



filling your ark

february 2008

Where Does Your Garden Grow?

Pick the sunniest spot available for a start so that your plants have a minimum of 6 hours a day of sunshine. Using graph paper, draw the layout of your garden space. Show trees, yard, house, garage, fences, flower beds, etc. Sketch in the afternoon shadows; then also show the morning shadows. Mark which way is north. Plants prefer the morning sun, so the tallest plants will be furthest north, stepping on down to the shorter plants heading south. Using sticky notes to represent a veggie, begin planning their placement before committing them to paper.

How large Should Your Garden Be?

Ideally you should plan on 50 square feet per person. But don't despair if you have a small property or none at all! That is why container gardening is so beneficial. More details on container gardening next month.

Crop Rotation

If annual vegetable crops are grown in the same place year after year, there is a risk that soil borne pests and diseases will be-

come a problem, and that plant health and vigor will decline. A better system is to move crops around the growing area. This ancient practice, known as rotation, continues to be used today to the benefit of both soil and plants. The aim of rotation is three-fold: to balance nutrient demands, foil insect and disease attacks, and deter weeds. The first season of planting could be devoted to leafy plants, the next season to fruits, followed by the root plants and then legumes. Here is a four year rotation plan.

A: Tomatoes, carrots, celery and peppers. Since peppers like onions, these are a good lead into section B.

B: Leeks, onions, cabbage, scallions, garlic, squash and cucumber who like radishes, pumpkin, and melons. Since cucumbers like beans and peas, these are good lead into section C.

C: Cleaners and Builders: Legumes are excellent for the soil because they store nitrogen from the air and release it into the soil. Examples of cleaners include corn and potatoes, examples of builders include beans and peas.

D: Brassicas - Cabbages, sprouts, cauliflower, broccoli, turnips, and Swedes. They get the benefit of the nitrogen fixed in the soil by the legumes.

Weed Reducing Rotation Tip: Alternate shallow-rooted plants like cabbages or lettuce with deep-rooted plants like tomatoes or squash, allowing the plants roots to do much of the soil loosening that would otherwise have to be done by hand.

Companion Planting

It's said that vegetables are like people, they thrive on companionship. It is believed that vegetables will yield up to twice as much when they are surrounded with companion plants. The following are a list of the top 12 vegetables and their ideal planting companions.



Beans--they like celery and cucumbers but dislike onions and fennel.

Beets--Bush beans, lettuce, onions, kohlrabi, and most members of the cabbage family are companion plants. Keep the pole beans and mustard away from them.

Cabbage--Celery, dill, onions and potatoes are good companion plants They dislike strawberries, tomatoes, and pole beans.

Carrots--Leaf lettuce, radish, onions and tomatoes are their friends, Plant dill at the opposite end of the garden.

Corn--Pumpkins, peas, beans, cucumbers and potatoes are nice companion plants, Keep the tomatoes away from them.

Cucumbers--They like corn, peas, radishes, beans and sunflowers. Cucumbers dislike

Coming Next Month...

Gardening Starting Seeds Indoors and container gardening

72-Hr Sanitation Kit

FS Variety in Food and Top Five Starter Books

aromatic herbs and potatoes so keep them away.

Lettuce--It grows especially well with onions. Strawberries, carrots, radishes and cucumbers also are friends and good companion plants.

Onions--Plant them near lettuce, beets, strawberries and tomatoes but keep them away from peas and beans.

Peas--Carrots, cucumbers, corn, turnips and radishes plus beans, potatoes and aromatic herbs are their friends. Keep the peas away from onions, garlic, leek, and shallots.

Radishes--This is one vegetable that has a lot of friends, they are excellent companion plants with beets, carrots, spinach and parsnips. Radishes grow well with cucumbers and beans. It's said that summer planting near leaf lettuce makes the radishes more tender. Avoid planting radishes near cabbage, cauliflower, Brussels sprouts, broccoli, kohlrabi or turnips.

Squash--Icicle radishes, cucumbers and corn are among their friends.

Tomatoes--Carrots, onions and parsley are good companion plants. Keep the cabbage and cauliflower away from them.

Sometimes plant friendships are one-sided. Carrots are said to help beans, but beans don't reciprocate. Though beans will help nearby cucumbers.

Other plants have bad companions and you'll be doing them a favor to keep them apart. Beans and onions are natural enemies so keep them at opposite sides of the garden.

More Resources... This information should be a good starting point. There is so much more information available, so feel free to visit the sources found at the bottom of the page and here are a couple more recommendations:

Website: Plan your garden using this 45-day free trial. www.plangarden.com

Recommended reading: Carrots Love Tomatoes, Secrets of Companion Planting for Successful Gardening by Louise Riotte

"When the time arrives, the time for preparation is past"

Oxygen Absorbers

For successful long-term food storage, the commodities we store must be low in moisture and oil content and shelf-stable. Oxygen absorbers are used to lower the oxygen content in containers of dry packaged foods. They also help protect stored food from insect infestation and help preserve product quality. The packets contain elemental iron mixed with a moisture-absorbing material. When moisture is absorbed into the packets, it causes the iron to rust – the process of oxidizing the iron absorbs the oxygen from the package atmosphere. Packet covers are made of semipermeable material that allows oxygen and moisture to enter, but does not allow the contents of the packets to leak out. Temperature and the moisture level in the container determine the rate of reaction. A packet rated for 300 cc of oxygen has the capacity to absorb oxygen in up to 1 gallon of properly packaged food.

Oxygen absorbers differ from vacuum packaging in that oxygen absorbers only remove the oxygen. Air is about 20% oxygen and 80% nitrogen. Residual air in the container, mostly nitrogen, does not affect the food.

Containers that can be used with oxygen absorbers for food storage include:

- Foil pouches/ Mylar bag
 - Metal cans with seamed lids
 - PETE plastic bottles with screw-on lids.
- Oxygen absorbers are only effective for plastic containers identified as PETE or PET under the recycle emblem.
- Glass canning jars with gasketed metal lids.

72-Hour Basic Emergency Needs

- o Tube Tent
- o Cord or tying material
- o Scout Field Handbook
- o Local & State Map
- o Compass
- o Battery/Solar Operated Radio
- o Water Storage (1 gal/person/day)
- o Water purification Tablets
- o Sleeping Bag and Pad
- o Emergency Thermal Blanket
- o Change of Clothes (inside & out)
- o Shoes
- o Poncho/Rain jacket/Umbrella
- o Jacket or Windbreaker
- o Hand Can Opener
- o Multi-Functional Knife
- o Compact Saw/ Shovel or equivalent
- o Flares/ Mirror/Whistle all for signaling
- o Candles/Light Sticks/ Flashlight
- o Waterproof & Windproof Matches

How To Use Oxygen Absorbers

- Cut open the top of the bag—not the individual packet.
 - Remove the number of absorbers needed in the next 20-30 minutes.
 - Reseal the remaining absorbers with a special blue clamp, an impulse heat sealer or place in glass canning jar with a gasketed metal lid. One pint will hold 25 absorbers. Do NOT use a zip lock bag.
 - Place one absorber into each container of food as it is packaged. (If using a 5-gallon Mylar/Foil pouch, then use 5 absorbers)
 - Remove additional groups of absorbers from the supply, as needed, during packaging process. Avoid opening the package repeatedly.
- Sis. G. Dane