

Sharon Billings & Dana Klimas Orange County Extension Master Gardener Volunteers February 22, 2020









Sharon Billings: Vegetable Gardening 101-The Basics for a Successful Spring Salad Bowl Garden

Dana Klimas: Vegetable Gardening 102— Special Tips from Experience

Questions: Please hold until end of both presentations!!!

Why Bother?



<u>Advantages</u>

<u>Home Garden</u>

- Saves \$\$\$
- Control of pesticides
- Source of hard to find vegetables (Kohlrabi, Chinese cabbage, horseradish, etc.)
- Quality & freshness superior
- Good hobby & satisfaction
- Exercise
- = better health

Spring Vegetable Garden

- Cooler weather
- Rain more plentiful
- Fewer insects
- Fast growing crops



*Homes and Land

Site Selection and Setup



- <u>Sun</u> 6-10 hours/day--some veg's tolerate less sun (spinach, lettuce, collards)
- Good Soil Drainage and Air flow
- Reliable <u>water</u> source—can use rain barrels
- Locate **near to house** for convenience
- Monitor frequently



Soil Preparation and Composition

- Texture needs to be crumbly (clay vs. sand)
- Possible soil amendments: compost (leaves, vegs, etc), vermiculite, perlite, manure, (lime & fertilizer)
- Good soil depth about 12"





Take soil samples to be tested at Orange Co. Extension Office

- Results will guide you on soil nutrient and pH needs
- pH optimum is 6.5; max. boundary 5.5-7.5
- Macronutrients: NPK (Nitrogen, phosphorous, potassium)
- Micronutrients: boron (B), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo), zinc (Zn), nickel (Ni) and chloride (Cl).





Planning Garden Location

- Size –can be small or large—Approx 25 sq ' ample for most families
- Options are a) traditional in-ground rows, b) containers, c) raised beds, d) row covers-hoop houses
- Right plant and right place—can be separate or incorporated into ornamental beds
- Gardening should be fun and manageable, not a burden
- Start small, improve soil, manage weeds, expand as needed

Plan a garden to suit your needs and capabilities

Small and Simple

Large and Complicated



NC State, Anne Moyer

Grayson, VA Landcare

A Deer-Proof Garden Design

******Raised Bed Gardens—"Outdoor Living Today"





Earth easy.com



My Mountain Garden Fries, VA



Key to success good planning

- Draw a plan
- For spring, need to select cool season crops
- Plant what you like to eat and can take care of
- Use the NC State home vegetable gardening guide
- Seed needs to be planted 2-3 X diameter into soil
- Run rows East to West with taller plants North



Garden organization

- Run rows across slope (if it is sloping)
- Trellis plants such as peas



- Rotation and succession plantings
- Planning crops, location, etc makes it easier to decide what to plant
- Keep a journal

Timing of Planting---Handout (earliest dates) Frost dates: March 22*, Apr. 9**, Apr. 22***

First Spring Planting







Second Spring Planting

Lettuce Cabbage Carrots Radish Turnips Arugula Cilantro Rutabaga





Last Spring planting group

Beets Broccoli Cauliflower Celery Swiss Chard Collards Kale Leeks Potatoes Parsley Spinach





Weeding, Watering and Waiting

- Reliable water source is critical (1 inch/week)
- When starting with seeds, need daily or every other day watering
- Transplants also need to be kept damp until acclimated
- Mulching—prevents weeds, holds in water, prevents erosion, cools soil temp.
- Mulches: organic or inorganic





Our animal opponents



Solutions:

- Fencing (18" Rabbit or 7' deer)
- Animal repellent spray on edging of plants

Spring Crop insect/disease management

Cabbage Looper





Solutions

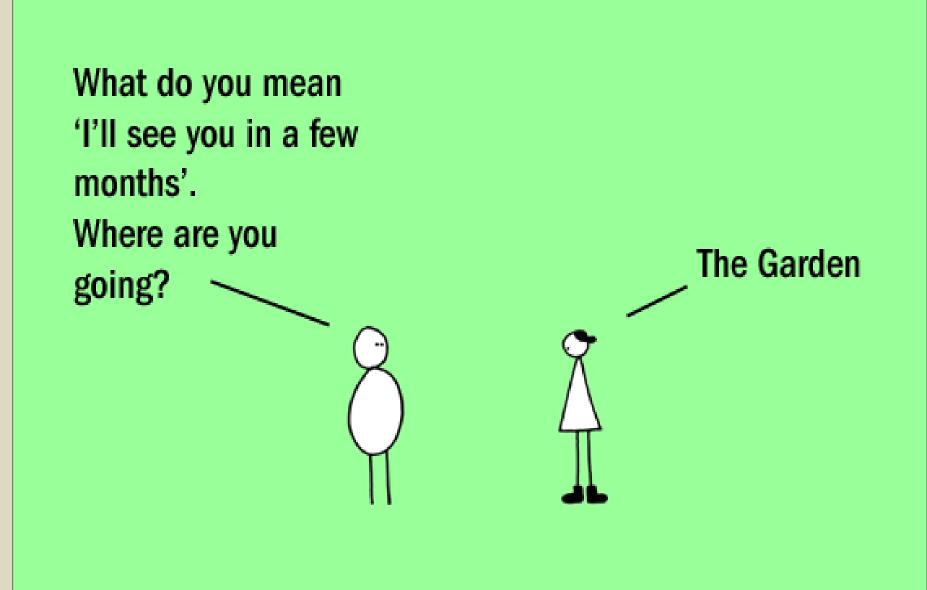
- <u>IPM</u>: Identify the pest, Learn about its life cycle, Try to prevent pest without using pesticides
- **<u>Pesticides</u>**: Bt, Sevin
- Remay cloth
- <u>Collars</u> for grubs
- <u>Resistant varieties</u>



Success!!!

 And now on to more tips from Dana, an expert in vegetable gardening

 Peek into her stunning Garden here in Hillsborough











Your garden should bring you joy—



And it should bring joy to others!







And as an added bonus—food









Grow your own salad bar

How do we achieved this diversity?





Transplants or seeds?

Transplants

Pros:

- Convenient, immediate impact
- Broccoli, cabbage, brussel sprouts and lettuce available at local stores

Cons:

- Limited choices, some not timely
- Have to rely on stores to maintain

Seeds

- More choices
- Can select for color, size, disease resistance, cold/heat tolerance, organic
- More economical
- Satisfying

More choices

















You can direct sow:













But, there can be problems:

- Variable germination
- Insect/bird pressure

And, then there is this problem—

• Thinning required



"The mere fact that you get a lot of seeds in a packet doesn't mean you have to plant all of them."

Henry Mitchell The Essential Earthman

Seed Starting Indoors using artificial lighting

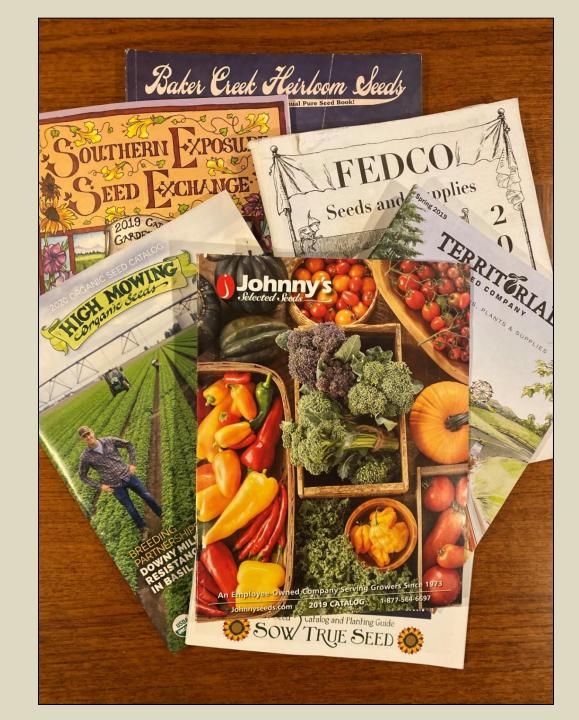
- Allows you to time your planting or jumpstart the season
- Grow exactly the number of plants you need
- Plants with greater root mass can tolerate the cold better











Extending the Season

Succession planting sow every ten days; works well for greens



Select seeds with different days to maturity



<u>Katarina</u>

Product Description:

45 days. Fast to mature, and absolutely delicious. This AAS award-winning cabbage produces, light green globes on compact plants.



Green Mariner

Product Description:

75-80 days. This superb green ballhead cabbage has its roots in Germany where it was bred to withstand cold winter weather.

Territorial Seed 2019

Choose varieties appropriate for the season

Fedco Seed Company Website

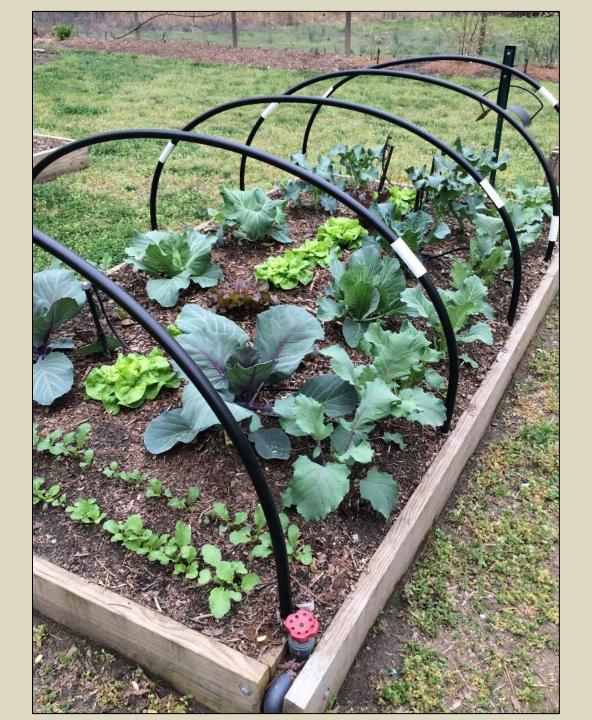
× fedcoseeds.com	T Save		
FEDCO	Winter Lettuce Mix	Log in to order 📑	
SEEDS	2931 Webb's Wonderful		
	2988 WINTER LETTUCE MIX		
	2740 OG Green Deer Tongue		
	2744 OG Really Red Deer Tongue		
About Ordering 🕶	2773 OG Hyper Red Rumpled		
	2786 OG Red Tinged Winter		
About Our Seeds 🔻	2788 OG Oscarde		
	2789 OG Merlot		
Seeds Library 🕶	2791 OG Tango		
	2793 OG Dark Lollo Rossa		
Ordering Deadline: October 31,	2805 Bronze Mignonette		
2018	2814 OG North Pole		
We will begin shipping seed orders on January 3, 2018.	2816 OG Winter Marvel		
	2849 Winter Density		
	2852 OG Pandero		
	2854 OG Blushed Butter Cos		
	2865 Rouge D'Hiver		
	2877 OG Marshall		
	2886 OG Winter Wonderland		
	2905 OG Cardinale		
	OG Brun D'Hiver (not in catalog)		

Provide frost protection





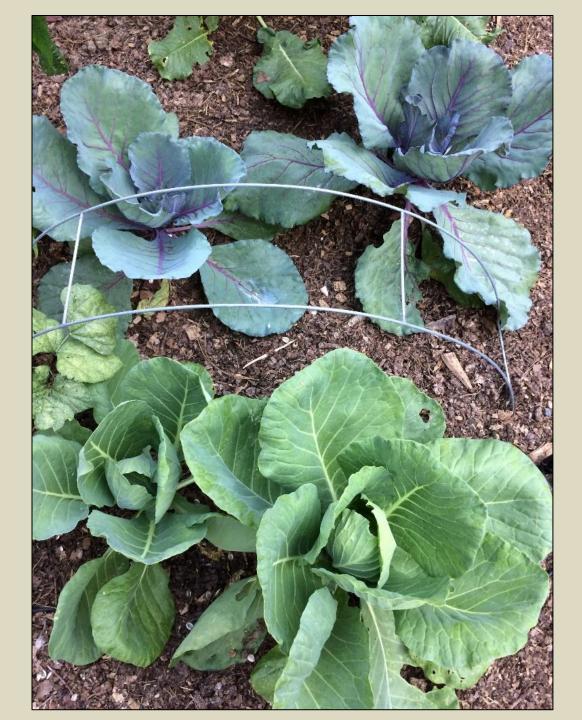


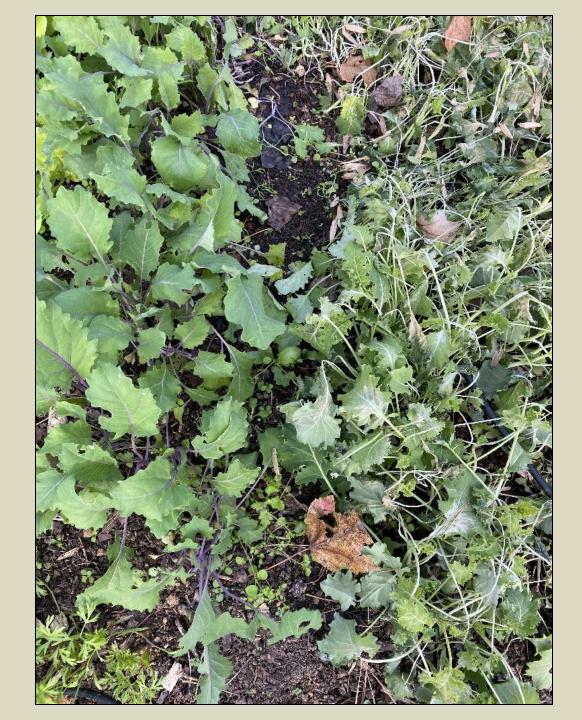


Rowcovers

- Non-woven, reusable fabric
- Prolongs the season
- Allows light, water, and air to pass through
- Can be an insect barrier









Rowcovers

Product	Purpose	Weight/ sq yd.	Frost Protection	Light Transmission
Agribon-19	Insect control Frost protection	.55 oz	2-4 degrees	85%
Agribon-30	Medium frost protection	.9 oz	4-6 degrees	70%
Agribon-50	Heavy frost protection	1.5oz	6-8 degrees	50%
Agribon-70	Extra heavy protection	2.0 oz	8+ degrees	30%





Using Mulches

- Can regulate soil temperature
- Reduce weeds
- Improves soil structure
- Prevent erosion

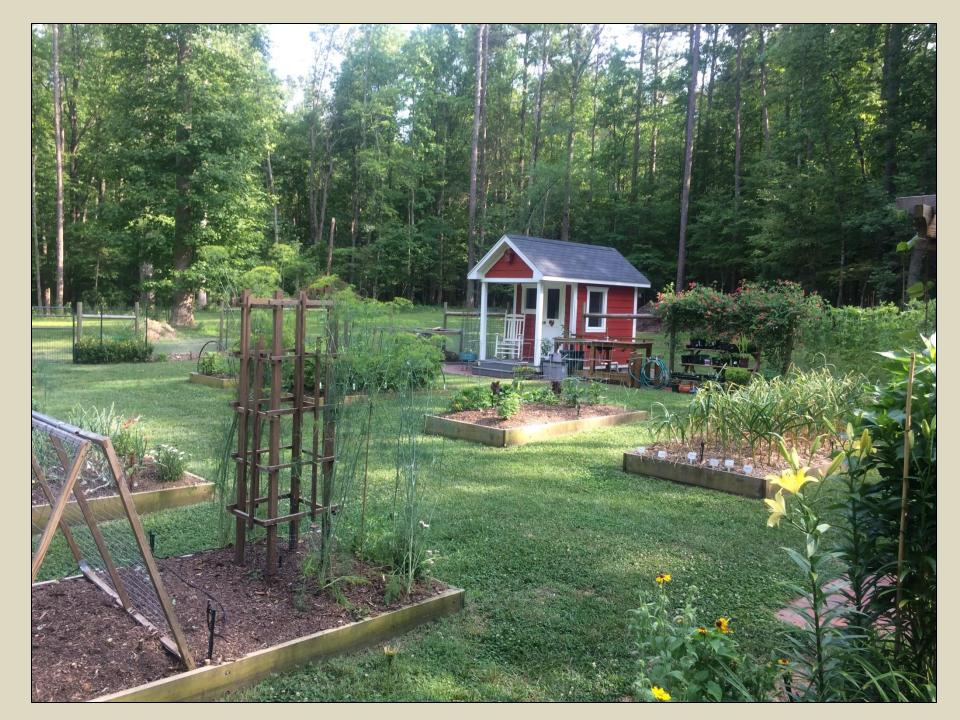
Wheat straw



Leaf Mulch







"The best fertilizer is the gardener's own shadow."



