



EVERGREEN GENERAL GARDEN GUIDE

(content provided by our garden expert)

What to plant

- Grow a variety of heirloom and native plant varieties.
- Seed save to conserve plant diversity for future generations and to select plants that are successful in your garden's microclimate.
- Plant companion plants to help attract beneficial insects, detract pests and encourage healthy plant growth.

Interplanting and Companion Planting

- Interplanting is a technique that takes advantage of the fact that some vegetables grow more quickly than others. For example, if you combine spinach and carrot seeds, the spinach will be ready for picking in six weeks, while the carrots will continue to develop.
- Companion plants are plants that help each other by improving the soil with minerals and nutrients, attracting birds and other natural predators that will deal with harmful insects on plants, and repelling some pests. They can also attract pests away from prized plants, provide shade and improve taste. Three companion plants that can be interplanted are corn, pole beans and squash. Beans provide Nitrogen for the corn, corn provides a stalk for the beans to climb and squash leaves help shade the soil so that it retains more moisture. An example of a trap plant is nasturtiums, a favourite food of aphids. Note that a few plants also inhibit each other, for example beans and onions.

How to plant

- Direct sow or transplant seedlings. Before transplanting, harden off seedlings by placing them outdoors, in partial sun during the day, for the week leading up to transplanting; be sure to bring them back in at night.
- Interplant companion plants.
- Plant intensively or bio-intensively, instead of following standard seed package instructions to maximize small spaces.
- Try the square foot gardening method for urban container gardens.
- Rotate crops regularly to avoid pests making a home in one place.

Water

- Water early in the day during summer months. Water deeply 2.5 cm once or twice a week to encourage plants to grow deeper root systems.
- To figure out how much water your plants are getting, use a rain gauge or stick your finger deeply in the soil; the soil should be moist to the tip of your finger.
- Buy irrigation spouts from a nursery that are attachable to 2L pop bottles (cut the bottom off the bottle for an easy water tank) or try poking a few small holes in a large can and burying it up to its opening in the centre of a planting mound.
- Plant water-loving plants, like lettuce, near water sources and plant more drought-tolerant plants, like tomatoes, further away from water sources.





Work with your weeds

- Weeds have many useful functions. They can tell you about your soil, be homes for beneficial insects, be traps for pests, bring nutrients to the surface of the soil for plants with shallow roots to use, be tasty to eat. They often add important minerals and elements to the soil, such as calcium, iron, magnesium, etc.
- Check whether a weed is invasive or really hindering your garden before you pull it. Suppress weeds just enough so that they don't overpower your garden (use cover crops and mulch to do this), but consider leaving a few, too.
- Compost weeds before they go to seed. Be careful of putting weeds that spread by rhizome or root into the compost pile.
- Some surprisingly useful weeds include: dandelion, yarrow, mullein, burdock, curly dock, clover, lamb's quarters, stinging nettle, plantain.

Pests and beneficials

- Plant "trap plants" to draw pests away from prized plants. For example, nasturtiums will trap aphids from tomatoes.
- Attract beneficials (pollinators, pest predators, etc) with plants they like.
- Find inventive and environmentally friendly ways of protecting plants (i.e. copper wire deters slugs and snails, plastic guards around the base of plants are great protection for cutworms).
- Hand-pick pests. Make home-made recipes (garlic, soap, chives, etc.).



Protect plants

- Use and reuse "floating row covers" to protect plants from some pests and when there is a frost warning. Fabric row covers help keep heat in and some flying insects out. When cold temperatures are predicted, place row cover over plants in the morning. The covers hold warmth that builds up during the day. Secure the edges with heavy objects, like wood or rocks. Plastic row covers are used to trap heat as well. Garden stores sometimes have these or you order them on-line (<http://www.leevalley.com/>).
- Use cloches or season extenders to grow plants in the cooler months.

Plant a little extra

- Plant a row for the hungry, be they people, squirrels or pests. You'll likely lose ~10% of what you plant, so plan for it!





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EVERGREEN'S ADVICE FOR VEGETABLE GARDENING

(content provided by our garden expert)

The Basics

Great vegetable gardens are built from the ground up. To help achieve high yields and great looking, great tasting vegetables, we have included a few tips to get you well on your way.

Choosing Vegetables

There are many varieties of vegetables and it can be overwhelming to choose. But here are a few you might try seeding or transplanting into your plot. While these tend to be successful, it is completely up to you and you can purchase and plant any vegetables that interest you.

The following are a list of the earliest-maturing vegetables so that you can enjoy your harvest as soon as possible:

Days to maturity under optimum growing conditions:

Vegetable	Early	Late	Vegetable	Early	Late
Bean, bush	48	60	Leaf Lettuce	40	50
Beet	56	70	Pea	56	75
Broccoli *	55	78	Spinach	37	45
Carrots	50	95	Squash	40	50
Cucumber, Pickling	48	58	Tomato *	60	90
Eggplant	50	80			

* This figure represents the number of days from transplanting an established seedling

How should I go about planting my seeds?

When planting seeds, follow the recommendations on the package for planting depth.

Interplanting and Companion Planting

Interplanting is a technique that takes advantage of the fact that some vegetables grow more quickly than others. For example, if you combine spinach and carrot seeds, the spinach will be ready for picking in six weeks, while the carrots will continue to develop.

Companion plants are plants that help each other by improving the soil with minerals and nutrients, attracting birds and other natural predators that will deal with harmful insects on plants, and repelling some pests. They can also attract pests away from prized plants, provide shade and improve taste. Three companion plants that can be interplanted are corn, pole beans and squash. Beans provide Nitrogen for the corn, corn provides a stalk for the beans to climb and squash leaves help shade the soil so that it retains more moisture. An example of a trap plant is nasturtiums, a favourite food of aphids. Note that a few plants also inhibit each other, for example beans and onions.





How much water does my garden need?

As a general rule, your garden needs 2.5 cm of water per week. Take into account rainfall and the fact that we will be providing maintenance three times weekly and watering the plots that require it. In addition, a moisture meter will be located in the shed so you can be sure that you aren't over watering.

Supporting Vegetables

Garden stakes can help support individual tomatoes or other tall plants. To stake, drive an 8-foot stake 12 inches into the ground. Vining crops such as peas grow nicely on lattice panels and stakes as well.

Harvesting

Most food crops reach their peak flavour and nutritional value when they are young and tender. For the benefit of all gardeners, please harvest your crops regularly to help keep down the frequency of "free pickers" who try to gain access to the garden in search of ripe produce. It will also minimize excess waste and garden rot.

As a general rule, avoid picking crops when plants are wet from dew or recent rain. This is when fungal diseases, various mildews and rots flourish and are most likely to spread because dampness makes them vulnerable to infection.

Communal Gardening Information & Etiquette

What constitutes a "working garden"?

A garden plot must be maintained, planted or mulched, and stay within its boundaries. Plots may not be consistently weedy, untended or filled with debris. Gardeners are expected to spend an average of at least five hours per week tending the plot during the growing seasons.

Keeping a Clean & Green Garden

Keeping a "clean & green" garden area helps to create an enjoyable place to work for all gardeners and is a delight for the community to see!

Gardening courtesy and communication

One of the main goals in community gardening is to work together or next to each other in relative harmony. Please be courteous in all interactions and work together to resolve any disagreements. Evergreen uses stepping stones to clearly divide all plots to help clarify the division of space amongst gardeners and encourage productive use by participants.

Respect of Municipal Property

It is important that you always respect your neighbour's garden plot and the rights of the community residents as well as appreciate the fact that this land has been made available for your personal use. Follow all guidelines, keep your area maintained as best you can and dump garden waste and garbage in the appropriate bins.





What to grow

This garden is intended only for the growth of vegetables and herbs. Growth for home consumption and donation are appropriate. It is not acceptable to allow quantities of produce to rot. No large structures, trees or large collections of non-plant items are allowed.

Water availability

Water in the garden can be accessed via the water barrel. Feel free to use a provided watering can to fill up with water and water your plot as necessary.

Tool care

Any soil that clings to your metal tools should be removed with water. Small soil particles and rust spots are easily removed with sandpaper. It pays to keep your tools in good working order. To keep the handle from drying out and splitting, rub it with linseed oil. Wipe off any excess oil so it won't get sticky. They will last much longer and will operate more efficiently if you do.

Please note that power equipment is not prohibited, nor is power provided for electric equipment. However, gardeners are provided with a number of key tools in their welcome kits along with a selection of seeds (kept in the shed) and various other supplies.

Role of garden managers

The hired landscaper/gardener and maintenance workers will act as garden managers and be responsible for the following:

- Keep track of plots that are used well, are neglected or are abandoned.
- Prune, rake and water plots that are lacking attention. Clean up around and maintain the immediate area that surrounds the garden structure.
- Help to resolve conflicts regarding garden site issues. A measure of logic and cooperation is always the best approach.
- Help provide volunteers to work on site projects and programs.
- Organize care for shared areas and assist with habitat areas.
- Serve as the main point of contact for the report of any vandalism, damage, issues and/or concerns.

Parking

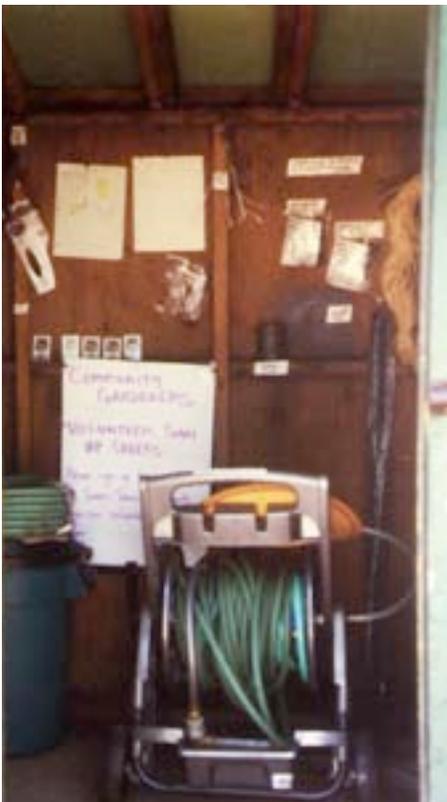
All gardeners are encouraged to walk, bike or use transit to get to the gardens, but should you drive, we ask that you use legal street-side parking.

Pets

Pets are prohibited in the garden.

Sale of grown goods

Produce grown through this program is not for commercial use and may not be sold.





Vacations or plot abandonment

If you plan to leave town and not attend to your plot for some time, it is recommended that you make someone aware of this (a fellow gardener and/or maintenance crew member). If you plan to leave town for an extended period of time and need to abandon your garden plot, then we ask that you notify us ASAP so that the plot can be well taken care of for the remainder of the gardening season.

Vandals and other garden pests

Grow an extra 10 percent. There is very little we can do about the occasional squirrel, raccoon or free pickers. However, we have done our best to put a fence in place to help create some security and hopefully deter this behaviour.





EVERGREEN'S RECOMMENDED PLANTING GUIDE

(content provided by our garden expert)

Community garden plot size

200 square feet (18.6 square metres)

- 60–100 square feet (5.6–9.3 square metres) is a good starting size in higher-density downtown areas of large cities.
- In smaller municipalities and suburbs, plots can range up to 1,000 square feet (93 square metres).

RECOMMENDED FOR COMMUNITY GARDENS

Focus on productive plants with higher economic value that are least likely to be stolen: basil, beets, beans, carrots, cucumbers, lettuce, peas, peppers, spinach, squash, tomatoes. Potatoes, chives and eggplants are reasonably successful as well.



Backyard plot size

60–100 square feet (5.6–9.3 square metres)

- A year's supply of vegetables and fruit for one person (320 pounds/145 kilograms) can be produced on an area as small as 100 square feet (9.3 square metres).

RECOMMENDED BACKYARDS

In your first year or two, try 5-10 easy-to-grow plants, like basil, beans, beets, carrots, chives, cucumbers, lettuce, potatoes, peas, pumpkins, rhubarb, spinach, squash, strawberries and tomatoes. In subsequent years, try adding asparagus, blueberries, broccoli, Brussels sprouts, cabbage, celery, corn, eggplants, gooseberries, peppers, raspberries and sweet potatoes.

Window boxes

1 square foot per sunny window (.09 square metres)

RECOMMENDED WINDOWSILLS

In a sunny windowsill, try basil, beets, carrots, chives, lettuce and peas.

Rooftop/balcony planter size

10 square feet (.93 square metres) per gardener

- This allows for a variety of pot or planter sizes for one individual. Smallest pots should have a minimum of 8–10 inches (20–25 cm) of soil.
- Use plastic pots instead of clay, to retain moisture and keep roots cooler.





RECOMMENDED FOR ROOFTOPS

For higher production projects, focus on heat-loving plants, like basil, beans, chives, cucumbers, eggplants, peppers, pumpkins, squash, tomatoes. For leisure container gardens, include a mix of shade-loving plants underneath sun-loving plants. These include heat-tolerant lettuces, as well as spinach and carrots. Early in your second season, try strawberries, lettuce and peas. Perennials like asparagus, blueberries, gooseberries, raspberries and strawberries should survive most winters.



Plant selection by hardiness zones and number of frost-free days

Perennials should be selected by their hardiness, or the minimum temperature they can tolerate. Hardiness zones for recommended perennials range from 0a to 8a, with zero representing colder areas and 8a being relatively mild (for Canada!).

Below are the zones for some common plants:

Raspberries	(0-8a)	Note: cover tips in zone 0-1
Strawberries	(0-8a)	Note: mulch in the north
Blueberries	(0-8a)	
Rhubarb	(2-8a)	
Gooseberries	(1b)	
Chives	(3-8a)	



To determine your zone

Annuals are selected by the number of frost-free days available. Check seed packages for information on the number of growing days needed. Some annual plants are frost tolerant and are able to grow well in the far north. These include peas, cabbage, lettuce, carrots, beets, broccoli, brussel sprouts, spinach and potatoes. Short season beans can be grown and, with greenhouse protection, tomatoes, eggplant, peppers and squash can grow well, too.

See the Plant Hardiness Zones of Canada map (<http://nlwis-snite1.agr.gc.ca/plant00/>).





EVERGREEN'S SOIL GUIDE

(content provided by our garden expert)

Test Your Soil's pH Level

The pH level is a measure of the acidity of the soil. The pH scale ranges from 1–14. The lower the pH level of the soil, the more acidic it is. Most plants prefer conditions of pH 6–7. Find pH test paper or pH meters at a garden centre.

Preparing the soil

Test soil to check its fertility, soil structure, pH and toxicity. (You can pick up a soil-testing kit from your local hardware store.) Healthy gardens come from healthy soil, which should be fed with compost (preferably made on site), green manure and sustainable amendments.

Double dig soil to make raised permanent beds, instead of rototilling soil every year. Double digging is a method of deeply working the soil, ideal for creating permanent raised beds of well-drained soil. It is useful in areas where drainage or weed rhizomes (such as morning glory) are a problem. It involves removing the topsoil, cultivating the subsoil, and returning the worked topsoil to its original location. It is a work-intensive process, but is only done once. A loose, very well-draining soil results, and the planting bed will only need to be worked lightly with hoe and fork in future years.

Permanent beds help the soil web develop and is healthier for plants and garden ecosystem in the long run. Move soil into mounds and valleys to create microclimates specific to the plants you are growing. To build mounds, dig a 30 cm deep, 1 m wide hole and refill it with compost (or a compost/soil mix). Then pile a mix of soil and compost over the refilled hole, until the mound is about 30 cm high. Sow seedlings or seeds and apply mulch around seedlings as they grow.

Build and protect the soil

In fall, sheet mulch to build soil, retain moisture and prevent weeds from growing. Sheet mulching is composting over a large area using locally available resources. It is a great way to kill grass and build soil over the winter. To sheet mulch an area, you'll need a combination of Carbon-rich materials (cardboard, newspaper, leaves, straw, finely shredded wood shavings) and Nitrogen-rich materials (compost, green weeds, grass clippings, aged manure). You need anywhere from 70–99% Carbon and 1–30% Nitrogen.

Grow cover crops or use mulch to cover the soil. Cover crops are used in three ways: as a green manure, as a living mulch and to catch nutrients that might be lost after main crops are harvested (i.e. they bind nutrients that might be washed away or, in the case of Nitrogen, be lost to the air). A great cover crop in summer is buckwheat, which acts as a green manure and living mulch. It also produces grain that humans or birds can use.

Cover crops may take more water, but can add Nitrogen and nutrients to the soil. Mulch reduces the need to water and weed in the summer, and protects the soil from harsh winter winds. Maintain or help stabilize soil ecosystem balance by avoiding the use of pesticides and fertilizers in the garden.





Feed the soil with compost, compost tea or Woop

Add compost to soil in spring or as a top dressing to plants.

Try compost tea or Woop instead of fertilizer to increase plant growth, provide nutrients to plants, increase beneficial organisms and suppress disease. They can be used either as a foliar application (sprayed on the leaves), applied to the soil, or on mulched beds.

Recipe: Compost Tea

Mix 1 part compost to 4 parts water in a large bucket. Leave enough room at the top for vigorous stirring. Stir the mixture, creating a vortex. Continue for 5 minutes, switching directions once in a while. Keep stirring like this, once every hour or two, for 3 hours to 2 days.

Woop—Organic Soil Booster

Evergreen is proud of an innovative new product called Woop, a high-performance, high nutrient, completely organic soil additive made from 100% worm poo. Spread Woop around the base of plants to get the best results.

It works to make your plants naturally beautiful by:

Improving soil structure

Like tiny pellets coated with a gel, Woop helps create spaces in the soil to allow better air and water flow. Woop also absorbs 5–9x its weight in water.

Increasing nutrient levels

During digestion a worm uniformly mixes nutrients and trace elements like nitrogen, potash, potassium, calcium, magnesium and others. Natural-source nutrients don't burn or harm plants like synthetic fertilizers can.

Adding beneficial plant microorganisms

As food passes through a worm, it is bombarded with micro-organisms that break down complex substances into plant-available nutrients. Micro-organisms are an effective pest repellent, deterring such things as aphids, white flies and spider mites. Studies show that soil with worm poo produces an enzyme called *chitinase* that is offensive to these insects.

A little goes a long way

Packaged in 2L containers, Woop is created by millions of worms that turn Toronto's fruit and vegetable waste into a nutrient-rich soil booster. It decreases the need for pesticides and other fertilizers and is safe and easy to use. It's also *the* environment-friendly way to grow healthy, robust plants...naturally!

All proceeds support Evergreen's charitable work to bring nature to cities across Canada.

For product and ordering information about Woop, or to learn more about what you've read in these guides, visit

evergreen.ca