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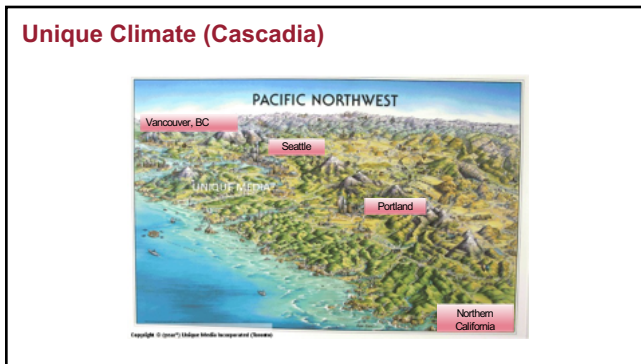
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**Basic Principles and Vocabulary**

- Alternatives to Pesticides
- Bolting
- Crop Rotation
- Determinate vs. Indeterminate
- Germination Temperature
- Extending the season
- Perennials, biennials
- Pollination
- Seeds, sets, starts, bare root
- Support
- Succession planting
- Thinning
- Varieties
- Winter gardens

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**Asparagus to Zucchini**

- Asparagus
- Broccoli
- Carrots
- Corn
- Garlic
- Lettuce
- Onions
- Peas
- Peppers
- Potatoes
- Tomatoes
- Zucchini and Pumpkins

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**Order of Presentation**

- Garlic – Winter Garden
- Asparagus – Perennials
- Peas – Determinate vs. Indeterminate
- Lettuce - Bolting, Succession Planting
- Broccoli – Alternatives to Pesticides, Extending the Season
- Onions - Seeds, sets, starts, bare root
- Carrots -- Thinning
- Potatoes – Crop Rotation
- Corn – Pollination
- Peppers - Germination Temperature
- Pumpkins – Varieties
- Tomatoes – Support

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6

Can I plant/grow \_\_\_\_\_?

Yes, But . . .

You have to \_\_\_\_\_.

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7

Can I grow my own garlic?

Yes, but . . .

You have to plant it in the fall.  
Which gives us an excuse to discuss  
"Winter Gardening"

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Winter Gardening




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**Garlic – Winter Gardening**

- Plant in the fall – mid to late Oct
- Each clove will make a new head
- Plant largest cloves
- 2 main types – hard necks and soft necks
- Hardnecks make scapes - should be cut off
- Hardneck are hotter in flavor but don't keep as well, softnecks are milder and easy to braid
- Harvest when leaves start turning brown in mid-summer



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**Can I grow my own asparagus?**

Yes, but . . .

Asparagus is a perennial, so

- You have to plan ahead
- Prepare your planting bed
- Be patient!

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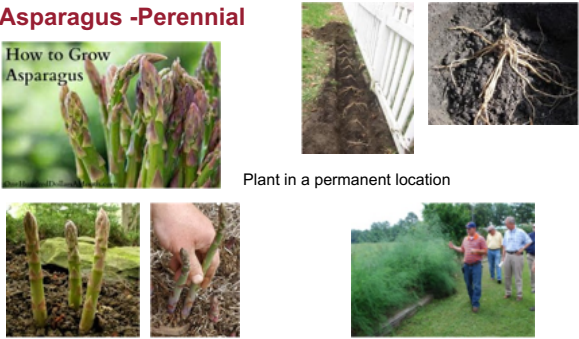
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**Asparagus -Perennial**

How to Grow Asparagus



Plant in a permanent location

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Can I get my peas to keep growing instead of stopping when they get 3 feet tall??

Yes, but . . .

You will have to choose the right variety.

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Peas – Determinate vs. Indeterminate

Indeterminant varieties grow tall and need to be trellised.



Determinant varieties are called bush peas. They need some support.

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Peas – Determinate vs. Indeterminate

- Other crops that offer both determinate and indeterminate varieties include:
- Beans
  - Pole beans vs bush beans
- Potatoes
  - Early vs late
- Tomatoes
  - Patio or small plants vs large, tall plants

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**Can I grow lettuce that tastes good? My neighbor's is bitter!**

Yes, but . . .

You have to harvest it before it starts to bolt.

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**Greens – Bolting**

Bolting= Going to seed



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17

**Greens - Succession Planting**



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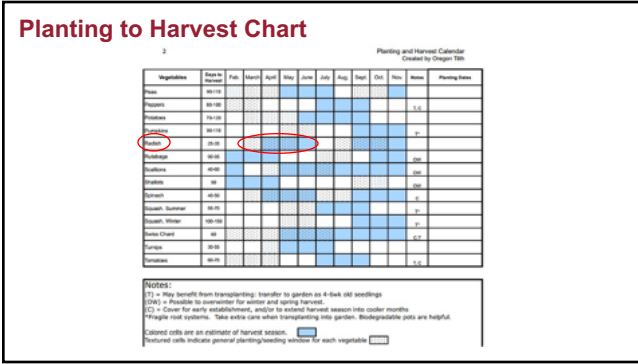
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### Can I grow broccoli without getting those green worms?

Yes, but . . .

You will have to spray or provide a barrier to keep the bugs off.

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### Broccoli – Alternatives to Pesticides

- Likes cool weather
- Side shoots will form after main head is cut
- Start seed mid-July for fall harvest
- Susceptible to cabbage worm –
  - spray with BT (**Bacillus thuringiensis**)
  - or cover with floating row cover



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**Extend the Season**

- Low tunnels protect from rain and frost
- Raise soil temperature
- Floating row covers protect from insects

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**Can I grow onions from seed?**

Yes, but . . .

You will have to start them early.

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**Onions – Biennials**

- Seeds
- Sets
- Bare root

Harvest when tops fall over

Bolting Onions

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Can I sprinkle carrot seeds over a planting bed instead of a row?

Yes, but . . .  
Regardless of how they are planted, they will need to be thinned.

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Carrots - Thinning



Thin to allow for correct spacing.

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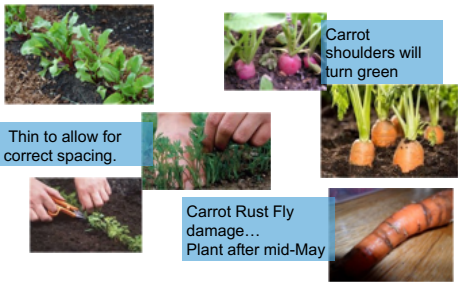
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Carrots, Radishes, Beets - Thinning



Thin to allow for correct spacing.

Carrot shoulders will turn green

Carrot Rust Fly damage...  
Plant after mid-May

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27

**Can I plant my potatoes in the same place every year?**

Yes, but . . .

You run the risk of having trouble with diseases.

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**Potatoes**



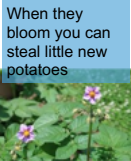
Buy seed potatoes. Chitting=sprouting



Wait for tops to die before you harvest.



Keep adding mulch as plants grow. Make sure new potatoes are covered.



When they bloom you can steal little new potatoes



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**Can I grow my potatoes in boxes?**

Yes, But . . .

You have to choose the right variety.



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### Crop Rotation Know Your Families

|            | Basic Four Year Rotation |                       |                       |                       |
|------------|--------------------------|-----------------------|-----------------------|-----------------------|
|            | SECTION ONE              | SECTION TWO           | SECTION THREE         | SECTION FOUR          |
| YEAR ONE   | Legumes                  | Brassicas             | Nightshades           | Onions and root crops |
| YEAR TWO   | Brassicas                | Nightshades           | Onions and root crops | Legumes               |
| YEAR THREE | Nightshades              | Onions and root crops | Legumes               | Brassicas             |
| YEAR FOUR  | Onions and root crops    | Legumes               | Brassicas             | Nightshades           |

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31

### Can I plant my corn in a long row?

Yes, but . . .

The corn cobs may be stunted.

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### Corn - Pollination

Cross-pollinated corns when pollen from one plant lands on the silks of another plant.

- Pollinated by wind
- 4' x 4' square block minimum
- Each strand of silk is connected to a kernel of corn

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33

**Can I start peppers from seed?**

Yes, but . . .

You will have to put them on a heat mat.

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**Peppers – Germination Temperature**



Need LOTS of heat both to germinate and to grow.




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**Best Soil Temperature for Seed Germination**

| Seed             | 30° | 41° | 50° | 59° | 68° | 77° | 86° | 95° | 104° |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Asparagus        | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Beans            | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Broccoli         | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Brussels Sprouts | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Cauliflower      | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Corn             | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Cucumbers        | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Eggplant         | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Kale             | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Karri            | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Leeks            | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Onions           | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Peas             | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Peppers          | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Potatoes         | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Spinach          | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Squash           | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Tomatoes         | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |
| Zucchini         | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132 | 132  |




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**Can I grow my own Jack-o'-lanterns?**

Yes, but . . .

You will have to start them early or buy starts.

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37

**Zucchini & Pumpkins Varieties**



White - Baby Boo  
Orange - Jack Be Little



White-Be-Little

- Small varieties of pumpkins have a better chance of ripening
- Round zucchini are popular in Europe and Great Britain



White - Lumina  
Orange stripe - Pump-Ke-Mon



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38

**Do I have to pinch the suckers on my tomatoes?**

Maybe. . .

It depends on the variety, and whether you want lots of green tomatoes.

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### Tomatoes – Determinate vs. Indeterminate



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### Tomatoes – Support



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### And Enjoy!!!



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# Questions?

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## Winter Series Presentations

**2024 Growing Groceries Classes and BDG Garden Workshops**

| Date             | Class  |
|------------------|--|
| Wed, January 31  | Healthy Soil, Healthy Plants, Healthy Food                 |
| Sat, February 10 | BDG Workshop - Starting Flower and Vegetable Seeds         |
| Wed, February 14 | Vegetables A to Z  |
| Sat, February 24 | BDG Workshop - Composting with Confidence                  |
| Wed, February 28 | All About Backyard Berries and Small Fruits                |
| Wed, March 13    | The Cool Season Menu: Peas, Hardy Greens, Carrots and More |

More info: <https://kingcounty.mastergardenerfoundation.org/education/go/>

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## Master Gardener Resources

**Ask a Master Gardener**

Send a messages with questions and photos to: [ask-a-mastergardener@live.com](mailto:ask-a-mastergardener@live.com)

Or use the online form at <https://extension.wsu.edu/king/ask-a-master-gardener>

**Become a Master Gardener**

For information on King County Master Gardener training, visit <https://extension.wsu.edu/king/gardening/become-a-master-gardener>

Applications for the 2025 class will open in September 2024

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**Thank you!**

**Growing Groceries**

*is brought to you by*



**King County Master Gardener Program**  
<https://extension.wsu.edu/kinggardening>

- Demonstration Gardens
- Plant Clinics
- Education Outreach
- Science-based Publications



**Master Gardener Foundation of King County**  
<http://www.mcfkc.org>

- Fundraising for these programs

**More information about growing groceries:**  
<https://kingcounty.mastergardenerfoundation.org/education/>

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