

Square Foot Gardening Lesson Plans

Text: All New Square Foot Gardening, 2nd ed., by Mel Bartholomew

February 29, 2016

1. Get acquainted, Fill out questionnaire, Fill out SFG grid (leave one open for herbs/flowers) for vegetable choices, (I will pick up from Robert for handout next class. He will only have early veg. ready. Summer veg. won't be ready until 1st April.)

2. Explain choosing a spot for individual gardens: location - close to the house, sun, avoid trees and shrubs, avoid low places that might hold puddles of water.

**Best location is where you can see your garden more often from more directions.

3. Set up demo garden at NDOG -

Show how to mix the 3 ingredients using tarp. Can mix within the frame or in a wheelbarrow also.

Handouts: Intern Agreements
Soil Mix for Class
Daily Check List
Square Foot Garden Grid (and stickers if used)

March 7, 2016

Explain soil mix - 18" - Free Gardens

12" - We recommend

6" Book recommends

Initial class attendance

Hand out books,

Repeat notes from 2/29 for those who weren't in class. Stress watering.

Go over germination rates - Make copy for those who don't have books yet

Explain propagation. Handout seeds to everyone. Take plastic box and garbage bag to demonstrate green house effect. Explain germination rates and seed starting schedules - Do not sprout beans!

Heel in onions

Book, Page 262. Germination Rates

Handouts: 2016 Planting Schedule, Frost Charts

P. 129 Demonstrate sprouting - hand out: frost charts and 2016 planting charts for 10?

Explain difference between sprouting/planting (in six pack) summer veg, or directly in garden (spring, fall vegetables)

Go over grid - have everyone who needs to, to correct their grid & transfer to permanent grid.

Plant climbing vegetables on north side - tomatoes, cucumbers, muskmelons, small watermelons, pumpkins, pole beans.

Plant tall vegetables on north side of grid.

Planting: If plant is root-bound - soak in bowl/bucket of water until it sinks, then cut off the bottom roots, then plant in soil mix.

If plant is not root bound - water very thoroughly before planting. Make sure entire garden bed is thoroughly watered. Use "finger" test.

Next week: Installing Trellis Frame (Debra will install at NDOG)

Alternate Method of building frame

Pest Control - Row covers, natural spray solutions

March 14, 2016

Debra put frame together.

Installing trellis, where to buy poles and fence section, Debra will install at NDOG.

Alternate method (see book - p. 162 - take materials to show.)

2 5' length electrical conduit $\frac{1}{2}$ " diameter

1 4' conduit pipe - $\frac{1}{2}$ " diameter

2 18" long rebar supports - $\frac{1}{2}$ " diameter - drive 9" into the ground.

2 elbow connectors

1 trellis netting - show how to cut and tie

(Can also use 3' tall fence post and attach conduit with three pipe clamps.)

Tip on planting tomatoes: Lay the entire plant down along a 3" deep trench with only the top sticking up out of the soil. Cover with soil and train tip end up your trellis. Roots will grow all along the plant stem.

Recipe for natural spray solutions for pests

March 21, 2016

CHAPTER 1: INTRODUCTION Pages 10-30

Background of the early concept of square foot gardening:

1. What was wrong with the traditional single-row garden?
2. 3-foot isles: wasteful, inefficient, and backbreaking work
3. Why plan a garden space that is tilled, watered and fertilized, then not even used? In fact it is used simply as a walk-way. It becomes a haven for weeds and takes up 80% of the garden space.
4. 30-foot rows. Spaced 1 foot apart, do we really need 30 cabbages? Do we ever buy 30 cabbages at the grocery store at one time? So why do we keep doing it? Answer: Because that's the way we've always done it. How many seeds in a packet of leaf lettuce?
5. Traditional planting method: sprinkle 1 packet of seeds down entire row, then go back and thin to the desired space. Wasted seeds, wasted work
6. Solution:
 - A. Shorten the rows,
 - B. Plant Spacing: sow only required amount indicated by seed packet.
 - C. Add compost, manure, etc. only to area that will be used for growingAll 3 improvements reduce costs, amt. of work.

Everyone fill out grid, fill out questionnaire, pick up supplies, promise to get their garden spot ready before next class. Discuss planting schedule and frost dates.

March 28, 2016

Chapter 2: Pages 30-44

Ten major improvements

- A. Location - Close to the House
- B. Direction - Up, Not Down
- C. Soil - Mel's Mix
- D. Box depth - Only 6 inches
- E. No Fertilizer - You don't need it
- F. Easy Access - Above Ground
- G. The Aisles - Comfortable width
- H. The Grids - Prominent and Permanent
- I. Novel Idea - Don't waste seeds
- J. Expanded Opportunities - Tabletop Garden

April 4, 2016

Chapter 3 - Plan Your Garden Pages 44-56

- A. Size - How much is enough?
- B. Your Family- Your Garden - Ideal: 16 sq.ft. for each person
- C. Down to Size
- D. Start Small
- E. Overall Size of the Boxes
- F. Don't Forget the Aisles
- G. Draw it Up
- H. Location
 - a. Close to the House
 - b. Sunlight
 - c. Avoid Trees and Shrubs
 - d. No Puddles
 - e. Existing Soil
- I. Design
- J. Be Creative

April 11, 2016

Chapter 4 - Building Boxes Pages 56-69

A. Reasons to build boxes:

- a. Looks neat and tidy
- b. Organizes and simplifies your gardening chores
- c. Holds a special soil mix aboveground
- d. It's easy to add protective features
- e. Use cedar for longer lasting boxes
- f. For raised beds, use either 5/8 or $\frac{3}{4}$ inch plywood for bottoms

B. Other Box Materials:

- a. brick
- b. cement blocks
- c. prefabricated stone, or large rocks
- d. riverbed decorative stone

C. Special Structures

D. Railing Boxes

E. Pyramid Boxes

F. 2-3 level boxes

G. Extra deep Boxes for nice effects, or for Carrots, Leeks & Potatoes

H. Build a Grid or it's not a Square Foot Garden

- I. Using Blinds for a Grid
- J. Wood Lath for a grid

April 18, 2016

Chapter 4 - Structures - Pages 68-83

- A. Protecting Your SFG
 - a. Chicken Wire
 - b. Full Cage
 - c. Construction
- B. Covers
 - a. Clothespins
 - b. Protective Dome Supports
 - c. Covered Wagon
- C. Plant Supports
- D. Vertical Frames For Vine Crops
 - a. Air Rights
 - b. Nature Supports
 - c. Best Material
 - d. Tie it Tight
 - e. Winter Storage
- E. Composters
 - a. Make Your Own
 - b. With a Gate
 - c. Weekly Bins
- F. Isles
 - a. Grass, mulch, gravel, brick, even carpet

April 25, 2016

Chapter 5 - Mel's Mix, Essential for Square Foot Gardening Success

- A. The Perfect Soil
 - a. Don't Skimp On This
 - b. No More Details of soil structure required
 - c. No Fertilizer, No Mess
 - d. No Digging
 - e. Like a Sponge
 - f. Math 101
- B. Compost
 - a. Good and Bad

- b. What to Use
 - c. Needs Mass
 - d. Compost ingredients
 - e. Move your bin, then refill
- C. Practical Composting Tips
 - a. Mow those Leaves
 - b. Dry that Grass
 - c. Mix and turn
- D. If You Decide to Buy Compost
- E. Go Big Time
- F. Peat Moss
- G. Vermiculite
 - a. Save some for starting & planting seeds
- H. Perlite
- I. Mel's Mix by Volume
 - a. How to Mix
 - b. Using a tarp
 - c. Don't water until you're dumping it in the box frame
 - d. Using a wheelbarrow
 - e. Using your box frame

May 2, 2016

Chapter 6 - How to Plant Your All New Square Foot Garden

- A. Planting Square by Square
 - a. Visualize the Harvest
 - b. Small, Medium, Large, Extra Large plants
 - c. How Much to Plant
 - d. Dividing Your Squares
 - e. Planting Your Squares
- B. Time of Year
 - a. Seasonal Plants
- C. Hardiness and Protection With SFG
 - a. Frost Dates
 - b. Frost Date Websites
- D. Sequence of Growth
- E. Charts
- F. Plan on a Fall Crop
- G. Soil Temperature

- H. Spring, Summer and Fall Crops
- I. Starting Seeds and Growing Seedlings
 - a. Storage of Seeds
 - b. How to Store Seeds

Special Section: Children & SFG

- A. Square Foot Gardening With Children
 - a. Off to a Good Start
 - b. Boxed Fun
 - c. Growing a Child's SFG
 - 1. Radishes
 - 2. Lettuces
 - 3. Cherry tomatoes
 - 4. Bush Beans
 - 5. Carrots
 - 6. Corn
 - 7. Sunflowers
 - 8. Nasturtiums
 - d. The Tiny Hands Planting Plan
 - e. Watering
 - f. Enjoying the Crops
- B. What Did I Do Wrong?
- C. Keeping Records
- D. Moving Plants
- E. Drop a Pinch
- F. How Deep?
 - a. Too Deep Isn't a Problem

May 9, 2016

Time to Sprout

- A. Presoaking
- B. Indoor Seed Sprouting
- C. Presoaking
- D. Indoor Seed Sprouting
 - a. Starting Transplants Indoors
 - b. Seed Leaf
 - c. Lift By Its Ears
 - d. Trim the Roots

- e. Water Well
- f. Saucer-Shaped Depression
- E. Outdoor Seed Sprouting
 - a. Hardening Off
 - b. Regulate Sunlight and Heat
 - c. Can't Dry Out
- F. Spacing
- G. A Typical Garden
- H. Plans and Drawings
- I. Replanting
- J. Weeding
- K. Harvesting
- L. You've Learned the Basics

May 16 -

Special Guest - Kaycee Davis - Howard County Extension Agent

Chapter 7 - Growing and Harvesting

Rules: 1. Don't walk on your growing mix - tend your garden from the aisles. The advantages of not walking on your soil which packs your soil down: Plant roots need air and moisture.

2. Only three tools needed - a trowel, a pencil, and scissors; optional accessory - a kneeling pad

Since each area of the country has different pests and problems, use your County Extension Agent for answers to those questions. Bear in mind that they do not always subscribe to organic methods.

Preventing Pest Problems

Guide to Common Pest Solutions

3. Support your plants

Watering, Harvesting, Replanting

4. Weeds and other pests are not a problem

The make-up and design of square foot gardens eliminate many of the row-garden problems

5. Water the right way

May 23 -

Chapter 8 - Vertical Growing

Why? It saves space, grows better crops, adds a third dimension, costs less than you think, lasts for years.

Installing a Vertical Frame
Plants that grow vertically
Pruning Cucumbers, melons, tomatoes and more

May 31 -

Chapter 9 - Extending the Seasons

Lengthen the season by 50 Percent
Growing out of season
Extending Cool-weather Crops into summer
Using shade screens
Growing Winter veggies

Chapter 10 - Special Gardens and Gardeners

Wooded Yard, No Yard
Hills, Decks, Railings
Senior Citizens
Veteran's hospital, bedridden patients, deaf, blind, prisons
Gardening in Schools
Community Gardens
Group Projects
 Children's gardens, scouts, 4-H'ers, Master Gardeners,
 Botanical Gardens, Garden Clubs
Humanitarian Projects

Handouts:

Day 1 - Soil Mix for Class

Day 1 - Daily Check List

Pollinators - Birds, Bees & Flowers

Bolting & Biennials

Pollinators & Vegetable crops

Plants that need Pollinators

Open Pollinated, Self Pollinated, Heirloom & Hybrid

Practices that Help Plants From Freezing

Trap crops

12 Plants That Repel Unwanted Pests

Dealing With Ants

The pH Scale

Effects of Common Synthetic Fertilizers

When is Compost Finished?

Organic vs. Chemical Fertilizers

Cabbage Moths & Butterflies

Cool Weather Vegetables, Summer Vegetables

2016 Planting Schedule

2016 Last Spring & First Fall Frosts

How Many Seeds/Plants to a Square

Definitions of Some Common Terms

The Soil - NPK and Other Minerals

Plant Nutrients

Tips for Growing Onions With Large Bulbs

How to Make Compost Tea

Water Wand For Organic Pest Control

Potato Towers and Living Fence Posts