

# HOW TO PLANT a potted tree or shrub

## Plan Ahead

Planning before planting ensures that the right tree or shrub is planted in the right place. First, choose a tree or shrub that is native to your area and suited to your yard's conditions (see CVC's *Ecological Landscaping Resources* at [www.creditvalleyca.ca/landscaping](http://www.creditvalleyca.ca/landscaping)).

Select a spot for your new plant where it will receive the sunlight it requires. In order for trees and shrubs to access the nutrients, moisture and oxygen they require, don't plant them too close to hard surfaces such as pavement or patios. Ensure shrubs have at least 1 sq m (3 sq ft), and trees have at least 3 sq m (9 sq ft) of soft, permeable ground (grass, garden bed, etc.) around them.

Be mindful of the full grown size of the shrub or tree when considering how far to plant from existing plants, property lines, buildings, fences and hard surfaces such as sidewalks, patios and driveways. Do not plant tall-growing trees under utility lines or within three metres (9 ft) of a building foundation.

Trees and shrubs require space to grow both above and below ground so locating any hidden pipes, wires or other service lines underground is important. To avoid accidentally digging into an underground utility, call your local municipality's general information line to learn who to contact to locate your underground pipes, cables or wires before you dig. This is a free service.

**Why Choose Native Species?** Native trees and shrubs have adapted to our local weather, soils, insects and other wildlife. Once established, they require very little maintenance. This saves time, money, energy, water, fertilizer and pesticide. Native plants also provide habitat for native animals such as birds and butterflies.



## When to Plant

### BEST

When the plant is dormant (not growing):

- Early spring: April to early May – as soon as the ground has thawed and can be worked
- Late fall: mid-October to late November – when deciduous plants drop their leaves and evergreens stop producing new growth

### GOOD

During the growing season when the weather is cool and moist:

- Mid to late spring: May to early June
- Late summer/early fall: mid-August to late September

If necessary, you can plant during summer, but plants may face the stress of growing in hot temperatures with little rain. Extra attention should be given to a tree or shrub planted at this time to ensure it is getting enough (but not too much!) water.

**Plant as soon as possible after purchasing your tree or shrub.** If you are not ready to plant immediately, keep your tree or shrub well-watered in a cool, shady place. To minimize transplant stress, plant in the morning on an overcast day.

## Site Preparation

Remove any weeds, grass, or ground cover plants growing in the planting area. These plants will compete with your new tree or shrub for water and nutrients. Do not return any sod to the hole when planting. Shake off any excess soil from the sod then chop and compost it.

## Size of Planting Hole

Dig a saucer-shaped hole (the sides of the hole should be sloped, not straight down) two to three times wider than your tree or shrub's pot, but only as deep as its root ball.



Hole should be 2-3 times wider than root ball and have shallow, "saucer-shaped" sides

As you dig, pile the soil beside the hole to use later in your planting. If your soil is hard and compact, use your shovel's edge to roughen the sides and bottom of the hole. A wide hole with a roughened surface helps the plant's roots spread into surrounding soil.

## Removing Your Tree or Shrub from its Container

Keep your tree or shrub in its pot until you are ready to place it in the planting hole.

**Plastic Containers:** Tilt the pot sideways and gently pull the plant out, keeping as much soil around the roots as possible. Carefully loosen the roots a little if they are tightly packed, keeping most of the soil intact. If there are roots that circle around the root ball, pull them outward and remove any severe kinks by carefully cutting the root off just before it bends. Circling or kinked roots will not straighten themselves out and can shorten the lifespan of your tree or shrub.

**Biodegradable Containers:** Slit open the sides of a cardboard or other biodegradable pot and pull back or cut off the bottom. A knife works best. Straighten or remove any circling or kinked roots before planting.

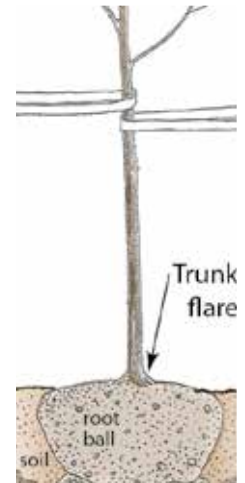
**Burlap and Wire:** Gently remove any string, plastic or wire from around the trunk and root ball. Place the plant in the hole carefully to ensure that the soil around the

roots remains intact. Pull away any burlap from around the stem or trunk and roll the burlap down to the base of the root ball. Cut off and remove any excess burlap. The remaining burlap under the plant can remain in the hole. It will eventually decompose.



## Planting Your Tree or Shrub

It is important to plant a tree or shrub at the correct depth. Place your plant in the hole so that the top of the root ball is level with the ground. The trunk flare (where the roots start to spread out at the base of the trunk) should be visible after the tree or shrub has been planted. Make sure that the plant is straight and that its root ball is centred in the hole. Do not cover the root ball with extra soil unless roots are exposed.



Adapted from International Society of Arboriculture's illustration of proper planting techniques for new trees.

**Cover your Roots.** Once planted, if any roots are exposed, cover them with a thin layer of soil, pressing gently so it stays in place. Make sure soil does not cover the trunk flare.

**Go Natural.** Do not add bags of new soil or soil amendments (such as manure, topsoil or peat moss) when refilling the hole. Native trees and shrubs suited to your yard's conditions will be stronger if their roots are immediately introduced to the local soil.



Gently pack down the soil by pressing firmly with your hands or stepping lightly on the replaced soil, making a slight impression (about 2.5 cm or 1 in deep) around the plant's root ball. This will help stop water from running away from the tree or shrub and direct it toward the roots.



Slowly and gently pour a large watering can or bucket of water over the planting area to reduce air pockets and settle the soil. If the soil level in the hole drops after settling for a few days, additional soil can be added to fill any depressions or gaps. Make sure the top of the root ball remains level with the ground and no roots are exposed.

## Protecting Your New Planting

Apply mulch around the planting area to protect your new tree or shrub. Choose a natural, biodegradable mulch, such as shredded bark, woodchips or leaves, to help retain moisture and prevent weed growth. Mulch also reduces stress on plants by keeping the soil cooler during summer and insulating roots during winter. As mulch breaks down it feeds the soil and improves its structure.



## Leaf Mulch

If you are using leaves to mulch, avoid black walnut and butternut leaves. They produce a substance that reduces the growth of many other plants. If you compost, do not add black walnut or butternut to your bin. The leaves of native maple, oak, basswood, or birch all provide excellent mulch (or compost material). For best results, run a lawn mower over the leaves a couple of times to chop them up before applying.

Apply a 6 to 8 cm (2 to 3 in) thick layer of mulch around your tree, covering the ground above the root ball plus a wider area if possible. Keep the mulch 6 to 8 cm (2 to 3 in) away from the stem or trunk, forming a doughnut shape.



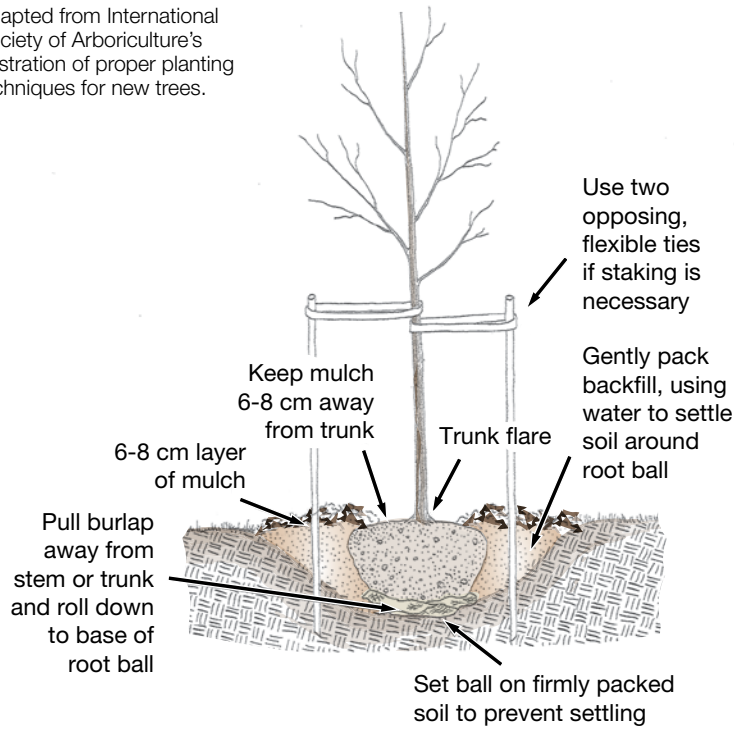
Pull mulch back from the base of the plant. Think doughnut, not volcano. Do not pile mulch up around the plant. No soil or mulch should touch the trunk or stem.

Through the winter, a tree guard (a plastic tube or plastic spiral wrapped around the tree's trunk) will protect young trees from rabbits and mice as well as from sun damage (frost cracks, sun scald). Remove the guard in the spring and wait until the tree is dormant in the late fall to reinstall or replace it. Leaving a plastic guard on during the growing season can trap heat and moisture that can damage the plant.

If animals are gnawing or chewing at your tree year-round, wrap "hardware cloth" (a wire mesh) around the tree, making sure it does not rub against the bark. All-natural sprays that repel animals but are safe for people and pets are another option. Many trees will lose their appeal to rabbits and mice as bark becomes thicker and rougher over time.



Adapted from International Society of Arboriculture's illustration of proper planting techniques for new trees.



### Caring for Your New Tree or Shrub

Without a surrounding forest to care for it, your tree or shrub needs you to help it grow.

See CVC's fact sheet: *Caring for Your New Tree or Shrub*

[www.creditvalleyca.ca/treecare](http://www.creditvalleyca.ca/treecare)

## References

Colorado State University. *CMG Garden Notes* webpages.  
[www.cmg.colostate.edu/gardennotes.shtml](http://www.cmg.colostate.edu/gardennotes.shtml)

LEAF. *LEAF Resources* webpages.  
[www.yourleaf.org/leaf-resources](http://www.yourleaf.org/leaf-resources)

Organic Gardening. *Doug's Organic Solutions* webpages.  
[blogs.organicgardening.com/blogs/dougsorganicsolutions/](http://blogs.organicgardening.com/blogs/dougsorganicsolutions/)

Toronto Master Gardeners. *Planting a Tree: A Toronto Master Gardeners Guide*.  
[www.torontomastergardeners.ca/index.php/factsheet/planting-a-tree-a-toronto-master-gardeners-guide/](http://www.torontomastergardeners.ca/index.php/factsheet/planting-a-tree-a-toronto-master-gardeners-guide/)

Trees are Good. *Tree Owner Information* webpages.  
[www.treesaregood.com/treecare/treecareinfo.aspx](http://www.treesaregood.com/treecare/treecareinfo.aspx)

Urban, James. (2008) *Up by Roots – Healthy Soils and Trees in the Built Environment*. Champaign, IL: International Society of Arboriculture.

Washington State University. *Linda Chalker-Scott* webpages.  
[puyallup.wsu.edu/~Linda%20Chalker-Scott/](http://puyallup.wsu.edu/~Linda%20Chalker-Scott/)

Credit Valley Conservation gratefully acknowledges financial support from our member municipalities for facilities, programs and services: the Regions of Peel and Halton; the Cities of Mississauga and Brampton; the Towns of Caledon, Erin, Halton Hills, Oakville and Orangeville; and the Townships of Amaranth, East Garafraxa and Mono.

© 2014 Credit Valley Conservation

## Additional Resources

**Ecological Landscaping Resources:**  
[www.creditvalleyca.ca/landscaping](http://www.creditvalleyca.ca/landscaping)

**Your Green Yard** offers workshops and presentations on native plant gardening and landscaping to local residents within the Credit River watershed.  
[www.creditvalleyca.ca/ygy](http://www.creditvalleyca.ca/ygy)

**Greening Corporate Grounds** offers advice, landscape concept plans and planting events to businesses and institutions within the Credit River watershed.  
[www.creditvalleyca.ca/gcg](http://www.creditvalleyca.ca/gcg)

**Countryside Stewardship** offers workshops as well as technical and financial assistance to support rural environmental stewardship.  
[www.creditvalleyca.ca/countrysidestewardship](http://www.creditvalleyca.ca/countrysidestewardship)



1255 Old Derry Road  
Mississauga, Ontario L5N 6R4  
Phone: 905-670-1615  
Toll Free: 1-800-668-5557  
Fax: 905-670-2210  
Website: [www.creditvalleyca.ca](http://www.creditvalleyca.ca)  
E-mail: [greencities@creditvalleyca.ca](mailto:greencities@creditvalleyca.ca)