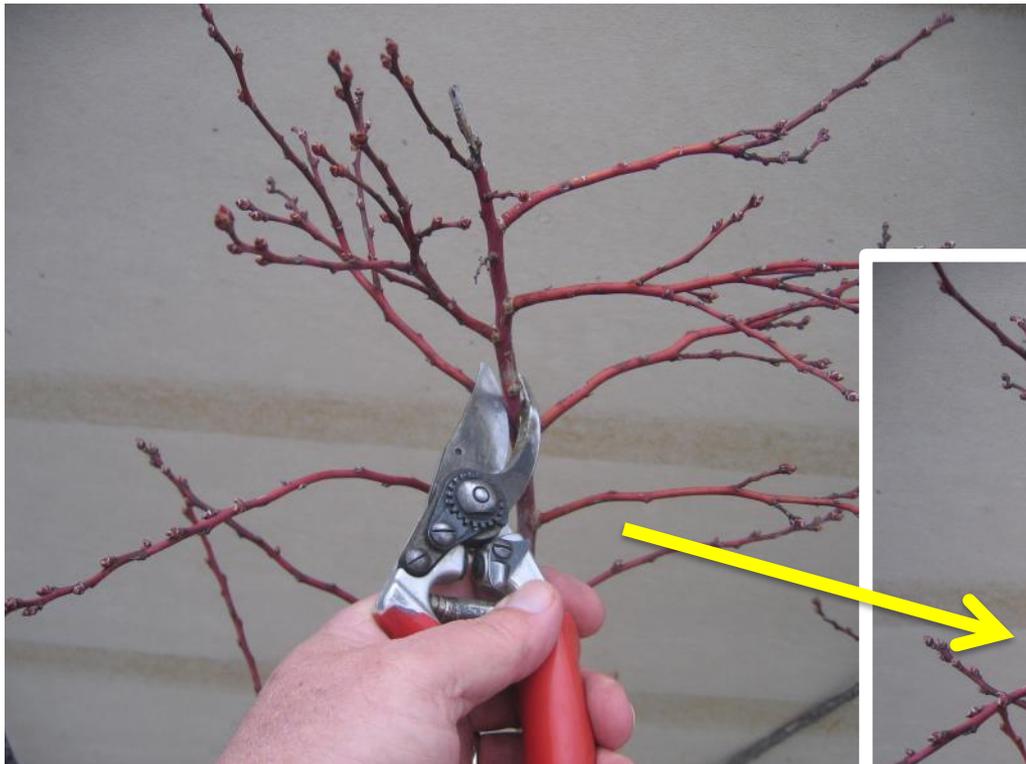
OK, we have shaped the bush by making large basal cuts. What's NEXT?

- 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



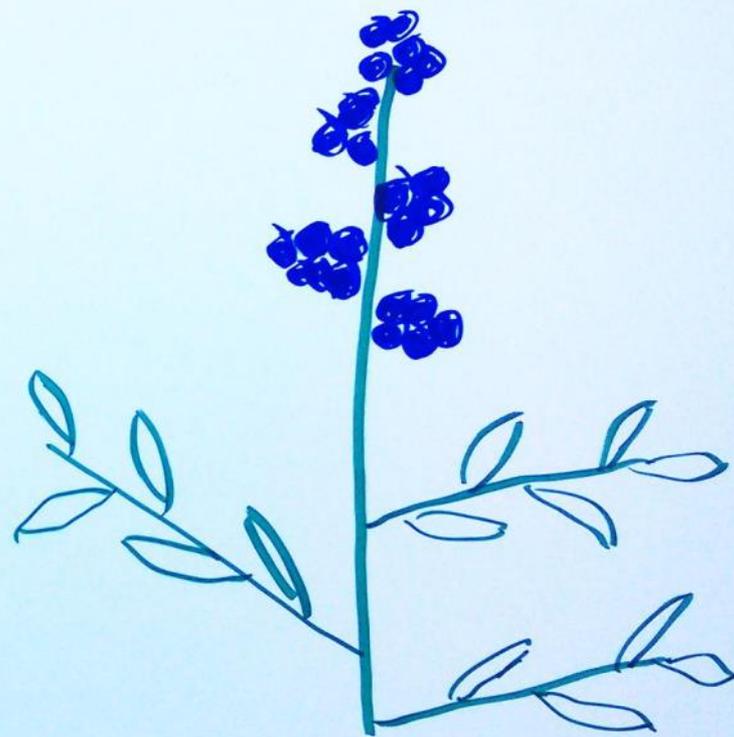
FIRST fruiting year of a blueberry stem = large berries



July-August

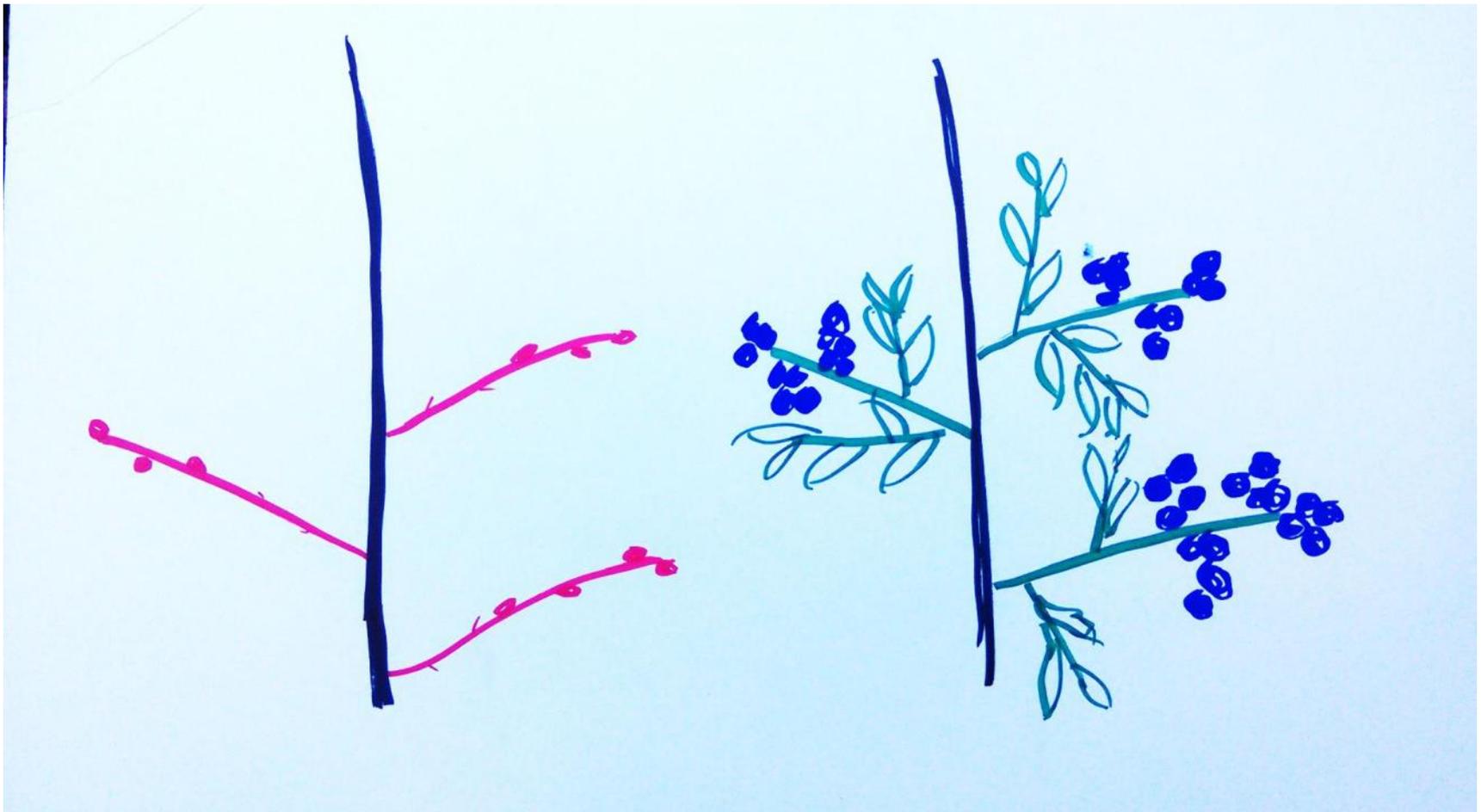


January

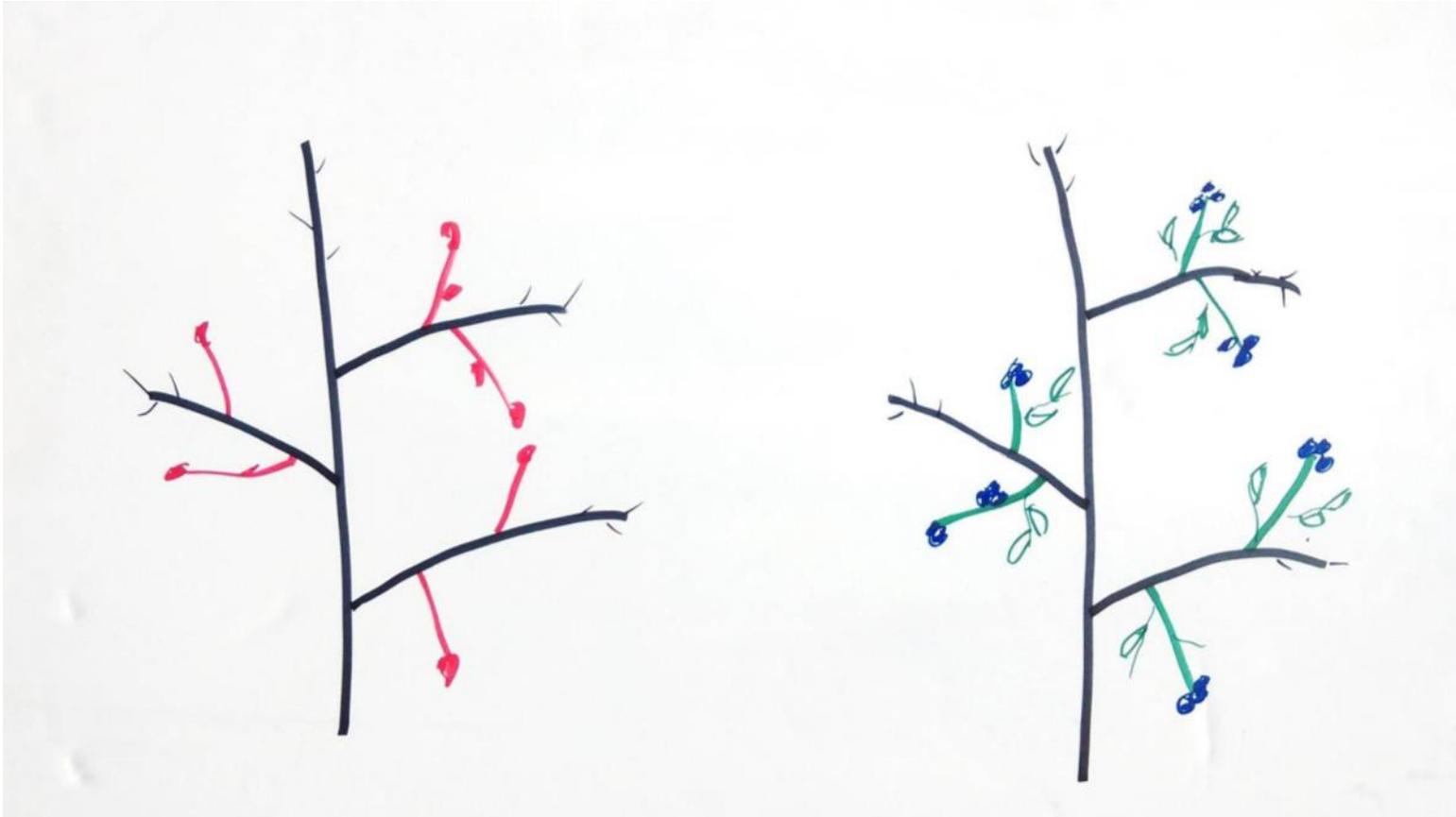


May-June

**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



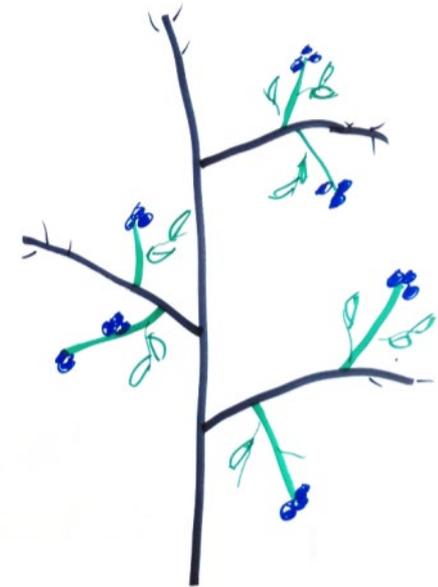
Berry size decreases over time as the shoot branches repeatedly



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

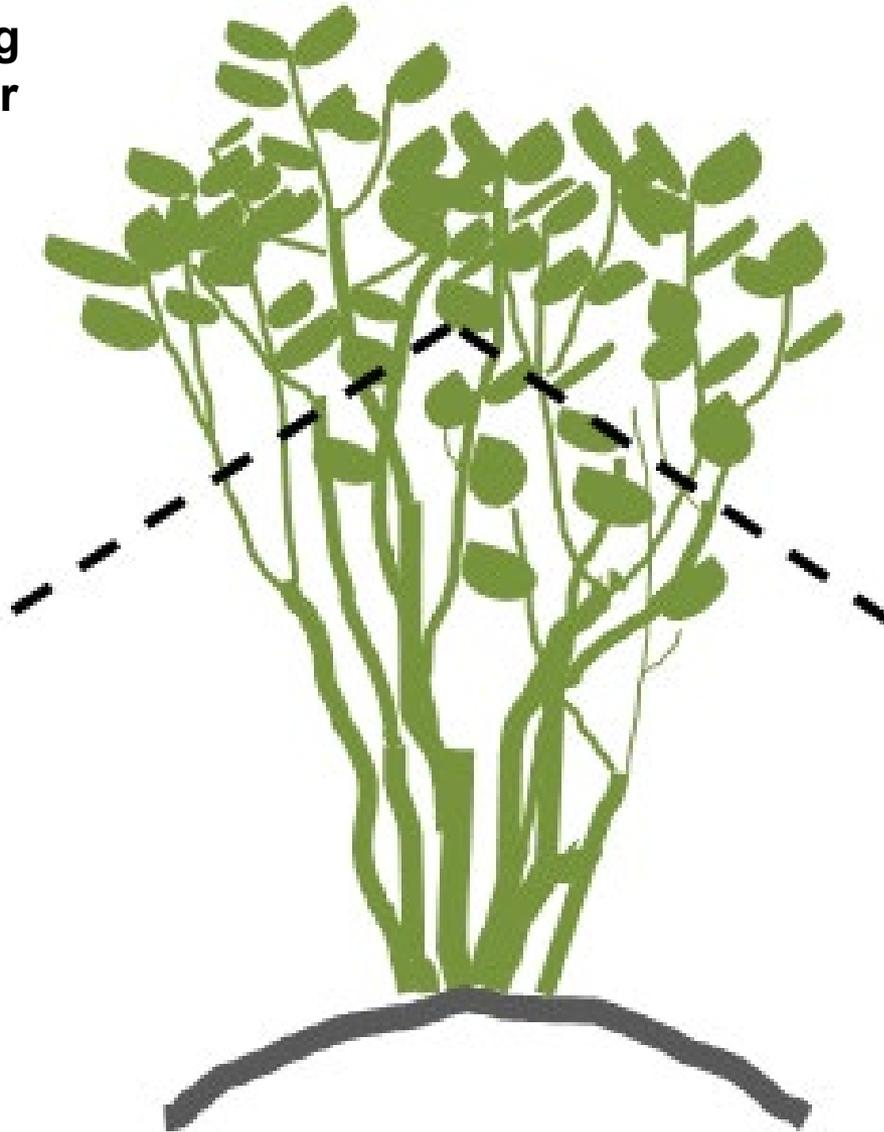
mowing/topping in JUNE, JULY

Immediately after harvest

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

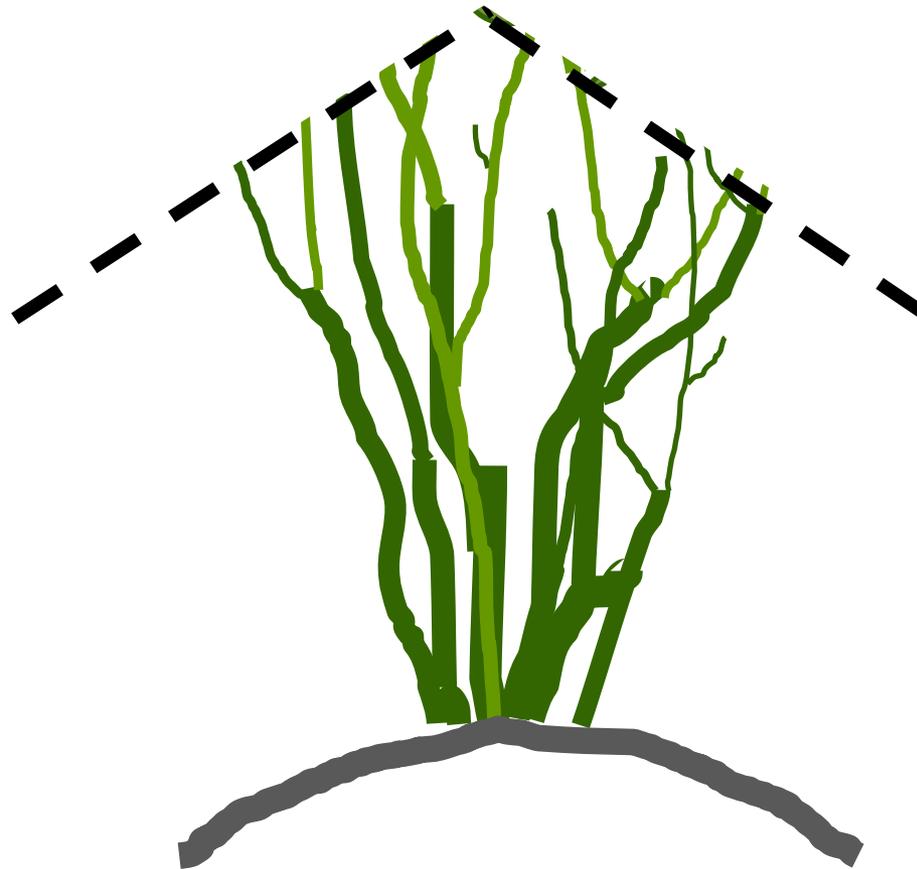
MOSTLY limited to USDA Hardiness
Zone 8 or higher

**Summer Hedging
Immediately after
Harvest on
Southern
Highbush**

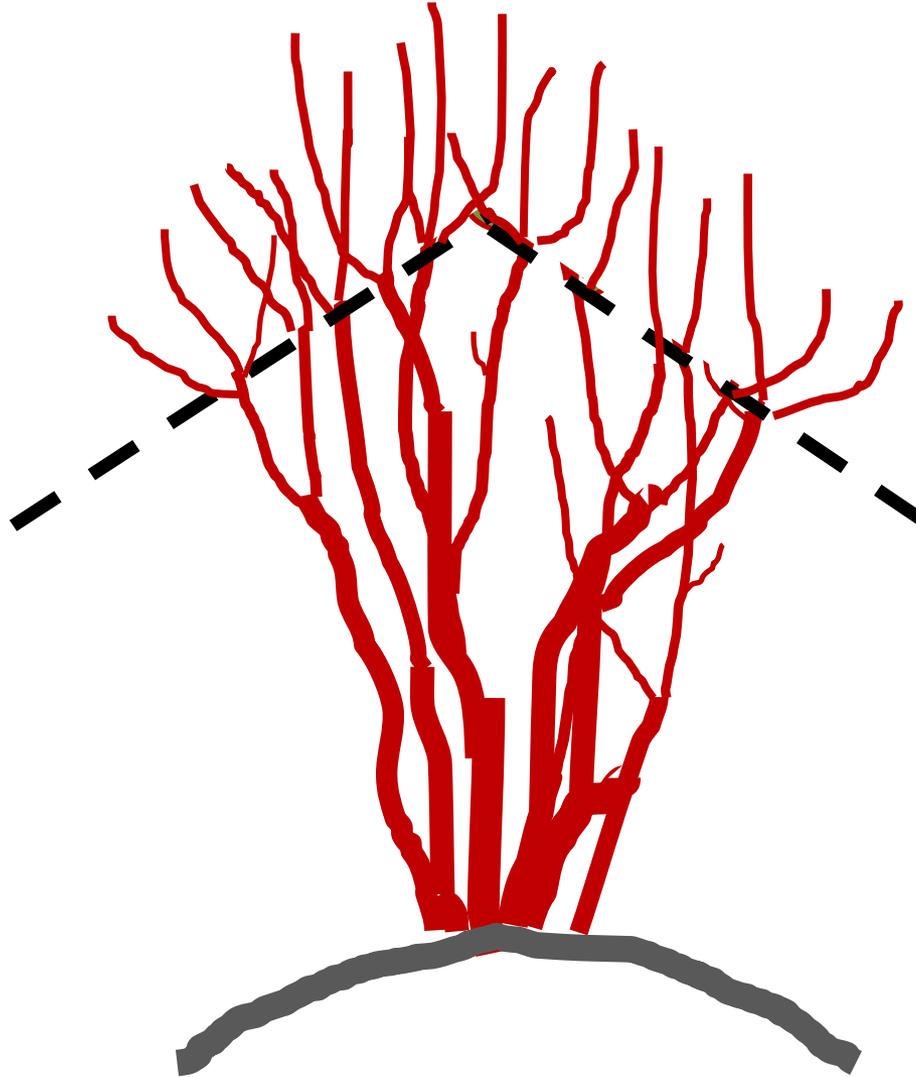


**36-48 inches
“Housetop”
angled cut**

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

