Introduction

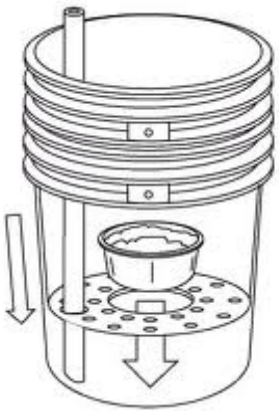
The Bountiful Backyard Gardens program brings you the joys of gardening and the ability to grow some of your own food. It is an introduction to gardening for you to gain experience and confidence so that you will be able to grow more of your food with each passing year.

One Bucket Garden Construction

- Use a food grade bucket:
  #1 PETE Polyethylene Terephthalate
  #2 HDPE High Density Polyethylene
  #4 LDPE Low Density Polyethylene
  #5 PP Polypropylene
- Cut the rim off the bucket lid so that it fits inside the bucket about 4 inches from the bottom. A jig saw or coping saw works well for cutting off the rim. In the lid: Drill a 2 ¾" diameter hole in the center of the lid (to hold the party cup.) Drill a 1 ¼" diameter hole in the lid about 1" from the edge of the lid (to hold the PVC fill pipe.) Drill many ¼" diameter holes about 1" apart in the lid (to allow water to drain and air to get to roots and microbes in soil.)
- Place three 4" tall spacers on the bottom of the bucket to support the lid. Place the lid on the three supports and secure them with a screw drilled thru the lid into the block. Mark on the outside of the bucket, where the lid sets. Drill 5-6, 3/8" diameter holes around the bucket, ½" below the height of the lid (to allow excess water to drain out and air to enter.)
- Measure the inside height of the bucket. Cut a 1" diameter piece of PVC pipe (either schedule 40 or thin wall irrigation pipe) the length to reach from the bottom of the bucket to the top of the bucket. Cut one end of the fill pipe on a 45 degree angle. (This aids water flow.) Place the pvc fill pipe into the 1 ¼" hole in the lid and rotate the lid so the fill pipe is positioned to not interfere with handle.
- Cut 6 slits in a 12 oz plastic, party cup (i.e. Solo) from about ½" from the top to about ½" from the bottom (to allow water to seep thru but not let soil escape.) Fill the party cup with compacted soil.
- Fill the bucket with compacted soil.

Two Bucket Garden Construction

- Use buckets of food grade plastic:
  #1 PETE Polyethylene Terephthalate
  #2 HDPE High Density Polyethylene
  #4 LDPE Low Density Polyethylene
  #5 PP Polypropylene



- Place the upper bucket inside the lower bucket and mark the bottom of the upper bucket on the outside of the lower bucket. Drill 5-6 3/8" diameter holes In the lower bucket about ½" below the mark for the bottom of the upper bucket (to allow excess water to drain and air to enter.)
- Remove the handle and the plastic hand grip from the lower bucket. Cut a 36" piece of 3/16" rope. Insert one end into the handle hole on the bucket on one side and tie a stopper knot (figure 8 knot works well.) Insert the other end of the rope into the plastic handle grip and then into the handle hole on the other side of the bucket and tie a stopper knot.

- Turn the upper bucket bottom upside down. In the bottom of the upper bucket, drill a 2 ¾" diameter hole in the center (to hold the party cup.) Drill a 1 ¼" diameter hole in the lid about 1" from the edge of the lid (to hold the PVC pipe.) Drill many ¼" diameter holes about 1" apart in the lid (to allow water to drain and air to get to roots and microbes in soil.)
- Remove the handle from the upper bucket.
- Place the upper bucket inside the lower bucket.
- Measure the inside height from the bottom of the lower bucket to the top of the upper bucket.. Cut a 1" diameter piece of PVC pipe (either schedule 40 or thin wall irrigation pipe) this height with one end cut on a 45 degree angle. (This aids water flow.) The pipe can be longer but it must be positioned to not interfere with the handle. Insert the pvc fill pipe into the 1 ¼" hole in the lid.
- Cut 6 slits in a 12 oz plastic, party cup (i.e. Solo) from about ½" from the top to about ½" from the bottom (to allow water to seep thru but not let soil escape.)
- Your bucket is ready for soil.
- There is a youtube video showing how to make the two bucket garden. www.Global Buckets.org

Bucket Garden Preparation

- Your Bucket needs to be filled with a mixture of 2/3 cubic feet potting soil and 2 cups of organic nutrients like GardenTone. These items can be purchased separately or you can fill your bucket at Spring Valley Nursery in Franklin for about $4. (2014)
- Fill the party cup and compact the soil to enhance water wicking and place in the 2 ¾" hole in the bottom of the top bucket.
- Fill Bucket with planting soil, also compacting it, to within 1 ½" from the top.

Plant Selection

The following table lists the plants that will grow well in your garden and how much space they will require. These spacing are closer than most gardens because the soil is very nutritious.

Planting Table

Name	Approximate Plants/SF	Height	Weeks from Seed to Harvest
Main Plantings			
Bean, Bush	9	12-18"	8
Cucumber	2	vine	9
Pepper	1	12-24"	19
Summer Squash	1 per 9 sf	bush	8
Tomato	1 per 9 sf	bush	17
Winter Squash	1 per 2 sf	vine	12
Interspersed with			
Basil	4	12"	
Carrots	16	12"	10
Lettuce	4	6-12 "	
Marigolds		6-10"	
Onions	16	12"	20
Parsley	4	6-12 "	14
Radishes	16	6-12 "	4

Source: All New SF Gardening p. 192

A 5 gallon bucket is about 1 ¼ square feet.

To plant a spring, summer or fall garden, there are catalogs with planting dates to identify when to plant for each season; eg, sowtrueseed.com/planting-guide for the Asheville area or johnnyseeds.com/t-interactivetools.aspx. Don't miss out on the fall planting!

Locate Your Garden

Most garden plants require 6-8 hours of sunshine a day. Locate a spot on your patio or yard where this happens. If you don't have 6 – 8 hours of sun, you can still successfully grow plants such as leafy greens.

Garden Layout

Layout your Bucket by selecting one plant from the Main Planting list plus several plants from the Interspersed list above.

Planting Your Garden

Locate where each plant will go in your garden.
The Main Plant will go in the center and the Interspersed plants will go around the Main Plant. Add water thru e pvc tpipe until water starts to overflow thru side hole. Repeat several times until soil is moist within 2" of surface.

To transplant established plants:

- Dig hole the size and depth of the pot.
- Place plant in hole so that top of potted soil lies just below the top of the hole.
- Fill rest of hole with planting soil dug from hole.
- Directly water plant thoroughly, not through the pvc pipe.
- Gently push soil around the plant.
- Water thoroughly again.

To plant seeds:
Using a pencil make a ¼" deep depression in the soil where each seed goes. Insert seed and cover with surrounding dirt. Water carefully so as not to wash away the seeds.

Garden Tending

Watering

- Week 1: Water your transplants and seeds directly (not through pipe) at least once a day preferably early in the morning by sprinkling water over the seeds/plants. Also, pour water into the fill pipe until water overflows through the side holes in the bottom. On sunny days which dry the soil, water again in the afternoon.
- Weeks 2-4: Continue to water seedlings daily, but transplants can be watered every other morning.
- Weeks 5 thru Harvest: Add water thru the fill pipe until water overflows the side holes.

Weeding
Pick weeds as you see them. They are easier to pick when young rather than after they mature.

Feeding: At your Six Week Followup Visit, your mentor will bring some organic, Chickity Doo Doo (composted chicken manure in pellet form.) This will be sprinkled on the surface and needs to be watered into the soil twice a week for 3 weeks.

Trouble Shooting:
If the leaves on your plants start to turn yellow, it is often a sign of either too much water or not enough water. It should not be due to insufficient nutrients.

If you see holes on the leaves, it is probably due to a pest. Pinch the pesky little pests or pick and drown them in soapy water. If they exceed your ability to pluck there are some organic sprays you can make with soap, garlic, hot peppers, etc. Contact your mentor for details.

Most importantly – enjoy your garden and the food it produces.

Internet References:

NCSU Home Vegetable Gardening - www.ces.ncsu.edu/depts/hort/hil/ag-06.html
Growing Vegetable Organically, UGA - www.caes.uga.edu/publications/pubDetail.cfm?pk_id=6141
SmartGardener.com
SquareFootGardening.com
Sow True Seed Catalog (www.SowTrueSeeds.com)

Books, many available at the public library:

Growing Fruits and Vegetables Organically, Rodale Press
Big Book of Gardening Skills, Gardenway Publishing
The Edible Salad Garden, Rosalind Creasy
Four Season Harvest, Eliot Coleman
All New Square Foot Gardening, Mel Bartholomew
Container Gardening for All Seasons, Barbara Wise