## BLUEBERRY CARE \& CULTURE

The blueberry bush is a valuable addition to the edible or ornamental landscape. They are attractive shrubs with multi-seasonal interest: twiggy form, glossy, deep green leaves in summer, and fiery scarlet autumn foliage.

Successful blueberry culture requires several conditions:
1.) Well drained, acidic soil ( $\mathrm{pH} 4.5-5.5$ ), with a high content of organic matter.
2.) Should be placed in a part shade/shade location. Protect from winter wind.

Acidic soil conditions are crucial to Blueberry cultivation, a condition rarely found in the Rocky Mountain West. Several methods of cultivation provide workable solutions to this situation.
1.) Remove existing soil from the proposed planting area to a depth of two feet and replaced with a 50/50 mixture of good commercial top soil and horticultural sphagnum peat moss. The addition of extra compost is also recommended.
2.) Sink half a whiskey barrel or a large 20 " plastic pot, with additional drain holes at the bottom for proper drainage, into the ground and fill with the same soil mix as above. This provides the same specialized soil environment but contains it in a limited space.
3.) Build a raised bed garden (3-4' wide and 8-12" high) again with the specialized soil mix as above.

It is important to test the pH of the soil on a yearly basis. Test kits are available in the Garden Center.

The blueberry is shallow rooted. Cultivation should also be shallow. A mulch of bark chips is recommended both to conserve moisture and cool roots as well as to cut down weeds. Continuous but moderate moisture throughout the growing season is necessary, however over watering must be avoided. Check the top of the soil first, if the first 1 " of soil has moisture do not water.

FERTILIZATION: Yearly soil amendment with compost and regular acidification with fertilome Evergreen Food or Miracid is necessary for healthy plant growth and fruit production. Never use fertilizers in the planting hole. Start fertilizing in May just before bloom, apply again after bloom and then through-out the growing season as specified on the label.

PESTS/DISEASES: Insect control is rarely a problem in the semi-arid Rocky Mountain West. To minimize fungal problems, early morning watering and proper pruning is recommended since many insecticides are specific to certain pests, it is best to identify the insect before applying.

BIRD CONTROL: Many species of birds enjoy blueberries as much as humans! The principal species include robins, finches and starlings. Birds can demolish your blueberry crop if not controlled. To protect blueberries as they begin to ripen cover entire shrub a netting. The netting provides a barrier that keeps the birds away from the berries. Please follow manufactures directions.

HARVEST AND STORAGE OF BLUEBERRIES: Blueberry harvest occurs from July through September. They may be kept in a refrigerator at 32-35 degrees Fahrenheit and will remain fresh for 10 to 14 days after picking. To ensure their best appearance, fresh blueberries should not be washed until just before serving.

Fresh blueberries freeze very well. They maintain taste, texture and appearance for up to two years in the freezer when kept at 0 degrees Fahrenheit. Fresh blueberries should always be frozen unwashed. The blueberry has a natural protective coating, which should remain during storage. To freeze blueberries, simply put them into freezer bags or containers and pop into the freezer. Blueberries may also be canned or processed into syrup.

Fresh blueberries are a delicious and nutritious addition to the home garden. Blueberries are good sources of vitamins A and C. They are high in potassium, iron and calcium while being naturally low in calories and have no cholesterol.

WINTER PROTECTION: Blueberries will survive and thrive best with adequate winter protection. During late November, apply 4-5" of bark mulch around the base of the blueberries after the ground has frozen to protect against heaving and thawing. This mulch layer should be removed in April. Watering during extended dry periods or when there is no snow, cover is extremely important. All fertilization should be withheld by the end of July. This allows the blueberries sufficient time to harden off before the arrival of cold temperatures.

## Establishment Years

Pruning during the first two years is limited to taking out winter killed and diseased wood. It is recommended that the plants not be allowed to set fruit during this time. Allowing fruit to set can slow down plant establishment. Flower buds can be easily identified and rubbed out in early spring. Flower buds are fat and have a rounded shape. Vegetative buds are thin and come to a point. It is easiest to identify and rub out buds soon after they have begun to swell.

## First Pruning Year

The first year for pruning will be after the bush has been in the ground for two seasons. Pruning is usually carried out before budbreak in early spring. Pruning cuts should be made as closely to the ground as possible. Any stubs that are left can serve as an entry point for pathogens. Look for any diseased or dead wood and prune those branches out first. Next, cut out any canes that are crossing or rubbing. Out of the remaining canes, select two or three healthy canes to keep that are far enough apart for good air circulation and sunlight penetration. Prune the rest of the canes out.

## Second Through Fifth Pruning

The second through fifth pruning year will be the same as the first; except that for every year that you prune, you will leave two or three canes. Your goal for the fifth year is to have 12 healthy canes of different ages for each bush.

## Maintenance Pruning

After the fifth pruning year you will be maintaining the shrub at 12 to 15 canes. You will want to prune out the two or three oldest canes every year and leave two or three new ones to take their place.

## Summary

In our experience it has been most beneficial to get the plant up to 12 good bearing canes as quickly as possible. We have found that under our conditions yields drop off significantly on canes bearing for more than 5 or 6 years. You may want to test this under your conditions. To maximize your potential for good-sized harvests as early as possible in the life of the planting, we suggest you not only prune annually, but also monitor soil pH , use drip irrigation, and mulch heavily. Pruning, like water, mulch, and soil pH , has a significant effect on berry size and quality. Our experience here has been that pruning every year helps lead to consistent, high-quality fruit.

