Jump Start Your Spring Garden

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Master Gardener

Ten Steps to a Successful Vegetable Garden

Step 1	Select a good location
Step 2	Plan your garden layout
Step 3	Grow recommended varieties
Step 4	Obtain good seed, plants, equipment & supplies
Step 5	Prepare and care for the soil properly
Step 6	Plant your vegetables properly
Step 7	Irrigate with care
Step 8	Mulch & cultivate to control weeds
Step 9	Be prepared for pests and problems
Step 10	Harvest at peak quality

Step 1 Select a good location

- Choose an area with plenty of morning sunlight and some afternoon shade
- Ensure that vegetables that create fruit (tomatoes, squash, peppers, etc.) will get 6-8 hours of full sun exposure
- Don’t plant under or near trees and large shrubs
- Make sure you have a convenient source for adequate watering
- Rotate crops
  - ❑ Root
  - ❑ Fruit
  - ❑ Green
  - ❑ Bean

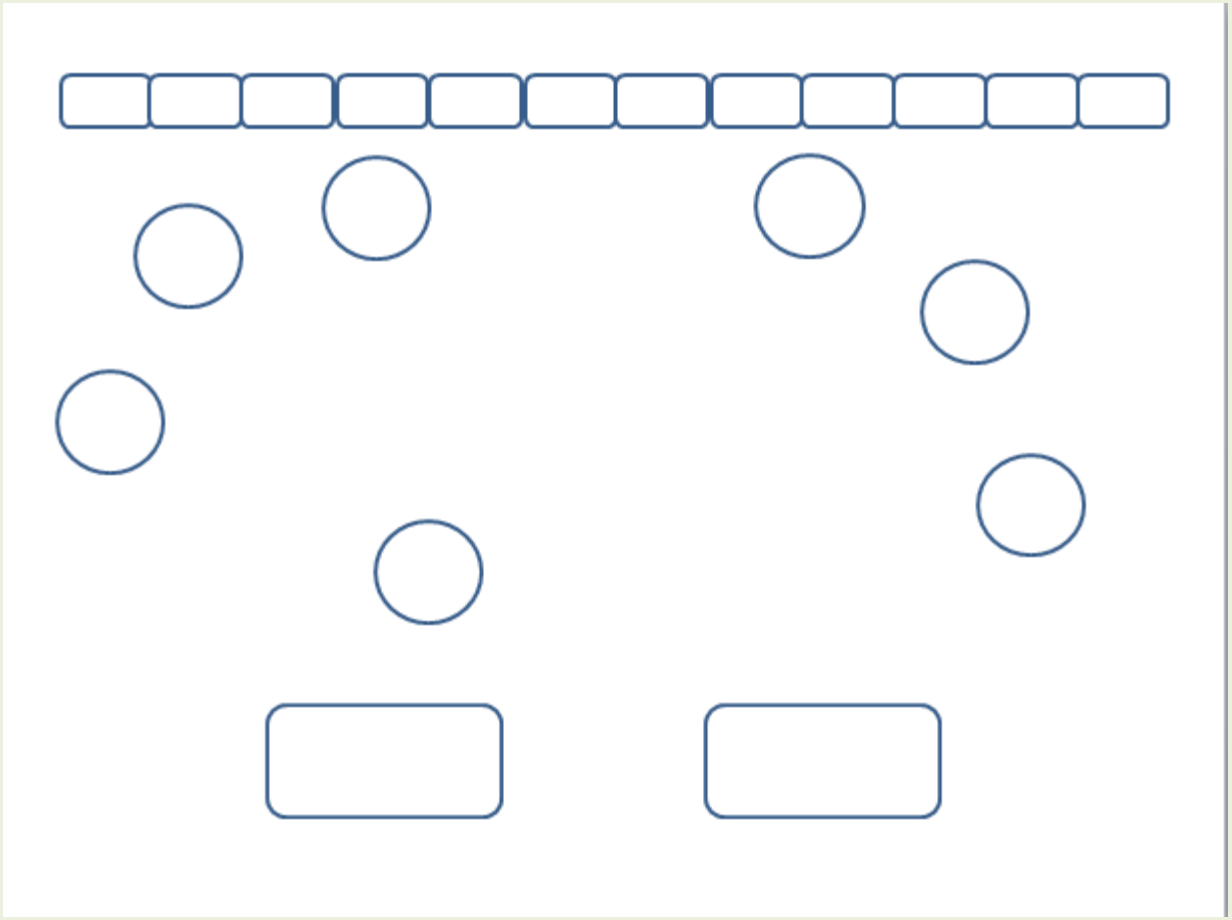
Step 2 Plan your garden layout

- Start a gardening notebook or journal
- Sketch a plan of the intended planting areas
- Decide on what vegetables you want.
  - Seed?
  - Plant?
- Determine when it is most advantageous to plant each type of vegetable
- Document all this in your gardening notebook

My Garden Journal

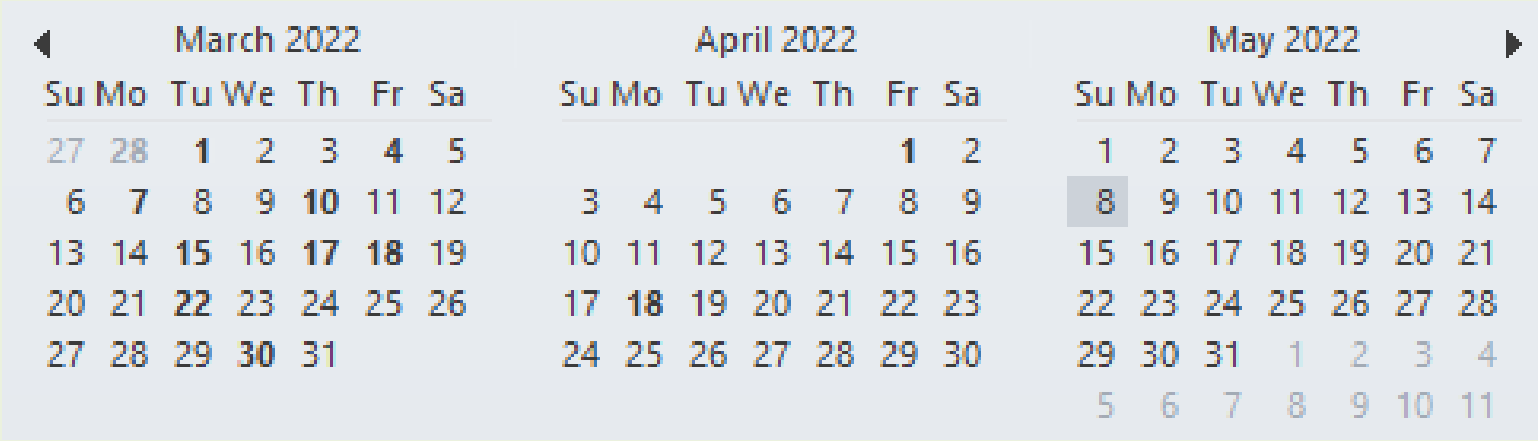
Plant	Normal Germination	Typical Harvest	Planting Location	Seed outside	Seed inside	Sprout	Harvest	Notes
Watermelon radish	4 to 10	55	Front Gabion	15-Feb		26-Feb		
Carrots	10 to 25	60 to 75	Front Gabion	15-Feb		5-Mar		
Beets	10 to 12	55	Front Gabion	17-Feb		15-Mar		
Swiss Chard	7 to 12	60	Front Gabion	17-Feb		10-Mar		

My Backyard Garden Layout



Normal Vegetable Garden Spring Planting Time

On Mother's Day (May 8th this year)



March 2022

Su	Mo	Tu	We	Th	Fr	Sa
27	28	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

April 2022

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May 2022

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11

After last hard freeze (32.5 degrees F)

Prescott Spring Freeze Dates and Probabilities* (32.5 degrees F)

Earliest	90%	80%	70%	60%	50%	40%	30%	20%	10%	Latest
4/14	4/26	5/3	5/8	5/13	5/18	5/21	5/26	5/31	6/2	6/17

Cottonwood Spring Freeze Dates and Probabilities* (32.5 degrees F)

Earliest	90%	80%	70%	60%	50%	40%	30%	20%	10%	Latest
3/18	3/24	3/26	4/3	4/9	4/15	4/20	4/25	4/29	5/5	5/8

Vegetable Species 4500-6000 feet

FROST TOLERANT	
Kale	Feb. 15-Apr 10
Onion, dry (seeds)	Feb. 15-Apr. 15
Pea, spring	Feb. 15-Aug. 15
Horseradish	Feb. 15-Mar. 15
Pepper (seed)	Mar. 1-Apr. 1
Rhubarb	Mar. 1-Apr. 1
Tomato (seed)	Mar. 1-Apr. 1
Chard 2	Mar. 1-Apr. 10
Lettuce, leaf	Mar. 15-Apr.15
Broccoli	March 15-30
Cabbage (seed)	March 15-30
Cauliflower	March 15-30
Onions, dry (sets) 2	Apr. 1-15
Parsley	Apr. 1-15
Asparagus	April 1-30
Leek	April 1-30
Garlic (cloves)	April 1-30
Mustard	Apr. 1-July 1
Radish	Apr. 1-June 15
Rutabaga	Apr. 1-May 15
Salsify	Apr. 1-May 15
Spinach	Apr. 1-May 15
Parsnip	Apr. 1-May 20
Turnip	Apr. 1-May15
Endive	Apr. 15-June 15
Onion, green bunch	Apr. 15-May 1
Broccoli (plants)	Apr.15-July 15
Cabbage (plants)	Apr.15-July 15
Cauliflower (plants)	Apr.15-July 15
Kohlrabi	Apr.15-May15
Beet	May 1-July 15
Carrot	May 1-July 15

FROST SUSCEPTIBLE	
Squash. summer	May 1-July 1
Watermelon	May 1-June 1
Pepper (plants)	May 10-Aug. 25
Basil	May 10-June 1
Potato, Irish	May 10-June 1
Tomato (plants)	May 10-June 1
Potato, sweet	May 15-20
Bean, bush	May 15-July 1
Bean, pole	May 15-July 1
Bean, lima	May 15-July 1
Squash, winter	May 15-July 1
Cantaloupe	May 15-June 15
Cucumber	May 15-June 15
Eggplant (plants)	May 15-June 15
Muskmelon	May 15-June 15
Okra	May 15-June 15
Pumpkin	May 20-June 15
Bean, edible soy	May 25-July 1
Corn, sweet	May 25-July 1
Corn, Mexican June	May 25-June 15
Celery (plants)	June 1-July 15

FROST TOLERANT	
Brussels Sprouts	June 1-July 1
Chinese Cabbage	June 1-July 15
Collard	June 1-July 15
Chard	July 1-Aug. 1
Lettuce, head	July 1-Aug. 1
Pea, fall	Aug. 1-Sept. 1
Lettuce, leaf 2	Aug. 1-Sept.15
Onion, dry (seeds) 2	Oct. 15-Jan. 1
Onions, dry (sets)	Nov. 1-Feb. 1

Taken from UofA Bulletin AZ1435-r2015. These guides are based on experience, observation, frost dates, hardiness and other characteristics of vegetable species.

Step 3 Grow recommended varieties

- Success is greatly influenced by plant variety
- Select from those known to do well locally
- Try one or two new varieties each year

Step 4 Obtain good seed, plants, equipment & supplies

- Seed catalogs
- Age of seeds
- Saved seeds
- Purchasing plants
- Avoid wilted, spindly, spotted leaves
- Look for insects
- Clean your equipment and tools
- Mulches and fertilizers

Step 4 Obtain good seed, plants, equipment & supplies

PLANT INGROUND DIRECTLY

- Root vegetables
- Lettuce
- Spinach
- Corn
- Watermelon
- Pumpkin
- Onions

GOOD FOR TRANSPLANTING

- Anything you would normally buy at a nursery
- Broccoli
- Cabbage
- Cauliflower
- Eggplant
- Peppers
- Sweet potatoes
- Tomatoes

Step 5 Prepare and care for the soil properly

- SOIL CONSIDERATIONS:
- New Gardens
- Mineral topsoil - soil rich in decayed organic material including nitrogen, potassium, calcium, sulfur and phosphorus
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- Existing Gardens
- Turn soil and mix in high quality, fully decomposed material into top 10-12 inches of soil
- May need to wait 1-2 months for harmful salts to leach through soil

- Square Foot Gardening Mix
- 1/3 Blended Compost (Minimum 5 types of compost)
- 1/3 Peat Moss (Coconut Coir fiber ok too)
- 1/3 Coarse Vermiculite

- Potting Mix – not recommended

Step 5 | Prepare and care for the soil properly

FERTILIZING

- Before Planting
- Typical fertilizer application would be 16-20-0 (ammonium phosphate) into the top 10-12 inches

- After Planting
- Top dress plants (or after seedlings emerge) with organic mulch

- During Growing Season
- Side dress 3-4 inches to the sides of plants

Step 6 Plant your vegetables properly

STARTING SEEDS FOR TRANSPLANTING

- Calculate when to start seed for proper transplanting into garden
  - Plants germinate and grow at different rates
  - If successive plantings are desired, successive seedings will be needed
- Determine the number of seeds to plant
  - Allow for non germinating seeds
- Medium (soil)
  - Use a seed starting mix
  - Homemade version:
    - ❑ 4 parts screened compost
    - ❑ 1 part perlite
    - ❑ 1 part vermiculite
    - ❑ 2 parts coir
  - When moving into large pot before planting in garden, ok to use potting mix

Step 6 Plant your vegetables properly

STARTING SEEDS FOR TRANSPLANTING (cont)

- Start in peat pots, trays, cans, virtually anything but make sure containers are clean!
- Plant per seed packet instructions and gently water
- Cover with plastic and place where bottom is warm (top of frig, water heater, near oven, on seedling heat mat
- When seedlings emerge, remove plastic and move to sunny or light supplemented location
- Thin plants to desired number early
- After seedlings have second pair of leaves and plants are in flats, move to individual containers

SPECIAL HANDLING

- If mold appears on soil, spray with a mixture of 1 pint of water and 4-5 tablespoons of hydrogen peroxide

Step 6 | Plant your vegetables properly

DIRECT SEEDING INTO GARDEN

- Mark out straight rows
- Space seed properly as suggested on seed package
  - Lay toilet paper on soil before putting seeds down
- Plant at proper depth
  - Rule of thumb is depth should be 4 times diameter of seed
  - Very small seeds just lightly dusted with soil
- Cover seeds and firm the soil by tamping with hand or flat back of hoe
- Irrigate by sprinkling soil surface lightly
- Thin plants to desired number as soon as possible

Step 6 Plant your vegetables properly

TRANSPLANTING INTO GARDEN

- Harden off plants taken from inside
- Transplant on a cloudy day or in evening
- An hour before transplanting thoroughly water plants
- Handle with care, remove gently from containers
- Keep roots moist if they are out of container for any period of time
- Hole for transplant should be slightly larger / deeper than container
- Use starter solution for faster start
  - Soluble fertilizer high in phosphorus (10-52-18 or 10-50-10)
  - Use about a cup per plant or enough to fill hole around plant
- If using peat or fiber pots break off excessive pot material at top
- Cover roots with soil and tamp down around plant
- Protect plants for a few days from sun, wind, or cold if necessary

Step 7 | Irrigate with care

- Water enough to keep soil moist – not wet
- Typically need to water when soil becomes crumbly when squeezed
- Use a spade or probe to determine moisture depth
- Moisture is needed for seed sprouting
- As plant grows increase watering period allowing deeper penetration
- Large plants need more water than smaller plants
- Shallow rooted vegies need water more often (cabbage, onion, lettuce, corn)
- Night time watering encourages disease growth

Step 8 | Mulch & cultivate to control weeds

Weeds – BAD

- Insects
- Diseases

Control Weeds

- Mulching – covering soil with protective material
- Cover crops
- Leaves, sawdust, wood chips, cardboard, newspaper, shredded paper
- Cultivation
- Use sharp hoe or cultivator just as weeds sprout
- Scrape and loosen soil on surface
- Good time to side dress with fertilizer

Step 9 | Be prepared for pests and problems

Pest problems can be minimized when you're prepared for them

- Keep a close eye on plants for insects and disease – treat right away
- Select disease resistant varieties
- Rotate crops (Root, Fruit, Green, Bean)

Step 10 Harvest at peak quality

- Most vegetable are at peak quality for short period of time
- Immature vegetables do not improve after harvest
- Maintain harvest quality with careful handling
- Learn proper storage temperatures
  - 40° F for asparagus, broccoli, leafy crops, peas, sweet corn
  - 55° F for tomatoes, peppers, cucumbers, eggplant

Wrap Up

- Remember to plant long lead time vegies early
- Get your starts growing inside and harden off
- Start seeds earlier than “Mother’s Day
- Green manures add an extra layer of protection
- Use season extenders for in-ground spring plants

Resources

Ten Steps to a Successful Vegetable Garden

Yavapai County Agriculture Extension Website

- http://extension.arizona.edu/yavapai/
- Put AZ1435-2015 in search box

For more information about our programs,
visit our website at
extension.arizona.edu/yavapai

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Cooperative Extension
Yavapai County