



THERE ARE NO FAILURES IN GARDENING....

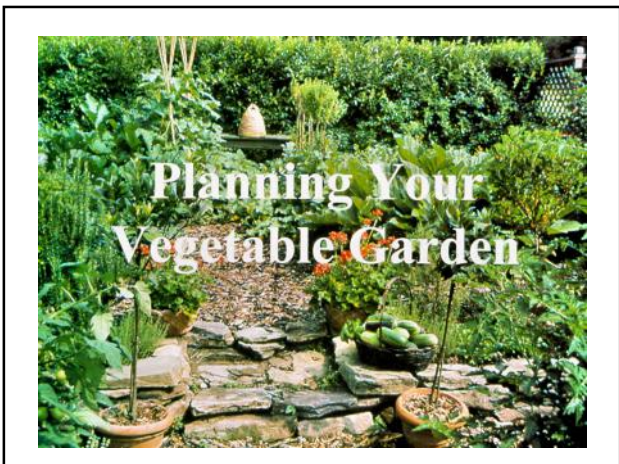
Only experiments which didn't work out

Fertility

Rotation & Reading

Experimentation

Diversity



Planning Your Garden

- Why?
- What?
- Where?
- How Much?

WHY?

- Freshness
- Flavor
- Savings
- Recreation
- Fun

What to Plant?

- Personal Preferences
- Regional Potential
- Value vs. Input
- Difficult (i.e. cauliflower) vs. Easy (i.e. radish, potatoes)
- Plant Maturity Timeframe (**READ**)
- Diversity and Experimentation**

Where to Plant?

- Land Availability – Competing uses
- Windowsill, balcony, containers
- Edges, Small or Large Plots
- Slope Aspect, Angle, Water, Proximity to House, Sunlight Duration

How Much To Plant?

- Family Size
- Preferences
- Plot Size and Land Availability
- Storage or Preservation?

TECHNICAL

- Seeds: Open Pollinated vs. Hybrid
 - (Not Genetically Modified)
- Life Cycle: Annual, Biennial, Perennial



Annuals

Plants which grow from seed and reproduce seeds and die within one growing season. Some tender perennials are grown as annuals.
Most salad crops, tomatoes, peppers, squash, peas, basil, beans, cukes



Biennials

Plants which grow from seeds one year, overwinter, and produce seeds the second year.
Most root crops – those which store well – like carrots, beets, onions, leeks



Perennials

Plants which live 3 or more years.
Asparagus, rhubarb, strawberries, raspberries, horseradish, rosemary, sage, and MOST WEEDS.

Site Selection and Preparation

- Aspect: Southeast to Southwest Best
- Full Sun – 8+ Hours Daily
- Good Drainage – both site and soil
- Close to Water and Home

Raised Beds – Box Method



–Double Digging



SOILS

- Sand – Large particles, drains rapidly, holds nutrients poorly
- Silt – Slightly smaller particles, helps other particles adhere
- Clay – Tiny particles, drains poorly, holds water and nutrients
- Loam – Combination of particles plus organic matter

pH – acidity or alkalinity of soil
 Most Douglas County soils are acid
 Only sure way to determine is with soil test and nutrient analysis

Most crops prefer slightly acid soils, pH ~6.0 to 6.5
 Potatoes, blueberries thrive in more acid soils
 Raise pH by adding ground limestone or wood ashes
 Lower pH by adding elemental sulfur

PH TOLERANCE OF POPULAR VEGETABLES				
← Acid		Neutral Alkaline →		
5.5	6.0	6.5	7.0	7.5
		Beans		
			Beets	
			Broccoli	
			Cabbage	
		Carrots		
			Cauliflower	
			Swiss Chard	
		Corn		
		Cucumbers		
		Eggplant		
			Lettuce	
			Melons	
			Onions	
		Parsley		
		Peas		
		Peppers		
		Radishes		
			Spinach	
		Summer Squash		
			Winter Squash	

CHOOSING VARIETIES

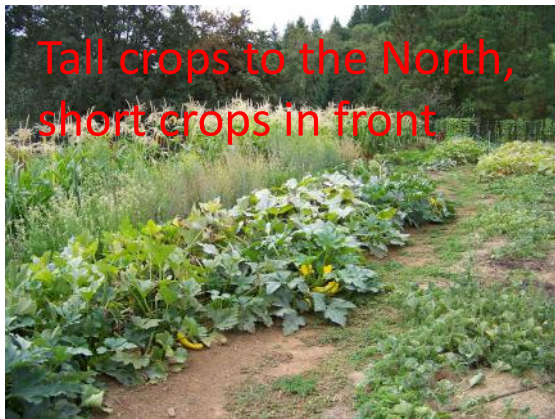
- All America Selections (AAS) good starting place
- Disease Resistance
- Days to Maturity
- Local Seed Companies
- Locally Grown transplants
- OSU Recommended Varieties
- Experiment each season**



Plant and Seed Placement

- Tall plants to North
- Perennials and Biennials separated from annuals
- Rotate from last year's plan**
- Wide rows in raised beds most efficient
- Succession Planting – later crop following early crop (can be same variety)
- Companion Planting – Varieties which thrive in each others company
- Interplanting – Crops planted between other veggies which will mature before companion needs that space or with complimentary growth
- Transplants for long season crops
- Direct seeding when soil temperatures are proper for that veggie (**READ**)
- Be aware of mature size to avoid gross overcrowding
- Proper planting depth printed on seed packet
- Hardening Off – gradually acclimating transplants to hostile outdoor conditions

Tall crops to the North,
 short crops in front



FERTILIZERS

N-P-K: Nitrogen, Phosphorous and Potassium, plus micro-nutrients

- Nitrogen for lush foliar growth
- Phosphorous for root and fruit development
- Potassium for plant strength and development
- Lime (calcium carbonate) allows fertilizers to be more available
- Organic fertilizers generally slower acting and more forgiving
- Chemical fertilizers usually faster acting, but shorter term and don't feed the soil – easy to over-apply
- MORE IS NOT BETTER – read the label!**

Fertilizer Bag Info

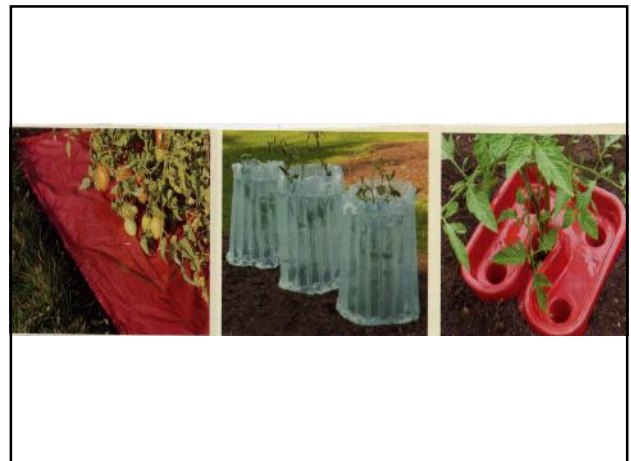


Chemical vs. Organic Growing

- Synthetic fertilizers give quick fix, but don't aid the soil
- Artificial pesticides may kill beneficial insects
- Herbicides may be non-selective, killing desired plants, and wind drift often carries them to unwanted plants
- Fungicides lessen rot when seeds are planted in cool soils
- Organic fertilizers feed the soil, which then feeds the plants

Temperature Modification

- Improper soil temp prevents good germination and development
- Some crops need cool soils, some require warmer soils
- Raise temperatures with plastic mulches, windbreaks, raised beds or shelters
- Lower soil temperatures with shading, organic mulches
- Spun Polyester row covers ("Remay"©) help raise temperatures & block insects





PESTS & DISEASES

- Prevention: Seedling sanitation, cleanup, crop **rotation**
- Resistance: Built in immunity or resistance
- Barriers: Spun Polyester fabric, fences, mesh screens
- Physical: Hand picking bugs, removing diseased plants
- Biological: Beneficial insects, selective organisms (B.T.), birds & snakes

TOOLS

INDESPENSIBLE TOOLS

Scuffle Hoe

Arrowhead Pointed Hoe

Small Hand Tools

Trowel, Fork, Weeder

Hori-Hori, Cultivator, Angle Trowel

Worthless Tools

Circle Hoe



Square Hoe



WEED CONTROL

- Mechanical – Pull, cut, till, or hoe
- Heat – Solarization, propane torch
- Smother – Organic mulch, plastic mulches, landscape cloth, rock/gravel
- Bio-friendly herbicides – Corn based
- Chemical – Broad spectrum, narrow leaf, broad leaf

CATALOG SOURCES

- Wealth of information, not just a sales tool
- Territorial (territorialseed.com) – Cottage Grove, OR
- Nichols (nicholsgardennursery.com) – Albany, OR
- Johnny's (johnnyseeds.com) - Maine
- Park (parkseed.com) – South Carolina

RECOMMENDED READING

- [The Basic Book of Organic Gardening](#), by Rodale Press
- [Encyclopedia of Organic Gardening](#), by Rodale Press
- [Sunset's Western Garden Book](#)
- [Square Foot Gardening](#), by Mel Bartholomew
- [Gardening for Food and Fun](#) – USDA Yearbook of Agriculture
- [The New Organic Grower](#) by Elliot Coleman, Chelsea Green Publishing

Additional information from OSU's website

<http://extension.oregonstate.edu/mg/>

Master Gardener Plant Clinic

Master Gardener booth setup at Umpqua Valley Farmer's Market

