Intensive and Year Round Vegetable Gardening

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Organic Gardening Certificate Program

Learning Gardens Lab
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Presentation Outline

• Intensive Gardening Methods
• Fall and Winter Gardening
• Resources
Why garden intensively?
Keyhole Design
Herb Spiral
My backyard bed design
Planning Considerations for Intensive Gardening

- Length of crop - short or long season crop
- Appropriate planting dates
- Season specific varieties
- Soil temperature
- Length of harvest
- Crop competition

#of days to maturity
Soil Fertility is Key!

- Increased soil fertility needs with intensive systems.
- Important practices as part of a proactive soil management plan:
  - Compost
  - Cover crops
  - Mulch
  - Crop rotation
  - Organic fertilizers
Intensive Gardening Methods: Succession Planting

• For quick crops
• For crops eaten fresh
• For crops that don’t hold well in garden
Intensive Gardening Methods: Succession Planting

**How to:**

- Plant same variety in 2-3 week intervals
- Plant varieties with different # of days to maturity at same time
- Plant combo of seeds and starts together
Intensive Gardening Methods: Succession Planting
Intensive Gardening Methods: Succession Planting

Intensive Gardening Methods: Interplanting

Growing two or more types of crops in proximity, maximizing sunlight and minimizing competition.
Intensive Gardening Methods: Interplanting
Intensive Gardening Methods: Interplanting
Intensive Gardening Methods:

Companion Planting

A type of interplanting method based on the concept that certain plants can benefit one another when planted in proximity.
Intensive Gardening Methods: Companion Planting

Benefits

- Beneficial habitats
- Trap cropping
- Symbiotic N fixation
- Biochemical pest suppression
- Security through diversity
Traditional Companion Planting

THREE SISTERS GUILD

- **Corn**
  - Mulch, Trellis
  - Nitrogen fixer

- **Squash**
  - Broad leaves cover soil, control weeds, hold moisture, and cool soil temp.

- **Pole Beans**
  - Nitrogen fixer

- **Cleome**
  - Attracts pollinators
  - Edible leaves, seeds, flowers, dye for pottery, accumulates iron

Recycles Nutrients
Traditional Companion Planting
Intensive Gardening Methods: 
**Companion Planting**

Undersowing cover crops
Intensive Gardening Methods: Companion Planting

Companion planting chart can be found at, http://attra.ncat.org/attra-pub/complant.html
Vertical Gardening
Vertical Gardening
Vertical Gardening
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Fall and Winter Gardening

- Portland area and Willamette valley has uniquely long growing season, about 200 days.

- Refer to Maritime NW Garden Guide for planting dates and experiment with timing!
Fall & Winter Gardening- Considerations

• Timing
• Soil temperature
• Varieties
• Location
• Drainage
• Soil fertility
• Spacing

See OSU Extension Publication: Fall and Winter Gardening in PNW #548 for chart of fall/winter crops, varieties, and planting dates.
Planting and Care: Bed Prep

- Winter crops need balanced low levels of plant nutrients
- Phosphorus and Potassium help to harden off plants for winter.
- Do not add fertilizers late into fall!
- Summer cover crops are great to plant before winter crops (i.e. buckwheat, phacelia)
Planting and Care:

Starting Seeds
Planting for fall, winter and spring harvest

For Fall Harvest:
• In June/July, plant slower growing crops that need extra time to mature before fall (broccoli, kale, carrots, beets).
• In Aug, plant quick growing crops (salad crops)
• August is considered our “second spring” in Maritime NW
Planting for fall, **winter and spring harvest**

For winter and spring harvest:

- Similar to fall planting strategy but plant extra so you can harvest through winter.
- Most winter crops are planted from June – early August.
- Crops that go through winter need to be well established, but not quite mature, unless you are cold storing them in the ground (carrots, leeks).
- There are some very long crops that are started mid-summer and harvested in spring (purple sprouting broccoli)
Season Extenders: Floating Row Cover
Season Extenders: Cold Frames
Season Extenders: Cloches
Season Extenders: Cloches
Happy winter gardening!
Further Resources


• OSU Extension’s Fall and Winter Vegetable Gardening in the Pacific Northwest, http://extension.oregonstate.edu/catalog/html/pnw/pnw548/

• How to Grow More Vegetables by John Jeavons

• The Maritime Northwest Garden Guide by Seattle Tilth

• Carrots Love Tomatoes by Louis Riotte

• Winter Gardening in the Maritime Northwest by Binda Colebrook

• Four-Season Harvest and The Winter Harvest Handbook by Eliot Coleman

• Gardening Under Cover: A Northwest Guide to Solar Greenhouses, Cold Frames, and Cloches by William Head