

## BLUEBERRIES

Blueberries are members of *Ericaceae* or heath family. They prefer growing conditions similar to those of rhododendrons and azaleas. Blueberries flourish in the moderate summer temperatures of the Northwest's coastal areas. They are not well adapted for Eastern Washington and can be grown only with careful management of the soil environment. Bushes come into full production about six years after planting and yield about a gallon of berries per plant.

### SITE SELECTION

- Full sun is best. Some shade, particularly in the late afternoon, may help avoid problems with sunburn in hot locations.
- Avoid planting in frost pockets where late cold snaps may injure the blossoms and young fruit. Also, very warm exposures such as on the warm side of buildings may force plants to bloom too early.
- Blueberries are classified by bloom time. Later blooming varieties are best suited for the Inland Northwest because they are less apt to be damaged by late spring frost.

### SOIL REQUIREMENTS

- Blueberries require acidic soil with the pH between 4.5 to 5.5. Test the soil where you plan to grow them. *The pH can be lowered one point by mixing 2 pounds sulfur powder per 100 square feet into the top 8 inches of soil.*
- If pH is between 5 and 6.5, mix 4 to 6 inches of peat moss, sawdust, bark or wood chips into top 8 inches of soil. If you use uncomposted sawdust you'll also need to add extra nitrogen to prevent the soil nitrogen from being depleted. *As a rule of thumb, add one-half pound of ammonium sulfate (21-0-0) for each cubic foot of uncomposted organic matter.*
- If pH is above 6.5, plant blueberries in raised beds 8 inches deep. Fill with equal parts peat moss and soil (sand mix). Soil below the bed must drain well.
- Since blueberries require an acid soil, soil tests should be done annually. Depending on the pH of the planting site, the root zone may benefit from sulfur applications every few years. Sprinkle powder around the dripline of each plant and gently scratch in. Water well after each application.

## **GROWING REQUIREMENTS**

- Because they have a shallow, fibrous root system, blueberries prefer soils with high organic matter and good water holding capacity.
- Water 1 to 2 inches per week.
- Mulching conserves moisture, controls weeds and protects roots from extreme temperatures. Blueberries are shallow rooted and are susceptible to winter kill. Fall watering and good mulching will prevent dieback.

## **PLANTING**

- Set dormant plants out as early in the spring as possible. It is important to prune hard after planting in order to stimulate vigorous growth.
- Plant bushes 5-8 feet apart in rows 8-10 feet wide.
- Blueberries are self-fertile; however, 2 varieties give good pollination and larger, earlier fruit.
- Use 2 or 3-year-old plants.

### **First Year Care**

Strip blossoms, preventing plants from setting fruit. This slows growth.

Remove dead branches, if any.

Mulch for weed control and to retain moisture

*Do not fertilize the first year.*

### **Second Year Care**

Strip most of the blossoms.

Remove dead, damaged or weak branches.

Renew mulch to 3-4 inches.

Fertilize.

### **Third Year Care**

Strip a few of the blossoms.

Remove dead, damaged or weak branches. Prune lightly.

Renew mulch to 3-4 inches.

Fertilize.

### **Miscellaneous:**

Consistent watering prevents cracking fruit.

Full production occurs in the 6th to 8th year.

Plants produce for 10 to 15 years.

Potential yield is 1 gallon per plant.

## **FERTILIZATION TIPS**

Ammonium sulfate (21-0-0) gradually lowers pH.

Red leaf color indicates nitrogen deficiency.

Good growth and no red leaves means little or no fertilizer is required.

Bone meal adds lime to soil and raises pH.

Manure is slightly alkaline and raises pH.

## BLUEBERRY FERTILIZATION

Age of plants from transplant date	5-10-10 March 15 - April 15	Ammonium sulfate (21-0-0) May 20	Ammonium sulfate (21-0-0) June 15
Newly set	0	0	0
1 year	2 oz. (1/4 cup)	1 oz. (2 Tbs.)	1 oz. (2 Tbs.)
2 years	4 oz. (1/2 cup)	1-2 oz. (2-4 Tbs.)	1-2 oz. (2-4 Tbs.)
3 years	6 oz. (3/4 cup)	1-2 oz. (2-4 Tbs.)	1-2 oz. (2-4 Tbs.)
4 years	8 oz. (1 cup)	2-3 oz. (1/4 cups + 1 Tbs.)	1-2 oz. (2-4 Tbs.)
5 years	10 oz. (1 1/4 cup)	2-3 oz. (1 1/4 cup + 2 Tbs.)	1-2 oz. (2-4 Tbs.)
6 years and older	12 oz. (1 1/2 cup)	2-3 oz. (1/4 cup + 2 Tbs.)	1-2 oz. (2-4 Tbs.)

### PRUNING

#### First Two Years

Prune dead branches only.

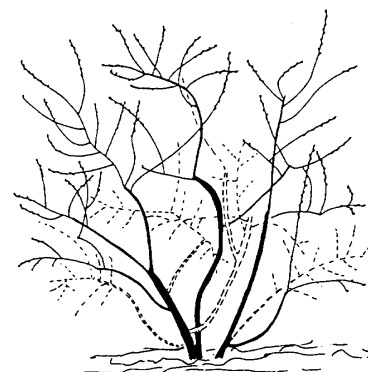
#### Third Year

Prune out crossing branches and dead twigs.

Cut 1 or 2 older canes back to the ground. Leave 1 or 2 new canes to replace them (new canes are not branched).

Leave 1 fruiting bud for each 3" of new shoot growth.

1. Each bud will produce 5 to 8 berries.
2. Fruiting buds are plump while leaf buds are small and pointed.



### TIPS

Severe pruning produces fewer but larger berries and more new growth.

Berries are produced on second and third year canes.

Prune in winter or early spring. Remove weak side shoots in top of plant.

To increase fruit size, head back shoots that have an abundance of flower buds.

## DISEASES & INSECTS

**Mummy berry:** Fungus disease that invades blossoms and destroys fruit. Once berries have mummified, it is too late to do anything that year. Fungus over-winters.

*Control:* Apply Benlate, Funginex or Orthocide from bud break to end of blossom time.

**Botrytis:** Attacks blossoms and young fruit; gray mold can be a problem in prolonged wet springs.

*Control:* Apply Benlate, Captan or Ferbam in early spring and at 10-day intervals if wet weather persists.

**Birds:** Use netting.

## BLUEBERRY VARIETIES

<b>Cultivar</b>	<b>Harvest Period</b>	<b>Fruit characteristics</b>	<b>Plant characteristics</b>
Earliblue	Early	First to ripen, excellent dessert quality, large fruit size.	Upright bush, avoid frost pockets and poorly drained soils.
Spartan	Early	Very large, light blue, excellent dessert quality.	Upright bush, productive, prefers light, well-drained sites.
Patriot	Early	Large fruit, firm, very good flavor, high yield.	Vigorous, upright, winter hardy, performs well on sites with less than perfect soil drainage.
Bluejay	Early to mid-season	Medium size, light blue, mild, tart flavor, fruit will drop from bush.	Bush vigorous, moderate yield, winter hardy, some resistance to mummy berry fungus.
Bluecrop	Mid-season	Most widely planted cultivar in world. Large, light blue fruit, medium fresh quality, firm.	Very productive, vigorous bushes bear fruit over a 1-month harvest season.
Berkeley	Mid-season	Large fruit, mild flavor (sweet), medium blue color.	Bush is open and spreading. High yields in the Northwest. More susceptible to spring frosts.
Darrow	Late	Largest of fruit size, tart flavor.	Vigorous, upright bush.