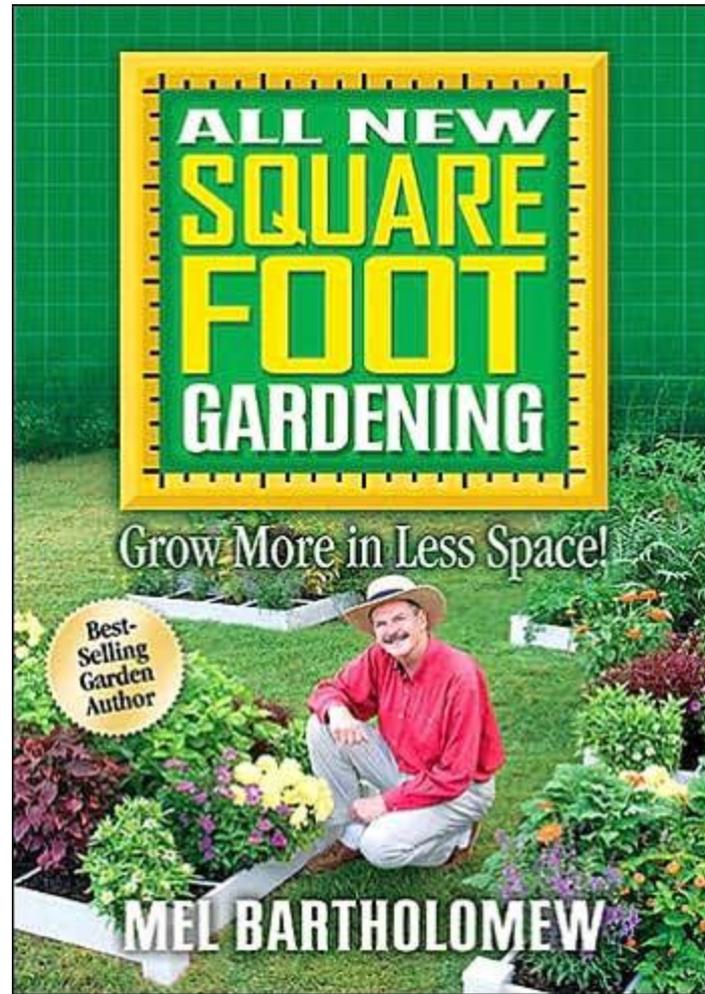


Square Foot Gardening

John Bird

Winthrop University Teaching and
Learning Center

April 4, 2013



**ALL NEW
SQUARE
FOOT
GARDENING**

Grow More in Less Space!

Best-Selling
Garden
Author

MEL BARTHOLOMEW



One 4 X 4 foot square garden, with tomato trellis

Why?

- Traditional row planting (TDR) takes too much space for suburban homeowners
- TDR uses more seeds
- TDR takes more time and effort
- TDR uses more water
- TDR produces more weeds
- Most importantly, TDR produces low yields when used in limited space

Why?

- Square foot gardening (SFG) uses minimal space—any homeowner can grow a good garden
- SFG takes less time and effort
- SFG takes less water
- SFG produces fewer weeds
- Easy to rotate crops
- Most importantly, SFG yields five times the crop in one-fifth the space

What?

- SFG uses raised beds of determined dimensions
- SFG is divided into square feet, not rows
- SFG uses quality soil to produce better yields and less effort

Where?

- Best placement of garden is a spot that gets 6-8 hours of sun
- Morning sun is better than afternoon sun
- A southeast exposure is optimal
- Close to the house, for ease of watering, tending, and harvesting
- Because of compact size, can be placed almost anywhere

When?

- In the Southeast, we can garden for three seasons, and sometimes even a bit in the winter
- A spring planting of peas, spinach, lettuce, beets, radishes, onions, and carrots
- A later spring planting of tomatoes, peppers, beans, corn, squash, okra, etc.
- A fall planting of spinach, lettuce, broccoli, cauliflower, collards, etc.

When?

- One of the great things about square foot gardening is your ability to plant constantly, in succession—when one square matures, plant another square with a different crop
- Following are two pages of planting guides from A. B. Poe Farmer's Exchange in Rock Hill, a great place to buy seeds and plants—click on the second to open

PLANTING CALENDAR

**A.B. POE CO.
FARMERS EXCHANGE**

322 South Cherry Road
Rock Hill, SC 29732
803-324-2925

MONTH	SOWINGS IN OPEN GROUND	SOWINGS IN HOTBEDS	MONTH	SOWINGS IN OPEN GROUND
JANUARY		Beet, Broccoli, Brussels Sprouts, Carrot, Radish, Cauliflower	JUNE	Snap Beans, Lima Beans, Beet, Stock Beet, Cabbage, Carrot, Collard, Cress, Corn, Cucumber, Endive, Lettuce, Melons, Okra, Pumpkin, Radish, Swiss Chard, Tomato
FEBRUARY	Asparagus, Asparagus Roots, Beet, Carrot, Herbs, Onion, Onion Sets, Leek, Irish Potatoes, Radish, Early Peas, Rhubarb, Roots, Spinach, Swiss Chard, Turnips	Broccoli, Brussels Sprouts, Cucumber, Eggplant, Lettuce, Onion, Radish, Tomato	JULY	Snap Beans, Beet, Broccoli, Brussels Sprouts, Cabbage, Carrot, Collard, Corn, Corn Salad, Cucumber, Scotch Kale, Lettuce, Okra, Pumpkin, Radish, Salsify, Stock Beet, Swiss Chard, Tomato, Turnip
MARCH	Artichoke, Artichoke Roots, Asparagus, Roots, Asparagus, Beet, Brussels Sprouts, Cabbage, Carrot, Cauliflower, Chives, Cress, Endive, Herbs, Horseradish, Spring Kale, Leek, Lettuce, Mustard, Onion, Onion Sets, Parsley, Parsnip, Winkled Peas, Irish Potatoes, Radish, Rhubarb, Roots, Sorrel, Spinach, Swiss Chard, Turnip	Cucumber, Muskmelon	AUGUST	Snap Beans, Broccoli, Brussels Sprouts, Carrot, Collard, Chard, Corn Salad, Dandelion, Kale, Mustard, Early Peas, Irish Potatoes, Radish, Spinach, Turnip
APRIL	Artichoke, Artichoke Roots, Snap Beans, Lima Beans, Beet, Broccoli, Brussels Sprouts, Cabbage, Carrot, Celery, Cauliflower, Chives, Corn, Cress, Cucumber, Endive, Horseradish, Leek, Lettuce, Melons, Mint, Roots, Onion, Onion Sets, Parsley, Parsnip, Winkled Peas, Pepper, Rhubarb, Salsify, Sorrel, Swiss Chard, Willow		SEPTEMBER	Snap Beans, Beet, Cabbage, Carrot, Cauliflower, Corn Salad, Cress, Kale, Lettuce, Mustard, Onion, Onion Sets, Winter Radish, Spinach, Turnip
MAY	Snap Beans, Lima Beans, Beet, Cabbage, Carrot, Celery, Chives, Cress, Cucumber, Kohlrab, Endive, Lettuce, Melons, Mint, Roots, Okra, Peas, Pepper, Pumpkin, Radish, Salsify, Squash, Swiss Chard, Willow		OCTOBER	Cabbage, Cauliflower, Lettuce, Onion, Onion Sets, Radish, Spinach, Turnip, Turnip for Salad
			NOVEMBER	Radish, Spinach, Onion Sets, Turnip for Salad
			DECEMBER	Radish, Onion Sets, Spinach

**AB POE CO
FARMERS EXCHANGE
322 S. Cherry Road
Rock Hill, SC
803-324-2925
Spring Vegetable
Planting Guide**

VEGETABLE species	Seed per 100 foot (ounces)	Rows apart (feet)	Set plants or thin in the row to (inches)	Planting Depth (inches)	Days to Germination	Days to Yield	Possible yield per 100 foot row	Time to Plant
Snap Beans, Bush	8	3	2-3	1 1/2	5-10	50-70	2-3 bu.	mid April
Snap Beans, Pole	6	4	5-6	1 1/2	7-14	65-80	4-6 bu.	mid April
Lima Beans, Bush	8-12	3	4	1 1/2	7-14	65-75	2-3 bu.	mid April
Lima Beans, Pole	6	4	5-6	1 1/2	7-14	80-90	3-5 bu.	mid April
Beet	1/2	2	3	1/2	7-12	60-75	300 roots	Feb
Chard, Swiss	1/4	2	12	1/2	7-12	50	100 plants	Feb
Broccoli	1/8	3	18	1/4	6-9	60-70	60 heads	Feb
Brussel Sprouts	1/8	3	18	1/4	6-9	70	60 qts.	Feb
Cabbage	1/8	3	12	1/4	6-9	65-100	90 heads	Feb
Carrot	1/8	2	2	1/4	12-18	60-75	500 roots	Feb
Cauliflower	1/8	3	24	1/4	6-9	55-65	50 heads	Feb
Celery	1/16	2	5	1/8	15-20	120-150	120 plants	Feb
Collard	1/8	3	18	1/4	6-9	75-85	70 plants	Feb
Corn	2	3	6-12	1	5-12	70-90	100 ears	April
Cucumber	1/2	4	12	3/4	7-10	60-70	400 fruits	mid April
Egg Plant	1/16	3	30	1/2	10-14	70-85	100 fruits	mid April
Endive	1/8	1 1/2	9	1/4	10-14	70-80	120 plants	Feb
Kale	1/8	2 1/2	18	1/4	6-9	70-80	70 plants	Feb
Kohlrabi	1/8	2	6	1/4	6-9	55-65	200 bulbs	Feb
Lettuce, Leaf	1/8	2	6-12	1/4	5-10	45-50	150 heads	mid Feb
Lettuce, Head	1/8	2	12	1/4	5-10	50-70	100 heads	mid Feb
Melons	1/8	6	12	1	7-12	80-100	200 fruits	mid April
Mustard	1/16	2	4-6	1/4	5-8	45-55	200 plants	Feb
Okra	1/4	3	12	1	8-12	55-70	2000 pods	late April
Onion	1/4	2	2-4	1/2	7-12	90-120	300 bulbs	Feb
Parsley	1/8	2	3-6	1/4	15-20	70-90	300 plants	Feb
Parsnip	1/8	2	4	1/2	15-20	90-100	300 roots	Feb
Peas, Garden	8	3	1-2	1	7-10	60-80	3 bu.	Feb
Pepper	1/16	3	24	1/2	10-14	65-80	400 fruits	mid April
Pumpkin	1/4	8	12	1	7-12	110-130	150 fruits	June
Radish	1/2	1	1-2	1/2	3-6	25-60	750 roots	Feb
Rutabaga	1/8	2-3	4-6	1/4	5-10	80-90	200 roots	Feb
Spinach	1/4	1 1/2-2	4	3/4	7-12	40-50	2 bu.	Feb
Squash, Bush	1/2	4	12	1	7-10	45-55	400 fruits	mid April
Squash, Vining	1/4	6	12	1	7-10	65-120	150-300 fruits	mid April
Tomato	1/16	3-4	24-36	1/2	7-14	75-90	400 lb. (8 bu.)	mid April
Turnip	1/8	2-3	3	1/4	5-10	50-80	300 roots	Feb
Watermelon	1/8	8	12	1	7-12	85-100	150 melons	mid April

How?

- Plan available space and choose layout
- Mel Bartholomew advises 4 X 4 foot beds, three feet apart



Four by four foot garden box

Bartholomew advises placing grids, which look like cedar slats to me—I think this cuts down a bit on usable space, and also causes problems when working the soil.



My Layout

I have four 4X8 foot boxes, with a three+ foot space between. I like using this small footprint, and I can reach across the space easily. Also convenient for watering. I built the trellisses for tomatoes and other vertical vegetables—more on that later.

How?

- I used 2 X 8 lumber, eight foot lengths
- I built the boxes twenty years ago, with pressure-treated wood (I would not use that now)
- I dug the ground underneath the boxes to 6-8 inches to give me a soil depth of over a foot
- I bought excellent garden soil and had a load trucked in—it takes years to amend our local soil for a raised bed

How?

- I have added compost, composted manure, and sphagnum peat most over the years
- Bartholomew recommends a mix of 1/3 blended compost, 1/3 peat moss, 1/3 vermiculite
- Important to have good soil—an investment in excellent soil now will last years, with amendments

How?

- I use a dibble to draw lines in the boxes (I have marks on the boxes to show me where the foot lines are)
- I subdivide the box according to what I am planting: sixteen radishes or beets or onions, four lettuce, one tomato (more on that later)



My box, ready for planting



Using the dibble to draw a line



Box divided into square feet



One square subdivided into sixteen to plant onion sets



Holes poked with dibble for onion planting



One square foot planted with sixteen onions



More square feet planted—after I draw the first square as a guide, I can plant the others by eyeballing it



Nearly half a box planted with onions—I will be coming around to give some away in the next few weeks!

How?--Spacing

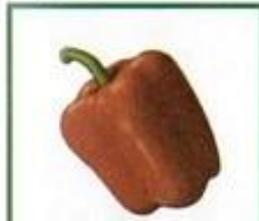
- SFG uses a formula to calculate how many plants or seeds fit into each square
- Radish, onions, beets, carrots—16
- Bush beans—9 (pole beans and peas—8)
- Spinach--9
- Lettuce, Swiss chard, parsley—4
- Cucumbers--2
- Tomatoes, cabbage, broccoli, cauliflower, corn, eggplant, peppers--1



Cabbage



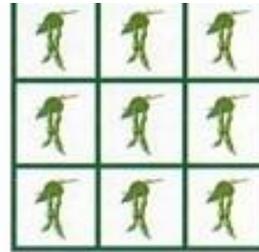
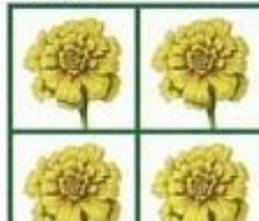
Pepper



Swiss Chard



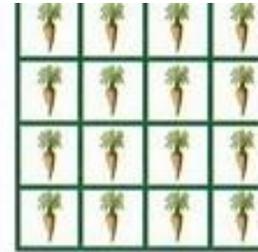
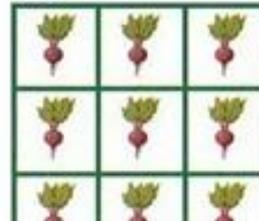
Marigold



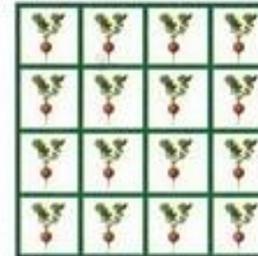
Spinach



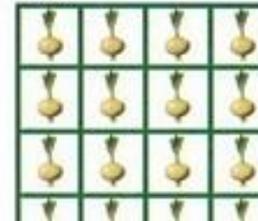
Beet



Radish



Onion



You can find numerous spacing guides online

SQUARE FOOT PLANTING GUIDE

 Arugula 16	 Dill 9	 Leeks 6	 Rutabagas 4	 Fennel 2	 Bok Choy 1	 Melons 1	 Rosemary 1
 Carrots 16	 Onions 9	 Bush Beans 4	 Basil 2	 Kale 2	 Brussel Sprouts 1	 Okra 1	 Sage 1
 Leaf Lettuce 16	 Parsnips 9	 Pole Beans 4	 Calendula 2	 Parsley 2	 Cabbage 1	 Oregano 1	 Summer Squash 1
 Radishes 16	 Spinach 9	 Garlic 4	 Celery 2	 Potatoes 2	 Cauliflower 1	 Hot Peppers 1	 Winter Squash 1
 Beets 9	 Turnips 9	 Kohlrabi 4	 Corn 2	 Swiss Chard 2	 Chives 1	 Peppers 1	 Sweet Potatoes 1
 Cilantro 9	 Peas 8	 Head Lettuce 4	 Cucumbers 2	 Thyme 2	 Eggplants 1	 Pumpkins 1	 Tomatoes 1


 Number denotes # of plantings per square foot

Another guide—Google images

Some of these numbers don't match up with what is recommended in the book.



Tomatoes, one per square foot

This spacing works best for indeterminate tomatoes.



Tomatoes with trellis—the slats on the top are spaced one foot apart

I tie twine along the bottom at the middle of each square foot, then tie to the top in the middle of each square. As the tomato grows, I twist the vine around the twine. No cages, no stakes—and it works! Also use the trellises for beans and sugar snap peas, same twine arrangement (no twisting)



Some people may find a higher bed more convenient.



You can go online and buy all sorts of square foot devices.

They make templates in all the different arrangements—or make your own. I find it easier just to draw grids and plant. Squarefootgardening.com sells all sorts of accessories, including tomato trellises. I would rather build my own!

Who?

- Everybody! From kids to the elderly, and all of us in between.
- My neighbors see me working in my garden and say, “Your garden looks so nice. I wish I had the time to do that!”
- It doesn’t take that much time!
- And I enjoy nearly every minute out there. A home garden is one of the true joys of life.



I am not 100% organic, but close.

SFG seems to cut down on pest infestations, and when they do come, I can deal with them by hand or with insecticide soaps or other organic methods. One of the best things about having your own garden is controlling what goes in—and what does not.

Resources

- Mel Bartholomew, *All New Square Foot Gardening* (Cool Springs Press, 2012)
- www.squarefootgardening.org
- Do a Google search for “square foot gardening” to find almost anything you need; also do an image search to see many pictures of various square foot gardens