Why grow edibles? - economical

- better tasting
- in-touch with where food comes from

Why grow organically?

- sustainable no chemical reliance, no long-term damage to environment
- healthier for you, for garden visitors, for beneficial insects, for birds

Keys to success:

- pick an appropriate site
 - at least 8 hours sun/day for most summer veges (varies for winter)
 - near water, near your kitchen if possible
 - suitable soil (non-poisoned)
 - be able to easily get amendments to the site
- plan your garden well plant only what you'll really eat! use graph paper
- select varieties adapted for this area, disease-resistant if possible (see website)
- use viable seed and/or get healthy seedlings and space them correctly
 - most kinds of seed should be less than 3 year old (plant 2 if in doubt)
 - store seeds in cool, dry area for storage
 - plant everything at the appropriate time (see website)
- **prepare your soil well** (feed your soil, your soil will feed you)
- have **the right tools** *gloves* (tight fitting), D-handle shovel, D-handle digging fork, garden rake, leaf rake, trowel, weeder, a pick axe if your soil is *really* hard, a wheelbarrow

Preparing Your Garden Bed:

- moisten the soil well 2 days before digging
- get rid of big weeds
- dig, dig, dig loosen soil at least 12" down, deeper if possible (DEMONSTRATION LATER)
 - spread and incorporate organic amendments into top 12" of soil
 - mushroom compost (less than \$8 for a garbage can-full)
 - city compost (free)
 - purchased organic compost (Common Ground)
 - level it with a rake
 - (optional) box it in (helps to keep bed raised, can help if you have snails/slugs)
- (optional) spread and incorporate organic fertilizers (organic alfalfa meal, kelp meal, Doctor Earth & various rock dusts are great)
- if you want to invest, check into getting a soil test (about \$40) it will tell you what your soil needs, what to add (see MG website - www.mastergardeners.org for a list of places)

Figure Out How You'll Irrigate:

- hand watering? -cheap, but you have to be consistent and have lots of time
- overhead watering? ok for seedlings, but will make more mature plants susceptible to disease and definitely wastes water
 - Best: Faucet-attached drip or soaker system on a timer (spring or battery run)
 - a \$50 expense that will last, save you time, conserves water (DEMONSTRATION LATER)

Plant The Right Stuff At The Right Time:

- what to plant in June:
- **Seedlings**: tomatoes, herbs, all the squashes, pumpkins, mustard greens, melons, heat-resistant lettuces, cucumbers, collards, Swiss chard, New Zealand spinach, rutabagas, beneficial-attracting flowers!
 - By seed: bush or pole beans, beets, carrots, corn, radishes, soybeans
- for what to plant when during other months, see website

Protect Your Plantings:

- Birds love seeds and small seedlings- use tulle, flats, bird netting, CDs, etc.
- Snails/slugs
 - Set beer traps and/or hand pick 3 consecutive nights before planting
 - 3" copper tape around raised beds (can be expensive)
 - Sluggo (iron phosphate)
- Earwigs
 - small covered plastic container w/holes, buried in ground, filled w/corn oil and soy sauce OR damp, rolled-up newspaper will trap (be diligent in emptying traps)
- Diseases in soil
 - Rotate your crops
 - Soil solarization is possible
- Plant flowers that attract beneficial insects (daisy flowers, cosmos, cilantro/dill/carrots gone to seed, sunflowers, borage, etc.)
 - Plant your herbs throughout your garden beds they can act to confuse bad bugs

Keeping Your Plants Happy:

- Weeding
 - keep up with it, or plant health will be compromised
- better yet, MULCH! (we use newspaper with anything over it untreated grass clippings, leaves, woodchips, sawdust, city compost are all fine choices)
- Watering
 - "hydro zone" put plants that have similar water needs together
 - use an \$8 moisture meter (or a trowel) to determine when things need watering
- Trellising/Staking certain veges do better when allowed (or trained) to climb (cucumbers, beans, some squash) or when contained so they don't fall over (tomatoes, some peppers)

Specific Tips For Various Summer Vegetables:

- Tomatoes

- they like it HOT and love the sun
- don't plant them in the same space as last year and grow VFNT if possible
- plant the seedlings deep/wet strip off all but the top few sets of leaves
- plant seedlings at least 2' apart
- cage tomatoes early or stake as soon as they are big enough
- never prune determinate tomatoes, or you'll be pruning off potential fruit
- pruning is optional for indeterminate tomatoes, but can increase the size of the tomatoes and makes it easier to pick them
- to prevent blossom end rot, supplement with calcium (when planting or with a spray) and water *regularly* (not too much, not too little)
- watch for bugs, provide alternate bird water sources so they won't go for the nice ripe tomatoes

- <u>Cucumbers</u>

- appreciate some shade
- decide sprawling (plant in hills) or climbing (plant in rows)?
- climbing up a wire fence/cage or up individual stakes
- seedlings can be planted 1' apart in rows or 3 plants to a hill (in 9 sq.ft. of space)
- very important to mulch cucumber roots are especially sensitive to weeds
- - watch for sow bugs, earwigs and slugs/snails while plants are young
- cucumber beetle is worst bug enemy hand pick, use hot pepper/garlic/onion spray, or cover with fine netting
 - powdery mildew spray hard with water and/or use water/baking soda mix
 - pick, pick, pick or the plants will stop producing

- Beans

- can be planted by seed in June best spacing is 4" apart, hexagonal spacing
- soak seeds overnight and plant 1" under fine, loose soil
- watch for sow bugs, earwigs and slugs/snails while plants are young
- Mexican bean beetles best dealt with by hand-picking beetles, larvae and eggs
- pick, pick, pick or the plants will stop producing

- Lettuce

- appreciate some shade (or will be bitter and will bolt quickly)
- a better winter item, in my opinion :)
- pick early in the day to reduce bitterness

- Squash (Zuc./Pattypan/Crookneck)

- 2-3 plants per family is enough share a 6-pack with a friend or two
- plant 3' apart in low hills
- water regularly and deeply and mulch well
- squash battle bugs and diseases similar to cucumbers (see above)
- harvest while squash are young (they will keep producing, don't worry)

- Carrots

- appreciate some shade - grow in the cooler areas of your garden

- especially fun for kids, and garden-grown ones can be *very* tasty
- need well-worked soil raised beds are best grow short ones otherwise
- don't need that much nitrogen (most root crops don't); they do like potassium though (wood ash is a good source)
- sprinkle seeds (mix with sand to avoid over seeding), then dampen soil, and lay a board over them check in 5-7 days and uncover when they have germinated
- thin twice once when 2" high, and again when the young carrots look crowded (eat the thinnings)
 - keep soil moist mulch is very beneficial for carrots
- harvest by a twist and pull and cut the tops off (greens will keep growing and draw moisture from the carrot)

- Corn

- soak the seeds overnight for fast germination
- try planting some each of early/mid/late season varieties (so you don't get an abundance of corn all at once)
- plant in good, rich soil that has been amended with organic fertilizer high in nitrogen (fish parts, composted manure, alfalfa meal, etc.)
 - plant 2 seeds per hole, 12" apart, hexagonal spacing
- make sure to plant in a square 3-4 short rows are better than 1-2 long ones this allows for better pollination ("tickle" your corn when you can)
 - protect the seeds/young seedlings vigilantly from birds
 - mulch well (newspaper with something over it is an excellent mulch)
- harvest when silks are dry brown and kernels are full-sized to the tip of the ear (pull back husk slightly to check), a thumb nail puncture will produce a milky liquid
- cook immediately if possible to retain sweetness (or keep cold until ready to cook)

- Swiss Chard

- plant seedlings or (soaked) seeds, 8-10" apart
- protect from hungry birds
- can tolerate some shade; not fussy about soil
- harvest by pulling off larger outer leaves near the base younger leaves will continue to grow
 - excellent (and highly nutritious) in soups, salads and pastas