

An introduction to “Square Foot Gardening”

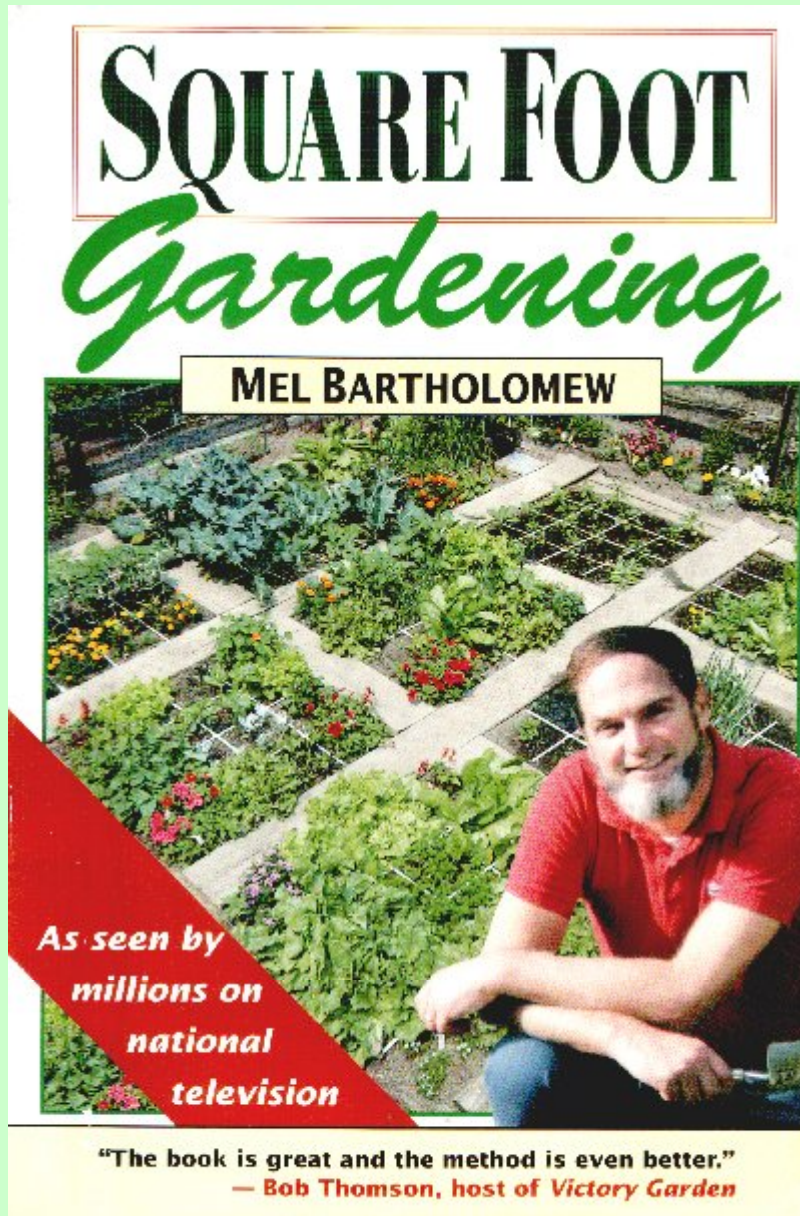
Copyright Colin Shaw 2009

This material is provided for online viewing and
must not be reproduced in any form without the
written permission of the author.

What is SqFt gardening?

- The SqFt method uses a 'no-dig' raised bed, 4ft x 4ft (1.2m) square.
- The bed is sub-divided into 16, 1ft (30cm) squares.
- A different crop is grown in each 1 ft square.

The book



“Square Foot gardening” is a term devised and patented by Mel Bartholomew. His book was published in 1981 and although there was a big following in the US it never really caught on here... until now!

Why use the 'SqFt' method?

- Plants grow in only 20% as much space as 'row' gardening.
- There are savings in water, fertiliser, and labour.
- Produces 5 times the harvest of a conventional garden.

Why use the 'SqFt' method?

- Makes a great family project, all ages can participate - kids love to garden.
- It is an excellent way to start growing fruit and vegetables.
- Boxes can be raised to wheelchair level

Siting a SqFt bed

- Ideally a SqFt bed should face South to gain maximum sunlight.
- Stay clear of trees and shrubs where roots and shade may interfere.

Siting a SqFt bed

- Area should not puddle after a heavy rain.
- Have it close to the house for convenience.

How to begin a new bed

Preparing the ground:

- Unlike the advice in the SqFt book, do not replace the soil with a 'mix' - use what is there and 'improve' it if required
- If it is lawn mark out the area and remove the turf
- 'Double dig' the area as follows

Double digging

- Double digging does not mean doing it twice!
- The aim is to loosen the soil, especially where it has been compacted, i.e. a lawn which has had heavy traffic

How to double dig

1. Dig a trench to one spade depth, saving the soil.
2. Fork, or dig, over the bottom of the first trench.
3. Fill in the trench with the soil from the second trench.

How to double dig

4. Repeat 1 - 3 until the whole plot is dug filling in the final trench with the soil from the first.



Improving the soil

Add around 30 litres of garden compost when you dig the new bed.

If you don't have garden compost then use some bagged soil improver from a garden centre or local DIY store.

Fork in the compost/soil improver in the top 4-6 inches (10-15cms), do not bury it.

To summarise - 10 basic tips

- **Layout** - Arrange your garden in in 4'x4' planting areas.
- **Boxes** - Build boxes to hold the soil.
- **Paths** - Space boxes 3' apart to form walking aisles.
- **Grid** - Make a permanent square foot grid for the top of each box.

To summarise - 10 basic tips

- **Care** - NEVER WALK ON YOUR GROWING SOIL. Tend your garden from the paths.
- **Select** - Plant a different flower, vegetable, or herb crop in each square foot, using 1, 4, 9, or 16 plants per square foot.

To summarise - 10 basic tips

- **Plant** - Plant only a pinch (2 or 3 seeds) per hole. Place transplants in a slight saucer-shaped depression.
- **Water** - Water by hand from a bucket of sun-warmed water.
- **Harvest** - When you finish harvesting a square foot, add compost and replant it with a new and different crop.

Planning a typical bed?

- The tallest crops will grow on the north side of the bed to avoid shading the smaller plants.
- Grow what you like to eat! It is your choice, a typical bed layout follows...

A typical Square Foot bed



- 1 - Mangetout peas x 12
- 2 - Mangetout peas x 12
- 3 - Vine type tomatoes x 1
- 4 - Vine type tomatoes x 1
- 5 - Leeks x 16
- 6 - Dwarf French beans x 4
- 7 - Perpetual spinach x 4
- 8 - Herb plants x 4
- 9 - Lettuces x 4
- 10 - Carrots x 16
- 11 - Lettuces x 4
- 12 - Mini cabbages x 4
- 13 - Pot marigolds x 4
- 14 - Beetroots x 16
- 15 - Spring onions x 16
- 16 - Nasturtiums x 4

Plant spacing

- Use the standard organic gardening technique of close spacing.
- Close spacing plants helps keeps weeds down and increases productivity.

Plant spacing

Once you have your square foot grid in place, this is the easiest way to learn the perfect spacing for all your plants. All plants, vegetables, flowers, or herbs, will fit either 1 – 4 – 9 – or 16 plants per square foot depending on how big they get.

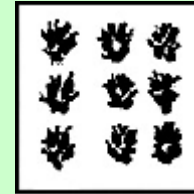
Plant spacing in a SqFt bed



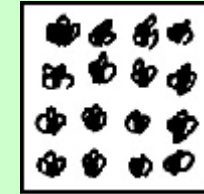
1 Plant
Broccoli
Cabbage



4 Plants
Lettuce
Swiss
Chard
Marigolds



9 Plants
Bush Beans
Spinach
Beets



16 Plants
Carrots
Radishes
Onions

Close spacing - the proof!



To prove it works here are 16 onions growing in a 1ft (30cms) square. The tops were cut off for this photograph.

Station sowing

An important technique used in SqFt growing is 'station sowing'. This means sowing seeds exactly where you want the final plant to be.

Station sowing



Make a small hole - never deeper than 1.5 times the size of the seed - then drop in 3-6 seeds depending on the germination rate e.g. carrots 3 and parsnips 6. Cover the hole.

Station sowing



If more than one seed germinates, snip off the weakest at ground level using a pair of scissors.

DO NOT PULL OUT!

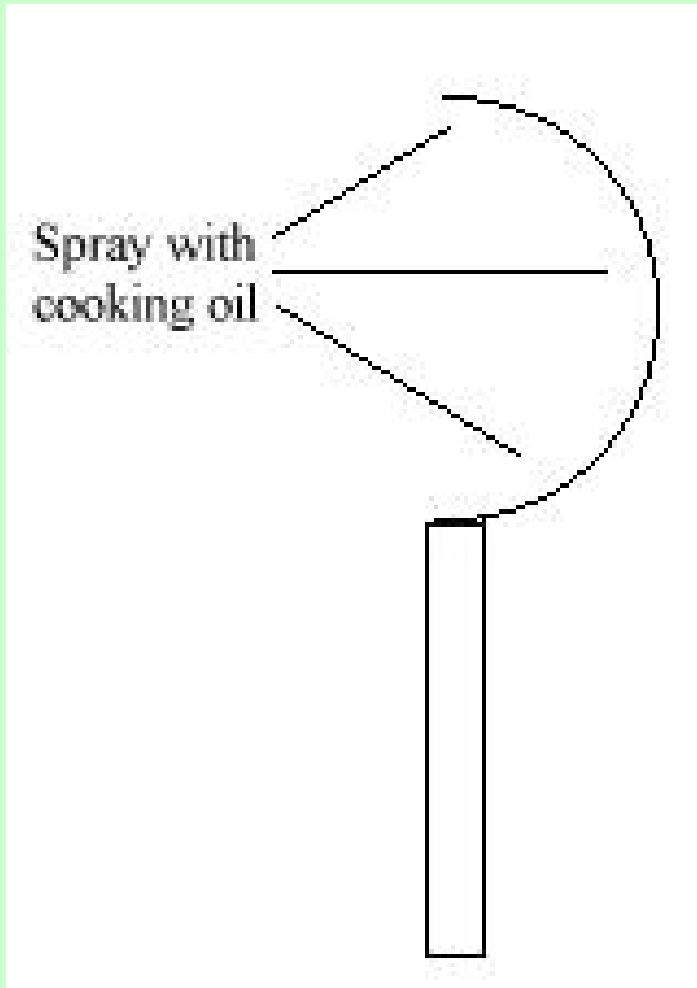
Crop protection - plastic bottles

Take a 1.5Ltr or 2Ltr clear plastic bottle and cut off the base with a craft knife.

Remove the stopper and place over a single plant! You can also remove the top of the bottle and slit lengthways to produce a mini plastic tunnel.



Crop protection - slugs + snails!



A simple way to keep out slugs and snails is to use semi-circular guttering mounted on the top edge of the board. Spray the guttering with cooking oil and the slugs and snails cannot get a grip and simply fall off. Joy!

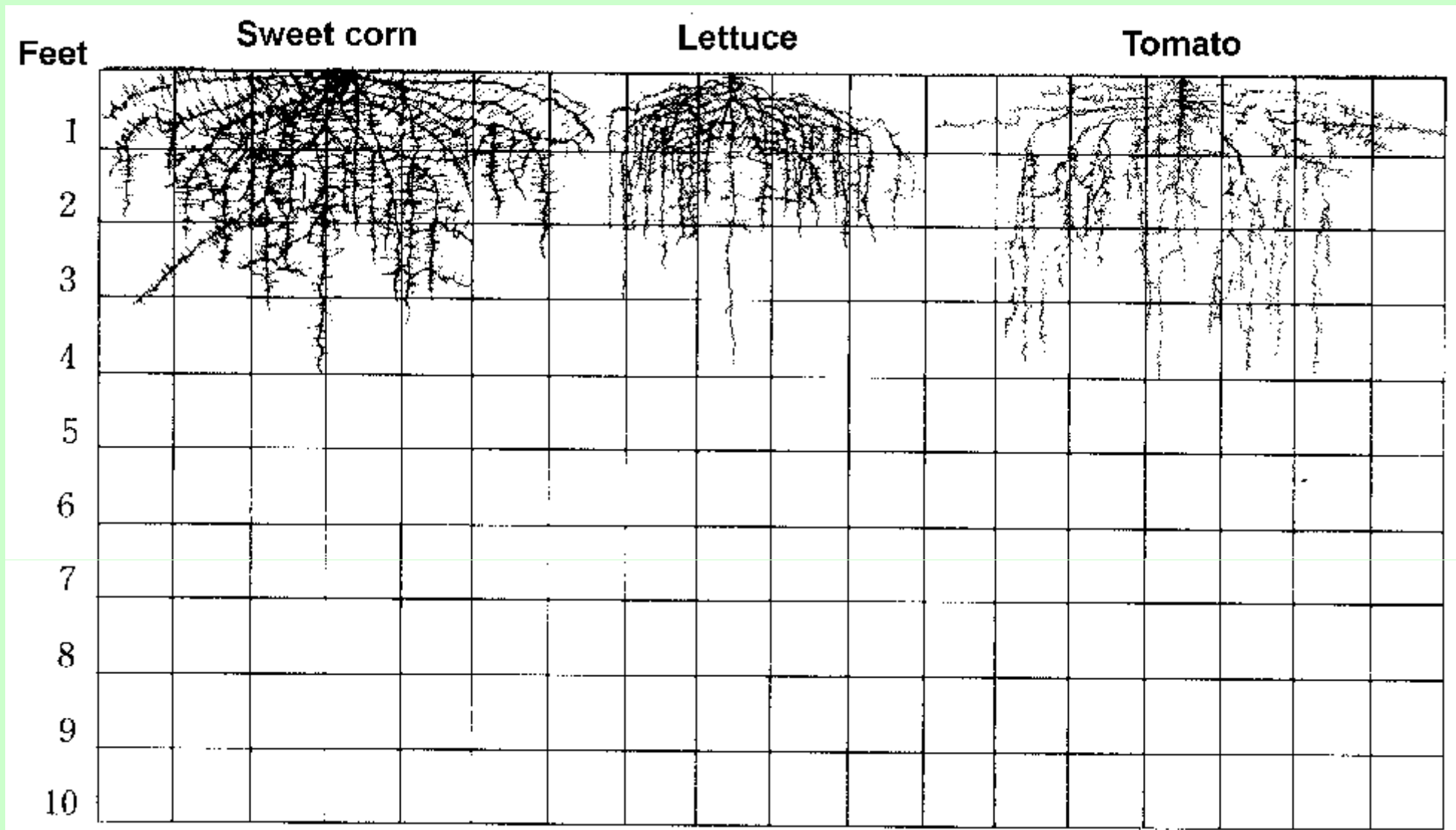
Crop protection

Another way to keep them out is to use the “Buttcombe box”, named after an HDRA member. This method uses guttering mounted horizontally on the top edge of the board and filled with water.

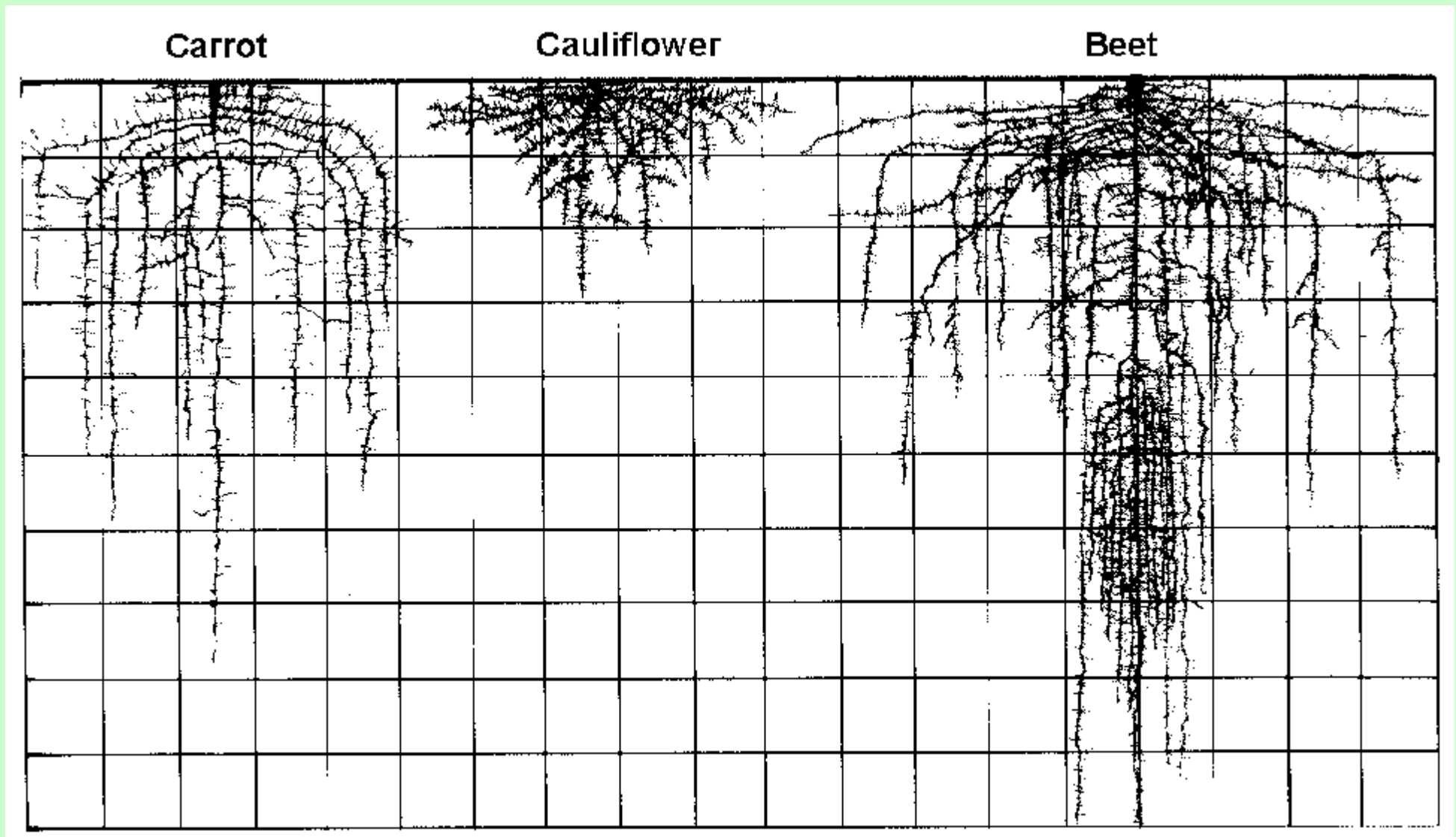


Crop rotation

- A general rule in organic gardening is to rotate crops around a plot so that the same crop is not grown in the same place for a period of time.
- The most common rotation period is 4 years - this should be seen as a minimum.
- But what about SqFt beds?



The diagram shows root spread on a 1ft grid.



Again, the diagram shows root spread on a 1ft grid.

Crop rotation

- Work on the root spread of common plants shows that in a SqFt bed all the root will be in all the squares!
- Be sensible! Do NOT plant the same crop in the same square for a while, move the plants around within the confines of the plant positioning rules.

Companion planting

- If you want to go totally insane then work out a planting plan that includes 4-5 course rotation AND companion planting
- Others have tried and are still recovering...

Flexibility

- SqFt beds can be adapted to suit your needs.
- It is possible to use groups of squares to grow more of a single crop
- You can even use a whole bed for one crop and grow 256 carrots or 256 onions in a 4ft (1.2m) square bed!

Summary

- SqFt gardening is an easy and economical way to grow food.
- Working with just 4ft (1.2m) square beds means many people can start food growing.
- The method is flexible so can be adapted to individual needs.
- It can be scaled up for commercial production

Have a go!

Dig up your lawn and discover the taste
of really fresh veg!

You can get help and support at:

www.organicgarden.org.uk