

# The Locavore's Garden

## Basic Vegetable Gardening in the Pacific Northwest

Some terms:

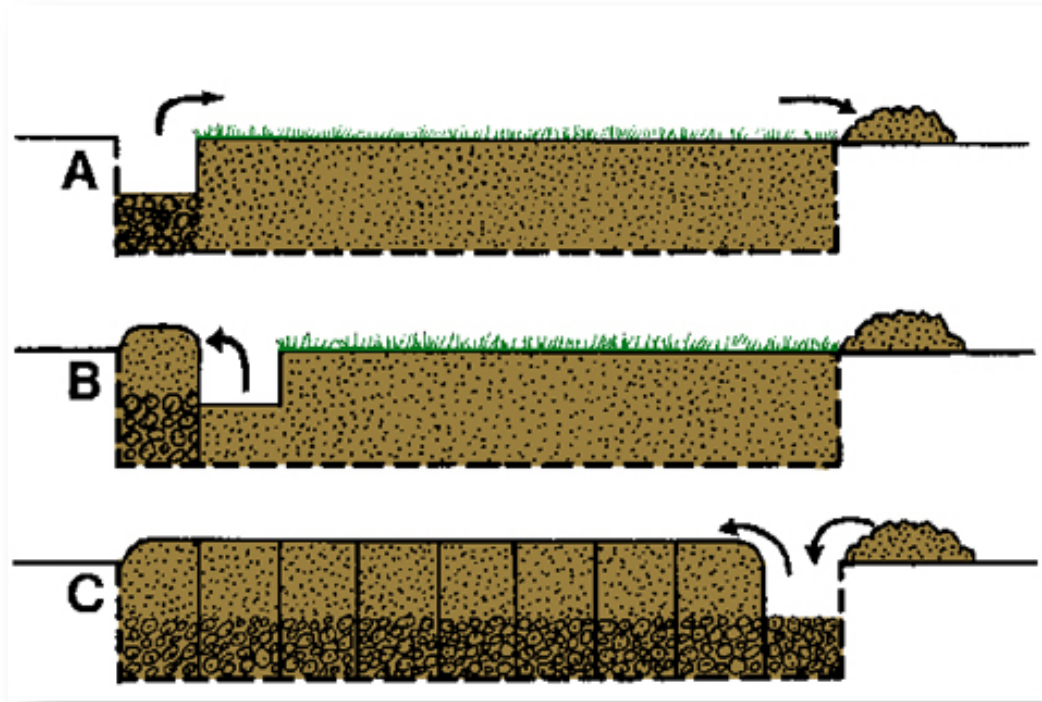
- Sow= to plant from seed. Direct sow=plant seeds directly in the ground rather than growing in pots for transplant.
- Cloche/coldframe=plastic, fiberglass or glass over low frames to create more warmth. These need venting on sunny days. Tunnel= large enough to walk into. Cloches and tunnels can greatly extend your seasons.
- Compost= (short description of a complex subject) compost is made by combining different forms of organic matter, i.e. leaves, kitchen scraps, sometimes poultry, cow or other manure, and containing it until it decays. It can then be used to add organic matter to the garden. Turning and aerating your compost will help it decay faster. Manure must be aged/composted before putting on the garden.
- Floating row cover=spun fabric that increases warmth, lets water, light, and air through, and protects crops from insects.
- Cover crops=annual crops grown to turn into the soil. These provide organic matter and some (crimson clover, vetch) provide Nitrogen, some (buckwheat, sweet yellow clover) bring up minerals. They can be cut down and turned in a few weeks before planting your crops.
- Open pollinated vs. Hybrid seed= Open pollinated seed refers to seed which was naturally pollinated by wind or insects. Seed collected from open pollinated plants will often be 'true', or just like the parent plant. Hybrid seed is the result of deliberate human controlled crosses, made to develop plants with specific traits. Seed collected from those plants will either be sterile or not breed 'true' but produce off types. All heirloom varieties (and many modern ones) are open pollinated. If you want to save seed for following seasons, you need to use open pollinated seed.



- Vegetable gardens need well drained soil rich in organic matter, sited in full sun. For gardening year round on heavier soils, building mounded or framed raised beds is helpful. If you have sandy soil that drains well, you can probably get by with ground level beds.
- Your site should be as sunny as possible, at least 6 hours of direct sun per day during the growing season. There are crops you can grow in less than full sun, but it does limit your selections. There should also be a reliable water source nearby.

## Soil preparation for new gardens if not building framed raised beds:

- Double Dig: Called the French Intensive Method, popularized by John Jeavons and Alan Chadwick: One moves and thereby aerates and loosens the top foot of soil while incorporating organic matter into the second foot and effectively deepening the top soil. These beds will need little tillage afterward and should stay relatively loose and friable.



*Double digging sequence*



*Meadow Creature Broadforks*

- Sheet Mulch: apply layers of cardboard or newspaper topped with organic matter such as compost or dead leaves, and leave it to kill the vegetation underneath. After 4-6 months, the cardboard/newspaper will have decayed enough to be worked into the soil along with the organic matter on top.
- Broad forking: One local source of broad forks is [Meadow Creature](#). Excellent quality and they are built on Vashon Island. They come in 12, 14", or 16" inch options and cost around \$200.
- Rototillers: very effective and relatively easy petrol powered soil tilling. Lots of options available, the nicest being [BCS](#). These retail for between \$1500 and \$6000 depending on the model.

## Fertility

- A soil test should be taken before you prepare your ground. Then lime and other mineral amendments can be incorporated when you work the soil. [Exact Scientific](#), in Ferndale, is a great local option, but somewhat pricy. Another local option in Burlington is [Simply Soil Testing](#). A third option is [Logan Labs](#) in Ohio.
- Compost: essential to add annually. Organic Matter levels in your soil are the key to plant health, and compost can be created a number of ways:
  - Compost happens—make a pile of organic materials, when it is a size which raises the temperature inside (usually 4' x 4' x 4' is a good size to aim for) leave it alone for a year.
  - Veggie Lasagna—for nicer compost and better nutrient retention, use equal parts 'brown' and 'green' in layers with stalky organic material such as sunflower or corn stalks or small twigs to encourage proper aeration. If you don't have the stalky material, lay plastic pipes with holes drilled often through the pile for aeration. This same concept can be used with animal waste (carcasses and manure) if done carefully and allowed to age at least a year.
  - Aerobic pile—regular turning or the incorporation of a large drainage pipe with a blower on a timer will increase aerobic bacteria populations and reduce pathogens from animal waste and increase nutrient retention significantly. For plans with a blower and pipe; search for 'ASP', Aerated Static Pile. Many good examples are online.
  - Bins—4' squared is an ideal compost pile size. A bin can be made from scrap lumber, pallets, or straw bales to contain compost while keeping good air movement. A very economical option is a 3' diameter tube 4' tall made from chicken wire or wire fencing and secured with two boards screwed on either side at the joint.
  - Vermicompost—Red wiggler earthworms can be utilized to decompose rich kitchen scraps and create very high fertility, well aerated compost. You can buy ready-made worm bins or find plans online to build one.
- Cover Crops—will break disease cycles, help retain nutrients, suppress weeds and add organic matter. In the case of Leguminous crops, they will also fix nitrogen.
  - Rye—Plant in fall, produces unmatched amounts of OM
  - Vetch—Plant in fall, fixes N all winter
  - Buckwheat—Plant once soil temps are 55 degrees, mines Phosphorus from the soil, produces large amounts of OM
  - Clover—plant almost anytime, can be used in pathways or among crops to fix N and retain soil tilth and nutrients
  - Lacy Phacelia—Plant almost anytime, will attract predatory wasps for aphid control, mediocre weed suppression



- Fertilizers—boost for those heavy feeders. Anything which requires continuous harvest will want supplemental feeding throughout the season. Incorporating organic fertilizers will supply slow release throughout the year and feed soil microorganisms. Liquid fertilizers or foliar feeds can be especially useful for a mid-season booster on a crop which looks a little pucky.

## Seed Starting

- Many plants are best planted from seeds. These include root crops including beets and carrots. Other crops, such as salad greens and cole crops like broccoli, can be done as transplants or as direct seeding. Some heat loving crops such as tomatoes and peppers are best done from transplants, to get a jump on the growing season.
- Watering is critical to success. For direct seeding, the area seeded should be kept moist until the seeds germinate. Allowing the soil to dry out can lead to crusting, which may prevent the seedling from emerging. Transplants should be watered thoroughly when planted, then kept moist to get them growing. If transplanting on hot days, you may need to shade the transplants to keep them from wilting.
- Plan on some form of irrigation. Installing a drip system and using timers will allow you to water without getting foliage wet, which is beneficial to many plants. It also allows you to irrigate early in the morning, which minimizes evaporation. The disadvantage of drip irrigation is germinating seeds, especially those planted in blocks. Using sprinklers or hand watering will be necessary in that case.
- Growing aids
  - Floating row covers are very light spun fabric covers which transmit both light and water. They can exclude insects, make a slightly warmer environment, and shade new transplants.
  - Cloches and cold frames are low structures that create a warm environment for shoulder season plants or getting heat loving plants going. They must be managed to keep plants from overheating.
  - Slitted row cover is a lightweight cloche material, clear to allow light transmission, but has slits to allow excess heat to vent as the cover warms with heat. At night, as the air cools, the vents close as the cover contracts with temperature.
  - Tunnels are larger structures that can be walked into, also for shoulder season and heat loving crops. They also must be managed to keep from overheating.
- Pest control can be necessary. Scouting, consistently observing your plants and soil is key to understanding whether a pest is present and catching it with an opportunity to quell any possible infestations. Hand pick small numbers of slugs and snails, or bait if necessary. Aphids can be treated with a strong jet of water or horticultural soap. Cabbage loopers can be treated with Bt (*bacillus thuringensis*).
- Rotate your crops. Rotating between families is ideal, i.e. do not plant members of the cabbage family in the same place every year. Ideally, rotations should be at least 3-5 years long. In reality, unless you have unlimited space, you probably cannot manage long rotations. Be aware that without rotation, soil diseases can become a problem.

## Timetable:

In the PNW, you can plant and harvest something most of the year. For basic, spring through fall gardening, below is a general timetable of what you can plant. One clue to planting-look at what kinds of starts are available at your local nursery, farm coop or grocery store. It's okay to buy transplants if you miss sowing seeds!

### *Mid February-mid March:*

- Sow cool weather crops indoors for planting out in late March to early April. This includes spinach, salad greens (lettuce, arugula, leafy mustards and Asian greens), swiss chard, broccoli, cabbage, kale and cauliflower.
- Sow onion and shallot seeds indoors; these will go out in April.
- Sow peas, shelling, snow or snap, outside. In warmer winters, peas can be sown as early as mid-February, but most years later sowings will catch up.
- Beets can be direct sown outside, but you can also wait until April. If you have well drained soil, carrots can also be direct sown.
- If you have a cold frame or cloche, you can sow transplants of lettuce, spinach and other greens out in early March.

### *mid-March on:*

- Sow radishes to eat with your salad greens.
- If you want to grow tomatoes and peppers from seed, start them now.
- Plant early potatoes now (and again in early June).

### *April:*

- Sow more salad greens, either in a cloche for faster growth, or out in the open garden.
- Sow beets and chard if you haven't already.
- Direct seed brassicas such as broccoli, cauliflower and cabbage. A floating row cover helps protect them from cabbage root maggot.
- Plant onion starts.
- Start basil inside to plant outside in late May.
- Late in April, start cucumbers and squash indoors. Grow them only 3-4 weeks inside before planting out- don't disturb their roots.

### *May:*

- Sow more salad greens!
- If the weather has warmed and frost danger is past, you can plant corn and beans. If they fail, you may need to replant later in the month.
- If you can plant in a cloche or tunnel, plant out your tomatoes. Later in the month, plant your peppers. Both of these crops appreciate the warmth a cloche or tunnel provides, and helps protect from rain borne diseases.
- Sow carrots if you haven't already, or a second crop.
- Plant out basil. Use a cloche if the weather stays cold.

### *June:*

- Start more salad greens.
- Sow Brussels Sprouts and fall cabbage early in the month. Other fall brassicas can be started the 2<sup>nd</sup> or 3<sup>rd</sup> week of June
- Plant late season corn.
- Plant out cucumbers and squash.

### *July:*

- Sow salad greens.
- Sow winter beets before mid month.
- Start a bed of fall/winter carrots. Choose a variety known for good winter ground storage, such as Autumn King or Merida.
- Sow overwintering brassicas (cauliflower, cabbage, kale) by mid-month
- Plant leek starts.

*August:*

- Sow winter salad greens and spinach first half of the month.
- Sow Arugula and hardy mustard greens second half of August.

*September:*

- You can still plant fast growing greens such as arugula and some Asian greens first half of the month.
- Plant garlic now until the ground freezes.
- Sow cover crops in empty spaces.

*October:*

- Plant garlic if you haven't yet.
- Plant cover crops in empty ground.
- Put cloches over fall/winter brassicas and greens; this will keep them in good condition longer.

**A few good sources for cool summer climate seed varieties:**

[Uprising Seeds](#)- Local organic seed company working with area farmers to produce quality seed of vegetables and flowers that thrive in our climate. Available locally at many nurseries and Food Coops

[Adaptive Seeds](#)- PNW grown organic, open pollinated varieties.

[Resilient Seeds](#)- Whatcom County seed company focused on dry beans and grains, along with storage crops and PNW climate friendly vegetable and flower varieties.

[Territorial Seed Company](#) Large Oregon seed company, good varieties for the PNW, available at many farm stores locally and online.

[Johnny's Selected Seeds](#) Maine company but many suitable cool climate varieties, good quality seed.

[West Coast Seed](#) Ladner, BC Canada Same climate, many Heirloom and OP seed varieties. Also a good resource for planting-timing charts.

[High Mowing Seeds](#), Vermont company. Many short season suitable seeds, all seeds are certified organic.

[Wild Garden Seeds](#) Oregon seed company. Mostly greens and herbs, all organic, heirlooms and open pollinated.

## Books and Resources;

Growing Vegetables West of the Cascades Steve Solomon  
Winter Gardening in the Maritime Northwest Binda Colebrook  
Maritime Northwest Garden Guide Seattle Tilth  
How to Grow More Vegetables John Jeavons  
The Resilient Gardener Carol Deppe  
The Intelligent Gardener Steve Solomon  
Teaming With Nutrients Jeff Lowenfels  
Teaming With Microbes Jeff Lowenfels  
The Humanure Handbook Joseph Jenkins  
Worms Eat My Garbage Mary Appelhof

## Some varieties we like, easy to grow:

### Salad greens:

Lettuce- Merlot, Flashy Trouts Back, Winter Density, Slo-bolt  
Spinach- Olympia, Tyee, Winter Giant (fall planting only)  
Mustards-Ruby Streaks, Golden Streaks, Giant Red  
Arugula  
Chard- Rainbow  
Mesclun mixes (mixes of lettuce and cold hardy greens, can be thickly sown and cut repeatedly for baby greens)

### Brassicas:

Broccoli- Umpqua, Nutribud, Di Cicco  
Cabbage- Too many to mention!  
Kale- Dwarf Siberian, Red Russian, Nero di Toscano  
Cauliflower- Snow Crown

### Peas:

Sugar Snap  
Sugar Sprint  
Sugar Ann

### Beets:

Early Wonder Tall Top  
Bulls Blood  
Cylindra  
Touchstone Gold

### Carrots:

Merida  
Autumn King  
Dragon  
Yaya

### Beans:

Pole- Helda, Musica, Northeaster,  
Bush- Jade, Provider, Carson, Dulcina  
Dry- Lina Cisco Bird Egg, Kenealy Yellow Eye, Becca Brown, Black Kabouli (Garbanzo),  
Black Coco, Jacobs Cattle, Speckled Cranberry

Tomatoes:

- Black Krim
- Striped Roman
- Stupice
- Black Cherry
- Legend

Sweet Corn:

- Bodacious
- Sugar Buns

Dry Corn:

- Cascade Ruby Gold
- Dakota Black (pop corn!!)

Potatoes:

- Yukon Gold

Onions/Leeks/Shallots:

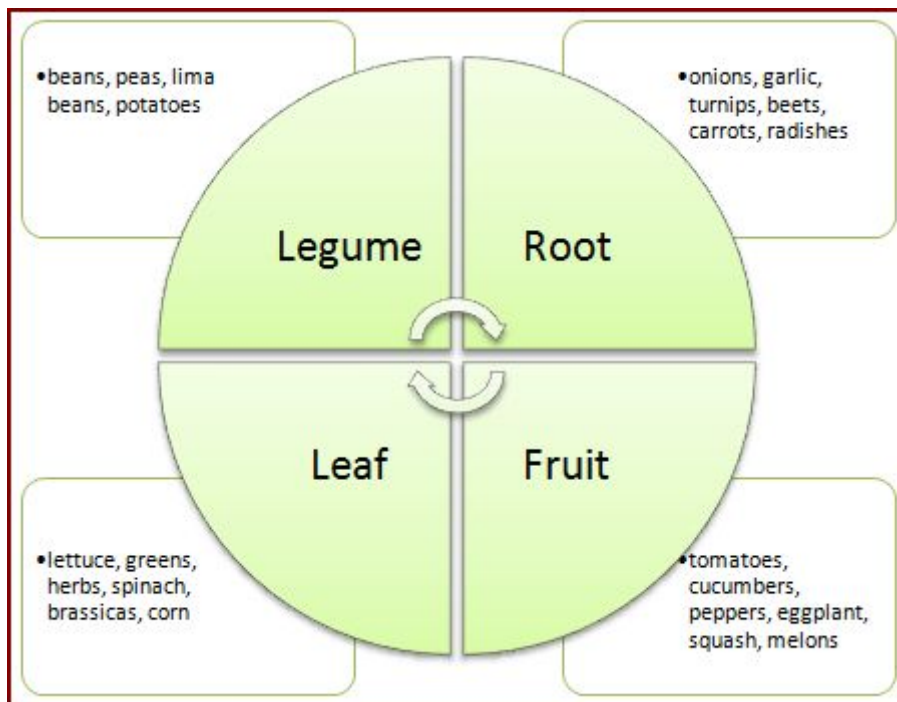
- Onions: Walla Walla Sweet, Copra (storage), Frontier
- Shallots: Ambition, Bonilla, Saffron
- Leeks: Lancelot, Sir Richard

Peppers:

- Sweet: Carmen, Tollis Italian, Golden Treasure, Krimzon Lee
- Hot: Early Jalapeno, Hot Portugal, Red Mushroom, Cheyenne

Other:

- Garlic- any variety, softnecks store the longest, hardnecks have great flavor
- Herbs- Cilantro 'Calypso', Basil 'Compact Genovese', 'Genovese', Dill 'Fernleaf'



Simple Rotation Diagram