

## 'Square Foot' Garden

If you haven't got much space to grow vegetables at home or at school why not try 'square foot' gardening?

The 'square foot' garden is an American method of growing as many vegetables as you can in, as small a space as possible, using a plot 120cm x 120cm (4ft x 4ft).

This space is all you need to grow a wide variety of crops. If you have more space you could double the area.

However, the 120cm x 120cm (4ft x 4ft) is enough to get you started.

### Creating a 'square foot' garden.

Measure out a plot 120cm x 120cm. Edge the area with wooden boards.

For more detailed instructions on developing a square foot garden why not visit the HDRA Organic Network for Schools website.  
[www.schoolsorganic.net](http://www.schoolsorganic.net)

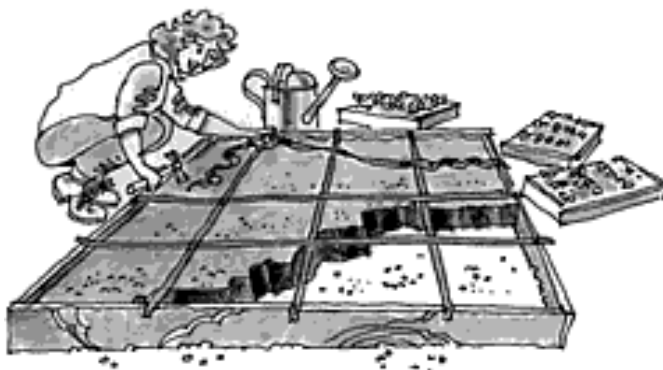
**Wood**— brand new wood can be expensive. Ask wood merchants for off-cuts and other waste timber, or look for second-hand wood.

Use untreated wood if you can and replace it as necessary. Otherwise any **preservative** used should be based on natural ingredients or one that acts as a **water repellent**.

Avoid using creosote as it may possibly damage plants, soil dwelling creatures, and humans.

Improve the soil inside the bed with garden compost mixed with some well-rotted **manure**. Make sure that the soil is weed free and remove as many stones as possible.

Divide the 120cm x 120cm area into sixteen 30cm (1ft) squares. This can be marked by nailing long shoe laces or string across the box. See below.



Decide which crops you are going to grow. Each square is planted with a different crop, using close spacing. When planning, this make sure that the tallest plants are at the back of the bed, with sizes decreasing towards the front. The bed should face south for maximum sunlight. Three examples of layouts are shown on the back of this leaflet.

As soon as each crop is finished, replace it with a different one. This will help you to rotate crops, but you still need to plan a formal crop rotation.

### Crop Rotation

As with any organic garden you need to rotate the crops around the space. This is essential to ensure pest and disease control and prevent the same **nutrients** been taken from the soil all the time.

See Crop Rotation - HDRA factsheet

### Planting methods and bed management.

Instead of sowing long rows of seeds and then **thinning out**, the square foot garden uses a different method - 'station sowing'.

- Make holes of the right depth for the seed, at the spacing needed by the plant (check the packet)
- Drop the seeds into the hole, then fill with fine soil. For most plants 1-2 seeds are enough, but for carrots and parsnips use 4-5 seeds to ensure some seeds **germinate**.
- If more than one seed germinates, simply snip off the weaker seedlings with a pair of scissors. This means you don't disturb the roots of the other plants.

## Examples of crops in a 'square foot' garden

### General

1 2 x 3" Sugar Peas	2 rows - Sugar Rae	3 Tomato	4 Tomato
5 16x Leeks 'King Richard'	6 4x Dwarf French Beans 'Golden Sands'	7 4x Leaf Beet	8 4x Herbs
9 4x Lettuce	10 16 x Carrots 'Amsterdam Forcing'	11 4x Lettuce	12 9x Cabbage Mini Savoy
13 4 x Pot Marigold	14 16 x Beetroot 'Boltardy'	15 Onion mix 'Paris silver- skin' 'Purplette' 'White Lisbon'	16 4 x Nasturtium 'Alaska'

### Spring

1 2 x Strawberries 2 x Pot Marigold	2 4 x Hamburg Parsley 12 x Radish 'French Breakfast'	3 Leaf Lettuce	4 16 x Garlic
5 8 x Buck- ler—leaved sorrel 4 x Little Gem Lettuce	6 9 x Spring Cabbage	7 16 x Carrots 'Nante'	8 Potato 'Swift'
9 16 x Carrots 'Nantes'	10 Radish and Cress	11 Potato 'Swift'	12 16 x Turnip 'Snowball'
13 2 x 'Douce	14 rows Pea Provence'	15 Spring onion mixture	16 9 x Summer cabbage

### Summer

1 2 x Strawberries 2 x Pot Marigold	2 2 x Raddichio 1 x Hamburg Parsley 1 x Little Gem lettuce	3 4 x Herbs sweet majo- ram, parsley, winter savory, celery, leaf parsley	4 2 x Lettuce 'Catalogna' 2 x Lettuce 'Lollo Bi- anco'
5 8 x Buckler— leaved sorrel 4 x Lettuce 'Catalogna'	6 9 x Callaloo (leaf amaranth)	7 Florence fennel	8 5 x Celeriac
9 4 x Baby Sweetcorn 'Minipop'	10 4 x Baby Sweetcorn 'Minipop'	11 4 x French bean 'Golden sands'	12 Tomato 'Gardener's Delight'
13 <i>Limnanthes douglasii</i> and a Little Gem lettuce	14 6 x Kohl rabi	15 4 x Runner bean 'Painted Lady'	16 4 x French beans 'Blue Lake'

### Glossary

**Germination**—when the plant starts to grow they develop a stem and roots.

**Manure**—animal waste

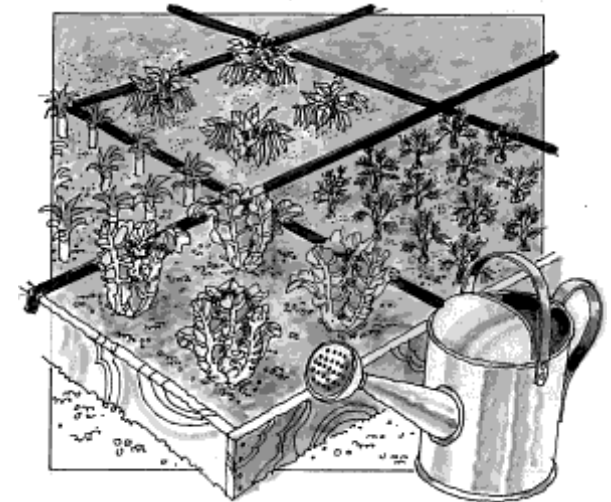
**Nutrients**—minerals that plants need to survive that are found in the soil.

**Preservative**—a chemical used to protect wood.

**Thinning out**— taking out some seedlings to give others more space.

**Water repellent**—doesn't let water in through the surface.

# Square foot gardening



A student's guide to growing in a square foot garden.

## 'Square Foot' Gardening

Finding the space in school grounds to grow vegetables is not always easy. This, together with the inexperience of some teachers and many students, can make growing vegetables seem like a daunting task. However, it is these factors that make 'square foot' gardening ideal.

The 'square foot' garden is an American method of growing as many vegetables as you can in as small a space as possible. The area is 120cm x 120cm (4ft x 4ft).

This space is all you need to grow a range of crops. If you have more space you could double the area. However, the 120cm x 120cm (4ft x 4ft) is ample to get you started.

### Creating a 'square foot' garden.

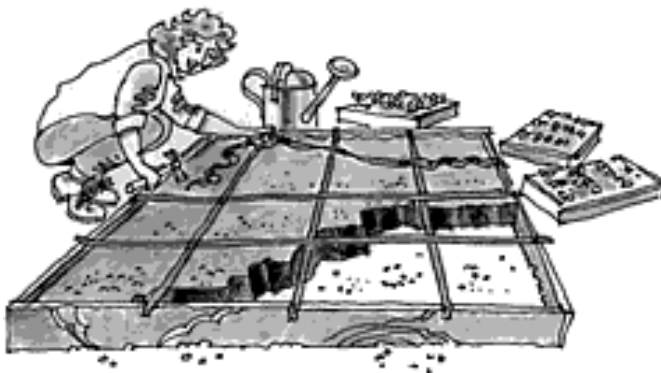
Measure out a plot 120cm x 120cm (4ft x 4ft). Edge it with wooden boards.

Brand new wood can be expensive. A cheaper option is to ask wood merchants for off-cuts and other waste timber, or use second-hand wood.

Try to obtain untreated wood and replace when it rots. Otherwise, any preservative used should be based on natural ingredients, or one that is just a water repellent. Try to avoid creosote. It can be harmful to people, soil-dwelling creatures and plants. It can leach into the soil after the wood has been treated.

Dig out and remove any weeds and stones from the area. Improve the soil inside the bed with garden compost or some well-rotted manure.

Sub-divide the 120cm x 120cm (4ft x 4ft) area into sixteen 30cm (1ft) squares. This can be marked by nailing long shoe laces or string across the box. See below.



Decide which crops are going to be grown in your 'square foot' garden. Each square is planted with a different crop, using close spacing. When planning this ensure that the tallest plants are at the rear of the bed, with sizes decreasing progressively to the front of the bed, which should face south for maximum sunlight. Three examples of layouts are shown on the back of this leaflet.

As soon as each crop is finished, replace it with a different one. This helps with the crop rotation, but planning for rotation is still essential.

*Square foot gardening—A Teacher's Guide*

## Crop Rotation

As with any organic garden, crop rotation is crucial in a 'square foot' garden. It helps with pest and disease control, and prevents nutrient depletion. It may appear that having distinct areas for each crop would make rotation easier, because simply replacing crops with another after they have finished is a natural crop rotation. However, it is not always that simple. Square foot gardeners need to plan a crop rotation carefully. This is further complicated by the fact that tall plants need to be near the rear of the bed.

See Crop Rotation - Garden Organic factsheet

### Planting methods and bed management.

Rather than planting long rows of seeds and then thinning out, square foot gardens require a different technique. The suggested method is 'station sowing'.

1. Make holes of the required depth for the seed at the spacing needed by the mature plant.
2. Drop the seeds into the holes then fill with fine soil.
3. For most plants 1-2 seeds are enough, but for carrots and parsnips use 4-5 seeds to ensure uniform germination.
4. If too many seeds germinate, simply snip off those not required, with a pair of scissors, to avoid disturbing the roots of the remaining plants.

## Examples of crops in a 'square foot' garden

### General

<b>1</b> 2 x 3" Sugar Peas	<b>2</b> rows - Sugar Rae	<b>3</b> Tomato	<b>4</b> Tomato
<b>5</b> 16x Leeks 'King Richard'	<b>6</b> 4x Dwarf French Beans 'Golden Sands'	<b>7</b> 4x Leaf Beet	<b>8</b> 4x Herbs
<b>9</b> 4x Lettuce	<b>10</b> 16 x Carrots 'Amsterdam Forcing'	<b>11</b> 4x Lettuce	<b>12</b> 9x Cabbage Mini Savoy
<b>13</b> 4 x Pot Marigold	<b>14</b> 16 x Beetroot 'Boltardy'	<b>15</b> Onion mix 'Paris silver- skin' 'Purplette' 'White Lisbon'	<b>16</b> 4 x Nasturtium 'Alaska'

### Spring

<b>1</b> 2 x Strawberries 2 x Pot Marigold	<b>2</b> 4 x Hamburg Parsley 12 x Radish 'French Breakfast'	<b>3</b> Leaf Lettuce	<b>4</b> 16 x Garlic
<b>5</b> 8 x Buck- ler—leaved sorrel 4 x Little Gem Lettuce	<b>6</b> 9 x Spring Cabbage	<b>7</b> 16 x Carrots 'Nante'	<b>8</b> Potato 'Swift'
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### Further Reading

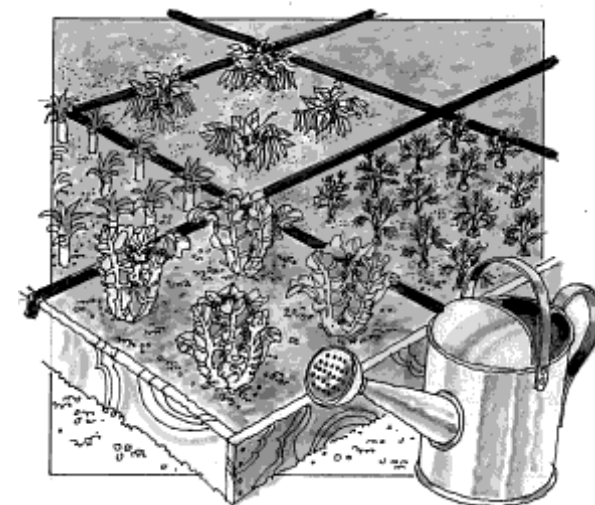
'Square foot' Gardening -  
HDRA newsletter issue 153

'The square foot marches on' -  
The Organic Way issue 159

'Square Foot Gardening' -  
Mel Bartholemew Rodale Press

'Beds' -  
Pauline Pears HDRA/Search Press, 1992

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A teacher's guide to  
growing in a square foot  
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Garden Organic  
for Schools