Growing Guide: Sugar Maples

Beloved for its grandeur, sweet sap, versatile lumber, and magnificent fall foliage, the sugar maple, *Acer saccharum*, is a deciduous tree native to the northeast and north-central U.S. and eastern and central Canada.

Mature sugar maples can reach heights of more than 100' and will cast dense summertime shade beneath their 50' wide canopies. To plant a sugar maple is to invest in the future: The tree grows just 1' to 2' per year, and a 10-year-old tree is typically about 15' tall. This quote is particularly apt: "The best time to plant a tree is twenty years ago. The second



best time is now." With a lifespan of up to 400 years, the tree you plant now will delight many generations to come.

Fun Facts

- The sugar maple is just one of more than 100 species of maple trees (genus Acer).
- According to the Champion Trees National Register, the largest known sugar maple in the country is in New London, CT, and measures 123' tall and 86' wide. The trunk has a circumference of 219" that's a diameter of almost 6'!
- The sugar maple is the state tree of four states: New York, Vermont, West Virginia, and Wisconsin.
- Sugar maples are important to a variety of wildlife. Deer, moose, squirrels, and other animals feed on the seeds, buds, twigs, and bark, and many birds and animals find shelter in the trees' large, dense canopy.
- Although other types of maples can be used to make sweet syrups, the sugar maple is by far the most popular species used for this purpose.
- Many pancake syrups are simply "maple-flavored." If you want the real deal, check the ingredients if there's anything besides 100% pure maple syrup it's an impostor.
- A forest of sugar maples that are used for making syrup is called a sugarbush. A tree should be 30 to 40 years old before it is tapped for its sap. A mature, healthy tree can produce up to 25 gallons of sap each spring. It takes 40 gallons of sap to produce one gallon of maple syrup.

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Choosing a Planting Site

Sugar maples are considered hardy in zones 3 to 8. But there are many things to consider besides hardiness when deciding whether to plant a sugar maple. Here are a few:

Mature size. These trees need a lot of space. That small sapling will grow into a stately specimen. As best as you can, imagine the tree in its location over the course of the next many decades. Are there power lines nearby? Roads or property developments planned?

Soil. Sugar maples need deep, well-drained soil. If soil is compacted, or is at risk of being compacted by vehicle traffic, choose another spot.

Shallow roots. The tree's shallow root system makes it difficult for anything to grow underneath it, including grass. The roots are easily damaged by digging, and roots that are growing at ground level are susceptible to damage by mower blades.

Environmental challenges. Sugar maples are particularly sensitive to road salt and pollutants, making them poor choices for roadside planting.

Are You Ready to Plant a Sugar Maple?

Do you have a site suitable for planting this majestic species? Nurseries generally sell maples that are either container-grown or balled-and-burlapped. Our article *How to Plant a Tree* (https://kidsgardening.org/gardening-basics-plant-a-tree/) offers detailed, step-by-step instructions. Follow them carefully, knowing that the time and effort you take in proper planting will reap rewards for generations to come.

Starting From Seed

Starting maple trees from seed is a rewarding activity, but it requires time, suitable space, and patience. Like many plants native to regions with prolonged cold winters, maple tree seeds need a period of chilling, call stratification, before they'll germinate. This chilling requirement prevents them from sprouting prematurely during a winter thaw. Sugar maple seeds need about three months of chilling at temperatures between 33 degrees and 45 degrees F.

The tree's "fruits" are the familiar two-winged "helicopters," called samaras, which flutter gracefully from the trees in autumn. The seeds are contained in the round pods where the two wings are joined. Sugar maples don't start producing seeds until they're about 30 years old.

Collect seeds in fall, when the wings are a papery brown, and when you open the pod the seed inside is still green.

Soak the seeds in water for 48 hours.

Plant each seed in a small (4" diameter) pot filled with moist seed-starting mix, covering the seed with about 1/2" of mix.

Firm the soil and water very gently to settle the soil around the seed.

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For chilling, you have two options.

In the refrigerator: Cover the pots with plastic film to conserve moisture, and place them in the refrigerator. Plan to leave the pots there for up to three months. Check every week to look for signs of germination.

Outdoors: Find a spot where pots will be exposed to chilly temperatures but won't freeze. This can be challenging! Depending on your climate, an unheated garage or potting shed might do. Or a cold frame on the north side of a building (so it doesn't heat up in the winter sun). Protect the pots from hungry rodents.

Once you see the green shoots emerge, place the pots in part shade to continue growing. When their roots have started to fill the pot, transplant the seedlings to larger pots or plant them in the ground.

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