The intent of this guideline is to educate buyers of nursery stock so that they can purchase the plants that are best suited to sites in Ontario. Native (indigenous) plants are increasingly being used in landscaping and restoration projects. These are the most appropriate plants for most uses in Ontario, particularly when the site is located near a natural area. It is important to understand some basic definitions.

**Indigenous** plants are simply those that grew in a particular place prior to settlement by Europeans. These are preferable for most uses to preserve our natural heritage for future generations. Synonym: locally native.

**Native** plants come from within a particular political jurisdiction i.e. native to Ontario. This is less relevant in natural communities, which often cross political boundaries. As used in the nursery trade, native often means indigenous to somewhere in North America, and not necessarily Ontario.

Alien, Introduced, or Exotic, is a plant from another nation or region e.g. Black locust in Ontario is an alien plant whose origin is in the northern United States; Norway maple is an alien plant whose origin is in Europe. A plant could also be an alien if is introduced into a different area of Ontario than where it occurs naturally.

**Invasive Exotic** species are alien species that reproduce aggressively and displace indigenous plant communities.

Endemic plants are those plants only found naturally in one area and nowhere else.

**Naturalized** plants are alien species that survive without human assistance and now reproduce here. Some are invasive exotic species. Naturalized is not equivalent to **Native** or **Indigenous** in meaning. A plant will never become native or indigenous if its origin is outside Ontario, regardless of how long it has been here, though it may still serve a useful purpose.

A **Cultivar** is a cultivated variety of a plant created by horticultural practice, often cloned in large numbers from a single individual. Cultivars can be created using Indigenous, Native, or Alien plants. Synonyms sometimes used: selection, variety (but not the same as *var.* when used in a species Latin name.

The best plants for use in projects in Ontario are those indigenous plants grown from seed collected as near to the place they will be used as possible and in approximately the same site conditions as the site the seed was collected from. At the very least, plants should be from Ontario seed sources and a similar climatic zone.

## DEALING WITH COMMERCIAL NURSERIES AND LANDSCAPE CONTRACTORS

Always remember - a nursery is a business whose job is to grow and sell plants. They may or may not know anything about indigenous plant communities. It is your responsibility to be informed and ask for what you want, and not settle for less.

As a buyer, you have the right to get what you asked for. If they don't provide it, ask until you get it or deal with another supplier. All nurseries guarantee their stock to be <u>true to name</u> (=correctly identified) so make them honour their guarantee if you don't receive what you ordered.

Ask the supplier where their plants came from. Plants dug from the wild, except those from approved salvage sites, should not be sold as many species have become rare because of unauthorized collection. Purchased plants should be labeled <u>Nursery Propagated</u>. If you want local seed sources,

you must ask for them.

Ask for species by their proper botanical (Latin) name. Common names can vary from place to place, and you may end up with something you don't want. Nurseries often make mistakes on botanical names in their catalogues so confirm that they have what you actually want. Proper botanical names have been changed for many species in the last few years and may change again for some species, though most nurseries still use the traditional names in their catalogues. This just makes getting what you want more challenging and provides more opportunities for identification mistakes to occur. Get help from knowledgeable people.

Don't expect the supplier to know what is indigenous to your area, or the specific conditions on your site. Educate yourself about the native plants of your region and confer with local experts. Local naturalist groups and books can provide a lot of useful information. Be cautious about information collected from the internet as it may not be applicable to Ontario, or your part of Ontario.

Tell the supplier that you will accept no substitutions without prior authorization. If you receive any plant you haven't asked for or if it is in poor condition, refuse delivery immediately. The nursery will be less likely to substitute in future if you deal with them firmly now.

Ask for native stock, not cultivars to ensure wider genetic variation in plants. Cultivar names often follow the scientific names e.g. Prunus virginiana 'Shubert'. Cultivars are often more readily available than the native stock from large nurseries.

Invasive exotic species are commonly substituted by nurseries for indigenous plants, often without their knowledge. Because of difficulty in accurately identifying some of these, it is more prudent to use another species than take a chance on a misidentification that won't be found until after the plant is already paid for and planted.

The most common misidentifications are:

- Carolina poplar *Populus x canadensis* for Eastern cottonwood *Populus deltoides*
- European highbush cranberry (Guelder rose) *Viburnum opulus* for highbush cranberry *Viburnum trilobum,* also known as *Viburnum opulus var. americanum*
- Black Alnus glutinosa or grey alder Alnus incana spp. incana for speckled alder Alnus rugosa, also known as Alnus incana spp. rugosa.
- European pussy willow (goat willow) Salix caprea for pussy willow Salix discolor
- London plane-tree Platanus x acerifolia for Eastern sycamore Platanus occidentalis
- several European species of willow such as hybrid willow Salix x rubens, white willow Salix alba, crack willow Salix fragilis, or bay-leaved willow Salix pentandra for black willow Salix nigra or peach-leaved willow Salix amygdaloides
- European aspen *Populus tremula* for trembling aspen *Populus tremuloides* (happens occasionally)

## SOURCES OF INDIGENOUS PLANTS

Indigenous plants that are suitable for restoration work in Ontario are available from a number of sources. You may need to use a combination of sources.

Allow natural succession to occur, while controlling exotic species. Allow the natural colonizing process to revegetate the site or add species that are not available or easy to grow. Control exotic species to preserve the niche for the desirable plants. You may need to mimic natural disturbance, such as fire, to get some species to reproduce, or wait for a good seed year.

**Assisted succession.** Create the necessary conditions for natural seeding to occur, such as plowing a field in readiness for seed fall from an adjacent forest.

*From the site*. Move plants from other parts of the restoration site, especially those that reproduce aggressively such as staghorn sumach, dogwoods, wild ginger, and many marsh plants.

**Purchase plants from nurseries**. A number of nurseries specialize in indigenous plants. Be cautious with large nurseries because they may be selling imported, wild-dug, or cultivar stock. The sometimes higher cost of stock from a small grower that collects seed locally should be weighed against the lower cost but potentially inappropriate seed sources sold by some large producers. It is recommended to use the small grower and buy fewer plants with the available budget. In the long term, the local plants will grow better and spread to fill the area, and the smaller supplier can work with you to supply more of what you need. See the latest copy of the SER Ontario Native Plant Resource Guide for nursery contact information.

*Purchase plants or seed from larger restoration projects* that propagate plants and have surpluses available for sale. Be careful to ensure that you are getting what you want as if dealing with any commercial nursery.

*Purchase from specialty plant sales.* Some plant societies and arboreta have annual plant sales. The same cautions apply for seed source identity and plant quality as nurseries.

**Propagate from seed or cuttings taken from the site or nearby**. This takes longer but you will learn what their growth requirements are from growing the plants. The seed can also be grown out for you by an experienced grower, but make sure they separate your seed from their other stock.

*Transplant soils* that contain seeds and roots to new sites that have similar conditions. This is particularly useful for wetland projects.

**Salvage from development or highway construction projects**. Always get permission from the landowner. The attached soil can also contain valuable plant seeds and microorganisms. Note that the plant's root system form may not be suited to the receiving site.