

PLANNING AND PLANTING TO PRESERVE

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The More Limited Your Space,
The More You Have to Plan!



COLLECT SOME FACTS

- What Do You Eat?
- What Do You Want to Preserve?
- How Much Should You Grow?

WHAT DO YOU EAT?

- Things you currently eat (and like!)
- How often do you eat them?
 - OR How often WOULD you eat them?
- How much do you eat?

Broccoli

Green/Yellow Beans

Butternut Squash

Tomatoes (in various forms)

Salsa

THINGS WE CURRENTLY EAT

| | |
|------------------|--|
| Broccoli | 1 head per week |
| Green Beans | 1 ½ lb per week (2 bags frozen) |
| Butternut Squash | 1-2 squash per month (large) |
| Tomatoes | 3-4 cans diced; 2-3 cans sauce per month |
| Salsa | 1 pint per week |



WHAT TO PRESERVE AND HOW?

- Canning
- Freezing
- Drying

- Long Term Storage



PRIORITIZE YOUR NEEDS

- Expense
- Quality
- Healthfulness?
- Try something new?
- Access?

A WORD ABOUT FRUIT

- Think about the cost...
- Long-term plan and priority
- Can have exceptional yield!

WHAT TO PRESERVE & HOW?

| | |
|------------------|---------------------------------------|
| Broccoli | Freezing |
| Green Beans | Freezing, maybe try canning? |
| Butternut Squash | Freezing? Canning? Long Term Storage? |
| Tomatoes | Canning; Freezing only if space |
| Salsa | Canning |

HOW MUCH TO GROW?

| Vegetable | Amount Use | Year Total | To Store |
|------------------|-------------|------------|-----------|
| Broccoli | 1 head/wk | 52 heads | 40 heads |
| Green Beans | 1½ lb/wk | 78 lbs | 60 lbs |
| Butternut Squash | 2 squash/mo | 24 squash | 16 squash |
| Tomatoes | 7 cans/mo | 84 cans | 70 cans |
| Salsa | 1 pint/wk | 52 pints | 40 pints |

HOW MUCH TO GROW?

| Vegetable | To Store | Equivalents | Needed |
|-----------|---------------------|-------------|---------|
| Tomatoes | 70 cans (35 qts) | 3 lbs/quart | 105 lbs |
| Salsa | 40 pints | Umm... | Hmm... |

SALSA – FIND A RECIPE

- Chile Salsa – 7 pints/batch
 - 5 lbs tomatoes
 - 2 lbs chile peppers
 - 1 lb onions
- Need 6 batches
 - 30 lbs tomatoes
 - 12 lbs chile peppers
 - 6 lbs onions

SO, WHAT TO PLANT?

- Research Yields
- Basic Plant Knowledge
- Keep Your Own Records

RESEARCH YIELDS

- Catalogs for estimates
- Vegetable Garden Planting Guide
- Other sources?

BASIC PLANT KNOWLEDGE

- 1 Broccoli plant yields 1 head
 - AND some side shoots
- 1 onion plant yields 1 onion (size varies)

KEEP YOUR OWN RECORDS

- K-State says 100 ft. row of tomatoes yields 100 lbs of tomatoes
- But I know I get 20 lbs from 10 ft?

KEEP YOUR OWN RECORDS

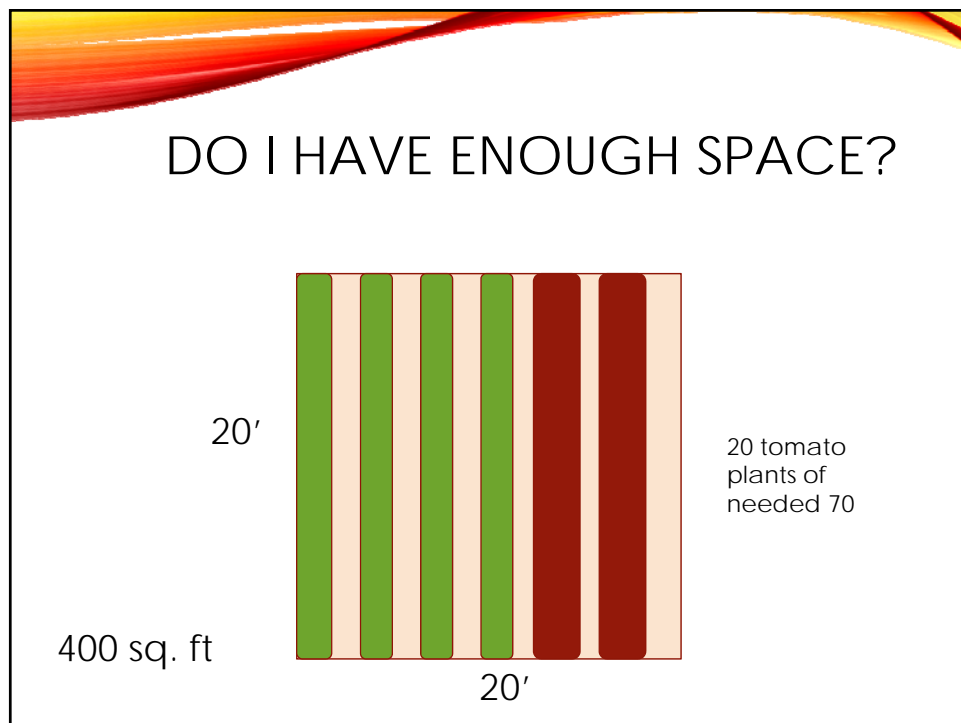
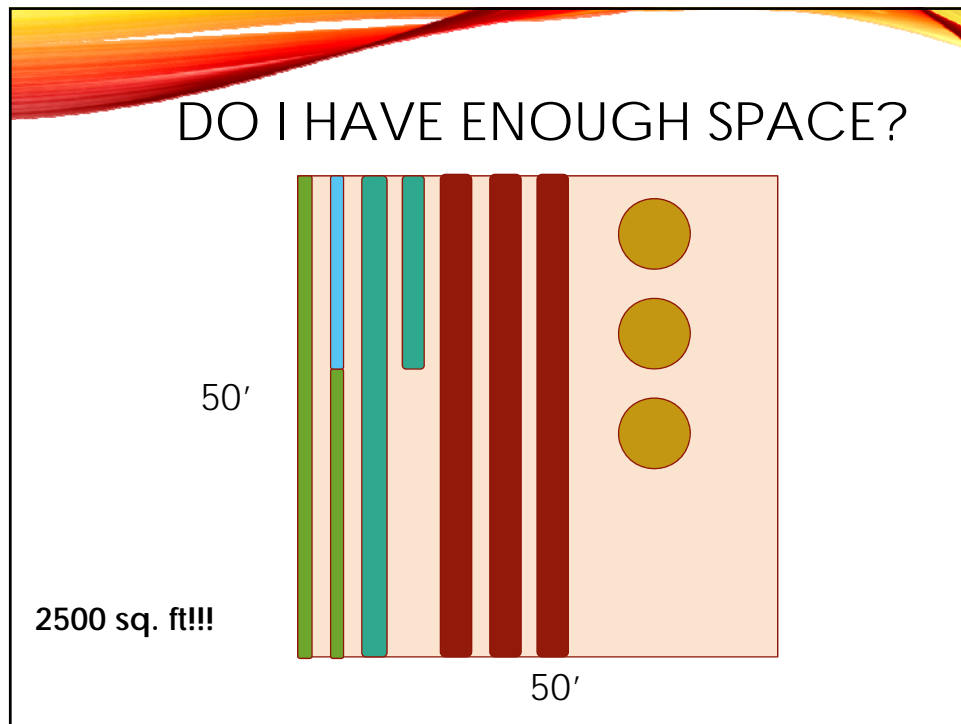
- Make it work for you!
- Know what you planted
 - i.e. - 20 ft. of beans
- Know what you stored/preserved
 - i.e. - 50 pints of beans

HOW MUCH TO PLANT?

| Vegetable | Needed | Expected Yield | Amount to Plant |
|------------------|-----------------------|------------------------|------------------------|
| Broccoli | 40 heads? (55 lbs) | 100 lbs per 100 ft. | 40 plants? (55 ft?) |
| Green Beans | 60 lbs | 120 lb/100 ft. | 60 ft + 20 ft? |
| Butternut Squash | 16 squash | 5 squash per plant | 4 plants? |

HOW MUCH TO PLANT?

| Vegetable | Needed | Expected Yield | Amount to Plant |
|--------------|---------|-----------------|-----------------|
| Tomatoes | 105 lbs | 100 lbs/100 ft. | 105 ft. |
| <u>Salsa</u> | | | |
| Tomatoes | 30 lbs | 100 lbs/100 ft. | 30 ft. |
| Peppers | 12 lbs | 60 lbs/100 ft. | 20 ft. |
| Onions | 6 lbs | 100 lbs/100 ft. | 6 ft. |

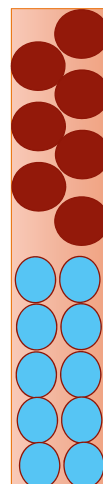


DO I HAVE ENOUGH SPACE?

4'x20' raised beds



80 sq. ft each
240 sq. ft. total

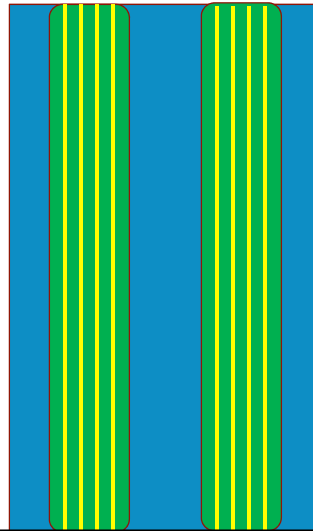


MAXIMIZING YOUR SPACE

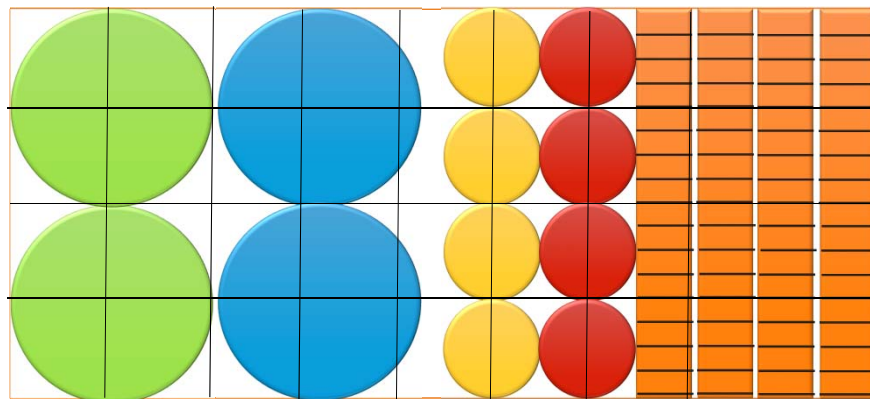
- Rethink the Layout
- Go Vertical
- Multiple Plantings

RETHINK THE LAYOUT

- Wide-bed system
- Narrow paths
- Minimize empty space



GRID SYSTEM

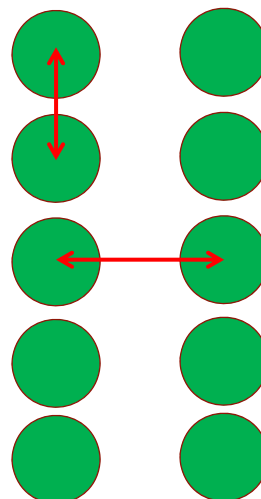


DETERMINE SPACINGS

- Veg. Garden Planting Guide

- In Row Spacings

- Between Row Spacings



GO VERTICAL



CAGES OR STAKING



CATTLE PANEL





SPACE
GAINED PER
PANEL
=
48 FT²

MULTIPLE PLANTINGS

- AKA "Succession Planting"

SHORT SEASON

- Radishes
- Some lettuces
- Salad mixes
- Spinach



HALF SEASON



- Potatoes
- Onions
- Beets
- Carrots
- Peas
- Beans
- Lettuces
- Broccoli

PLANT "LATE"

- Okra
- Sweet Potatoes
- Vine Crops
- Eggplant
- Peppers
- Even Tomatoes!



SUCCESSION PLANTING

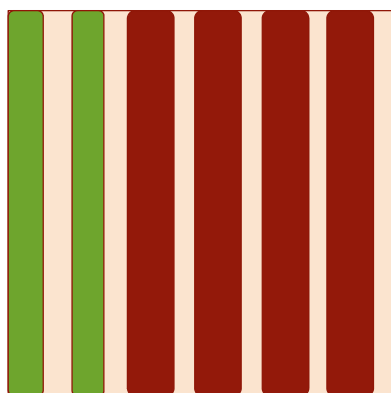
- Plant 2-3 times in one spot
- Plant the same thing multiple times
- Plant different varieties of a vegetable

PLANT 2-3 TIMES IN ONE SPOT

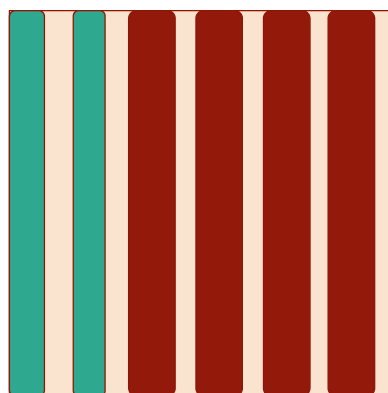
- Plant an early crop of radishes or spinach
- Follow with a regular season crop of tomatoes, squash, or cucumbers
- In the fall, plant another crop of radishes, greens, or garlic

ANOTHER EXAMPLE

Spring



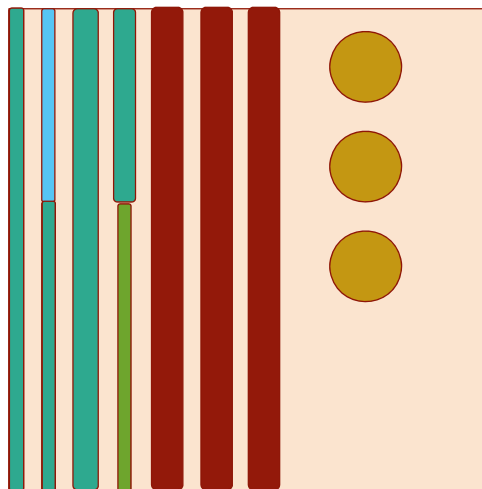
Fall



PLANT SAME THING MULTIPLE TIMES

- Same or different varieties
- Allows for a continual, consistent harvest
- Provides a “backup plan” in case of problems

MULTIPLE PLANTINGS



HOW MANY TIMES DO I PLANT?

- Some vegetables only need 1 or 2 plantings
- Some vegetables may benefit from 2-4 plantings
- Some vegetables should be planted every 1-2 weeks

PLANT MULTIPLE VARIETIES

- Buy varieties with differing Days to Maturity
 - Tomatoes – 52 to 100+ DTM
 - Sweet Corn – 62 to 94 DTM
 - Broccoli – 55 to 75 DTM
 - Eggplant – 50 to 80 DTM
 - Lettuce – 45 to 75 DTM

WOULD YOU RATHER...?

Can 30 quarts of tomatoes at one time?

OR

Can 5-10 quarts of tomatoes every 1-2 weeks?

CHOOSING VARIETIES





CHARACTERISTICS TO CONSIDER

- Weather tolerance?
- High yield?
- Disease resistance?
- Plant size/growth habit?
- Days to Maturity?
- Hybrid or Heirloom?



MORE CHARACTERISTICS

- Texture?
- Acidity?
- Production timing?
- Flavor?
- Quality?
- Uniformity?

INSECT OR DISEASE TOLERANCE

- Disease resistance for soil-borne diseases and nematodes
 - V, F, N
- Powdery mildew resistance
- Tolerance of squash vine borer

DAYS TO MATURITY

- Sometimes abbreviated DTM
 - Read the catalog, seed packet, or label
- Direct seeded – DTM from seed
- Transplanted – DTM from transplant
- Allows you to schedule plantings properly

SELECTING HYBRIDS

- A hybrid is a vegetable variety that has been developed by crossing at least 2 parents and selected for the best combination of characteristics.
- Cannot save seeds
- Hybrids are NOT “genetically modified”

REASONS TO SELECT A HYBRID

- Consistency or Uniformity
- Disease tolerance/resistance
- Compact plant habits/traits
- Quality



SELECTING HEIRLOOMS

- An heirloom is a vegetable that is open-pollinated and has been around for at least 50 years.
- Often have “stories”
- Can save seed
- May or may not have improved traits



REASONS TO SELECT AN HEIRLOOM

- Unique traits
- Flavor characteristics
- Quality values
- Ability to save seed



UNDERSTANDING HEIRLOOMS

- May or may not have the same consistency or uniformity as hybrids
- Often large plants
- Wide quality variations
- Adapted to specific growing conditions
- Narrow harvest window?

HARVESTING & STORAGE





HARVESTING

- Peak maturity
- Minimal blemishes



SHORT-TERM STORAGE

- Refrigerator, high humidity
- Freeze tomatoes to can later




LONG-TERM STORAGE OPTIONS

- Cure & store
 - Winter squash
 - Potatoes, onions, etc.
 - Sweet potatoes



ROOT CELLARING

- Choose winter storage varieties
 - There are “long keeper” tomatoes!
- Create a space with appropriate conditions



STORING "IN PLACE"

- Root vegetables, primarily
 - Mulch heavily
 - Cover with row cover
 - Dig as needed/able

QUESTIONS?

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