Cool Weather Vegetables! Now! It's 100°.

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Amador County Master Gardener

8-15-20

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This virtual class is being recorded and will be posted after the class at: https://ucanr.edu/sites/Amador_County_MGs/Classes/Handouts_-_Presentations/

Why Grow Vegetables

- Enjoy the outdoors and gardening, and it is fun to watch them grow and mature.
- The flavor of freshly grown and harvested vegetables is so much better.
- There are many more varieties available to grow than you can get in a store or even farmer's market.
- A victory garden for our times

Planting Vegetables

- Warm season crops grow best when the days are long and hot (between 65º F and 95º F)
- Examples: Basil, beans, corn, cucumber, eggplant, melons, okra, peppers, pumpkins, summer squash, winter squash, tomatoes…

- Cool season crops grow best and produce the best quality when the average temperatures are 55º F to 75º F.

Examples: Asparagus, artichokes, beets, broccoli, cabbage, carrots, chard, cilantro, kale, lettuce, parsley, peas, radish, rhubarb, spinach...

Timing

Summer

- Plant in late spring
- Harvest in summer
  - -busy in enjoying produce
  - -too hot to work in garden
- Finished with first frost

winter

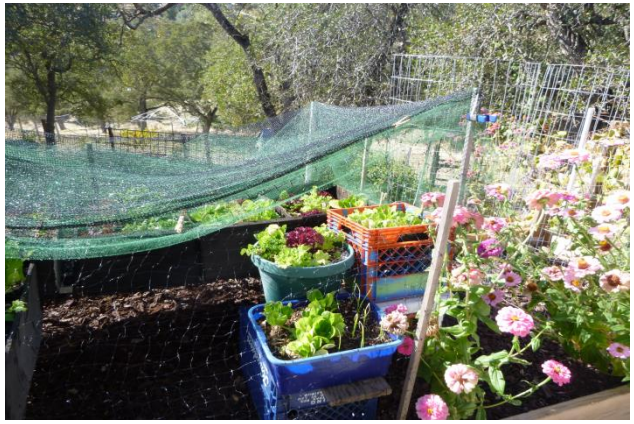
- Needs time to grow before frost
- Harvest all winter
- Heat puts an end to winter garden

Where do I start?

- Plan
  - What do you like to eat?
- Evaluate
  - Space -- flat or raised beds, containers, interplant
  - Soil -- sand, loam, clay
  - Water -- source available to area
  - Sun -- 6-8 hours
  - Climate -- last frost date

SPACE

- Dedicated vegetable garden in the ground
- Raised beds
- Interplanted with flowers and plants in your yard
- Containers of all types.



SPACE

Plant Charateristics

- Single or continuous crop
- Compact, sprawling, climbing

Soil
Healthy soil=healthy plants

Soil provides plants with air, water, and nutrients.

All soils need organic matter for tilth.

- Allows air and water to reach roots.
- Provides space for vigorous roots growth.
- Holds moisture.

Soil provides nutrients.

- 17 known essential nutrients, mostly from the soil
- primary nutrients N, P, K

Soil Preparation
When and What

Compost

Manure

Cover crops

Mulch

Fertilizer

Goal: Healthy soil with organic matter and necessary nutrients.

Water and Sun

- Make sure water is available
  - Nearby and convenient
  - Decide on irrigation method
- Look at patterns of sun and shade—predict changes in the wintertime
  - Where will it be shady and sunny as the sun moves south
  - Will deciduous trees affect light patterns

Climate

- Cool weather vegetables can tolerate some frost.
- They may benefit from protection from weather and hard frosts.
- **New transplants** need protection from frost until they are established.

Pay attention to your own frost dates.

“Be aware of your own microclimate”

Local terrain can sharply modify the climate in any zone.

- South facing slopes are warmer than flat land or north facing slopes.
- Cold air drops. Hill sides are warmer than the ground below them, hilltops are warmer due to rising warm air but are also more susceptible to wind and storm damage.
- Shaded areas and windy areas may cause temperature variations.
- Walls, solid fencing, or barriers will affect temperature.

FALL, WINTER, AND EARLY SPRING EATING

COOL WEATHER CROPS

COOL WEATHER VEGETABLES--FALL/WINTER PLANTING GUIDE

1/14/2017

MID ELEVATION (ABOUT 1000-2500) CHART

lower elevations--shift dates about 2 weeks later into the fall and about 2 weeks earlier in the spring

higher elevation --shift date about 2 weeks earlier in the fall and about 2 weeks later in the spring

GREENS	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Days to Yield	GERM.
Arugula			DS	DS	DS			DS	DS	DS			28-35	40-55
Bok Choy			ST	DS/T	DS/T				ST	ST	DS/T	DS/T	25-55	50-80
Collards		DS	DS	DS					ST	DS/T			65-85 T	45-85
Kale		DS	DS	DS				ST	T	DS/T			56-80	45-85
Lettuce		DS/T	DS/T	DS/T	DS	DS	DS	DS	DS	DS	DS/T		45-60	40-85
Mustard Greens		DS	DS	DS					DS	DS	DS		40-60	45-85
Spinach		ST	DS/T	DS/T	DS			DS	DS	DS/T			40-60	40-75
Swiss Chard	DS/T	DS/T	DS/T	DS/T	DS				DS/T	DS/T	DS/T	DS/T	55-65	40-95

ROOT CROPS	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Days to Yield	GERM.
Beets			DS	DS				DS	DS	DS	DS	DS	55-65	50-85
Carrots		DS	DS	DS						DS	DS		60-80	50-85
Fennel	DS	DS								DS	DS		80-110	60-90
Kolhrabi	DS	DS								DS			60-70	45-85
Parsnips	DS	DS							DS	DS			85-90	50-85
Radish			DS	DS					DS	DS			25-40	55-85
Turnips			DS	DS				DS	DS	DS			45-60	45-85

COLE CROPS	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Days to Yield	GERM.
Broccoli	ST	ST/T	T					ST/T	T				60-80 T	45-85
Brussel sprouts	ST	ST/T	T										80-90 T	45-85
Cabbage	ST	ST/T	ST/T				ST/T	T					65-95 T	45-85
Cauliflower	ST	ST/T					ST/T	T					55-65 T	45-85

FIRST FROST DATE

LAST FROST DATE

DS=DIRECT SEED

ST=START TRANSPLANTS

T= TRANSPLANT

COOL WEATHER VEGETABLES--FALL/WINTER PLANTING GUIDE

MID ELEVATION (ABOUT 1000-2500) CHART

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HERBS	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Days to Yield	GERM.
Cilantro			DS/T	DS/T					ST	DS/T			40-50	55-70
Parsley	DS/T	DS/T	DS/T	DS/T				ST	ST/DS	ST/DS	DS/T	DS/T	85-90	55-85

ALIUMS	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Days to Yield
Garlic		DS	DS	T	T								150-180 CLOVES
Leeks		DS	DS	T	T					T	T		80-90 T
Onions		DS	DS	T	T								120-150 T, 95-120 BULBS
Shallots		DS	DS	T	T								

PERRENIALS	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Days to Yield
Asparagus								*	*				crowns, 2 yrs.
Artichoke				*	*			*	*				root divisions, 3 yrs.
rhubarb				*	*	*							roots, 1 yr.

LEGUMES	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Days to Yield	GERM.
Fava beans			DS	DS	DS	DS							85-90	40-75
Peas		DS	DS	DS				DS	DS	DS			65-85	40-85

FIRST FROST DATE — LAST FROST DATE

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Approximate elevations:

Carbondale 200	Plymouth 1100	
Ione 300	Jackson 1200	Pine Grove 2500
Comanche 300	Sutter Creek 1200	Daffodill Hill 2900
Dry Town 600	Quartz Mountain 1400	Pioneer 3000
Sunnybrook 800	Martell 1500	Mt. Zion 3000
Amador City 950	Westover Field 1700	Buckhorn 3400
	Fiddleetown 1700	Sherwood Forest 3600
	River Pines 2000	Amador Pines 3800
	Jackson Butte 2300	Hams Station 5500

Leafy Greens—Direct seed or Transplant

- Lettuce
- Chard
- Kale
- Spinach
- Asian greens
- . . .

Root Crops—Direct Seed

- Beets
- Carrots
- Turnips
- Radishes
- Parsnips
- . . .

Cole crops—Transplant

- Broccoli
- Cauliflower
- Brussel sprouts
- Romanesco
- Kohlrabi
- . . .

Herbs—Direct seed or transplant

- Parsley

- Cilantro

Alliums

- Garlic
- Leeks

- Onions
- Shallots

Perennial Vegetables

Artichokes

Asparagus

Rhubarb

Legumes—Direct seed

- English Peas
  (shelling)
- Snow Peas and
  Snap Pease
  (edible pod)
- Fava beans

Strawberries

Enjoy
good eating
from your garden.

Thank You for Joining Us Today

Amador County Master Gardeners can be reached by phone or by email on Tuesdays through Thursdays from 10:00 a.m. to 12:00 p.m.

209-223-6838,
mgamador@ucanr.edu

Additional information at:
California Master Gardener Handbook
cagardenweb.ucanr.edu

Protection for Your Crop

Alan Vosburgh
Amador County Master Gardeners
August 15, 2020

Fall Gardening

Cold Frames -Transparent roofed enclosure built low to the ground. Used to protect plants from adverse weather primarily excessive cold, rain, and wind. The transparent top admits sunlight and prompts heat escape via convection that would otherwise occur particularly at night. Essentially the cold frame is a miniature greenhouse to extend the growing season.

Reasons To Use Cold Frames

- Extend Growing Season
- Protect from the elements such as wind, harsh rain or hail
- Starting seeds early(hardening off)

Frugal Cold Frames

- Milk cartons

Cold Frames

Cold Frames

- Ideal position is a southern exposure
- Slant should be between 35 and 45degrees to capture light
- Slant should be at least 1 inch for each foot of width
- Place out of the wind(close to the side of a building)

Cold Frame

Automatic Opener

Building a Cold Frame

Introduction - Cut the lumber for all sides. a) Use 2x12 boards on the sides & back, b) 2x5 on the sides and back, c) 2x8 on the front, d) 2X12, 72” long for the back & the front, e) 2x12, 36” for the side.

Step 1 – Mark the cuts for angled sides. Lay the pieces out to form cold frame. Mark where the sides line up with 2x8 in the front. Draw a line from this mark to upper corner.

Directions

Step 2 – Cut the angled side. The straighter the cut, the tighter the fit.

Directions

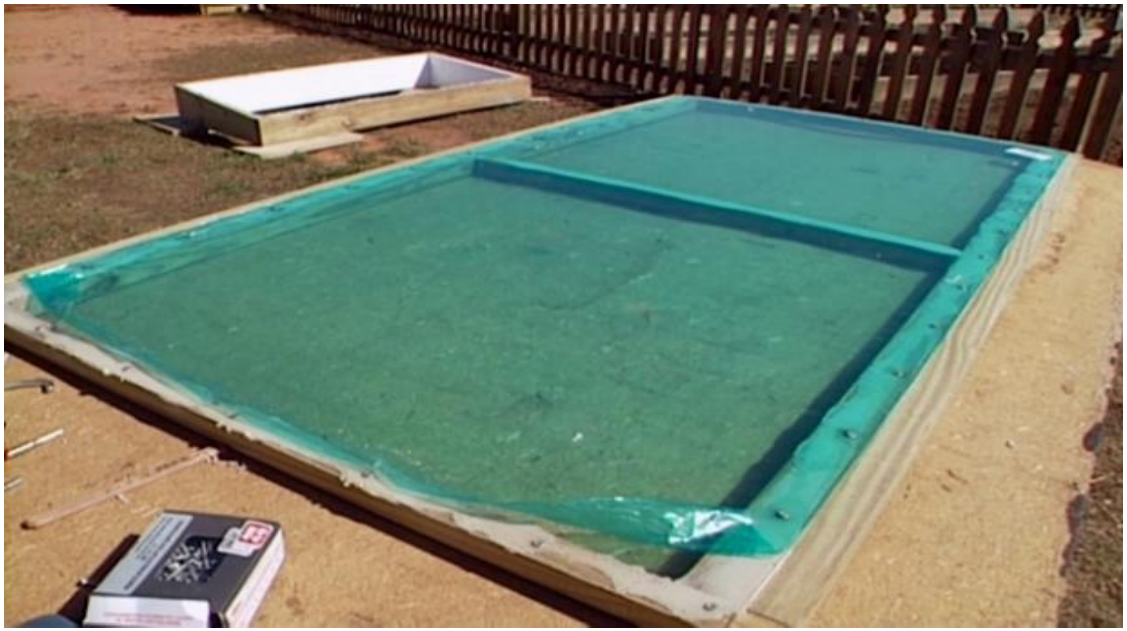
Step 3 – Assemble the Bottom. Use 3” galvanized screws to attach the sides. Pre-drill the holes to prevent splits. Use L brackets on the inside corners. (You can also use 2x2” pieces of wood.)

Directions

Step 4 – Cut and install insulation.

Directions

Step 5 – Cut the lumber for the lid: Two 2'x2' pieces of lumber at 39”long, two 2”x4” pieces at 69 ¾” long, two 2”x2”at 32 “ long. (An old door or window could be used for the lid.)



Directions

- Step 6 - Assemble the lid.

Pre-drill holes with 3” galvanized screws. Put Plexiglass on top of frame and square the frame. Remove the plexiglass & put a bead of construction glue on the frame. Put plexiglass back on and use a plexiglass drill bit to drill holes every 4-6 inches.

Directions

Step 7 – Attach the lid with utility hinges. Center a hinge at one end of cold frame. Pre-drill for 1 1/4" screws. Repeat at the other end. Measure 22" in from middle of outside hinges at both ends.

Raised Bed with Hoops

- Click to add text

Tunnel

Hoop House

- 20ftx12ft.(Rib every 5 ft.)
- 4, 4ft x10ft. raised beds

Resources

1) Websites

- You Tube – Mlgardener -How to build a Cold Frame for $50 from start to finish

- Peaceful Valley Farm Supply – www.groworganic.com

- FarmTek.com – gardening supply house