Urban Gardening

Darren Vance 9-27-2012

Opening questions:

• What is the difference between dirt and soil?

What does it mean to be a successful gardener?

Answers...

Opening Answers:

- What is the difference between dirt and soil? On a volume basis a good quality soil is one that is 45% minerals (<u>sand</u>, <u>silt</u>, <u>clay</u>), 25% water, 25% air, and 5% organic material, both live and dead. The mineral and organic components are considered a constant while the percentages of water and air are the only variable parameters where the increase in one is balanced by the reduction in the other
- What does it mean to be a successful gardener?
 One that learns from the previous season.

Garden Planning

- You need to consider soil, climate, season, personal taste, time and budget.
- <u>Try Try Succeed.</u>
- Location-Location-Location
- <u>Determine Type of Garden</u>
- Garden Space (Size)
- Work Force
- Garden Equipment

Try – Try – Succeed

- Experimentation is the key to success.
- What variety of plants to plant. Heirloom vs. Hybrid.
- Where to plant certain plants.
- When to plant, have back-ups for early plantings.
- Spacing, support, transplanting vs direct sow.
 A successful gardener is one that learns from the season to season.

Location-Location-Location

- Sun Exposure Garden should get 6-8 hours of sun year around.
- Drainage It should not be placed in the lowest location on your property.
- It should not be placed over grass. There should be a barrier between grass and garden.
- Access Avoid locations too close to trees, within 20ft, if it can be avoided. Pets.
- Aesthetics Will there be an issue with unsightliness during fallow or end of season times.
- Radiant Heat Too near to concrete structures, this can be balanced to provide cost/benefit to the garden.

Determine Type of Garden

Urban Gardens types:

Bucket /Bag Garden

Portability is an important aspect if you live in a home that does not provide optimal conditions for a stationary garden. Some of the issues that may require portability may include minimal access to sunlight, strong wind conditions or animal control.

Raised Garden

Good fixed location, high density planting, square foot planting. Separation from surroundings and good drainage.

Traditional Garden

Larger area gardening, mainly native soil.



Top: Square Foot Garden

Center: Bag Garden

Bottom: Bucket Garden





Garden Space (Size)

- How many places have enough light?
- Does it need to be portable?
- Do you have good soil on your property?
- How much experience do you have gardening?
- What do you want to grow?
- How big of a garden did you want to plant?
- How much do you have to spend?
- Physical limitations.

Work Force

- Don't plant a bigger garden than you can maintain.
- Mulch soil and limit weed growth and retain moisture. Leaves from your yard are a great, free source of organic matter.
- Learn to proper pruning techniques for various plants.
- Begin weeding early in the season and do a little every day so that it doesn't become an overwhelming chore.
- Group plants according to their water needs.
- Harvest often to promote increased production.
- Feed your plants as they grow.
- Provide support for those plants that require it. Tomatoes, Peas, etc.
- Remove dead or dying plants.

Garden Equipment

 Hand Trowel , Utility Bucket , Leaf Rake , Garden Rake , Watering Can , Work Gloves , Hose With, Sprayer, Shovel

• Watering system, Rototiller

Initial soil components (SFG)

- Square Foot recommendations:
- 1/3 Blended Compost
- 1/3 Peat Moss (Bails not loose.)
- 1/3 Vermiculite



Home Depot \$20.97



Lowes \$13.17

\$150-200 for a 4 x 8 garden plot

Compost:

Choose a mix of different types, at least 5.

•Most purchase compost is from a single ingredient, you need a mix.



Initial soil components (MLR)

- 25% Blow sand 75% Peat moss
- 75% saw dust 25% clean sand
- 15% Perlite 50% Peat moss and 35% clean sand.
- 50% Sawdust with 25% Styrofoam pellets and 25 % clean sand.
- Note: Any mixture of perlite, peat moss, sand and saw dust can be used, the actual composition of the medium does not matter as long as it drains well and stays aerated.
 - * I have found it difficult to find good clean sawdust, without glues, stains and paints.

\$100 for a 4x8 square + \$30 weekly feed**



http://foodforeveryone.org/fertilizers/ For the weekly feed mix.

Once mixed, the \$30 of weekly feed will last a full year for small gardens.

Initial soil components (Lower Cost)

\$80 for a 4 x 8 Garden + Weekly feed.

- 55% Peat Moss (4 Bails not loose.)
- 12.0% Vermiculite (1 Bag)
- 33% SANDY LOAM .20 Yards

Sandy Loam is 33% screened fill dirt, 33% mulch, 33% manure. Sandy Loam is A great medium for vegetable gardens and other applications that utilize the warmth and micro nutrients of manure.

Found at:

Pioneer Landscaping materials

2305 S. Higley Rd.

Gilbert, AZ 85295-4795



Watering Systems

- Soaker hoses clog and rot over time.
- Plastic landscaping hose time consuming to setup and change from spring, summer and fall.
- Flood watering- time consuming, a lot of water, manual unless you setup with a hose timer. Loss of area to grow due to furrows.
- PVC drill pipe on a timer = Best thing I ever did in my garden. 3 min a day, automatic watering.



This is not my system but it is similar.



Watering Systems Continued

The engineer in me surfacing – Science tidbit.



- Water in our area is considered "Hard" and is generally alkaline, close to 8 which increases the PH of the soil making it basic.
- Most plants prefer a slightly acidic soil, between 6-7 for nutrient absorption.
- The more water used watering the plants, costs you more and degrades the soil faster.
- Gypsum and Soil Sulfur are used to return the soil to normal PH levels.
- Soil test kits can be purchase for less than \$5 that will give you PH and soil nutrient levels.

http://www.thegardenhelper.com/soilPH.htm

Low Desert P	w Desert Planting & Harvest Calendar																	= Main harvest							
Brought to you b	bught to you by the Urban Farm, Matt Suhr and Greg Peterson K															Ε	Y		= Potential extended harvest season						
For information on o	information on classes and events offered on gardening and sustainability visit																	XX	= Ideal planting time						
our website at www.	website at www.urbanfarm.org and add yourself to our email newsletter																	X	= Good planting time						
or email Greg@urba	email Greg@urbanfarm.org or to contact Matt Suhr - happydirt@earthlink.net																		*	= Can be planted (with protective measures)					
																		t	= Set out transplants						
Crop	Hardiness Temp	J A N 1	J A N 15	FEB 1	F E B 15	M A R 1	м А R 15	A P R 1	A P R 15 1	M A Y	M U A U Y N	J (J (I N 15	J J J U N L 5 1	J U L 15	A U G	A U G 15	SEP 1	S E P 15	0 C T 1	0 C T 15	N 0 1	N 0 V 15	D E C 1	D E C 15	Comments
Artichoke Globe	20	* t	t * t	t	t							8=					X	X	XX	Х	X	* t	* t	* t	Light frost helps first year harvest.
 Jerusalem 	< 0	X	X	X	X	Х	X	X																	Can be invasive.
Arugula	15	ХΧ	(XX	X	*												*	Х	XX	XX	XX	XX	XX	XX	May be planted thickly.
Asparagus	< 0				X	XX	XX	Х	X	*								t	t	t	t				Don't harvest until 3rd year.

Here's a little taste of the free Low Desert Planting and Harvest Calendar you can get for free at <u>www.urbanfarm.org</u>.