


- Presented by Missouri Valley
Master Gardeners



## How to Read Your Plants

How to plant the most in the smallest space

## Square Foot Gardening

- Developed by Mel Bartholomew, an engineer not a gardener
- Wrote the first book in 1981
- Too much wasted space and resources
- Too much work



## Location

- Close to house, easy to tend because you see it all the time
- Plenty of sun, at least 6-8 hours of direct sun
- Can use shade of plants for crops that need less than full sun all day
- Good drainage, water does not puddle in the spot

- Away from tree roots


## Direction

- Plant UP not down
- No need to amend existing soil
- Create great planting area on top of the soil that is already in the location
- Depth of 6 inches
- Easy access 3 feet between boxes or beds



## Size of Beds

- You need to be able to reach across them, usually 4 foot, children's size 3 foot
- You can use any configuration as long as you make them no more than 4 foot and have at least 3 foot
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## Boxes?

- Looks tidy
- Holds soil
- Easy to add protection



## Soil mixture

- $4 \times 4$ bed will need 8 cubic feet of mix
- Compost $1 / 3$
- Peat moss $1 / 3$
- Compressed bales
- A non renewable natural resource
- Wear gloves and mask
- Vermiculite $1 / 3$
- Course
- Look for larger 4 cubic foot bag
- Can substitute Vermiculite (does not hold moisture as well)
- Wear gloves and mask
- No Fertilizer
- No Digging
- 2 large bags ( 3.5 cu ft ) vermiculite, \$18.00 each
- 1 large bale ( $3.8 \mathrm{cu} \mathrm{ft} \mathrm{compressed}$, expands to be more) peat moss, $\$ 9.00$
- 8 bags ( 1 cu ft ) compost, \$2.00 each (average price)
- 6 extra bags ( 1 cu ft ) compost, $\$ 2.00$ each (average price)
- TOTAL COST (three 4’x4' boxes): \$73.00


## Grids

- Square foot
- Wood Lath can be bought in 4 foot lengths
- PVC piping can be adapted to a watering system
- Blinds such as Venetian
- Strings



## Planting Small, Medium, Large and Extra Large

- Extra Large-One per Square
- Cabbage
- Peppers
- Broccoli
- Cauliflower

- Large-Four per Square
- Parsley
- Basil
- Lettuce
- Kale

- Medium-Nine per Square
- Bush Beans
- Beets
- Turnips

- Small-Sixteen per Square
- Leaf Lettuce
- Carrots
- Onions
- Radish



## Planting



## Plantings

## Square Foot Planting Guidelines

| $\begin{aligned} & \text { es } \\ & \text { Garlic (4) } \end{aligned}$ | Olrs. (1) | Canots. (16) | Hot peppers. <br> (1) | Kale, (2) | Kohlrabi, <br> (4) | Head <br> Lettuce, (4) | 5664 945 9F506 <br>  <br> Leaf Lettuce. (16) | $\begin{aligned} & 4^{4} x^{4} \\ & 4^{4} x^{4} x^{2} \\ & \text { Peas. (8) } \end{aligned}$ | Peppers. <br> (1) | Potatoes, <br> (2) | Melons, (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \frac{3}{2} \frac{3}{3} \\ & \frac{3}{2} \frac{3}{2} \\ & \frac{3}{2} \frac{2}{2} \\ & \text { Dill. (9) } \end{aligned}$ | Fennel, (2) | Beans. <br> (4) | Beets, (9) | Bok Choi, (1) | Brussels Sprouts, (1) | Cabbage. (1) | Cauliflower, <br> (1) | Chives, (1) | Corn, (2) | Cucumbers, (2) | Eggplants. (1) |
| Oregano, <br> (1) |  | Parsnips, <br> (9) | Cilantro. (9) | Rutabagas, <br> (4) |  <br> Radishes. <br> (16) | Rosemary. <br> (1) | Pumpkins. <br> (1) | Peppers. <br> (1) | Sage, (1) | Basil, (2) | Aruguls. (16) |
| 4guty "yuf wis yeus us Spinach, (9) | Summer Squash, (1) | Sweet Potatoes. <br> (1) | Chard, [2) | 数 数 <br> Thyme. (2) | $\begin{array}{lll} 5 & 5 \\ 5 & 10 \\ 5 & 10 \\ 0 & 5 & 5 \end{array}$ <br> (9) | $\left\lvert\, \begin{array}{ccc} \psi & p & p \\ p & \psi & p \\ \psi & \psi & \psi \\ \text { Tumips. } & (9) \end{array}\right.$ |  | Swiss <br> Chard, (2) | Leeks, (6) | Celery, (2) | Calenduls. (2) |

## Planting




## Pruning

cutting away dead or overgrown branches or stems, especially to increase fruitfulness and growth.

## Pruning Tools

## Pruning Shears

Bypass (scissor-like blades) for growing stems


Anvil (straight blades) for dry branches and stems

## Pruning tools

Loppers for pruning branches (trees and woody vines) up to $21 / 2^{\prime \prime}$ thick

Anvil: for dead material or preparatory cuts

Bypass: for cuts that affect the health of the plant. Keep razor sharp.


## Pruning Tools

Saws: for branches $1 \frac{1}{2}$ to 5 inches

## Pruning Tools

Hedge shears: for hedges, small shrubs or deadheading perennials

## Pruning Tomatoes

-Encourages larger fruit production -Allows for better air circulation -Eliminates branches and fruit from the bottom, where they would touch the ground and rot


## Techniques

-Trim off leaves or stems that touch the ground
-Remove suckers

-Chop off the tops of the plants to 5 or 6 ' in height (Labor Day)


# Rejuvenation pruning -removal of all canes to a height of 2-3 inches. 

Renewal pruning
-removal of about one-third of the canes to a height of 2-3 inches.



Step 2
Continue to prume out one-third of the stems in a random pattern, starting with any damaged or diseased wood.



## Trimming branches





## Resources

iGrow(SDSU Extension): igrow.org/search/?q=pruning+trees

Fine Gardening Magazine:
http://www.finegardening.com/pruning-tips-and-techniques

