

Gardening Without a Garden

A Beginner's Guide to Growing Food in Containers

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In 2009, when #1 of this guide was first printed, the Vancouver Island Health Authority defined food security as "a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes self-reliance and social justice".

A sustainable community food system improves the health of the community, environment and individuals over time, involving a collaborative effort in a particular setting to build locally based, self-reliant food systems and economies.

This guide was originally made possible by funding provided through VIHA's Community Food Action Initiative.

As part of ActNowBC, the Community Food Action Initiative (CFAI) aimed to increase food security for the BC population. The specific objectives they chose to accomplish this goal were:

- * increase awareness about food security;
- * increase access to local healthy food;
- * increase food knowledge and skills;
- * increase community capacity to address local food security;
- * increase development and use of policy that supports community food security.

Original funding for this project was obtained by the Blanshard Community Center, who also hosted workshops in the Spring of 2009 on container gardening; office space and research assistance for creating the original guide was provided by the Vancouver Island Public Interest Research Group (VIPIRG).

#2 of this guide was made possible by support from the Environmental Youth Alliance, in Vancouver, BC. This version (#3) was made to support food literacy work done by LifeCycles in Victoria, BC, Coast Salish Territories.

This guide was created by Matthew Kemshaw.

Please distribute freely
 March, 2014
 Victoria, BC
 Coast Salish Territories



Pricing Things Out

This is not a comprehensive price list by any means. Information is presented here to give you an idea of what things cost, and where you might find it.

Planters

ITEM	DISTRIBUTOR	PRICE
5 gallon pot	Hydroponic Shops	\$4
Wooden Trough Planters (Window Box Style)	Hardware Stores	\$30-80
8" Deep Ceramic Pot	Garden Stores	\$10-20
30" Deep Ceramic Pot	Garden Stores	\$40-80

Soil and Plants

ITEM	DISTRIBUTOR	PRICE
Sea Soil Container Mix	Garden Stores	\$9
Compost (Sea Soil ORIGINAL blend)	Garden Stores	\$7
Other Container Garden Soil Mixes (be sure to add some good compost)	Garden Stores	\$4-8
Seed	Garden Stores Farmers Market	\$3-5
Starter Plants	Farmers Market Garden Stores	\$2-12

You can build and/or salvage a garden of containers, amazing compost can be made from your waste, and plants give us their seed, year after year.

Troubleshooting

Just some places to help get you started. Google it.

Community Organizations

COMPOST EDUCATION CENTER
(250) 386-9676 - info@compost.bc.ca

LIFECYCLES PROJECT SOCIETY
(250) 383-5800 - www.lifecyclesproject.ca

Garden Instruction/Learning

HORTICULTURE CENTRE OF THE PACIFIC
(250) 479-6162 - info@hcp.bc.ca

GAIA COLLEGE
250-709-2229- info@gaiacollege.ca

Seed Distributors

WEST COAST SEEDS
1-888-804-8820 - www.westcoastseeds.com
Catalogue Available at Garden Stores

STELLAR SEEDS
www.stellarseeds.com

FULL CIRCLE SEEDS
www.fullcircleseeds.com - (250) 642-3671

SALT SPRING SEEDS
www.saltspringseeds.com - (250) 537-5269

VICTORIA SEED LIBRARY
www.gvpl.ca/seedlibrary

REBECCA'S GARDEN SEED
Moss St Market

SAANICH ORGANICS
Moss St Market

Finding the Right Pot

PLASTIC POTS

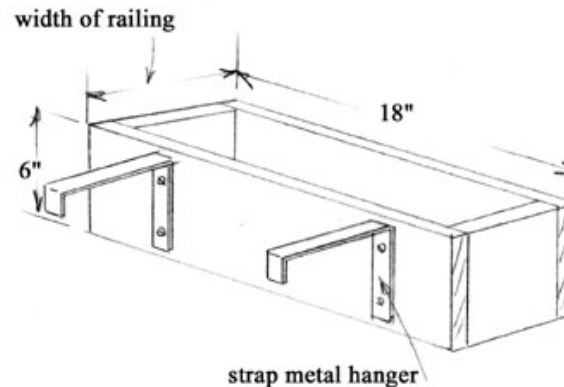
It is easy to acquire cheap 5-gallon circular pots. 5-gallon veggie oil drums can be salvaged from most restaurants and bakeries in town. Punch in a few holes for drainage and you're set! You can also salvage these from garden shops or buy them at hydroponics stores. 5 gallon pots are good for one tomato or pepper. They can be used to grow a variety of other crops as well.

TROUGHS

Most garden supply stores carry small wooden troughs, which are great for growing many herbs and leafy greens. It is also easy to create your own small trough using salvaged wood and a few screws. Be sure to use untreated lumber to ensure food does not become contaminated. Cedar holds up the best. Fir and spruce will not last quite as long, but will last a few years at least..

PURCHASING POTS

Almost every home hardware and gardening shop carries containers for planting. Think about what you want to plant and pick a pot that is suitable to your plants and budget. Thrift Stores may also have containers, and you can adapt any container to become a planter, just be sure that you punch some drainage holes in the bottom so you don't drown your plant (and don't put food plants in contact with potentially toxic materials). There are so many ways to make a container to hold soil. Just make sure that the plant you are putting in the pot will have enough space to grow to maturity in its containers. Lettuce needs much less space than squash! Check out the details to follow on some of the easier veggies to get you started and go from there!



This simple planter design can be adjusted to any size. Metal hangers can be used for smaller pots to hang them from windowsills or balconies, or planters can be placed on the ground or a table.

Finding the Right Soil

Healthy soil is ESSENTIAL to the long-term health of your vegetables. For plants to grow well in pots, you need soil that has **good moisture retention and lots of nutrients**.

Sea Soil Container Garden Mix

It's too bad that this is the best suggestion I can make for many people interested in getting started with growing vegetables in containers. This bagged mix is made with: fish waste from fish farms, wood waste from pulp mills, coconut husks, perlite, and some mineral additives. It is really THE ONLY bagged mix that has enough nutrients to grow vegetables in, so this is what I recommend to folks who don't have ready access to their own homemade compost.

Home Made Compost

This is the best! If you have it, use it. You can mix your compost with some coconut coir or a cheap bag of potting mix designed for flowers. Also feed your plants a little compost once in a blue moon as they grow.

Other Bags of Soil

You can buy all kinds of soil in bags at garden or hardware stores. Just know that these bags usually do not have enough nutrient to grow healthy vegetables. Mostly, they are designed for growing flowers. If you want healthy food plants, add some extra nutrients in the form of compost. You can buy Sea Soil's original mix, which has the nutrients you need to get you started. You can also buy fancy organic fertilizers and use them as directed.



Caring for Your Plants

PLANNING

- Check the back of seed packs to determine when the best time to plant is (most veggies can be **planted outside between April - May**)
- Leafy greens can tolerate some shade, and do not like direct afternoon sun (they prefer 4-6 hours direct sunlight per day).
- Fruiting vegetables such as tomatoes like sunny spots that receive lots of light (south facing windows and patios are best).
- Think about sunny vertical space where you can encourage beans and/or nasturtiums to grow.
- What about the animals? Think about a bird feeder, bee or bat box to encourage more animals to come visit your balcony garden.
- Draw up a rough plan of what you want to plant where (see below).
- When transferring plants from in-door, to out-doors, **harden them off** by putting them outside for a few hours during mid-day then bringing them in. Over a few days let them stay out a bit longer to adjust to the temperature change. Start leaving them outside after ~2 weeks.

WATERING

- This is SO IMPORTANT. Your plants will need water often.
- Put your fingers 5cm (2 inches) into the soil and feel for moisture. If the soil bed is not evenly moist, they need water.
- On average, plants should be watered **every second day** as they develop. (Hot days they will need to be watered more).
- Water **in the evening** time to ensure water does not evaporate.

FEEDING/FERTILIZING

- Plants in containers need lots of food to keep them healthy. Because there are only so many nutrients in your pot, it will be helpful to give your vegetables some extra food (nutrients).
- Most vegetables benefit most from feeding right when they start flowering. Spread a layer of compost around base of plant, or spread an organic fertilizer around plant.
- Herbs do not need as much feeding; greens need less than fruiting plants. If plants look "sad," give them a bit of compost.
- Watch your plants. If they start to look wilted, yellowish, or droopy ("sad") and nothing else has changed, they are likely in need of some compost or fertilizer.

Best Plants for Containers

INDOORS/OUTDOORS

BABY GREENS

You can experiment indoors with fresh greens, year round (though things grow really slow, if at all, in the winter). A sunny windowsill (south facing is ideal) in containers as shallow as 10cm (4 inches) deep! Plant seeds tightly, as close as 1.5" apart, to grow a dense carpet of baby greens.

- Loose Leaf Lettuces
- Mustard Greens
- Arugula
- Mizuna
- Kale
- Chard

Cut baby greens to 1.5" from the soil once they have reached 3-5" in height.

SPROUTS

Soak seeds overnight in canning jar filled with water. In morning, strain water from jar (larger seeds like beans should sit for up to 24 hours). Using a cheese or hardware cloth sealed onto the top of the jar, you can strain the water off in the morning and allow the sprouts to sit anywhere with light. Rinse the seeds once per day. Google: 'growing sprouts' for more info. Suitable seeds for sprouting include:

- alfalfa, clover, buckwheat
- mung, lentil, garbanzo, pea
- RAW almonds, filberts (hazelnuts)
- wheat berries, rye

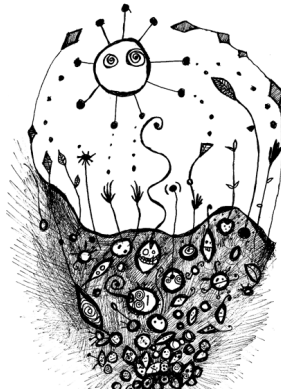
Seeds, beans, nuts and grains are available at local health food and grocery stores.

HERBS

Most herbs can be grown easily on sunny windowsills (again, south facing is best). Placing above the kitchen sink allows for easy harvesting at mealtime. You can grow the following herbs from seed in pots that are 20cm (8 inches) deep.

- Annual: basil, cilantro
- Biannual: chives, parsley
- Perennial: mint, lemon balm, oregano, thyme

Herbs can be grown from seed but it is a lot easier and a lot quicker to get a small starter plant.



Best Plants for Containers

OUTDOORS

HERB TROUGH

In a pot or trough 25-30cm (10-12 inches) deep you can grow a jungle of herbs. These varieties are perennial and delicious. Plant them ~25cm (10") apart. Some may live on you patio for many years.

- Rosemary
- Thyme
- Oregano
- Lavender
- Sage

Plant starter plants outdoors in early-late spring or fall. These plants can all grow to be several feet high and/or wide. You can space them close and let the duke it out, or give them room to grow into.

TOMATOS AND PEPPERS

Both need lots of sun, at least a 5-gallon pot, and lots of nutrients (compost/fertilize at least once when flowers start to emerge).

- Starter plants are easier - ask the seller to recommend a good variety for container growing
- Trim back excessive growth (if two branches try to grow out of one node, trim the smaller)
- Once plants start to fruit trim big leaves to encourage fruit development

Small, cherry tomatoes do a lot better in pots, as do smaller varieties of pepper (ie cayenne).

EDIBLE FLOWERS

The following flowers can be grown easily from seed or starter plant, provide beautiful color, and can be added to salads as a beautiful (and edible) edition.

- Nasturtium: climbing or trailing vine with beautiful flowers, both leaves and entire flower head are edible
- Calendula: happy orange/red flowers with edible petals. Grows like a weed and can work to protect your tomatoes from pests

Plant seeds in March/April in pot at least 20 cm (8 inches) deep.

STRAWBERRIES

Perennial. Need container 20cm (8 inches) deep.

- Plant babies from a friends plant or by starter
 - Plant out early-late spring or fall
-

Best Plants for Containers

OUTDOORS

LOOSE LEAF LETTUCES

Lettuces can survive well in partial shade. Mid day HOT sun can cause these plants to set seed, making them bitter. They can be grown in containers 30cm (12 inches) deep.

- Space seeds 5-10cm (2-4 inches) apart for dense carpet of baby greens or give space indicated on package for full size plants
- Plant outside beginning in March
- Plant lettuce, radishes, and Johnny jump ups together in a larger trough or pot for a colorful and yummy planter
- Stagger plantings every 3 weeks starting in March
- Plant cold hardy varieties early in season, moving to bolt resistant varieties in May-August

BEANS

Can grow in a pot 25 cm (12 inches) deep. Plant in May.

- Love to climb, so make sure you give them some string, a stake or a trellis to climb up
- Great way to utilize vertical space
- Bush beans can grow in shallower soil than runner beans

KALE AND CHARD

You need a pot that is at least 30cm (12 inches) deep. You can start planting seeds outdoors in April, or indoors in March.

- Thin plants to 15-20cm (6 inches) spacing once they are partially grown, favoring the most vigorous
 - Kale and chard can be continually harvested, take the oldest and lowest leaves to encourage new growth
 - You can grow plants for baby greens in a smaller pot or let them mature and get bigger
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Other Plants for Containers

OUTDOORS

PEAS

You need a pot at least 45cm (18 inches) deep. Most varieties can be planted outside in late February, and you can eat young pea shoots as salad greens or let them develop into big pods. Peas may mature before summer is over, so you can stagger your planting so that peas develop at different times through the summer.

- Plant seeds ~5-10cm (2-4 inches) apart
- Peas will want to climb, so making sure there is a post, net or trellis above them is key to their growth

CUCUMBER, BROCCOLI, POTATOES

These plants and their relatives need lots of space (5 gallon pot is too small) and lots of time to mature. They are not ideal for containers, though can be a lot of fun to grow.

- Broccoli isn't worth growing in containers, in my opinion
- Potatoes can be grown in a bag or box successfully. Google "growing potatoes in a bag" for more details
- Cucumbers will need a BIG pot, but can grow to be big plants - they climb and so can use vertical space. Ask around for good varieties for containers and you might get lucky!

I recommend you try these plants only after having some success with others listed in this guide.

TREES AND SHRUBS

Some dwarf fruit tree varieties are designed to grow in large pots. Fig trees are known to do OK in big pots. You'll need a large barrel style pot to grow a tree, but it can be a great way to add a canopy and real garden feel to your small patio.

- Buy a dwarf fruit tree or fig at a local nursery, at the Moss St. Market, or Seedy Saturday - happens every February in Victoria
 - Talk to the grower about appropriate pot sizes and tree care
 - Talk to growers about appropriate shrubs for containers
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