Gardening Guide for Schools and Childcare Facilities 2022

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Contents

Introduction	2
"A goal without a plan is just a wish"	2
Logistics	3
Safety	3
Toxic plants	3
Other hazards	4
Building engagement	5
Being a green gardener	6
Choosing plants	6
Go native	6
Avoid invasives	6
Strive for diversity	6
Gardening best practices	7
Mapping out your garden	7
Keeping soil healthy	9
Starting seeds indoors vs. direct sowing	9
Succession-planting vegetables	10
Using the square foot method	11
Transplanting/planting	11
Staking	12
Watering and fertilizing	13
Managing weeds, insect pests, and diseases	13
Staying safe while gardening	14
Harvesting vegetables	14
Saving seeds	14
Putting the garden to bed for the winter	15
"I have a gardening question!"	15

Introduction

Sault Naturalists and Clean North strongly support schools and childcare facilities creating or augmenting a garden. The benefits of gardening and exposing children to nature are many. If we can foster love and care for the natural world in children, they will hopefully grow up to become the next generation of keen gardeners and environmental stewards.

It can be challenging for educators to create/augment a garden as they may not have a background in gardening or natural resources. We created this guide to support schools and childcare facilities in gardening with children.

"A goal without a plan is just a wish"

Developing a plan for your school or childcare facility garden will allow you to determine goals, budget, timelines, etc. What should a garden plan address?

What are you trying to achieve? Potential goals could include:

- Aesthetics: Plants and trees add beauty to any location.
- Education: Gardening gives educators and children opportunities to learn more about nature and the growing of food and flowers.
- **Health/nutrition:** Playing and working in dirt helps strengthen kids' immune systems, and vegetable/fruit gardens can provide a source of healthy food.
- Mental health: Research shows that spending time gardening and being in nature can benefit the mental health of both children and educators.



- **Conservation:** Adding native plants to a school or childcare yard can help protect the urban ecosystem including pollinators and birds.
- **Sense of pride/ownership:** Children/educators may become more emotionally invested in the facility and its environment.
- **Privacy/protection:** Trees, shrubs, and other plants can reduce the line of sight for individuals not associated with the facility (as well as provide shade and wind protection).

How will you achieve your gardening goals? Questions to ask:

- Who should be involved in garden planning and operation?
- What is our budget?
- What can we realistically expect to achieve this year, the next few years, the next 5 years?

- Where will we **source materials** (wood for raised beds, pots, shovels, trowels, soil, trees, plants, seeds, etc.)?
- Who will do the **labour** (building beds, planting trees, sowing seeds, etc.)?
- How can we best **engage the children** at each stage? Should **parents** be involved and how?
- Who and how will we **maintain** the garden over time? (For example, young trees and perennial plants must be kept watered through summer or are at high risk of dying, and many school/childcare gardens falter or fail when staff champions move on.)
- What will the **timeline** be for carrying out each plan stage?

Logistics

- How much **space** do we have for growing, and is it enough to meet our goals?
- Do we want **raised beds** or to plant directly into the ground? (Check to see if your soil is suitable for the latter: Is it nice loam, rocky fill, clay, or sand?)
- If space is limited, can we go **vertical**? (Google ideas for vertical garden beds.)
- How many hours of **sun** does each part of our garden site get?
- Is there a convenient water source? Can we set up a rain barrel? (Check with public health.)
- How can we make the site **secure?** (Consider lighting, fencing, locked shed, etc.)
- Do we need a **potting table** and/or picnic table?
- Do we wish to **compost** on site? (Check with public health.)
- Can we augment **natural habitat** like trees, plants, logs, etc. with features like birdbaths, insect dishes, and bat, bee, bird, and toad houses?

Safety

When designing a garden space for children, **minimizing risks** to health and safety is critical.

Toxic plants

The issue of plant toxicity is challenging and complex for those gardening with children. Many families likely have plants in their yards that are toxic and don't even know it. These plants rarely cause issues because it's rare for people, even children, to pick off parts of random plants and start eating them. One scientific journal article says: "Plant poisoning in the developed world is predominantly a problem of small children who put things in their mouth while exploring their environment. [However] Few cases result in significant harm."

Toxic plants are all around us:

- **English yew** is a common garden plant in our city, and all parts are toxic. Yet deaths or even serious illness due to yew poisoning are very rare.
- **Rhubarb** leaves are toxic. However, a child would have to eat a lot of rhubarb leaf material to get sick, and given the rough texture, kids are unlikely to chew on these plants.

- **Irises** are toxic but taste awful, so again, children are not likely to eat them. The most toxic part of irises is their roots, which kids are unlikely to access.
- Mature raw seeds/leaves of scarlet runner beans contain small amounts of a toxic lectin.
 Eating several mature seeds/leaves could make a child/adult ill. However, the same is true of some other dry beans, especially red kidney beans, yet they remain on store shelves. The scarlet runner bean is a delightful plant because it attracts hummingbirds. It may be a reasonably safe choice as long as you harvest beans young and keep seeds away from children who may be tempted to eat them. A Google search yields many articles promoting growing scarlet runner beans with children.
- Many fruit trees have toxic elements. For example, apple seeds and cherry pits have cyanide in them. However, even if swallowed, these seeds rarely cause harm because they pass through us whole. The leaves and twigs of cherry trees are also toxic.
- A surprising number of common garden plants produce berries that may tempt children but are mildly to very toxic. Examples include lily of the valley, snowberry, winterberry, elderberry, holly, bittersweet nightshade (a common weed here), and virginia creeper.
- **Monkshood** (Aconitum) and **foxglove** are two flowering plants not to plant in a school or childcare garden, as the toxins in them can be absorbed by just touching them.

If reading this section makes you nervous about gardening with kids, remember, plant poisonings are rare (deaths due to bee stings and lightning are more common). And even if kids do ingest a toxic plant part, they rarely get seriously ill.

Bottom line: When choosing plants for a school or childcare facility, carefully assess each for toxicity risks:

- Which parts are toxic and at what period of plant development?
- How likely are children in your care to ingest the plant or toxic part?
- How dangerous is the toxin in that plant?

Also consider the **age** of the children who will have access to the garden. **Younger children and those with certain disabilities may be at greater risk** as they may be less able to understand the risks of eating plant parts and/or be more vulnerable to toxins due to their size.

It is hard to find reliable sources that list the toxicity of all garden plants; the Alberta

Government has one resource here. Government/university sites tend to be the most reliable.

Searching by the plant species' scientific name may yield better results.

Some plant parts (acorns, cherries, small crabapples, etc.) can also be choking hazards.

Other hazards

Digging: Always <u>call to get a line locate</u> before starting a garden project that involves digging.

- **Chemicals:** Whenever possible, avoid using chemical herbicides, insectides, fungicides, and fertilizers. Choose less harmful alternatives like hand weeding, insecticidal soap, proper watering, and organic fertilizers like compost and manure.
- **Security:** Locate plants to reduce security risks. For example, a group of cedars at the back of a playground that adjoins a natural area with hiking trails could pose a security risk if children like to hide behind the cedars where staff can't see them and hikers *can* see them. Having a fence will reduce random strangers entering the garden.
- Allergens: Allergies to plant pollens are common. While having a school/childcare garden
 could increase the amount of pollen on site, the reality is children with environmental
 allergies are exposed to pollen everywhere they go in the great outdoors. Some children
 have serious allergies to vegetables or fruit like strawberries.
- Mushrooms/fungi: These often appear in gardens especially in moist areas like under trees, on rotting wood, and on mulch. Remove and throw away any mushrooms/fungi that appear in a school garden as many are toxic or even deadly.
- Insects: Flowering plants can attract stinging and biting insects.
 Generally, the value of having a school/childcare facility garden outweighs the risk of insect stings or bites but be aware of this risk and be prepared. Regularly check children for ticks as they are becoming more common here.
- Other wildlife: Growing fruit/vegetables could attract bears, raccoons, squirrels, chipmunks, mice, rats, etc. Having flowering plants that develop seedheads attractive to birds could result in more bird poop in your garden area. Again, these risks are generally outweighed by the benefits of children gardening and can be managed.



• **Gardening tools:** Gear to the age of the child. For example, some trowels can be quite sharp and could pose an injury risk to children.

Building engagement

Consider installing a dedicated bulletin, chalk or white board for the garden somewhere in your facility—a place for staff, parents, and children to learn:

- What are we planting?
- What's new in the garden this week?
- What should children look for in the garden?
- What did we harvest this week and how was it used?
- Who are our special garden helpers this week?

You could also post garden **photos** on this board.

Being a green gardener

Keeping our urban ecosystems safe while gardening is important. To ensure your gardening practices are as sustainable as possible, <u>watch this video from Clean North and the Sault Ste.</u>

<u>Marie Public Library</u>. It presents a myriad of ways to protect the environment while gardening.

Choosing plants

Go native

Both the Sault Naturalists and Clean North strongly encourage schools and childcare facilities to **prioritize native plants**. They support native pollinators and other wildlife and are far less likely to wreak havoc if they escape into nearby natural areas. However, some native plants are toxic, so choose the species carefully. It's fine to grow some non-native plants to fulfill your gardening objectives, especially fruit trees/shrubs and vegetables, but choose ones that are not invasive.

Avoid invasives

Invasive plants are non-native species that harm ecosystems by crowding out our native plants and even changing soil chemistry, causing ripple effects throughout the food web. Native insects can decline, then birds, and so on. If your garden already contains invasive plants, we urge you to rip them out, bag them, and throw them away. Invasive plants should never be given away, sold, or composted. Some invasive species to avoid (<u>learn more from Ontario Invasive Plant Council</u>):

Goutweed	Norway maple
Himalayan balsam	Periwinkle
Japanese knotweed	Purple loosestrife
Lily of the valley	Scots pine
Non-native large grasses	Wild parsnip
Non-native honeysuckles	Yellow flag iris
	Himalayan balsam Japanese knotweed Lily of the valley Non-native large grasses

In vegetable beds, watch out for chives, mint, comfrey, and horseradish. All are very spready. Jerusalem artichoke is a wonderful and spectacularly blooming native plant with edible roots, but we recommend growing it in a half barrel as it is aggressive.

Strive for diversity

When choosing plants, strive for diversity. The more plant diversity, the better for pollinator and wildlife diversity:

- Choose a mix of trees, woody shrubs, and herbaceous perennials (plants that die to the ground in fall and grow back again in spring). Annuals—for example, petunias or snapdragons—live only one season but are great for providing colour throughout the season.
- Include both evergreen (conifer) and deciduous trees (the latter lose leaves in fall).

- Choose plants with a variety of forms (tall/short, slender/bushy), bloom colour, and leaf shapes/colours. Having plants with a diversity of shapes and colours helps make your garden interesting even when plants are not blooming. In essence, each plant becomes a flower and the garden becomes a giant bouquet (especially effective with groupings of hostas).
- Consider sensory aspects of plants: Lilacs, creeping thyme, anise hyssop, golden oregano, and rose-scented bergamot have lovely scents; lamb's ear has lovely soft leaves; and tall grasses make a lovely rustling sound in the wind. You could even have a special sensory garden with five sections, one each for plants that children can see (are interesting to look at), hear, smell, feel, and taste. With younger children, maybe skip the taste section as it might encourage them to taste other plants that are not safe to eat.



- **Consider plant height.** Put taller plants and vines needing a trellis at the back. Tall plants can also hide an ugly fence, shed, or rain barrel.
- Plan for continuous blooming. Avoid having all spring-blooming or all late-summer blooming plants. Annuals such as petunias and nasturtiums can help fill in blooming gaps (the latter are edible!). Choose some plants with winter interest (provide something to look at in winter/winter habitat for wildlife)—for example, evergreen trees/shrubs (such as cedar), taller perennials with seedheads (like black-eyed susan or perennial sunflower), and tall native grasses.
- Check winter hardiness. It's disappointing when a perennial dies over the winter so check cold hardiness of species before you buy. Native plants tend to be tougher; for example, our native eastern white cedar is tougher than the emerald cedars sold at garden centres.
- Check other requirements such as soil pH and sun vs. shade (you can get a soil test kit at any garden centre). Some plants can tolerate varying conditions, while others are picky. Succulents, for examples, do not tolerate soggy soil; Siberian irises don't mind it.
- When designing your garden areas, go for natural curves. Straight lines and boxy shapes are less visually appealing.
- **Be cautious about what trees you plant.** Planting trees that get huge like maples and oaks could eventually make it challenging to grow vegetables or sun-loving flowers. Consider smaller trees and shrubs like lilac, fruit trees, forsythia, cedar, nannyberry, and serviceberry.
- Integrate places to sit into your garden. Add rocks and logs for interest. Consider child-safe weather-proof garden art or sculptures.

A few recommendations for child-safe native plants (always double-check species for potential safety issues before purchasing/planting):

- **Trees** (smaller ones to avoid excessive shade): White birch, serviceberry, tamarack, eastern white cedar, pussy willow
- **Shrubs:** Nannyberry, raspberry, blueberry
- Perennials: Foamflower, bee balm, anise hyssop, false sunflower, joe pye weed, threadleaf coreopsis, black cohosh, smooth aster, New England aster, coneflowers, blackeyed susan, Jerusalem artichoke (edible roots), ostrich fern, big bluestem grass, Indian grass



Some of the most toxic garden plants/weeds:

Bittersweet nightshade	Elderberry	Mayapple
Azalea	Foxglove	Monkshood
Bleeding heart	Hydrangea	Rhododendron
Buttercup	Jack in the pulpit	Star of Bethlehem

Cherry Larkspur (delphinium) Tansy

Chinese lantern Lilies Wild parsnip
Canada yew Lily of the valley Wisteria

Remind children regularly of the importance of not eating any part of any plant unless an adult says it's ok. And the supervising adult must be very sure it's safe!

Gardening best practices

The rest of this guide is based on a gardening guide developed by the Common Ground at Emmanuel Community Garden. We've broadened the focus to cover flower gardening as well.

Mapping out your garden

You can download a **garden planning app** on your phone or computer or draw your plan on graph paper. Keep your plan **simple/sustainable**. You can always add more the following year.

A key decision is what to grow. With trees/flowers, we recommend prioritizing native plants. When choosing what vegetables to grow, keep in mind that high value crops like squash, pumpkins, and eggplant are more tempting targets for theft. Veggies that are easy to grow, don't get too tall/shade neighbouring beds, and are less tempting to thieves include:

- Beets
- Bush beans
- Cabbage
- Carrots
- Cucumbers

- Peppers
- Lettuce, spinach, kale, swiss chard
- Radishes
- Tomatoes

- Zucchini/summer squash
- Nasturtiums (edible flowers; discourage pests)

Companion planting means grouping plants that grow well together. Some plants help others by fixing nutrients in the soil or deterring pests by emitting a repelling odor or chemical. Many companion planting charts are available online. A <u>Three Sisters Garden</u> offers the opportunity to teach companion planting from an Indigenous perspective.

Other planning considerations

- Shape and size: Plant taller plants so they will not shade shorter ones. When planting veggies, consider that large vine plants such as zucchini and cucumbers take lots of space, water, and nutrients and may grow over the edge of your bed and into the grass.
- **Spacing**: Too much open soil wastes space and invites weeds; plants that are too crowded may not grow well or produce less flowers/vegetables.
- Crop rotation in veggie gardens: Rotating crops around your garden from year to year helps ensure you don't drain one part of the garden of a given soil nutrient and disrupts the life cycle of diseases and insects.

Keeping soil healthy

Soil is the foundation of your garden. The better you look after it, the better your garden will grow.

In a raised bed, the soil level will drop over time. Adding compost (well-decayed organic matter) or manure is a great way to revitalize your soil by adding volume, texture, and nutrients. Adding only black earth/top soil adds volume without nutrients.

When adding compost/manure to veggies beds, it's ok to work it into the top 3-4 inches of soil. With perennial beds, keep in mind that the deeper you till, the more damage you might do to perennial roots (plus deep tilling turns up weed seeds and causes other issues).



Avoid walking on soil to prevent *compaction*, which leads to a host of issues including water runoff and root development issues. **Seasonal soil tips:**

- **Spring:** Warm soil faster by covering vegetable beds with clear plastic for a week or two.
- **Summer:** Apply mulch to protect soil, conserve water, and suppress weeds. Mulch types: straw, shredded leaves, and/or Clean North's Christmas tree mulch, given away each May and August.
- **Fall:** Remove mulch to help soil stay warm longer and extend the growing season. You can also improve your veggie bed's soil nutrients and texture by planting a cover crop such as alfalfa, clover, rye, barley, or winter wheat; keep moist until seeds germinate and leave through winter. In spring, turn plants under when they reach 4-5" (10-13 cm) tall.

Starting seeds indoors vs. direct sowing

When you start seeds indoors, plants mature sooner, giving you earlier bloom/harvest. Larger seedlings are also better able to fight off pests and diseases. With vegetables, starting seeds indoors can help ensure a steady food supply over a longer period (succession planting).

Seed starting tips

- To find out how soon to start seeds indoors, check the seed packet. With veggies, broccoli/related veggies, lettuce, onion, peppers, and tomatoes all do well started indoors.
 Root crops (especially carrots) don't like being transplanted.
- To start seeds indoors, try a **south-facing windowsill**; east or west can also work.
- Adding **fluorescent lights** can help ensure plants get enough light; place lights 4-6" (10-15 cm) above the plants and raise them as the plants grow.
- Use a **commercial seed-starting soil mix**. Soil from your yard may contain insects, weed seeds, or diseases that could damage or kill young plants.
- **Pot choices**: Many options are available—peat pots, plastic pots/flats, cardboard coffee cups, egg cartons, cut-up paper towel rolls. If you are reusing plastic pots and flats, make sure they are clean; scrub with a weak bleach solution (1:10), rinse, and let dry. Make sure pots have **drainage holes** to prevent root rot.

Direct sowing in the garden is less work, but it isn't safe to plant many vegetables and annual flowers until all chance of frost has passed and the soil has warmed (usually last week of Mayfirst week of June). **Some veggie crops that can be sown early:**



Succession-planting vegetables

This strategy lets you have fresh food available over a longer period. Two methods for spreading out the harvest:

- Plant more than 1 variety of a given vegetable all at once, with each having a different maturity period (see backs of seed packets or bedding plant labels). One variety might take 55 days to mature while another takes 60; planting 2 types at once will stagger the harvests.
- Plant the same variety several times. If you expect the crop to be harvested over 2 weeks, plant every 2 weeks.

Some cold-tolerant veggies (lettuce, radishes) can be planted again in late summer and harvested in fall. Lots more about succession planting is available online.

Using the square foot method

To maximize growing space in a raised vegetable bed, **consider square foot gardening.** Use string and nails to divide your bed into 1-foot squares.

Consult a square foot gardening guide to determine how many of each type of vegetable to plant in each square.



Transplanting/planting

To avoid shocking delicate seedlings started indoors, harden them off before planting:

- Set seedlings outside in a sheltered, shaded spot for a few hours.
- Each day, increase how long plants are outside and how much light they get until they are outside all day.
- Water more often as pots dry out faster outside.

How to plant seedlings:

- 1. Water a few hours before planting (soil should be moist, not soggy).
- 2. Choose a cool/overcast day, early morning, or late afternoon (avoid hot days/midday).

- 3. Dig holes before you remove plants from pots to minimize how long roots are exposed to air. Make each hole as deep as the plant's root ball.
- 4. If pot is plastic, turn it upside down into your hand while holding the plant stem gently between 2 fingers. If the plant's root ball doesn't slip out easily, tap pot edge against a solid surface while holding it upside down or gently squeeze the pot to loosen the soil.



- 5. If the pot is biodegradable (peat, paper, cardboard, etc.), keep the plant in the pot but cut away the bottom to allow root growth.
- 6. If plant roots are matted, pull them apart gently so they point outwards.
- 7. Position the plant in the hole so the top of the root ball is level with the surrounding soil.
- 8. Gently firm the soil around the root ball. If the plant needs support (stake, trellis), add that now to avoid damaging mature roots later (see Staking below).
- 9. If possible, put a shade over the plants for a day or two while they settle in.
- 10. Recycle/reuse pots (some garden centres take them back).

Tip: Parents/other visitors will appreciate it if you label what you plant. Wooden craft sticks are a biodegradable option, but plastic is more durable. You can cut up large yogurt containers to make plant ID tags. Look for special garden markers that have truly permanent ink (regular Sharpie ink is not weatherproof).

Staking

Some plants (including vegetables like tomatoes, cucumbers, peppers, beans) **benefit from supports.** They help protect plants from being blown over, reduce sprawl, reduce the risk of diseases by keeping leaves off the soil, and make harvesting easier.

Install **stakes/cages** early in the season to avoid damaging roots of mature plants. Store-bought cages may not be strong enough to support a full-grown plant,

especially tomatoes. Consider making your own (lots of plans online).

You can also use **stakes** made of wood, bamboo, plastic, or metal. The sturdier the better! Staking tips:

- Tie stems tight enough to support plants but loose enough to avoid damaging stems. Consider using natural twine rather than plastic.
- Check plants regularly and tie up new growth.
- Ensure each stake is tall enough to support the plant at max height.
- If using stakes rather than cages with tomato plants, prune to a single stem.

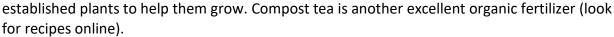


Watering and fertilizing

The best time to water is early morning followed by late afternoon. Midday watering results in more water waste; late-day watering can increase risk of diseases like mildew. To discourage diseases like mildew, water the base of plants rather than leaves.

Seedlings need less water applied often; **large plants** benefit from deep watering less often. **Mulch** can help conserve soil moisture and reduce the need to water.

As for **feeding**, plants will tell you if they **lack nutrients** via stunted growth, pale leaves, and/or low yields. Working organic matter such as **compost or manure** into your soil each season will improve soil over time. You can also simply spread compost/manure around



<u>Clean North has a composting webpage with information on both regular and worm composting</u>. Schools/childcare facilities should consult with public health before launching a composting project.

Make sure any manure you used is **well composted**; fresh manure can burn plants and smell bad. Manure from meat-eating critters (dogs, cats, humans) is **not** safe for food crops.

Blood meal adds nitrogen to your soil (many plants are heavy nitrogen users). It's water soluble and can be applied as a liquid. Be careful when applying to young plants or you can burn them. FYI: Blood meal comes from animals.

Bone meal adds phosphorus and calcium to your soil. It's available as powder or granules, and the powder can be dissolved in water for a fast-acting fertilizer. Granular bone meal is more slow release. Bone meal won't burn your plants if you add too much. Organic bone meal is recommended. FYI: Bone meal comes from animals.

Fish- and seaweed-based fertilizers are also available. Caution: Any products with **animal ingredients** could attract wildlife.

Managing weeds, insect pests, and diseases

Weeds steal nutrients, light, and moisture from valued plants. Chemical herbicides are illegal; instead use hoeing, mulching, and hand weeding. Be careful digging out weeds; it's easy to damage roots. Try chopping the heads off weeds when they are tiny — often they will not resprout. Planting as soon as possible and mulching can also deter weeds. Open soil is a weed magnet.

Most insects do no harm; some are even helpful. The best defense against pests is to ensure your soil and plants are healthy. Inspect plants regularly for signs of damage (spots on leaves, leaves turning brown or curling, holes in leaves, etc.). **Avoid chemical pesticides** — they pose risks to people and kill good bugs, too!



Alternative methods for reducing/controlling insect pests as well as diseases:

- Choose disease-resistant varieties
- Maintain healthy, nutrient-rich soil
- Rotate crops each year
- Hand-pick insects off plants or use insecticidal soap, diatomaceous earth, or homemade non-chemical pest sprays (many recipes online)
- Water deeply/less often rather than lightly/often

A key garden pest that might surprise you: Humans! We people pick at tree bark; carve initials in trees; whack trees with sticks, mowers, and string trimmers; pull flowers, leaves and branches off plants, etc. Children should know that such actions stress plants and leave them vulnerable to insects and disease.

Staying safe while gardening

- Wear closed-toe shoes, gloves, and other protective clothing to reduce risk of injury.
- Wear sunscreen/cover up, bring a water bottle, and take breaks, especially on hot days.
- For those with allergies especially to bees or other insects, take appropriate precautions.
- Consider having a rule against eating anything while in the garden. Young children may not understand that one berry is safe while another is toxic.

Harvesting vegetables

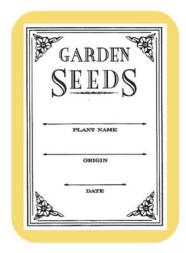
- Harvest in the morning or on an overcast day when plants are less stressed.
- Know which parts of each plant type are **edible**. Some plants have both edible and toxic parts. Rhubarb stems? Delicious. Rhubarb leaves? Toxic!
- If harvesting leaves, take the whole plant or trim off leaves (start with the outer ones). Make a clean cut to reduce risk of disease.
- If harvesting the whole plant, take the roots to help keep it fresh.
- When harvesting fruits/seedpods, again make a clean cut. Some fruits will come off easily
 in your hand when ripe no need for scissors.
- When harvesting **root vegetables**, you can be less careful with the top because it will be composted/thrown away. Loosen soil around the root to ensure it doesn't break when pulled. If your soil is loose, you may be able to pull root veggies right out. Some roots such as beets have edible tops, but doublecheck to make sure.
- If you have surplus, please consider donating to those in need (food banks, soup kitchens).

Saving seeds

Some gardeners like to **reserve some plants to produce seed for** next year. Saving seed can save you money and be a fun educational project. How you do it depends on what type of plant it is. **When saving vegetable seeds:**



- Keep in mind that some vegetables (broccoli, cauliflower) are flowers, and if you leave them on the plant long enough, the florets will go to seed. When the seedheads are dry you can collect the seed.
- Other vegetables produce fruit/pods that contain seeds (tomatoes, beans, peas, melons, etc.). How to harvest seed from these plants varies. With beans, leave some on the vine until they turn dry and brown, pop open the seedpods, pull out the seeds, let dry in a cool, dark place, and stick in an envelope until spring (reminder: mature bean seeds should not be eaten raw). Saving tomato seeds takes more steps. You can find many websites that explain saving seeds online.



Three caveats: 1) Saved seeds can be less reliable; 2) those from hybrid varieties may not produce the same variety; and 3) some seeds may be toxic even if the veggie itself is not.

Also, getting native tree and plant seeds to germinate can be challenging. Most native plant seeds need a cold period in winter. One possible fun project for a school or childcare facility is wintersowing, which involves planting native plant seeds in plastic jugs or bins and then setting them in the snow in mid-winter to sit till spring. It's a great way to get native plant seeds to germinate! Learn more about wintersowing here.

Putting the garden to bed for the winter

With flower gardens, we recommend you leave stems till the following Mother's Day. Flowerheads with seeds provide a winter food source for birds and other wildlife, and some insects overwinter in plant stems. If you notice diseased plants, for example, ones with powdery mildew, cut off affected stems/leaves and throw them in the trash.

With vegetable gardens, harvest all produce and return your garden to its pre-season condition, including removing remaining plant/weed material and moving it to composters or putting in the trash. Any diseased foliage (and all that from nightshade veggies like tomatoes, potatoes, peppers, and eggplant) should be bagged and thrown away. Put away cages, growing supports, etc. And start planning for next year! ©

Got lots of compostable material and no composter? You can always take it to Lemieux Composting on Black Road.

"I have a gardening question!"

Consider joining the Master Gardeners of Ontario Facebook group (an amazing resource) or email Clean North at info@cleannorth.org.