

***KEEP ON GROWING!***



**COOL WEATHER GARDENS**



Master Gardener  
Program

WASHINGTON STATE UNIVERSITY  
EXTENSION

# What's on tap

- Why we can easily have year round gardening
- Choosing varieties
- Choosing a location
- When to plant for fall harvest
- Pre-sprout seeds or buy plant starts
- Early care
- Preparing for frost
- Season extension



# Plant NOW

for fresh veggies in fall, winter, and spring

- If you have the time, space and the energy now is the time to start prepping for a winter garden.
- There are a wide variety of vegetables that can be planted during the summer and will survive the cool falls and mild winter.
- Planning is essential!

Planting Guide for Fall and Winter Gardening	
BEANS	Plant Bush beans until late July to produce a good crop before frost. The plants develop more rapidly in the warm summer months than in early spring. Pole beans require more time to develop and should be planted by July 1 for a fall crop. Check days to maturity on seed packet.
BEETS- Winterkeeper, Albina Verduna. Will resprout in spring for greens	Beets can be planted until August 1 and produce a dependable crop. If you want beet greens, plant until September 1. *Mature vegetables can be stored in the ground and used as needed. Minimum Temperature 10; harvest all winter-through spring
BROCCOLI Purple Sprouting, White Sprouting Late, Rudolph	Direct seed until mid-July and transplant until mid-August. A fall broccoli crop will usually continue producing past Thanksgiving and sometimes until Christmas. Minimum Temperature 10; harvest early spring
BRUSSELS SPROUTS Jade Cross "E", Lunet, Oliver, Red Rubine	Brussels sprouts require a slightly longer growing season than broccoli. Direct seed by July 1 and/or transplant by August 15 for a dependable fall crop. In protected spots harvest can continue into mid-winter. Minimum Temperature 10
CABBAGE Danish Ballhead, Excel, Gloria, Melissa, Zerlina	Ballhead cabbage for fall harvest requires the same culture as Brussels sprouts. Treat Savoy cabbage as broccoli. Fall cabbage crops will hold in the garden for prolonged periods and can be harvested in to early winter. Jersey Wakefield cabbage can be seeded from September 1-15 to winter over. *Mature vegetables can be stored in the ground and used as needed. Minimum Temperature 10; harvest early spring



# Plant NOW

for fresh veggies in fall, winter, and spring

- Advantages of growing a winter garden:
  - Extends the growing season
  - Stockpile fresh grown vegetables all year long
  - Fewer insect pests.
  - Washington weather cool summers and mild winters
  - The taste of vegetables after a frost
- Disadvantages of growing a winter garden:
  - The crop is limited to cool weather crops.
  - Wet falls and winters (need well drained soil).
  - Short days and overcast light



# Choosing varieties

- Corn, peas, beans can be planted midsummer for a fall crop
- Cool weather vegetables can overwinter and provide harvest either all winter or in early spring.
- Some vegetables such as Kale, collards, Brussels sprouts get a little sweeter with a bit of frost.



# Choosing varieties

- Radishes can be planted all summer until mid-September.
- Winter radishes, such as oriental and Black Spanish varieties, should be planted in July and can be harvested all winter
- Plant leaf lettuce, mustard greens, and spinach seeds mid-August—preferable in the semi-shade of a taller plant like your tomatoes or peppers so they don't bolt in the warm weather.



# Choosing varieties

- Most root vegetables can overwinter in the ground; plan on harvesting them all by spring, as they will bolt when the weather warms up and the days get longer
- Crops that overwinter well include leafy greens, some root vegetables (carrots, beets), peas, onions, garlic, and sprouting crops like broccoli, cabbage, cauliflower, and Brussels sprouts
- Overwintered greens such as kale and collards will produce delicious flower stalks in the spring



# Choosing varieties

- Look at the seed packet or plant start label. Some are used specifically for fall planting.
- Choose varieties with fastest maturing dates





# Choosing varieties

- Direct seed these veggies in the first weeks of July and/or transplant seedlings by August 1 for a fall harvest.
- If protected you can harvest them throughout the winter

broccoli	rutabaga
Brussels sprouts	turnips
cabbage	Swiss chard
bok choy	carrots
kale	head lettuces such as Romaine
kohlrabi	



# Why start from seed?

- Get an early start on the season
- Start plants that are difficult to find
- Good for hard-to-germinate seeds
- Plants do not have transplant shock when direct seeded
- Try comparing starting from seed and transplanting the same plant—you might find the ones started from seed do best



<https://www.centraltexasgardener.org/wp-content/uploads/2016/11/fall-vegetable-seeds-Central-Texas-Gardener.jpg>



# Why use transplants?

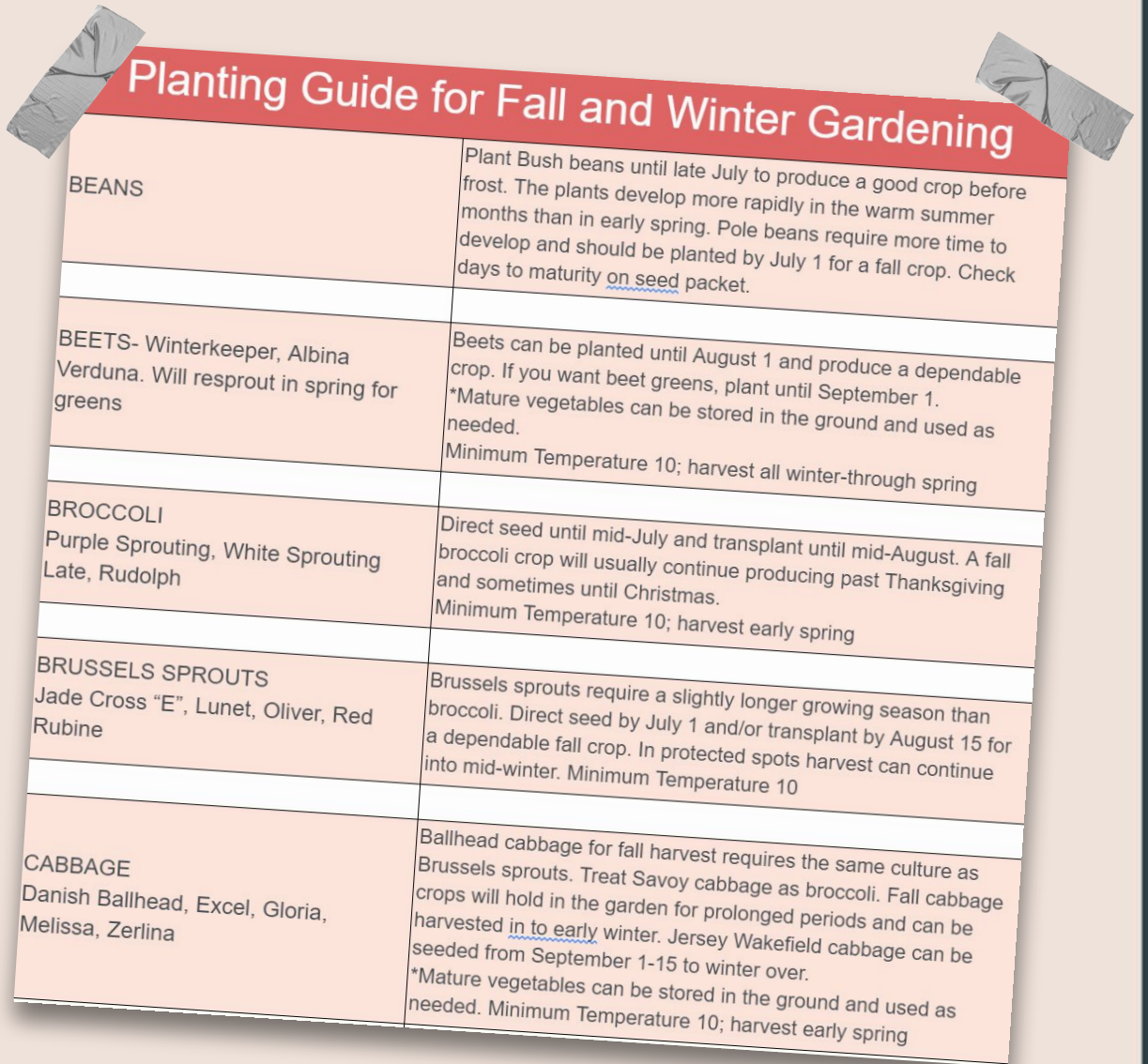
- You do not need such an early start on the season
- Plants are already ready to go
- You can decide on your garden when you are buying the plants
- You don't have to fuss over seeds
- Find varieties that suit our area (hopefully)
- Shorter time to harvest



# Choosing varieties

Suggestions and timing for possible choices

[Handout](#)



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# Choosing a location

- The sun is in the south sky. Choose the sunniest spot in winter—at least 8 hours of sun
- A wall, fence will provide shelter from winter winds and give reflected warmth



# Choosing a location

- Plant in a convenient location!
- Don't plant in an area where a related plant was located



# Preparing the soil

- Good drainage is essential ([perk test](#))
- Raised bed is best
- Alternative: amend soil with compost drainage
- Fertilization—replenish nutrients—layer of compost or manure, or **small** amount of balanced fertilizer to increase soil nutrients



# Timing is everything!

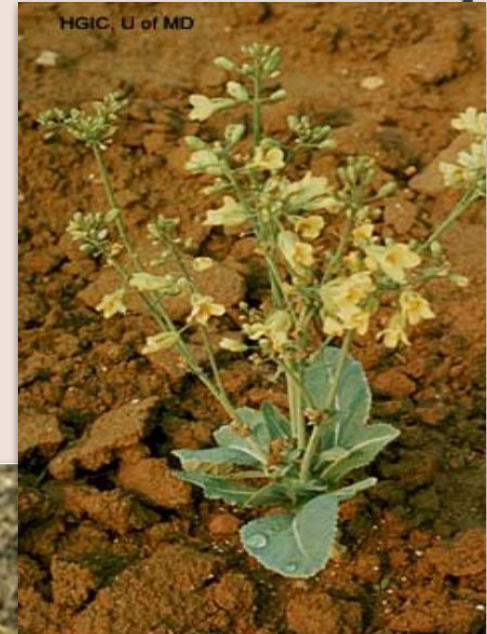
- For spring/overwintering harvest: **time your crops so that they are established but not mature at the onset of winter;** successfully overwintered crops will produce early in spring
- Why? Growth slows during the fall and nearly stops when there is less than 10 hours of daylight





# When to plant for fall harvest—timing is everything!

- Plants need to mature before short days and cold temps slow down growth.
- Plant too soon, summer heat might damage it, or it will mature sooner than you planned
- Some vegetables will do best when planted and harvested during the right time frame
  - E.g., beans, peas



*Cauliflower that has bolted*



*Spinach bolted--University of Maryland*



# How to plan what to plant!

## Frost Dates: First and last frost dates for Longview, WA

In the Fall									
Temperature	10%	20%	30%	40%	50%	60%	70%	80%	90%
First 16°	Dec 18	Jan 1	Jan 14	Jan 30	--	--	--	--	--
First 20°	Nov 30	Dec 15	Dec 26	Jan 6	Jan 17	Feb 1	--	--	--
First 24°	Nov 15	Nov 28	Dec 7	Dec 15	Dec 23	Jan 1	Jan 11	Jan 26	--
First 28°	Nov 3	Nov 13	Nov 19	Nov 25	Nov 30	Dec 5	Dec 11	Dec 17	Dec 26
First 32°	Oct 23	Oct 29	Nov 3	Nov 7	Nov 10	Nov 14	Nov 18	Nov 22	Nov 29
First 36°	Sep 30	Oct 6	Oct 10	Oct 14	Oct 17	Oct 21	Oct 24	Oct 29	Nov 4

<https://garden.org/apps/frost-dates/Longview%2C+WA>



# When to plant for a winter harvest

- Follow charts or use seed packet or plant label for information
- Add 2-3 weeks to the dates to maturity on the label—slower growth in cool fall weather (“fall actor”).
- If it is frost-tender (will die below 32 degrees), consider our average frost date—November 3—Plan to harvest about 2 weeks prior to frost date.

**Bottom line:** For frost-tender vegetables (tomatoes, peppers, corn) you have to add 4 weeks to the “days to maturity” time.

For cole crops—cabbage family—the challenge is to have them mature, but not bolting!



# Seed or plant start?

- Starting from seed—Take about 5 days off the harvesting calculation:
- Place seeds between layers of damp paper towels, place in a plastic bag in a warm place (don't seal the bag). Check in a few days for germination.
- Don't break roots when transplanting 1 inch seedlings.
- Plant them deeper than normal to prevent drying out.
- Water well until plants break the surface



# Early care

- Seedlings need extra care not to dry out. Water daily or twice daily at first. They may need to be protected from hot sun with row cover.
- Ones the plants are established, mulch to keep soil moist and moderate soil temp.



# Care for over-wintering vegetables

- Watch for slugs when mulching—eradicate them in early fall so they don't lay their eggs and produce hungry hordes of baby slugs
- Give plants lots of space to reduce root rot and slug predation
- Don't fertilize in late fall—promotes rapid plant growth—may be damaged by freeze.
- Insect control—not many problems in summer, except for cabbage worms and cabbage root maggots—use rowcovers



<https://extension.umd.edu/hgic/topics/floating-row-cover>



# Preparing for frost

- Harvest all tender crops summer vegetables tomatoes, peppers, eggplants, melons, cucumbers, summer squash—pick and store before frost—and before a heavy rain!
- Shorter days and lower temps stop growth
- If mild frost—above 30 degrees, try covering plants with fruit that's not ready to be harvested—boxes, blankets, sheets, buckets, plastic bag at night

Tomato cages with protective covers from Masters of Horticulture



# Extending the growing season

- prolong harvest of tender crops into the winter
- season extension can add up to a month on either end of the growing season
- floating row covers and frost blankets cover plants, trapping in solar warmth, and protecting against frost damage
- Cloches are small bell-shaped vessels that create a mini-greenhouse around individual plants



<https://s3.wp.wsu.edu/uploads/sites/2071/2013/12/Making-a-Covered-Bed.pdf>



gardeners.com





# Resources

## [Handout for this talk](#)

### **Growing plants for fall and winter harvest:**

Territorial Seed Company Wither Gardening Chart

<https://territorialseed.com/blogs/fall-winter-growing-guides/winter-growing-chart>

Territorial Seeds-detailed growing guides for individual crops:

<https://territorialseed.com/blogs/fall-winter-growing-guides?page=1>

Fall and Winter Gardening in Western Washington

<https://extension.wsu.edu/snohomish/fall-and-winter-vegetable-gardens-for-western-washington/>

Fall and Winter Vegetable Gardening in the Pacific Northwest:

<https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/pnw548.pdf>

### **Extending the growing season**

Making a covered bed:

<https://s3.wp.wsu.edu/uploads/sites/2071/2013/12/Making-a-Covered-Bed.pdf>

How to build your own raised bed cloche

<https://catalog.extension.oregonstate.edu/ec1627/html>

Cold Protection Myths, Cold Protection Options

<https://extension.uga.edu/publications/detail.html?number=C1027-14&title=Extending%20the%20Crop%20Season:%20Unheated%20Spaces>

Short Season Vegetable Gardening:

<https://www.extension.uidaho.edu/publishing/pdf/PNW/PNW0497.pdf>

**Thank you!**

