



PRINCIPLES OF PRUNING THE Highbush Blueberry

Bill Cline and Gina Fernandez
Extension Horticultural Specialists

Effect on Plant Size and Crop Yield

Pruning a plant reduces its ultimate adult size and the crop yield in at least the following season. To compensate for this loss of bearing area and yield, other factors, largely economic, must be considered in planning a pruning program.

Effect on Fruit Size

By reducing the number of fruit buds (and hence clusters) on the bush, pruning results in an increase in the size of the individual berries. Up to a point, the more severe the pruning, the larger the remaining berries are. Pruning for increased size is a compromise between desired size and yield (numbers) of fruit.

Effect on Ripening Period

Moderate to heavy pruning tends to shift the ripening period forward so that most of the remaining fruit ripens together and early. Light pruning results in a longer season of ripening. It may be more profitable in southeastern NC to prune fairly heavily, even at the expense of some yield, to realize the earliest possible maturity.

Effect on Plant Growth and Vigor

Pruning results in longer and more vigorous (thicker) shoot growth in the next season. Heavy pruning causes thicker and more leafy shoots than light pruning. The thicker and later-developing shoots tend to produce fewer fruit buds than those which stop growing earlier in the season. Fruit of the

blueberry is borne on wood produced in the previous season (one-year-old wood). By pruning, you are regulating the fruiting potential of next season's crop. Pruning should be severe enough to invigorate the plant so that sufficient new wood is produced during the following season. You are actually determining the fruiting potential of the crop of two seasons hence by the number and type of cuts you make this winter.

Spacing the Crop on the Bush

By wise selection of canes and lateral shoots on those canes which will bear the crop, the grower can prune to have his fruit well-distributed on the plant. Well-distributed clusters should have enough leaves around them to provide adequate foodstuffs, but not enough to overshadow the fruit, or to reduce spray or dust coverage, or to make the clusters hard to reach during harvest.

Bush Life and Productive Life

Blueberry bushes tend to overbear, which shortens their lives. By pruning to regulate crop load, the grower can lengthen the life of his bushes and increase the number of commercial crops.

When to Prune

Blueberries should be pruned during the winter while the bushes are dormant. In winter, flower buds are easily visible on one-year-old wood and their numbers can be adjusted by pruning to regulate the crop load for the coming year.

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Tools Needed

Most blueberries are hand pruned using long-handled pruning loppers capable of cutting branches 2 to 3 inches in diameter. Finer, more detailed pruning such as thinning of flower buds on individual fruiting twigs requires smaller, one-hand pruners. For larger plantings, pneumatic pruners are available, but these tools require an air compressor and are fairly expensive.

Training Young Plants (1 to 3 or 4 Years of Age)

If vigorous, well-rooted 2-year-old plants are set, they do not need cutting back the first year in the field except to remove fruit buds shortly after planting. Pruning should be moderately heavy in the second year in the field to stimulate strong new growth on selected canes. Do not permit plants younger than 3 years of age to bear more than a cluster or two of fruit, or the onset of the commercially productive period will be delayed. A large bearing area should be established in the shortest possible time.

Pruning Bearing Plants (over 3 to 4 years of age)

1. Make large “shaping cuts” — Remove all low-spreading branches and the oldest canes if they are weak, particularly if in the center of the plant. “Head back” the upright “bull shoots” to the desired height to keep the bush from growing too tall. Essentially, you have then automatically selected the remaining, more upright canes to bear your crop next season and the following season.
2. On the remaining canes, systematically “thin out” the shorter, thinner shoots, leaving enough of the thick shoots to bear the crop and make new growth. Only experience can tell you how many shoots a particular

variety of a particular age can carry and still perform well. It is probably better in most instances to prune too lightly than too heavily. Lighter pruning is usually practiced as the plant grows older because it can carry more “wood” successfully due to a larger root system.

3. Finally, some varieties such as ‘Murphy’ and ‘Morrow’ should have their fruiting shoots cut back to 3 to 4 fruit buds per shoot. This is done principally to insure adequate fruit size.

Renewal Pruning

When blueberries are about 8 to 10 years old, they are at their productive peak, but renewal growth has reached a minimum, and production will then decline markedly from year to year. Some provision must be made to revitalize the plant to prolong its productive period. Weak or badly diseased canes should be removed entirely. These canes can be identified by generally poor vigor and low fruit bud production. However, eastern NC many varieties do not sprout new canes readily from the crown. It may be necessary to either cut the cane back to a strong lateral which is properly located, or to cut the cane severely (“dehorn”) back to within 2 to 3 ft of the ground. By the latter method, it is hoped that new lateral branches can be forced from below the cut.

Either method may result in a 1- to 3-year crop reduction, but the plants should then bear several more good crops. However, when rejuvenation becomes necessary, it is well to start considering newer and better varieties to which your acreage may be systematically replanted in the near future.