

Planting Butternut in Ontario - 2011

Butternut must be planted strategically, and with the understanding that the canker can kill many trees within the first 10 years, especially if they are stressed by poor planting and tending on a poor site. There is as yet no proven resistance to the canker although researchers are hopeful that it exists. Planting in a mix with other species of slower or similar growth rates could reduce the speed of infection and leave you with an overall planting if/when most of the butternut die. Refer to the **Planting details on the next page**. Please note that planted butternuts are not protected under Ontario's Endangered Species Act (ESA 2007) unless they were planted as a condition of an ESA Permit or Regulation.

The following growers may have butternut for sale. **Always ask any grower for documentation about their seed source** to ensure the seed or seedlings are from native, locally adapted butternut trees. Hybrids are common, can be hard to distinguish and produce seed more frequently than native butternut. Recovery Programs are collecting seed from promising native trees where DNA tests have been done to rule out hybridity.

Name	Grower	Email	Address	Phone
Acorus Restoration Native Plant Nursery	Paul Morris	info@ecologyart.com	#722 6th Concession, R.R. #1, Walsingham, ON N0E 1X0	519-586-2603
Baker Forestry Services, Nursery & Consulting	Bob Baker	bakerforestryservices@hughes.net	5001 Ninth Line, R.R. #5, Georgetown, ON L7G 4S8	905-877-9390
Ferguson Forest Centre	Ed Patchell	info@seedlingnursery.com	275 County Rd. 44, Kemptville, ON K0G 1J0	613-258-0110 ext 224
St Williams Nursery	Mary Gartshore	info@stwilliamsnursery.com	Box 150, St. Williams, ON N0E 1P0	519-586-9916 1-866-640-8733
Grimo Nut Nursery	Ernie Grimo	nuttrees@grimonut.com	R.R. #3, 979 Lakeshore Rd., Niagara-on-the-Lake, ON L0S 1J0	905-934-6887
Ground Covers Unlimited & Shady Ideas	Ted & Melissa Spearing	shadyideatrees@gmail.com	1045 Porter Rd., Bethany, ON L0A 1A0	705-277-3005
Hortico Inc.	John Vanderkruk	johnV@hortico.com	723 Robson Rd., Waterdown, ON L0R 2H1	905-689-6984 905-689-3002
Natural Themes	Beate Heissler	bheissler@kos.net	P.O. Box 738, Frankford, ON K0K 2C0	613-398-7971
Richardson's Pineneedle Farms	Paul Richardson	treepro@pineneedlelarms.ca	423 Hwy. 35, Box 220, Pontypool, ON L0A 1K0	705-277-9993 1-888-621-8980
Van Den Nest Nursery	Julie Van Den Nest	edentree@amtelecom.net	9594 Somers Rd, Eden, ON. N0J 1H0	519-866-5269
Winkelmolen Nursery Ltd.	Jan Winkelmolen	winkelmolen@sympatico.ca	148 Lynden Rd., Box 190, Lynden, ON L0R 1T0	519 647 3912
U of Guelph The Arboretum	Sean Fox	sfox@uoguelph.ca	The Arboretum, University of Guelph. Guelph, ON N1G 2W1	519-766-0718
Grand River CA Tree Nursery	Bruce Graham	bgraham@grandriver.ca	25 Wight Road, Burford, Ontario, N0E 1A0	519-449-2265
Somerville Nurseries Inc	Carl Mansfield	carl@somervillenurseries.com	5884 County Rd 13, Box 1445, Everett, ON L0M 1J0	(705) 435-6258 ext 105
Green Side Up	Doug Kennedy	doug@greenservices.ca www.greenservices.ca	121 Grassy Rd. Omeme, Ontario K0L 2W0	H 705-799-2610 C 289-892-2827

Visit www.ontario.ca/speciesatrisk or **contact MNR at 1-800-667-1940** and ask for your local Species at Risk Biologist to learn more about how the Endangered Species Act affects butternut and you. Also ask for information on local Recovery Programs that can help you manage your butternut.

Source: Forest Gene Conservation Association, Suite 233 266 Charlotte St. Peterborough, Ontario K9J 2V4 www.fgca.net

Butternut Planting details

Site Selection

Butternut is intolerant of shade and must be planted on sites with full overhead sunlight. The best soil is deep, rich, moist, well-drained; of fine to medium texture. Drier, shallower soils of limestone origin may suffice if they have full sunlight. Seedlings can grow fast on good sites that are protected from prevailing winds (NW). Forest openings larger than 3X the height of surrounding trees are best; but seedlings can grow well in the short term in smaller, protected openings. They often seed into fence lines and forest edges and do well because of the sunlight and the protection of the surrounding trees.

Stock Selection

Stock Type - Butternut has an aggressive root system and is usually grown as a 1 yr old seedling, usually bareroot, sometimes as potted stock. Larger 2 year old potted stock is sometimes available. A 1 yr old bareroot seedling is preferred as its taproot is not too large to plant well. These seedlings are usually 30 to 60 cm tall (dependent on the seed source) and about the diameter of a pencil. Hybrids are common in southern Ontario and produce seed crops more frequently than native butternut. Ask the seedling supplier for assurance that their stock is not grown from hybrid seed. Seed source is important for any planted tree. To ensure the trees will be adapted to the local climate ask the seedling supplier for stock that is grown from locally adapted seed. Ontario Tree Seed Zones can help you determine what source is best for your site - go to www.fgca.net. Density and Other Species – Butternut rarely occurs in a pure stand. Plant less than 200 butternut/ hectare mixed with species of similar or slower growth rates to slow canker infection and spread.

Site Preparation

Fall mowing of tall herbaceous or woody plants that can shade seedlings makes spring planting easier and can reduce rodent populations. In heavy soils, some type of soil cultivation (a ploughed row) may help with the planting. Band or spot spraying can reduce competing vegetation and promote early establishment of the trees.

Planting

Plant bareroot seedlings in the spring, as soon as the soil can be dug and before the seedlings leaf out. Keep bareroot stock cool and shaded until planted. Dig a hole to accommodate all the roots in as natural a configuration as possible. Only prune the roots where some are damaged or excessively long, using a sharp tool to ensure a clean cut. Butternut has a large aggressive root system that does not transplant well, but if the top dies back, they often resprout. Spacing – Plant butternut at least 3 metres from other planted trees to avoid competition for light and to reduce humidity which can accelerate canker infection.

Tending & Protecting

Control Vegetation that is competing for light, moisture and space around the base of the trees, until the trees are established. Mowing, spraying and mulching or matting work well. Some vegetation between trees can moderate heat and wind effects. Generally speaking the seedling should be well established after 5 years. Watering is not likely necessary unless there is a serious drought. Butternut is a deep-rooted species and can establish quickly on good sites. Stakes can indicate tree locations to help avoid damage during motorized tending operations. Tree guards protect the lower stem from rodents but should be monitored to prevent interference with stem growth. Tube guards are not recommended because they encourage rodents to build nests inside them. Deer can be a problem when the seedlings become saplings. Browsing is infrequent, but bucks often rub the stems with their antlers and create a large wound that can occasionally kill the young tree. Often though, the sapling will send up new shoots (coppice) that grow quickly to replace the dead stem. Planting larger numbers will help ensure some will survive. Smaller numbers of trees can be protected using tall wire cages.

Thinning

As they grow into saplings and larger, and depending on the initial spacing and later survival, a thinning may be needed to remove trees that are competing with the butternut.

Monitoring

For the first 5 years assess plantings twice yearly to better plan for tending and protection operations. Survival can also be noted and in later years growth and canker infections can be assessed. Share your information with the FGCA or a local butternut recovery program so we can all learn more about this species.