


The Compost Education Centre's Programs & Resources

Presentation Offered by Kayla Siefried
Interim Co-Director

January 23, 2020 City of Victoria Council Meeting

The Compost Education Centre is located on unceded and occupied Coast Salish territories, specifically, the ancestral lands of the Lekwungen speaking peoples, the Songhees and Esquimalt Nations.





**The Compost Education
Centre's mission is to
encourage composting,
local food security, waste
reduction & diversion, and
ecological conservation,
through education in
Victoria and throughout
the CRD**

A photograph of a garden bed covered in wood mulch. In the center, there are several large, ripening tomatoes in shades of red and orange. To the right, there is a cluster of small, bright red cherry tomatoes. In the bottom right corner, there are two daisy-like flowers, one white and one pink. The background is slightly blurred, showing more of the garden bed and some green foliage.

We achieve our mission by offering our extensive, accessible, public education programs that focus on community-based climate change adaptation and resiliency

- School Programs

- Onsite

- In Classrooms

- Adult Education Programs

- Onsite Scheduled

- Offsite Booked

- Healing City Soils Program

- Attendance at community events, hosting two annual plant sales and a garden party



Model Food Forest

The Compost Education Centre's site is a large food forest made up of smaller gardens called guilds. A guild is a light ratio grouping of plants that provide similar functions while being as mutually supportive as possible. The functions of a guild might include providing food, beauty, beneficial insect habitat as well as building and mulch materials. A guild before you is a model food forest designed to demonstrate how a guild can be used in a garden.



The many functions in our model food forest include providing mulching material, building, and insect habitat.

Centre





Compost
Education
Centre


1216 N. Park



Small informational sign for a tomato plant.



Small informational sign for a tomato plant.



Small informational sign for a tomato plant.



Small informational sign for a plant.





Compost Education Centre
2020 Workshop Schedule
FREE Workshops! Saturdays
10am-12pm

Composting Basics
Feb 1, Mar 7, May 2, June 6, Sept 12,
October 3, Nov 7

Worm Composting
Mar 21, Sept 19

Advanced Composting
Apr 18, Oct 17

Advanced Composting: Sheet Mulching
Nov 21

Soil: Really Important Tiny Lives
Apr 25, Sept 26

Composting for Small Spaces
Apr 4

SPECIAL EVENTS

Spring Organic Plant Sale
Saturday May 9, 10am-2pm

Annual General Meeting & Garden
Party Fundraiser
Saturday June 13th, 11-3:30

August Organic Plant Sale
Saturday August 8, 10am-1pm

2020 Paid Workshop Schedule
Register online: www.compost.bc.ca

| | |
|----------|---|
| Jan 25 | Winter Pruning |
| Feb 1 | Advanced Fruit Tree Pruning Techniques |
| Feb 8 | Planning Your Year-Round Veggie Garden |
| Feb 8 | Composting Toilet Systems |
| Feb 22 | Rainwater Resilience |
| Feb 29 | Boulevard Blooms and Street Greens |
| Feb 29 | Greenhouse Growing: Cloches, Hoop Houses, and Cold Frames |
| Mar 7 | Spring Planing: From Seed to Seedling |
| Mar 14 | Gardening for Garry Oak Ecosystems |
| Mar 28 | Grow Your Own Food 101 |
| Mar 28 | Soil Amendments: What and When? |
| April 4 | Making Herbal Tinctures |
| April 18 | Regenerative Agriculture for the Home Garden |
| Apr 25 | Garden Pests and Disease: Organic Solutions |
| May 2 | Creating an Herbal First Aid Kit |

2020 Paid Workshop Schedule
Register online: www.compost.bc.ca

| | |
|---------|---|
| May 23 | Indigenous Plant Walk |
| May 30 | Home Scale Solar Systems |
| June 6 | Late Spring Edibles in W̱SÁNEĆ Territory |
| June 20 | Native Bee Care |
| Aug 29 | Summer Pruning |
| Sept 12 | Herbs for Winter Wellness |
| Sept 19 | Hot Water Bath Canning |
| Sept 26 | Pressure Canning |
| Oct 3 | Food Preservation Zine Making & Canning Swap |
| Oct 17 | Fermented Hot Sauce and Salsas |
| Oct 24 | Perennial Vegetables |
| Oct 31 | Grow Your Own Mushrooms |
| Nov 7 | Advanced Mushroom Growing Techniques |
| Nov 14 | Fermenting Vegetables |
| Nov 21 | Plant Propagation |

Note: Our Saturday paid workshop times & prices vary. Please check our Eventbrite page, website or social media listings for workshop details.

We achieve our mission by maintaining our demonstration site for the public to observe and experience. The site includes:


- A wide variety of composting systems
- Organic vegetable and fruit growing
- Permaculture practices in action (model food forest, guilds, no till agriculture)
- Rainwater harvesting and storage
- Solar power & aquaponics systems
- Greenhouse and cold frame growing
- And a strawbale learning classroom

Organic Vegetable Gardens

These gardens demonstrate how to grow annual produce in several ways. They are organic gardens in which no chemical fertilizers, pesticides, or genetically modified seeds are used. The small space is maximized through intensive planting of a diverse array of crops which are often interplanted as companions.

Leaf mulch, straw and cover crops protect the soil in these beds over the winter, limiting compaction from heavy rains and nutrient loss due to run-off. Mulch also helps to keep moisture in the soil and prevent weeds during the growing season.



 **Compost Education Centre**

The Food Forest

different layers in this model food forest?



- Vine**
Makes efficient use of vertical growing space by climbing up tree layer.
- Shrub**
Makes use of space and light above herbaceous layer, keeps herbaceous plants from getting too aggressive.
- Ground cover**
Competes with weeds, provides medicine.
- Root**
Takes advantage of underground growing space.

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Maison Des Maisons

Edible Perennial Polyculture Garden

Native Plant Rain Garden

A rain garden is designed to capture and filter rainwater that flows off hard, impervious surfaces such as roadways and rooftops. The garden is dug down a meter and filled with layers of increasingly fine gravel, pea gravel, sand and finally soil and compost. The plants growing on top absorb storm water run-off and filter out any pollutants it may carry. In this way, the rain garden mimics natural processes to recharge aquifers and reduce flooding caused by large amounts of storm water runoff.

The native plants in this garden provide food and habitat for local species of birds and beneficial insects. They require very little care once established because they are well adapted to regional climate conditions. This garden also provides an opportunity to learn about First Nations uses of these plants.

As you can see, this garden combines the power of two great design strategies. It works to "slow, spread and sink" rainwater while providing much-needed habitat for native species.



Compost Education Centre



We achieve our mission by having

- Knowledgeable and trained staff available to the public
- A demonstration site that features an office and retail/resource library open 4 days a week all year long
- 20+ free educational factsheets available online and onsite
- Staff who respond to email, phone, social media and walk in queries
- Retail sales of compost bins, compost accessories, and local organic garden seeds
- Staff that attend approximately 30 community events per year





Cukes

Peas

Beans

Brassicas

Greens

Beets

Flowers

SWEET PEA

SUNFLOWER

COMPOST EDUCATION

Compost Ecology

Composting is a biochemical process, meaning that decomposition takes place as a result of biological life breaking chemical bonds. Microscopic organisms such as bacteria, actinomycetes and fungi chemically break down organic material via enzymes that they secrete. The decomposition process is finished by physical digestion through the digestion process of the soil.

Mulching

Mulching is the process of adding a layer of material to the surface of your garden soil. Whether you grow fruits and vegetables, flowers or perennial ornamentals, mulching is an important way of protecting and improving your soil. Without mulch, the soil surface is vulnerable to erosion, dehydration, loss of structure and compaction.

Urban Leaves

Leaves are truly one of the urban gardener's greatest resources. According to *The Rodale Book of Composting*: "...the leaves of most trees contain twice the mineral content of manure." This is because the extensive root system of trees allows them to draw minerals from deep in the soil. They are also high in fibre which aids in improving the aeration and crumb structure of most soils." In the Greater Victoria Area, leaves, along with other yard and garden waste, cannot be put out with the garbage, and in many municipalities leaf burning is prohibited. However, leaves have many uses for the home gardener and when used properly can greatly improve a garden's soil. Leaves can be used for composting, mulch, lasagna gardening/sheet mulching, potting soil, soil building, worm bedding, and chicken coop bedding. In most cities leaves are plentiful in the autumn and can easily be collected from yards, parks, and streets.

Trench Composting

Trench composting, or trenching, is a way of composting by burying food scraps directly in the garden. This method of composting is effective for materials that attract rodents such as meat, dairy, breads and cooked foods. It is also a safe way to compost pet waste. Trenching is a great way of depositing nutrients into your soil at the exact place where plants need it - at their root zones.

Effort Scale: 1 2 3 4 5
Easy Hard Involves some deep digging and a system for remembering where you buried your scraps.

Trenching is the act of burying your organic waste directly into your garden soil. The advantage of this method over conventional composting is that it enables you to compost meat, grains, dairy and cooked foods in addition to other kitchen scraps. Because these items attract rodents and flies, we recommend that you don't put them into your regular compost. By burying them in a trench you can avoid these problems, since rodents should not be able to access the material if it is covered by at least 30-45 cm (12-18") of soil. All you need is a shovel!

3. Protect the soil with a layer of organic mulch material (i.e. leaves or straw). Alternatively, you can also sow a cover crop to protect the soil from the elements and suppress weeds in the time it takes for the trenched materials to decompose.



Trenching is also a safe method for composting pet waste. Because the waste is buried in the ground, it is very unlikely to attract rodents or other animals.

Hot Composting

Hot composting is a process of rapid decomposition that takes place at high temperatures. This decomposition is performed mostly by bacteria adapted to working at high temperatures in order to break down organic materials quickly and efficiently. Hot composting allows for faster production of larger amounts of compost.

Backyard Food Waste Digester

Food waste digesters are the easiest way to compost any type of kitchen scraps, including hard to manage kitchen waste like meat, breads, dairy and processed foods. Since these food scraps often attract rodents, the enclosed, half-buried digester acts as a deterrent, keeping rodents out of your compost and away from your home.

Vermicomposting

Vermicomposting, or worm composting is an easy process that requires only a few simple components: some red wiggler worms, a ventilated bin, bedding for the worms to live in, food for the worms, and some time to harvest their nutrient rich castings. Once you have all the components in place, worm composting is easy! Vermicomposting is a natural, biochemical process which results in the decomposition of organic matter into a nutrient-rich soil-like product. This process is facilitated by bacteria, fungi, worms, and many other microorganisms. Decomposition is nature's way of recycling plants, animals and other organisms back into the soil that supported them when they were alive. When we compost our food scraps and garden trimmings, we are mimicking this natural decomposition process. The finished compost can then be used to improve the quality of our garden soil. Another major benefit of backyard composting is the diversion of compostable materials from the landfill, where they decompose in an environment without air and release greenhouse gases.

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Effort Scale: 1 2 3 4 5
Easy Hard Involves weekly maintenance (aeration) and monitoring (for moisture content). Your compost needs to be harvested one to two times each year.

- To keep your compost bin secure from rodents and other small animals, make sure it has the following:
- A secure lid
 - A bottom or baseplate (ideally with small holes to allow contact with the soil ecosystem while keeping rodents out)

Can I Compost? ... can be composted but some ... toward bins

Some Numbers:

- In 2019 we taught 217 school workshops to 5637 students and their teachers; **90** of these were in Victoria, more than any other municipality
- In 2019 we taught **89** workshops to adults reaching 1737 participants; **47** of these were hosted at the demonstration site in Fernwood
- In 2019, social media platforms & website received approx 450 000 unique interactions, and we responded to approx 6500 email queries
- 10 active volunteers, and 270 members in good standing
- In 2019 approximately 1250 people visited our demonstration site, not including those attending educational programs

Why am I telling you all this?

- We are soon to be operational on city lands, and wish for council and residents to better understand the range of services, programs and resources the Compost Education Centre has to offer
- Demand for our services and resources continues to grow and we require support in meeting the thirst for education and practical skill building on topics of climate resiliency, soil health, ecological conservation, waste diversion, waste reduction and local food security