

College of Agricultural, Consumer and Environmental Sciences

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Planting the Fall Vegetable Garden

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The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and extension programs.

Know YOUR Climate --

- Sun / Shade patterns
- Sun moving from north/south sky
- Elevation
- Winds
- Protection
- 1st Frost dates
- Winter temps
- Temperature swings



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Fall Frost Dates (Avg)

- Sept 15
 - Grants, Gallup, Raton, Springer
 - Sept 25-30
 - Las Vegas, East Mtns
 - Oct 5-10
 - ABQ valley, Santa Fe, Portales
 - Oct 15-20
 - City of Albuquerque, Farmington
 - Oct 31
 - Las Cruces, Silver City, Alamogordo
 - Roswell, Carlsbad
- <https://www.weather.gov/abq/climate/fallfreeze>
- <https://www.plantmaps.com/interactive-new-mexico-first-frost-date-map.php>



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Garden clean-up

- Remove diseased plants
- Remove spent or non-bearing plants
- Trim back tomatoes and vines
- Cut corn stalks (use for fall deco)
- Terminate cover crops
 - (2-weeks prior to planting)



Soil Prep and Health

- Dry soils – hydrophobic / dead
- Re-hydrate and mix
- Add compost 1 week before planting
- Turn in cover crops – 2 weeks before planting
- Till vs minimal-tillage
- Raised bed vs in-ground



Fall Cover Crop – Winter Cover

- Plant now!
 - Winter wheat, cereal rye, triticale, barley (salinity issues)
 - Common vetch, Austrian winter peas, canola aka rape seed, daikon radish, turnips, berseem white clover
 - Need ~ 6 weeks for good growth
- Cover bare soil –
 - Shredded leaves and straw
 - Manure to age and compost
- Keep soil moist all winter = alive



Watering --

- Plants still need water in winter
- Soil – water meter = Finger
- Harvest rain and snow melt
- Well water **
 - Salinity and brackish issue
- Drain lines and hoses



What to plant now --

- | | |
|--------------------------|---------------------|
| • Spring flowering bulbs | • Broccoli** |
| • Garlic | • Cauliflower** |
| • Lettuce | • Brussel sprouts** |
| • Spinach | • Carrots |
| • Kale | • Beets |
| • Swiss Chard | • Turnips |
| • Radish | • Kohlrabi |
| • Peas | |



Spring flowering bulbs

- Plant in Sept and Oct –
 - Daffodils
 - Crocus
 - Hyacinths
 - Tulips
 - Iris
 - All early spring blooming bulbs
- Needs enough chilling hours to bloom
- Wrap in mesh to protect from squirrel



Garlic

- Plant time
 - Mid Sept – early Oct – Colder climates
 - Mid Oct – Early Nov – Warmer climate
- Hardneck varieties – colder area
- Mulch after planting
- Needs cooler temps ~40F (5C)
- 1-3 in. deep x 4-6 in. apart
- Prefers loose soil, not heavy clay
- NMSU Publication H-234



Lettuce

- Leaf lettuce
 - Oak leaf, green leaf, red leaf
- Prefers it cool BUT... NO FROST
- ~ 30 - 45 days from seed to harvest
- Multiple harvest possible
- NEEDS protection from

COLD FREEZE



Spinach

- ~ 30 days planting to harvest
- Some varieties more cold tolerant than others
- Multiple harvest
- Will benefit from cold protection



Kale

- ~ 60 -90 days
- Germinates best in warm soils
- Seed at least 4-6 weeks before frost
- Some cultivars more cold hardy than others
- Germany leave in field most of winter
- May benefit from light protection



Swiss Chard

- Known as "leaf beets"
- Close cousin to beets
- Sow directly 4 weeks before frost
- Prefers cooler weather
- Cut and grow again
- Some protection needed for coldest of nights



Radish

- Red, Icicle, Daikons
- ~ 30-70 days for ripen
- Stagger planting for ripening
- Likes it cool
- Needs light protection when colder



Peas

- Shelling, Snow peas
- Plant ~ 4-6 weeks before frost
- Able to tolerate light frost
- Doesn't tolerate hard freezes
- Keep harvest to encourage set
- Needs active pollinators**



Broccoli, Cauliflower

- Start seeds indoors 4-6 weeks before frost
- Transplant out – hardened off
- Prefers cool
- Grows best in mild winter areas
- May need protection for hard freezes



Brussel Sprouts

- Some varieties more cold hardy than others
- Sow out in mid-summer for winter harvest
- Tolerates frost well, but not deep cold
- Does better with milder winters



Carrots

- Plant 4-6 weeks before frost
- Germinates best in warm soil
- Ripens best in cooler weather
- Need protection
- Small tunnels or covering
- Mulch in for winter harvest
- Prefers loose soils not heavy clay
- Watch for mice damage



Beets

- Plant ~6 weeks before frost
- Germinates well in warm soils
- Prefers cooler weather
- More sugars and deeper colors for winter ripened
- Tolerates cool
- Benefits from cold protection
- Watch for mice eating



Turnips

- Plant ~ 6 weeks before frost
- Germinates well in warm soils
- Grows great in cooler weather
- Needs protection for cold



Kohlrabi

- Sow ~ 6 weeks before frost
- Germinates best in warm soil
- Ripens best in cool weather
- Tolerates light frost
- Leaves and bulbous stem edible
- Benefits from light protection



Season Extension --

- Row Cover
 - Agribon 19 – light frost protection
 - Agribon 30 – moderate frost
 - Agribon 50 – heavier frost to mid cold
- Mini- hoops
 - Electric Conduit (UV rated)
 - 6 mil plastic
 - Needs air circulation on sunny days
- Cold Frames
- Straw bale insulation



Additional Resources

- Video on Building Mini-hoops – low cost hoop tunnels
 - <https://www.youtube.com/watch?v=cQ51oT0mns4>
- Written plans for mini-hoops and raised beds
 - <https://extension.umaine.edu/york/wp-content/uploads/sites/28/2018/06/raised-bed-plan.pdf>
- NMSU Extension Publications -- https://aces.nmsu.edu/pubs/_h/
 - H – 252 Hoop House Vegetable
 - H-457 Home Vegetable Gardening
 - H-457B Growing Zones and Recommend Varieties
- USU Extension Pub – Planting the Fall Garden
 - https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1319&context=extension_cu_fall
- Texas Agri-life Extension – Fall Vegetable gardening
 - <https://agrilifeextension.tamu.edu/browse/featured-solutions/gardening-landscaping/fall-vegetable-gardening-guide-for-texas/>



THANK YOU

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QUESTIONS ...

