

# Vegetable Gardening Basics - Part II

**Claudia Steen**  
Master Gardener



Peas on trellising

Part II will go into more detail on many aspects of vegetable gardening, so you will be well prepared to have an amazing vegetable garden.

## SOIL

This is the most important ingredient to a good vegetable garden - good soil is a must!

- Assess the type of native soil you have, is it clay, loam, or sandy? You need to know what you start with in order to know how to obtain the best soil for your vegetables.
- Assess the pH acid to alkaline, pH is best at 6.2-6.8. The Master Gardener clinic will be able to have a soil test performed.
- Use amendments to adjust the native soil using aged steer manure, limestone for alkaline soil (many soils in Eastern WA are alkaline), etc.
- There is a definite need for abundant organic matter to improve garden soil, as it holds nutrients better and makes the soil more porous
- You can buy commercial compost, steer manure, or topsoil by the truck load
- Or you can make your own compost – it is a great way to recycle garden and yard wastes
- The key is to balance food, water and air to favor growth of thermophilic microorganism that will break down ingredients into rich soil

## Compost basics:

- Have the compost area near the garden. The container should be a 3-sided structure of wood, straw bales, fence, or can even be an open pile
- You make the pile using a 1:2 ratio of green to brown materials.
  - Green = nitrogen or energy sources needed for fast microbial growth – grass clippings, chicken or cow manure, garden waste, coffee grounds, etc
  - Brown – carbon sources or bulking agents needed to aerate the compost pile – straw, sawdust, wood chips, corn stalks, etc

- Balanced agents – have both energy and bulking agent properties - deciduous leaves, horse manure, shrub trimmings (chipper to reduce the size is best), etc
- Layer the above items adding a shovel full of soil between layers which add the microbes necessary for decomposition
- The compost should be 3 feet high x 3 feet wide x 3 feet deep when finished
- Keep the pile moist but not soaking wet
- Turn the pile with a pitchfork
  - Fast compost: turn twice a week as it needs oxygen. The pile heats up in the center to a temperature of 120-150 degrees. The pile will shrink in size and be brown and crumbly in 4-6 weeks
  - Slow compost: need not be turned as often and may take up to 3-4 months
- When done screen the soil to  $\frac{1}{2}$ " to remove large pieces
- Apply as side dressing to plants or work into the top 3-4" of soil

### **Planting the garden:**

- It is important to select only seeds/plants that you or your family like to eat
- Start indoors from seeds in early spring if you want to get a jump start on the season
- You can also choose to use season extenders such as cold frames, wall of water, cloches, cut off gallon milk jugs with stopper off to cover the plants
- Plant cool weather crops outdoors after last frost date (5/1-15). You can pre-sprout larger seeds (use a damp paper towels in a plastic bag and choose the seeds that sprout)
- Plant warm weather crops when the soil temperatures warm up
- For several plants it is easier to use bedding plants (for example, tomatoes, peppers, squash, cucumbers, melons, etc). Know the Master Gardener plant sale is around the first week-end May, and we have an amazing selection of plants at reasonable prices
- Decide how much to plant of each so know production amounts
- Decide how you will use excess produce if there is more produce than you need
- Plant tall or trellised plants on the North side so they will not shade the shorter plants
- Know planting depth, planting distance, time to maturity, etc for each plant. It is very important to read the information on the back of the seed packet
- Plant perennial vegetables (for example rhubarb and asparagus) in a separate location where they will not be disturbed and they renew year after year
- Allow space for sprawling vegetables or put a trellis near the base of the plant
- Label all rows & plants, especially varieties or have a garden map with plant names.

### **Watering:**

- Water needs to be consistent yet adjusted to the weather patterns (the hotter the temperature the more water is needed), more water is needed by plants after planting, when they sets flower and when they set fruit
- Basic tenants of watering include water slow and deep best at 4-6" and water first thing in morning so leaves have time to dry
- There are many ways to water that often depends on garden style chosen: Row type is best by furrow irrigation or overhead sprinklers. Hand watering for containers. Drip

irrigation is BEST for raised bed, however it is costly and needs to be set up. Soaker hose can be used only if house water is used as irrigation water plugs up the lines

### **Fertilizing:**

- “Feed the soil not the plant” as we need to keep the microbes happy
- Three important components: Nitrogen – N is needed for photosynthesis, growth of stems & leaves, Phosphorous – P is needed for strong roots & ripening of crop, Potassium – K assists in production of carbohydrates and aids in resistance to disease
- Micronutrients include calcium, sulfur, magnesium, iron, etc
- It is nice to know the plants feeding needs, heavy, moderate, and light
- Fertilize every 2-3 weeks depending on need, a weaker solution more often is better than a stronger solution less often
- There are several types of fertilizers: read the labels for NPK ratio, for example, 20:5:5
- Chemical fertilizers are water soluble, fertilizers with higher nitrogen for growth and fertilizers with higher phosphorous for bloom
- Organic options include fish emulsion, dried kelp, and bone or blood meal
- Compost tea is aged horse manure that is put in burlap bag and soaked in water, then side dress the plants

### **Weed control** – these are the scourge of gardeners!

- Pull or hoe weeds when the soil is wet and when weeds are young as they are easier to pull. Older weeds can go to seed, and then you get even more weeds
- The “magic of mulching” has many advantages: it conserves water in the soil lost through evaporation, it insulates the plant roots from extreme cold & hot temperatures, it reduces the need for weeding and the garden looks neater
- Types of mulches include shredded bark, straw, grass clippings and plastic sheeting
- Place mulch around the plants (but not covering the stem of the plant) about 4-6” thick

### **Harvesting:**

- Experience or consult references when food is ready to pick or try sampling it until it is right for you
- Harvest early in the morning is always best
- The more you pick the more that will be produced

## **ENJOY THE FRUITS OF YOUR LABOR**

Learn from your mistakes and make changes accordingly for next year’s garden. Keeping a garden journal helps this process. And remember the WSU Master Gardener program is here to help you if you have questions OR attend our free Saturday class each month in our Heirloom Garden at the Greenhouse location.



Rhubarb is a perennial and stays in the same location



Lettuce under plastic at the end of the season to protect from the cold