Ask a Master Gardener

Timely insights on relevant topics from our area's home gardening experts

Planting, growing and maintaining blueberries

Growing blueberries: Start with the right soil to get "superfood" results

How to choose blueberries well suited for success in the Pacific Northwest

By Kari Ranten

Blueberries are a staple of Skagit County's thriving commercial agricultural economy and are an increasingly popular plant and crop for northwest home gardeners.

Commercially, Washington leads the nation in blueberry production, with 26 percent of U.S. blueberries generating a revenue of $205 million, according to the U.S. Department of Agriculture (USDA-NASS.2025). Blueberry acreage in Skagit County increased eightfold since 2000. In 2023, 4,800 acres of blueberries were grown commercially in Skagit County, ranking

third in crop acreage behind only field crops and potatoes, according to Washington State University Extension Skagit County's Crop Acreage and Yield Report.

These strong statistics show that northwest Washington is an excellent growing environment for home and commercial production of blueberries, yielding a delicious summertime fruit crop or serving as a sturdy, attractive ornamental addition to the home landscape.

Blueberries have gained popularity among consumers for their nutritional qualities and are recognized as a "superfood," offering an excellent source of essential nutrients, vitamins C and K, and dietary fiber. Blueberries are also a nutritional source of valuable "phyto-components," contributing to antioxidants and anti-inflammatory qualities.

For those interested in growing blueberries in the home garden, there are some decisions and preparatory steps to take to get ready for planting from January to March.

Common varieties

Of the five main types of blueberries grown in the United States, northern highbush blueberries (*Vaccinium corymbosum L.*) are most common in Washington. These deciduous, perennial shrubs are shallow-rooted, take six to eight years to reach full production, and varieties can reach five to nine feet in height.

The publication "Blueberry Cultivars for the Pacific Northwest" notes that half-high blueberries, the result of crosses between northern highbush and lowbush blueberries, can also grow in the region and reach three to four feet tall. The cultivars are also used as attractive landscape plants and are suited to container production.

Researchers at WSU Mount Vernon Northwestern Washington Research & Extension Center (NWREC) play a vital role in working with commercial blueberry growers. Chakradhar Mattupalli, assistant professor of plant pathology, leads the Berry and Potato Pathology Program, conducting research and extension activities addressing the biology and management of diseases of highbush blueberry and potato crops. He provided guidance and resources in the preparation of this article. For more information about Mattupalli's research, go to Berry and Potato Pathology | Washington State University

NWREC is one of four WSU Research Centers operated by the College of Agricultural, Human, and Natural Resource Sciences, housing nine research programs, extension outreach, and research affiliates. The research center works to solve plant-related problems and develop cost-effective and environmentally sound plant production practices based directly on results from experimental field, greenhouse, and laboratory research trials.

The NW Fruit Garden, next to the Discovery Garden on Memorial Highway in Mount Vernon, provides home gardeners with an excellent illustration of 30 blueberry varieties suitable to the local environment. The garden is maintained by volunteers, including Beth Jones, a NW Fruit volunteer since 2019, who leads the blueberry team charged with caring for 122 plants, some more than 20 years old.

Northern Highbush "Duke"

Northern Highbush "Draper"

Northern Highbush "Bluejay"

All three photos © Chad E. Finn, OSU PNW Extension Publication.

Start by selecting a location and testing soil acidity

Home gardeners can start by selecting the right location and soil for blueberry bushes. Blueberries require acidic soil with a pH of 4.2 to 5.5, similar to rhododendrons and azaleas, according to a 2025 presentation to Skagit County Master Gardeners trainees by Lisa Wasko DeVetter, associate professor of small fruit horticulture at Washington State University's NWREC in Mount Vernon. Soil can be lab tested for pH, and if needed, acidification can be enhanced. A publication by Oregon State University Extension titled *"Acidifying Soil for Crop Production West of the Cascade Mountains"* provides a good resource on evaluating and enhancing soil acidity.

Because of the acidic soil needs of blueberries, home gardeners will need to plan ahead and prepare the space and soil before the arrival of the early spring planting season.

Blueberries can also be grown in containers and flourish in the full sun.

Plant selection, pollination, and care

Home gardeners should select two- to three-year-old plants (when shopping, ask at the nursery about plant age) and be on the lookout for those that are disease and heat-resistant "Legacy", "Rubel", and "Liberty", have shown resistance to common diseases and rising summer temperatures in the NW Fruit Garden.

Plant blueberries from January to March, spacing three feet apart, in holes large enough to handle all of the shallow roots and allow three to four inches of soil to cover. Once established, blueberry plants are quite sturdy, with most producing fruit for 20 years.

While northern highbush blueberries are self-fertile, experts advise home gardeners to plant at least two different cultivars with overlapping bloom times in proximity to one another to benefit from cross-pollination and larger, earlier fruit.

All northern highbush blueberries are compatible with each other for cross-pollination.

Remove all flowers during the first year or two after planting to prevent fruit from setting and to give plants time to mature and enhance future yield.

Fertilize annually with a focus on nitrogen. For more information, see Oregon State University Extension publication EM 8857 titled *"Nutrient Management for Blueberries in Oregon."*

Blueberries require regular, supplemental watering from May to August and annual mulching with untreated wood chips.

Prune each year in winter or early spring to eliminate any dead or weak shoots and select two to three new canes to retain for the next season. Prune carefully to retain the desired shoots, creating a vase shape that opens up the middle of the plant to provide air and light. Half-high cultivars do not need to be pruned as severely or as regularly as highbush types.

Healthy, established blueberry plants can yield more than one gallon of fruit per plant. Blueberry plants can decline over time and should be replaced when they stop sending up new shoots during the growing season.

Pests and common diseases

A variety of pests and diseases can impact blueberry bushes and fruit.

Birds enjoy feasting on blueberries. To protect the fruit harvest from birds, home gardeners may want to cover plants with fine netting mounted on a frame and anchored to the ground from mid-June through harvest completion in August.

Interested in Becoming a Master Gardener?

Application period is now open through August 15, 2025.

WSU has recently launched a new training platform called Washington Green School, designed to provide comprehensive research-based horticulture and environmental stewardship education. The Washington Green School offers two distinct tracks:

- **Washington Gardener Certificate Track**
  This option is ideal for individuals seeking to enhance their gardening skills without the commitment of volunteering. This self-paced, online-only course provides a certificate upon successful completion.
- **Extension Master Gardener Volunteer Track**
  This track is for those interested in becoming certified WSU Extension Master Gardener volunteers and includes the Green School online coursework, in-person, local volunteer training, and a commitment to volunteer service hours.

For more information, go to https://skagitmg.org/home/green-school/

To apply for the Skagit County WSU Extension Master Gardener Program, go to *https://extension.wsu.edu/skagit/mg/apply/*

If the bushes are growing for landscape purposes, let the birds have a summer snack.

Spotted wing drosophila, aphids, scale insects, root weevils, inchworms, and fruit worms can damage blueberry plants and fruit. To prevent or manage such infestations, refer to WSU's publication *"Growing Small Fruits in the Garden."*

In northwest Washington, blueberries are impacted primarily by two diseases: mummy berry and botrytis blight or gray mold.


Left: Mummy berry © Photo Jade Florence, Oregon State University. **Right:** Mummy berry infection is identified by a spore mat covering the leaf stem. © Photo Jay W. Pscheidt, Oregon State University

Mummy berry is easily identified by the home gardener in the mid- to late- stages as the mature mummified fruit appears gray, shriveled, hard, and inedible. The disease is caused by a fungus that infects young flowers and vegetative buds in spring. About three weeks after primary


Left: © Photo: Jay W. Pscheidt, 2010. PNW Pest Management Handbook. **Right:** Botrytis rot of green fruit. Here the floral tissue is seen still attached to the berry. © Photo: Jay W. Pscheidt. PNW Pest Management Handbook

infection, a brownish-gray mass of spores develops on blighted flower stalks and leaves that are spread by wind, rain, and honeybees (pollinators) to healthy flowers.

To manage the disease, the home gardener must remove the mummified fruit from the plant and lift it off the ground, add about two inches of mulch around the plants, and regularly disturb the soil during the spring. Healthy fruit can be harvested and used. At season's end, clean the area to prevent infected berries from overwintering.

Blueberries, strawberries, and raspberries, especially on the west side of the Cascades, are affected by botrytis blight and gray mold. The cool and wet weather in western Washington is conducive to the development of this disease. Pruning creates airflow in the plant canopy, and reduced moisture on the foliage or fruit can help slow down the fungal growth.

REFERENCES AND RESOURCES:

- Brun, C. A., DeVetter, L., and Benedicts, C. (2016) *Growing Small Fruits in the Home Garden.* Washington State University Extension Home Garden Series. EM103E *https://www.skagitmg.org/wp-content/uploads/Public-Pages/Food%20Gardening/Food%20Gardening%20Library/WSU%20Bulletin%20EM103E%20Small%20Fruits.pdf*
- Finn, C., Strik, B., and Moore, P. (2024) *Blueberry Cultivars for the Pacific Northwest*. Oregon State University Extension Service. PNW 656 *https://extension.oregonstate.edu/catalog/pub/pnw-656-blueberry-cultivars-pacific-northwest*
- Hart, J., Strik, B., White, L., and Yang, W. (2020) *Nutrient Management for Blueberries in Oregon*. Oregon State University Extension Service. EM 8918. *https://extension.oregonstate.edu/catalog/pub/em-8918-nutrient-management-blueberries-oregon*
- Horneck, D., Hart, J. Stevens, R., Petrie, S., and Altland, J. (2004) *Acidifying Soil for Crop Production West of the Cascade* Mountains (Western Oregon and Washington). Oregon State University Extension Service. EM 8857. *https://extension.oregonstate.edu/sites/extd8/files/documents/em8857.pdf*
- Pscheidt, J.W., and Ocamb, C.M. (2025a). *Blueberry (*Vaccinium corymbosum*)-Mummy Berry.* Pacific Northwest Plant Disease Management Handbook. Oregon State University. *https://pnwhandbooks.org/plantdisease/host-disease/blueberry-vaccinium-corymbosum-mummy-berry*
- Pscheidt, J.W., and Ocamb, C.M. (2025b). *Blueberry (*Vaccinium corymbosum*)*-Botrytis blight. Pacific Northwest Plant Disease Management Handbook. Oregon State University. *https://pnwhandbooks.org/plantdisease/host-disease/blueberry-vaccinium-corymbosum-botrytis-blight*
- Washington State University Northwestern Washington Research and Extension Center. (2025) *Berry and Potato Pathology.* *https://berry-potato-pathology.mtvernon.wsu.edu/*
- Washington State University Skagit County Extension Skagit County Agricultural Statistics. (2023) *Crop Acreage and Yield Report.* *https://wpcdn.web.wsu.edu/wp-extension/uploads/sites/2073/2025/04/2023-Skagit-Ag-Stats-003.pdf*

- Yan, L. (2023) *Blueberries and Health*. USDA Agricultural Research Service.
- *https://www.ars.usda.gov/plains-area/gfnd/gfhnrc/docs/news-articles/2014/blueberries-and-health/*

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Kari Ranten is a retired journalist and health care communicator who became a certified Skagit County WSU Extension Master Gardener in 2024.

Questions about home gardening or becoming a master gardener may be directed to Skagit County WSU Extension Office, 11768 Westar Lane, Suite A, Burlington, WA 98233; by phone: 360-428-4270; or via the website: www.skagit.wsu.edu/mg