Start Your Own Vegetable Garden

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--Putnam County Master Gardener Volunteers--

Photo: Jen Lerner
Cornell Cooperative Extension | Putnam County

• The Environmental Horticulture & Natural Resources Program focuses on an array of gardening, agricultural, and community health topics. Our current priority areas are Climate Change and Food Systems.

• The 4-H Program is a youth-development initiative with a range of clubs and activities for kids from age 5-19.

Follow us on IG/FB/Twitter @CCEPutnam
Gardening questions? Email Mastergardener.Putnam@gmail.com
We Can’t Cover Everything . . .

Find Good evidence-based advice by searching your subject and adding site:edu to the end of your search string

Example:
growing pole beans site:edu
Presentation Overview

- Choosing what to plant
- Selecting a good garden site
- Garden bed preparation
- Growing in containers
- Taking care of your soil
- Planting
- Trellising
- Mulching
- Garden Maintenance

Photo: Jen Lerner
Take the Poll

1. How would you describe your vegetable gardening experience?
   Beginner (no experience)
   Intermediate (1-5 years)
   Seasoned (5+ years)

2. Where do you plan to grow vegetables this year?

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What and when to plant

Where and how to set up your garden
Vegetable Garden Planning

Important considerations

• What do you like to eat?
• How large is your family?
• How much time do you have to garden?
• Are you a perfectionist?
Growing Zones

USDA Hardiness Zone 6a and 6b

Important Dates:
- Last Frost: May 15th
- First Frost: October 20th

https://planthardiness.ars.usda.gov/PHZMWeb/
Growing Zones

VEGETABLE
Lettuce
Black Seeded Simpson

Crisp textured loose heads have broad, light-green, frilled and crumpled leaves with a delicate flavor.

SOW in average soil in full sun in early spring for first crop, in late summer for fall crop. Sow thinly in rows 12” apart and cover with 1/4” of fine soil. Firm lightly and keep evenly moist. Seedlings emerge in 7-10 days. Sow every two weeks to extend harvests.
Cool Season Vegetables:
Early spring and Fall

• Leafy Greens
• Lettuce
• Mustard Greens
• Kale
• Spinach
• Radish
• Peas
• Swiss chard
• Any other favorites to share?

http://elevennews.byu.edu/wp-content/uploads/2013/02/Kopfsalat_Setzung-e1360782702733.jpg

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Warm Season Vegetables: Summer

- Tomatoes
- Peppers
- Summer squash
- Edamame
- Eggplant
- Melons
- Any other favorites to share?

http://blog.lib.umn.edu/wolfx450/myblog/peppers.jpg
Garden Site Requirements

- 6+ hours sunlight
  - Some plants can grow in shade
- Well Drained soil (no standing water)
- Level site
- Convenience
- Protection from hungry neighbors
  - Deer and rodents

http://people.morehead-st.edu/fs/j.birriel/SUNDIAL/new_page_2.htm
Avoid wet areas
Or elevate beds

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Garden orientation

• Observe your site!!
• Generally select space on the south facing side of your property
  • East or west can also work well
• Orient rows east-west
  • Tall plants on north side
Garden orientation

http://www.aces.edu/pubs/docs/A/ANR-1345/index2.tmpl
Planting Maps

Photo via Seed to Supper program of Oregon Food Bank and Oregon Cooperative Extension
Vegetable Spacing

Plant Footprints!

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As you design your map...

...think about plant spacing:
• The “footprint” of mature plants
• The height of mature plants
Make a Planting Map

Sketch your space
Make it to scale
Remember orientation and plant spacing!

Photo via Seed to Supper program of Oregon Food Bank and Oregon Cooperative Extension
Raised bed vs. In-ground vegetable garden

- Improves soil drainage
- Easier working height
- Reduces soil erosion

- Warmer soil temperature in spring
- Provides a structure for deer fencing

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Raised bed materials

No walls
Wood *
Cement blocks
Hay bales

*Don’t use pressure treated
Filling a Raised Bed (on a lawn)

- Cover area with cardboard, layers of newspaper, or a weed barrier fabric
- Fill the bed with a mixture of compost and topsoil at a ratio of between 1:1 and 1:2 (some garden centers sell a mixture of topsoil and compost)
Irrigation

Hose
Watering Can
Drip Irrigation or soaker hose
Sprinkler
Irrigation

In dry periods, we need to provide water DEEPLY and INFREQUENTLY.

Most plants need at least 1” of water per week. Use a rain gauge.

In general, water 2–3 times per week, in the morning.

Photo from KOMUnews via Flickr
Q&A
Healthy Soil is Key to Healthy Plants

http://coolclimate.berkeley.edu/files/coolclimate/images/sponsor_logos/compost_bin.jpg

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What is Soil

Air
Water
Organic matter
Pieces of minerals and rock

Image via NC State Extension
Symptoms of Poor Soil

Don’t Treat Your Soil Like Dirt

• Dried and cracked
• Hard to dig
• Doesn’t absorb water
• Poor drainage

NEVER work your soil when it is wet

Don’t leave your soil bare (mulch, cover crop)

Don’t step on your garden beds -- it compresses the air out

Adding compost is almost always a good idea.

Photo from UMaine Extension
Adding Compost

Increases soil organic matter
Allows soil to hold moisture and nutrients better
Attracts beneficial organisms

To learn more about to making your own compost, visit our website.

<table>
<thead>
<tr>
<th>Brown layers (high in carbon)</th>
<th>Green layers (high in nitrogen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry leaves</td>
<td>Garden waste</td>
</tr>
<tr>
<td>Straw</td>
<td>Kitchen scraps</td>
</tr>
<tr>
<td>Sawdust</td>
<td>Coffee grounds</td>
</tr>
<tr>
<td>Torn paper bags</td>
<td>Grass clippings</td>
</tr>
<tr>
<td>Dry corn husks</td>
<td>Pet hair</td>
</tr>
<tr>
<td>Shredded newspaper</td>
<td>Composted manure</td>
</tr>
</tbody>
</table>

**NO:** Meat, dairy, bones, diseased plants, weeds, or poop from people or meat-eating animals like dogs or cats.
Lasagna garden

• Remove weeds
• Layer cardboard
• Fill with greens and browns to compost
• Top off with finished compost or soil
No Till/Low Till Gardening

Adding “lasagna layers” each fall will replenish soil and reduce weed pressure.

Plant cover crops in the fall to add organic matter and suppress weeds. (Oats are a great low maintenance cover crop)

Tilling disrupts your soils’ delicate balance and just sets your garden back.
Containers vs. In-Ground

**Similarities:**
- Many plants can be grown both ways
- Growing Season
- Sunlight Requirements

**Differences:**
- Watering
- Fertilizing
- Soil Care
Container Types

**Good containers**

- Old recycling bins
- 5 gallon buckets
- Wine barrels
- Bag of potting soil with holes poked in the bottom.

**Bad containers**

- Tires
- Treated wood
- Buckets that contained chemicals, laundry soap, or cat litter
- See-through containers
Containers cont.

- More controllable environment
- Few to no weeds
- Moveable and re-arrangeable
- A garden you can stack and put away
- Keep out of reach of deer/other pests.
- Faster growth

Compact varieties are best for containers:
Look for words like “Patio”, “bush” or “dwarf”

Photo: Jen Lerner
Transplanting

• Harden off your starts 1-2 weeks before planting outdoors.
• Transplant when at least 2 sets of “true leaves” have grown.
• Wait until the recommended soil or air temperature has been reached before planting.

https://www.johnnyseeds.com/growers-library/seed-planting-schedule-calculator.html
Planting Do’s and Don’ts

• Press down: “Just right”
• Cardboard collars?
• Water-in transplants: always!
  • Not too wet
  • Not too dry
  • Water gently
Succession and Relay Planting

• Succession planting is done to maximize yields and to spread out your harvests.
• 1–3 weeks apart
• Know the days to maturity (DTM) of the vegetable to determine when your 1st and last succession should be.

Some veggies for successions:

1-week Intervals
• radish
• spinach
• baby greens

2-week Intervals
• beans
• beets
• peas
• arugula

3-week Intervals
• carrots
• cucumbers
• summer squash
Succession and Relay Planting

Relay planting or intercropping: following 1 crop with another or seeding 1 crop into another.

Follow a spring vegetable with a summer one or summer with a fall. Example: radishes or leafy vegetables can make way for tomatoes or squash.

Intercrop a vegetable into the understory of another or undersow a cover crop into a crop past its prime.
Trellising: Vert. Gardening

**Materials:** Tomato cages, bamboo, branches, fencing, netting, metal wire, stakes, rope\string

**Designs:** Be creative- use what you have available

**Consider weight and plant size:** tomatoes, peas, beans, cukes, melons, squash- use supports for heavier vegetables
Trellising Examples

Peas on fencing/ Tomato Ladders
Additional Trellising Examples:

Use branches for TeePee Trellis for Beans;

Use metal hoops (or other structures) between raised beds \ wood frame with string
Mulching

Retains moisture
Moderates temperature
Reduces: weed competition, erosion, disease
Improves soil tilth: can till in after season
Use: wood chips, shredded straw/leaves, black plastic, bark, dry grass clippings, cardboard, bagged mulch, landscape fabric
Mulch Examples: shredded straw & wood chips
Throughout the season...

- **Weeding**: best when soil is moist; use proper tools- stay on top of it!
- **Watering**: shallow vs. deep rooted; best in morning; attention to seeds\seedlings. Target plants
- **Weekly Scouting for Pests**: 
- **Fertilizing**: nitrogen for greens; phosphorus for fruiting veggies

Throughout the season...

Pollination

• Wind pollination (some)
• Insect pollination (many)
• Putnam Pollinator Pathway
  • Make the Pledge
• Pollinator Paradise Program

Join Us: May 2nd & 9th
Summary

• Set garden goals that work the best for you!

• Keep the sun, water, and soil in mind!

• Select crops that your family loves to eat and that are in season!

• Mulch, weed, and water!

• Have fun and keep learning!

Photo: Jen Lerner

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Additional Resources:

- [gardening.cals.cornell.edu](https://gardening.cals.cornell.edu)
- [putnam.cce.cornell.edu/food-gardening](https://putnam.cce.cornell.edu/food-gardening)
- [Beginning a vegetable garden PDF](https://gardening.cals.cornell.edu)
Thank You!

Enjoy your time in the garden and stay in touch
mastergardener.putnam@gmail.com

Plant Sale
Order Online by May 9th
putnam.cce.cornell.edu

Brought to you by the Master Gardener Volunteers

- Native and pollinator friendly plants
- Organic tomatoes and vegetables
- Aromatic and culinary herbs

All proceeds benefit CCE Putnam programs!