

Growing Fruits: Wild Lowbush Blueberries

Wild lowbush blueberries have always called New Hampshire home. These small, flavor and antioxidant-packed fruits are common in abandoned fields, in succession forests, on mountaintops, and along roadsides. They grow best in well-drained, gravelly soils with a surface layer of organic "duff" and a pH of 4.5 to 5.0. They won't thrive under a forest canopy that offers dense shade.

Lowbush blueberries are spread both by seed and through the growth of underground stems called rhizomes. Over many years, a seedling will develop into an irregular plant mat that can stretch from a few inches to many feet in size as rhizomes gradually grow out into surrounding soil. These mats are called clones since all the stems in these mats are identical.

There are two species of lowbush blueberries that dominate the New Hampshire landscape:

Vaccinium angustifolium - "low sweet," is our dominant species, especially in the southern counties. It has smooth leaves and stems. Fruit color can range from light, powder blue to jet black.

Vaccinium myrtilloides - often called "sour top", is more common in the northern areas of the state and on mountain tops. Its leaves and stems have fine, white hairs and plants are usually more branched than *V. angustifolium*.

Planting Lowbush Blueberries at Home

First, the site must be prepared properly by eradicating weeds and making sure the soil pH is between 4.5 and 4.8. A soil test is essential. Care should be taken to avoid planting into shady areas. Low light levels will inhibit flower development and reduce yield. This will be the case along forested edges and areas with poor weed management. Soil testing can be done through a number of private and public labs. UNH Cooperative Extension offers this service. Forms and instructions are available on our website: https://extension.unh.edu/Problem-Diagnosis-and-Testing-Services/Soil-Testing, or you can call our Info Line at 1-877-EXT-GROW (1-877-398-4769).

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Lowbush blueberries that are ready for harvest.



Lowbush blueberries that have just been raked.



Using a hand rake to harvest lowbush blueberries.

Did You Know?

Lowbush blueberries are spread by both seed and through the growth of underground stems called rhizomes.

There are three ways to get lowbush blueberries established in an area where there are none:

• The first, and generally the least expensive, is to transplant local material. "Plugs" transplanted from a wild stand (your own or that of someone else who's willing to share) are often used for this purpose.

A three-inch or greater diameter "punch" or a spade can be used to get plugs—a golf-hole cutter works well. You only need to go down 3-4 inches.

• A second option is to purchase nursery stock. There are several companies that offer wild blueberry plants including named varieties such as "Brunswick" and "Burgundy."

Plugs or plants are set in a grid arrangement with a plant spacing of 12 inches although a wider spacing will work if a large area is being worked and a three-to-five-year fill-in is acceptable. Once you've set the plants, mulch the area with an inch or two of pine needles, wood chips and/or bark. Irrigation in the first year will help get these plugs or plants off to a good start; lowbush blueberries grow slowly, spreading into surrounding ground via rhizomes.

• Wild blueberry sod is a third option and offers the promise of an instant, solid planting. Sod availability is limited, but it can be purchased from some nurseries. As with plugs and plants, proper soil preparation including perennial weed eradication and soil pH adjustment to 4.5 to 4.8 is essential. Irrigation is generally required to insure success.

When to Plant?

Ideally, you should harvest and transplant plugs in very early spring before growth gets started. Nursery plants should also be transplanted in early spring. Irrigation will greatly increase the early growth and development of new plantings.

Prepare the Site

Preparation should include killing existing vegetation, applying sulfur (if needed, based on a soil test) to lower pH, and mulching the area to help protect the site from erosion. If this site preparation is completed in the early fall, the site should be ready for planting the following spring.

Planting Seeds

It is possible to plant wild blueberry seedlings by growing out the seeds extracted from wild blueberries, although this may not be a viable option for many home growers. To do this, store wild blueberries in the freezer for at least 90 days. Then grind the thawed fruits for a few seconds in a blender with water. Good (viable) seeds will settle to the bottom in a few minutes while the berry pulp will remain suspended in the water. Clean the seed by pouring off the top, adding clean water, and allowing seeds to settle several times.

Sow the seeds in flats in a sand/peat mix (equal parts peat and sand) or peat alone, in January or February. Sow seeds on top of this mix, and cover with a thin layer of ground peat. Keep the peat moist and keep flats at room temperature. Cover flats with a piece of newspaper to help keep seeds from drying out. Transplant young seedlings into plug trays or pots and grow them indoors until all danger of frost has past. Once they are growing well, they can be fertilized with a soluble plant food designed for foliar feed of acid-loving plants. Mix at half the rate suggested on the label. When all danger of frost has past, they can be planted into a properly prepared field site is essential.

Care of Lowbush Blueberries

Cover young plantings with two inches of an organic mulch such as bark, wood chips, or pine needles to conserve soil moisture and protect roots and rhizomes.

Nitrogen is the primary plant nutrient that blueberries may need. To provide needed nitrogen, plants can be fertilized with a soluble or granular plant food designed for acid loving plants such as azaleas and rhododendrons. Organic growers can use organic blended fertilizers, soybean meal, or other organic amendments to provide nitrogen. Nitrogen should be applied at a low rate, such as 5 lbs. 10-10-10 (or the equivalent) per 1,000 square feet. Fertilizers should be applied in the spring, at bloom time.

Flowers should be removed from blueberries for at least one year after planting to encourage good plant growth. Careful harvesting of fruits in the first several years is important. Raking fruits can damage young plantings by dislodging rhizomes.

Pruning Lowbush Blueberries

Lowbush blueberries respond positively to pruning and will require burning or mowing to ensure good harvests. Approximately 70% of the plant biomass is below ground, allowing for quick regeneration of leaves and shoots once pruned. Plants are typically mowed or burned in the fall after leaf drop, or in the spring before growth begins. Pruning must occur during dormancy, or yield will be negatively impacted. Mowing should be done to a height of one inch for maximum yields. While burning can be more expensive, it will also help with management of some insect and fungal pests.

In the first year following pruning, lowbush blueberry plants will regrow vegetative shoots and will not produce fruit. At the end of the first year, the plant will produce flower buds on the young shoot. In the second summer, plants will produce a crop from the flower bud developed the previous fall. In subsequent years, fruit yield will decline as flower buds will not develop on old vegetation or on lower branches of the plant. The plant will become over-vegetative and will shade, reducing flower & bud development.



A healthy planting of lowbush blueberry.



Lowbush blueberries in bloom, ready for pollination.



To ensure heavy annual fruit production, divide your planting in half. Prune one half in even years and the other half in odd years. This will ensure a harvest every year.

Did You Know?

Lowbush Blueberries provide attractive fall leaves and winter wood in addition to flavorful fruit.

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About the Author

Original fact sheet by William Lord, UNH Extension Fruit Specialist, Emeritus. Reviewed and revised by Becky Sideman, UNH Extension Vegetable & Berry Specialist and Olivia Saunders, UNH Extension Field Specialist.

For More Information:

State Office

Taylor Hall 59 College Rd. Durham, NH 03824 http://extension.unh.edu

Education Center and Information Line

answers@unh.edu 1-877-EXT-GROW (1-877-398-4769) 9 am-2 pm M-F Search key words: "UNH Education Center"