

Gardening 101



Garden Planning Tips

1. Look at planting schedules before planting anything! Timing is everything.
2. Consider size of plants when arranging garden. Tall plants can shade out smaller ones, but in some cases this is beneficial.
3. Run rows north-south so sunlight exposure is even.
4. If you have a small space, raised bed square foot gardens or the French Intensive planting method may be for you.
5. Most vegetable plants need at least 6-8 hours of FULL sun; but sometimes respite from blazing summer sun can be beneficial!
6. Plant longer growing or perennial plants (i.e. strawberries, herbs) to one side of the garden so they don't interfere with annual preparations (i.e. lettuce, tomatoes).
7. Interplant quick growing plants like radishes among slower growing ones like carrots.
8. Plan for getting around! Wheelbarrows and foot traffic should have dedicated paths to avoid soil compaction and frustrations.
9. To provide consistent supplies of veggies, make interval plantings every 10-14 days. Works well for beans, sweet corn and peas that have a short "peak" period of quality.
10. Consider crop rotation to prevent diseases that carry over from season to season. Look for the name of plant families (usually ends in "eae") and try to avoid growing the same family in same location more than once every three years. Mixed plantings in small square foot gardens may not necessarily require rotation if diversity is maintained.
11. Use existing fences as a trellis for climbing plants like peas, beans, cucumbers.
12. Consider companion planting. French marigolds may deter nematodes and should be planted near susceptible plants like tomatoes and okra. Leafy greens appreciate some shade provided by taller plants.
13. Plant flowers in/near the garden to attract pollinators. Diversity makes a great garden, aesthetically pleasing and biologically beneficial.

LABELS AND NUTRIENT REQUIREMENTS



Essential elements supplied by the soil are divided into micro and macronutrients. Plants use large amounts of macronutrients and smaller quantities of micronutrients. However they are all essential and deficiencies in the soil can result in poor plant growth and harvests. Primary macronutrients, nitrogen (N), phosphorus (P) and potassium (K) are contained in varying amounts in synthetic and organic fertilizers. A label that reads 6.6.6 means that each of the three macronutrients are present in the fertilizer at 6%, with a total of 18% nutrients in the bag.

N- Nitrogen for lush leaves. Nitrogen provides for leafy production, encouraging new growth. This is the nutrient you'll probably have to add most often. However, too much nitrogen can be problematic, preventing fruit or flower formation and should be used at the proper time. Adding extra nitrogen to peas and beans can reduce harvest, they fix their own nitrogen. **Deficiency symptoms:** stunted or poor growth, pale or yellow leaves especially older lower leaves. When fruit sets, many plants will show symptoms because demand is high at this time. Sprinkle nitrogen sources into soil before planting and side dress leafy crops more often than other crops. **Sources:** blood meal, fish meal, guano, chicken manure, legumes, alfalfa meal

P- Phosphorus for roots and fruits. Flowers, fruits and seed formation depend on phosphorous and healthy roots and stems also benefit. Phosphorus helps crops mature and is good to apply in the middle of growth. **Deficiency symptoms:** purplish color under leaves and on stems especially at base. Plants and roots may be stunted, skinny and have brittle stems, yellow streaks on leaves. Fruit may set and mature late. **Sources:** bone meal, rock phosphate, guano, fish emulsion, liquid seaweed, animal manures

K- Potassium for healthy growth. Potassium makes plants vigorous, helping them develop strong root systems and resist disease. It is used in photosynthesis and also forms starches so root crops and tubers like potatoes, carrots, beets and turnips require higher amounts of potassium. **Deficiency symptoms:** stunted growth and poor yields. Leave may develop irregular yellow splotches starting at the bottom of the plants and working upward. **Sources:** granite powder, greensand, kelp meal, wood ash (be careful not to overuse wood ash, can raise soil pH).

Square Foot Gardening Method

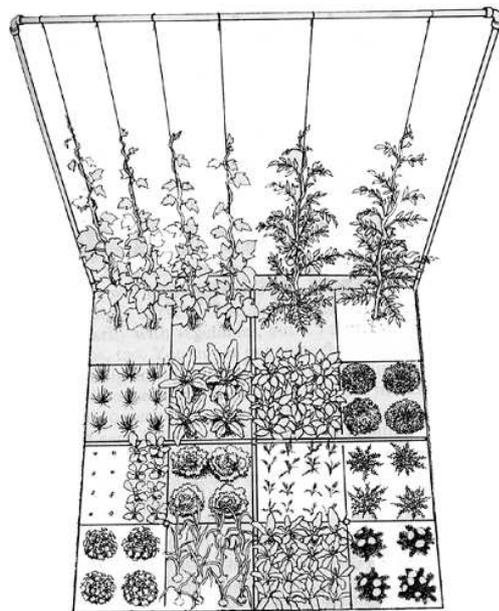
The concept is simple: more plants in less space. Using the square foot method, home gardeners with limited space can maximize space by following this method developed by Mel Bartholomew. Depending on the mature size of the plant, grow 1, 4, 9 or 16 equally spaced plants per square foot. Use the following as a rule of thumb, based on plant spacing recommendations provided on seed packets.

- 12" = 1 plant per square foot
- 6" = 4 plants per square foot
- 4" = 9 plants per square foot
- 3" = 16 plants per square foot

Some gardeners like to place permanent square foot markers in the beds with wood or string. Others prefer to make a light mark in the soil only, letting the mark disappear as the plants grow. It's up to you!

In Florida where we are prone to high humidity and rain, thus various plant diseases you may wish to plant slightly less dense to improve aeration through the garden.

You should also consider location of sprawling plants like oregano, mint, strawberries and put them along the edge so they can spill over and not interfere with the other plants. Be careful not to set up climbing, trellised plants where they will shade others. Check out the Square Foot Gardening book for more details.



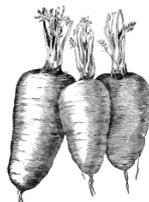
rendering courtesy: *Square Foot Gardening Method* by Mel Bartholomew

General Gardening Tips and Tricks

1. Keep a journal or print an empty calendar and keep notes! Write down dates, what varieties you planted and any observations. It will help you later when deciding what worked, what didn't and why.
2. There is lots of bamboo in Gainesville....your neighbors might have some and it makes for great staking and trellis material. Kanapaha Botanical Gardens sells bamboo sticks if you can't find a free source.
3. Keep cardboard when you get it for a free. Cardboard can be layered with soil, straw or other organic matter to build soil and attract worms. It can also be used to suppress weeds when your garden is not active.
4. An upside down bucket makes a great seat in the garden.
5. Go in on bulk purchases with neighbors and friends-it's cheaper. Seeds, soil, supplies...just about everything is more economical but you rarely need that much on your own!
6. Don't buy plants from large department stores; they are not always seasonally or locally appropriate.
7. Draw out your garden plans/ideas BEFORE planting. Always consult a planting guide for dates and consider sun, water, spacing, height of plants etc.
8. A bale of straw is cheap at Alachua County Feed and Seed, lasts a long time and makes great mulch. A layer of mulch helps conserve moisture and prevents splashing water and soil onto plants. It breaks down fairly quickly adding organic matter to your soil.
9. Keep a couple spray bottles on hand, preferably ones with a pump. They are handy for mixing up soaps, emulsions etc.
10. Keep learning! Gardening is a life skill not learned in a day. Look things up online, collect a few good books, take notes and ask questions.
11. There are many horse stables in Alachua County that are willing to let gardeners shovel their own manure. Call them first to make sure it's okay. Horse manure should be well composted prior to usage as it can burn plants and tends to have more weed seeds compared to other manures. Rule of thumb for manures is that they are ready to use when they no longer look or smell like poop!

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Cool Season												
Beets												
Broccoli												
Brussels Sprouts												
Cabbage												
Carrots												
Cauliflower												
Celery												
Chinese Cabbage												
Collards												
Endive												
Kale												
Kohlrabi												
Leek												
Lettuce												
Mustard												
Onions (Bulbing)												
Onions (Bunching and Multiplier)												
Peas (English)												
Potatoes												
Radish												
Spinach												
Strawberry												
Turnips												

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Warm Season												
Beans (bush and pole beans)												
Beans (lima)												
Cantaloupe												
Corn												
Cucumbers												
Eggplant												
Okra												
Peas (Southern)												
Peppers												
Potatoes (Sweet)												
Pumpkin												
Squash (Summer)												
Squash (Winter)												
Tomatoes												
Watermelon												



LOCAL RESOURCES

Soil Amendments

Soil Enrichment Products (352) 317-3131 Various soil amendments available in bulk. Call for self-pick up times and prices
www.customcompost.com

Abundant Edible Landscapes (352) 658-1514 Various amendments delivered for \$5 in 5G buckets. Also carry great Florida-friendly edible plants
www.ediblelandscapers.com

Free bat guano from UF (352)-392-3410 Call for pick-up, bring your own lidded 5G bucket

Plants

Abundant Edible Landscapes (see above)

Edible Plant Project www.edibleplantproject.org

The Herb Garden <http://steelesherbgarden.com/>

Loften High School **Wednesdays, call for times (352) 955-6839

Square Inch Starts (423) 921-2874

Comet Farms Seasonal Garden Kits Email inquiries for fall/spring kits to haleygardener@gmail.com

Mulch **not for vegetable garden use but in the landscape for paths etc.

Wood Resources Recovery www.woodresourcerecovery.com

GRU Woodchip Recycling Program <http://www.gru.com/YourHome/ProductsServices/woodchip.jsp>

Alachua County free mulch and wire compost bins; Earth Machines for sale (352) 374-5213 or email jseitz@alachuacounty.us and visit www.alachuacounty.us

Other Gardening Resources

- Alachua County Feed and Seed
- Alachua Farm and Lumber
- Earth Pets Organic Feed and Garden Store
- Harmony Gardens
- Hogtown HomeGrown (learn how to cook your garden harvests!)
- Wards Supermarket (local plants, organic seeds)
- Prairie's Edge Organics
- Cognito Farms (compost tea)

Inquiries

Any gardening related questions can be directed to a Master Gardener from M-F. Just call 955-2402 and receive FREE expert advice. Keep checking the calendar for free garden and landscape workshops <http://alachua.ifas.ufl.edu/calendar.shtml>

You can also call Florida Organic Growers at 377-6345 with any garden related questions.

Handy References

Florida Organic Growers GIFT Gardens Growing Guide <http://www.foginfo.org/docs/giftguide.pdf>

Gardens Alive! http://www.gardensalive.com/article_mcgrath.asp?ai=4

IFAS Extension publications. http://solutionsforyourlife.ifas.ufl.edu/lawn_and_garden/

Mel Bartholomew. Square Foot Gardening.

Organic Gardening Magazine <http://www.organicgardening.com/>

Rodales' Encyclopedia of Organic Gardening.

Rodales's Vegetable Garden Problem Solver.

Rodales' Successful Organic Gardening Improving the Soil.

Florida Home Grown 2: The Edible Landscape by Tom MacCubbin.

Vegetable Gardening in Florida by James Stephens. Book available, also a shortened PDF available at <http://edis.ifas.ufl.edu/vh021>

