

# Basic Vegetable Gardening

Vegetable Gardening has been a valuable livelihood for thousands of years. Until the past 50, or so years, we have been an agricultural society, dependent on ourselves, or those nearby, to provide our food. With transportation and refrigeration improvements, we have lost the interest in the origins of our food until recently. This form of gardening provides the most personal satisfaction and health benefits than any other. Welcome to “Vegetable Gardening”! Whatever your experience level, I hope we will learn a lot from each other.

## 1. Select a Site:

- Full Sun - 6-8 hours minimum required for growing any food
- Full Sun – 10-12 hours a day for tropical foods, as Tomatoes and Squash
- Pitch of the ground - the grade is important for drainage and
  1. Optimum sun reception
- General Environment
  - . Wind conditions
  - . Weather protection
  - . Sheltered area
- Soil Composition – is the soil sandy, clay, silt, rocks, or good top soil,
  - acid or neutral soil?
- Drainage – how does the water flow through the soil, or over the soil?
- Traffic of Native Animals – try to avoid problems in the garden
- View - from the house, from the road, etc. should be considered

## 2. Decide on the *Style* of Garden which is most practical for you:

- **Flat bed rows**
  1. 10 feet for beginners
  2. 25 feet for moderate experience
  3. 40 % of your space is lost to pathways
- **Raised beds** – for root crops and mounded crops
- **Framed Raised beds** – for all crops
- **Containers** – for small spaces, portability, convenience or for conversation
- Or a **combination** of all or many of these

## 3. Site Preparation:

Healthy soil has 45% minerals; of sand, silt clay and pebbles (or rocks), 25% air, 25% moisture, 5% organic matter. Percentages will vary according to the needs of the crops you are planting, so plan accordingly.

- A **soil test** – to test the Ph, mineral content and general quality.
  - Do you have sandy, clay or loam soil?
  - What is your **fertility**?
    - Need nitrogen – add Compost

- Need phosphorus – add rock phosphate
- Need potassium – add green sand
- What is your **PH**? Some vegetables need acid soil to grow well, while others require sweet soil to produce a good crop. Amenities should be added at least two weeks *before* planting your seeds or plants.
  - To **sweeten acid soil** requires lime or wood ash,
  - **Salt or chemical damage** requires Gypsum
  - **Sweet soil** will become acid by adding composted manures
  - **Root crops** require more sand in the soil
  - **Sandy soil** may require more organic matter for some crops
  - **Clay soil** may require the addition of sand and organic matter for other crops.
- Double dig the bed to 18 inches deep, or deeper.
- Construct beds or rows

#### A. To build raised beds:

1. Double dig the soil area for the bed
2. Mound soil from pathways on to new bed to remove topsoil from pathways and build up the bed.
3. Add soil enhancers to the soil of the bed as directed from soil test
4. Water the bed soil well - At least one inch of water
5. Let the soil rest for 1 to 2 weeks **before** planting to allow the soil to settle, allow the soil improvements to establish themselves in the soil, let the moisture level equalize in the soil and to establish a healthy bio system in the soil.

#### B. To build framed raised beds:

1. Double dig the soil area for the bed
2. Mound soil to center from pathway
3. Trench the perimeter of the bed, mounding the extra soil onto the bed, down to two feet, or more.
4. Fill the trenches with rubble stone, or trap rock to the soil level. Tamp down firmly. This will provide drainage of excess water to protect the wood frames. The trenches will also provide water for plants for up to three weeks after a rain and prevent burrowing animals from eating the crops.
5. Build frame to box soil in space, using 2X12X12 lumber, or other material. The frame should be no more than 4 feet *across*, as that is as far as is comfortable to reach to tend the garden. 12 feet is the maximum **length** of a bed, as that is the maximum distance to walk around when tending a bed.
  - 4 feet by 8 feet is a comfortable size.

- 4 feet by 12 feet is the maximum size I recommend per bed.
6. Set the frame on top of the rubble stone or trap rock trenches to prevent burrowing predators from eating your crops, hold water for up to three weeks after the rain and to protect the wood from excessive moisture to extend the life of the beds.
  7. Fill the sides corner of the frames with more trap rock to 1/2 way up the bottom level **of boards** (not the full area of the bed), to protect the wood from excess moisture and damage.
  8. Add soil enhancers and mix soil smoothing to the edges of the box, leaving a few inches of soil from the top for drainage.
  9. Water the soil well with at least one inch of water
  10. **Let the soil rest for 1 to 2 weeks before planting** to let the biodiversity and soil come into balance

#### 4. **Select your crops.** Consider:

- What foods does your family enjoy eating?
- What vegetables would you like to try introducing to your family?
- Do you want to have a cash crop?
- Do you want to have abundance to share with friends, neighbors and associates?
- companion planting,
- cold weather crops
- warm weather crops
- Perennial vegetables and fruits
- The amount of *time and energy you have* will also determine the size of your crops at the various times of the season. Try to be realistic and conservative, if you are just starting out.

Specific vegetables could include:

- The **Squash family** like sweet, rich soil, needs a lot of room, or needs much more tending in smaller spaces.
- **Tomatoes and Peppers** Need deep rich **acid** soil and a lot of attention.
- **Peas and String Beans** can share the same space at different times of the same year and prefer **sweet** soil.
- Root plants like **carrots and potatoes** require deep loose soil with extra sand.
- **Quick growers** (great for school gardens) include:
  - Peas
  - String Beans
  - Radishes
  - Leaf Lettuce
  - Spinach
- Slow growers with **big yield**:
  - Tomatoes
  - Squash family
  - Potatoes
  - Cucumbers

Warm weather plants will follow the cool weather crops, and then may be planted again in August for another cool weather crop for harvesting as late as November.

- **Cold weather crops** ( may also grow in the shade in warm weather):
  - **Peas** – plant by seed outdoors, usually around mid March, if the soil is workable and not frozen, or muddy.
  - **Broccoli** – start indoors and plant outside early April and again in August.
  - **Cabbage family** – plant in April or again in August
  - **Lettuce family** - Plant in April in the sun, summer in the shade, August in the sun and December in the house
  - **Kale** - Plant in April in the sun, summer in the shade, August in the sun and December through March in the house. Often this plant will continue to produce *outside through the winter*. The more frequently it is pruned back for harvesting, the more it will produce.
  - **Spinach** - Plant in April in the sun, summer in the shade, August in the sun and December through March in the house
  - **Garlic** – Plant cloves outside in October, or after the frost, mulch for the winter, harvest greens (scapes) in June, and harvest garlic in July. Garlic may be used around the perimeter of a planting bed or down the center row of a tomato bed to protect other plants from grazing mammals and to increase “garden real-estate”.
  - **Parsnips** – Plant by seed in April, harvest the following February or March for a sweet fresh vegetable in the cold months. These are best harvested in the cold months, as the sugar content increases.
  - **Carrots** – plant by seed, each week, late April to Mid June, then Mid August through September. Harvest through November, leaving some to be mulched with straw to save some to harvest in February and March.
  
- **Perennial Vegetables** – Those you plant **once** and they return year after year, and multiply year after year.
  - **Asparagus** – Plant in the first spring by plant, and then wait three years to harvest. This is a spring treat that keeps going!
  - **Rhubarb** – Plant the first year, and then start to harvest the second year through the summer and many summers to come!
  - **Egyptian Onions** – Plant the first year small harvest of bulblets first year, larger harvest the second year with greens, bulblets at various times, third year plants start to propagate rapidly. The base onion is also a sweet, narrow

onion. These are also called “Walking Onions”, because when not harvested in time, the stalk with the bulblets will bend down to the ground to take root, then start a new plant of 4-5 onion plants. These bulblets are also known as “Pearl Onions”

- **Scallions** – Plant first year, snip greens for salads, will propagate every year. Best used around the perimeter of the garden to keep away grazing mammals.
- **Jerusalem Artichokes** – Plant tubers first year in a sunny area, enjoy the sunflower tops. Harvest some tubers in the spring, allowing others to multiply for the following year.

There are so many more vegetables to choose from, but these are the most frequently requested. Each vegetable has its own needs for soil type, temperature requirements, water needs and soil type preferences to produce a good crop.

#### 5. Plan **your beds**:

- What plants will go in where you live *and* when?
- Map out your beds by seasons
  - Spring, summer, fall and winter
- Plan the various stages of the garden

#### 6. Start **planting** at appropriate times.

7. **Enjoy growing** your own food in the natural world around you. Enjoy the fresh air, sunshine and exercise you will experience, while providing delicious and healthy food for yourself and others!

**Decide in advance**, what your watering patterns will be and who will do it **regularly**. Consistent water and nutrition is important for steady growth and good production of food.

Consider mulching your plants with straw, shredded paper or crushed leaves to retain moisture, prevent weeds, maintain a more consistent temperature of the soil and provide food and shelter for earthworms and soil biodiversity who build your soil.

The best time to **water plants** is in the **morning**, because plants do not drink at night and do not like to be damp in the evening either. Mold and mildew spores thrive in dark, damp spaces. Watering in the morning pleases the plants and prevents mold and mildew problems.

**For a healthy garden**, it is best to check your plants *daily*. By keeping up with your garden, you are able to find problems as they occur and deal with them before they become unmanageable and discouraging. A daily walk through usually takes only a few minutes and can be a very relaxing time of the day. I try

to carry a bucket and pruners to tidy up the garden as I go. I often bring a harvest basket to collect anything that is ready to be collected, or I just nibble as I go and harvest at another time.

**Harvesting your crops** will be a daily task. The more often you harvest from the plants, the more they will produce. The more they produce the more nutrition the plants will require to keep up the pace. “Snacks” of a small amount of compost added to the surface of the soil every two or three weeks will make a big difference in the yield of the plants.

Try to keep some kind of a **journal** about your experience in the garden. This will help you to remember your progress (good and bad) in future years. Also consider photographing your garden from various angles throughout the year, each year, to see your progress. It will be an encouraging reminder, as well as help you to avoid the same mistakes in the future.