

Blueberry Cultivation In Oklahoma

Although the health benefits and culinary usefulness of blueberries justifies their growing popularity, the value of cultivating blueberries goes well beyond the nutrition and versatility of the berry. Given the proper growing requirements and care, this perennial shrub offers attractive flowers with fall foliage color, varied plant structures to add interest to the landscape, and a source of food and habitat for pollinators and other wildlife.



Site Selection and Preparation

Great site selection and good soil are key to successful growth and production..

Full sun (6+ hours/day) is required. Avoid areas subject to hot, drying winds, and low ground prone to frost. Supply a close irrigation source (drip irrigation is best) as blueberries require 1 - 3 inches of water weekly.

Blueberries grow best in raised beds in deep, well-drained, sandy loam mixed moderately with organic matter. Prep the soil to adjust to a pH of 4.5 to 5.2 and apply fertilizer to provide major nutrients before planting. Keep the beds weed free as the shallow root structure does not allow for nutrient competition. Irrigation water with a low salt or lime concentration should be considered to prevent nutrient leaching and keep pH at optimum levels.

Blueberries have special needs, so for soil prep guidance, consult [this video](#) from Oklahoma Gardening, and [OSU Fact Sheet HLA-6248](#) for irrigation information and fertilizer application rates.

Plant Selection

The best performing species are those suited for Oklahoma; highbush/northern highbush (northern Oklahoma), southern highbush (central Oklahoma) and rabbiteye (southern Oklahoma). A number of varieties are available as listed in [OSU Fact Sheet HLA-6248](#) and [OSU Fact Sheet HLA-6222](#). Opt for virus-resistant varieties, and inspect carefully before purchase for insect infestation or disease.



Planting and General Care

In Oklahoma, blueberries are planted after growth stops in the fall or before growth begins in the spring (February or early March).

Plants will be placed 3 to 6 feet apart, depending on the species. Consult the spacing requirements for your selected type. Allow enough space between rows to accommodate equipment. Prepare the site first to avoid drying and keep the roots damp until ready.



Set plants at the same depth as they were growing in their pot. Plant firmly in a hole twice the size of the root ball, prepared with a mix of native soil and $\frac{1}{3}$ cubic feet of dampened peat. Gently loosen and direct outward any container-bound roots. Remove the top $\frac{1}{3}$ or $\frac{1}{4}$ of the plant if bare rooted to help steady the plants in higher winds. Firm up the soil

around the crown and water well. Mulch with organic materials such as pecan shells, pine bark or sawdust to a depth of 6 inches.

Fertilize only around the drip line two weeks later, and only once again in the fall after the growing season the first year. Choose ammonium forms of nitrogen fertilizer (e.g. urea) and avoid nitrate forms as they may be toxic to blueberry plants. Keep fertilizer off foliage and branches to prevent burning and water to one inch if rain is not expected in the following days after application.

Subsequent years will require periodic small nitrogen applications: once before bloom, after fruit set and monthly until August. Consult [this Oklahoma Gardening video](#), and [OSU Fact Sheet HLA-6259](#) or [OSU Fact Sheet HLA-6248](#) for further instruction and fertilization rates.



From late February to early March (always before bud break), prune to remove dead, dying, diseased, leggy, crossing or sunshaded canes, as demonstrated in [this Oklahoma Gardening video](#). Summer pruning after harvest will help control the size and efficiency of the plant. Be careful to sanitize cutting tools with a 10% chlorine bleach solution between cuts if disease is suspected, otherwise, sanitize between plants.

The first years prepare the foliar growth for harvest in the third or fourth season; a strong leaf structure is critical for the production of good berries, and fruiting the second year is a health risk for the plant. Therefore, prevent fruiting the second year by removing the flowers. Continue to fertilize and prune, and even remove flowers and fruit the third year as necessary.

Harvesting and Pest Control

Providing the optimal nutrition for blueberry production starts with soil tests six months before planting and every two years thereafter to maintain the proper soil pH. Follow the fertilization instructions according to your sample results.



Bloom to harvest varies among species and weather conditions, but Oklahoma varieties ripen from May through July. For your chosen variety, consult [OSU Fact Sheet HLA-6248](#) for pollination requirements and yield expectations.

Blueberries are susceptible to diseases controllable by proper sanitation and irrigation methods. Pests affecting foliage and fruit may require spraying. Harvests may need protection from birds by the use of netting and deterrents.

More Information is Available

Although blueberries are a bit particular about their soil and irrigation needs, the rewards are well worth the effort. Plan ahead and consult the many resources found in the [links at the end of this article](#). Here you can find additional details on recommended varieties, seasonal care and pest and disease control.

Resources:

- [OSU Fact Sheet HLA-6248: Blueberry Production for the Home Garden](#)
- [OSU Fact Sheet HLA-6259: Small Fruit Fertilization and Maintenance Schedule](#)
- [OSU Fact Sheet HLA-6222: Home Fruit Planting Guide](#)
- [OSU Fact Sheet CR-6243: Weed Management in Small Fruit Crops](#)
- [OSU Fact Sheet BAE-1511: Drip Irrigation Systems](#)
- [Oklahoma Gardening Video Resources: Fruits, Nuts, Berries](#)
- [OSU Fact Sheet PSS-2207: How to Get a Good Soil Sample](#)