



## Strawberries for the Home Garden

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## Native strawberries



*Fragaria chiloensis*  
(beach strawberry)



*Fragaria vesca*  
(woods strawberry)



*Fragaria virginiana*  
(mountain strawberry)



## Terminology:

Crown: short compressed stem -- has a whorl of leaves and produces trusses and runners



Mother plant daughter

New strawberry planting



Truss

Runner

Cap

"seeds" are called achenes



## There are 3 types of strawberries:

### June-bearers:

- Crop once/year (in June)
- Produce many runners



### Day-neutrals:

- Better than ever-bearers
- Produce fruit continuously May through October
- Produce few runners

### Everbearers:

- Produce fruit twice/yr June & August
- Produce few runners



## Publication:

"Strawberry Cultivars for Western Oregon & Washington"



<http://extension.oregonstate.edu/catalog/>



## Cultivars:

### June-bearers



Shuksan



Totem

### Puget Reliance



Benton



**New cultivars to watch for:**  
June-bearers

Sweet Sunrise




Puget Crimson



Moore

Sweet Bliss



Charm





Photos: courtesy Nourse Farms

**Cultivars (E. Oregon):**  
June-bearers

Fresh market cultivars adapted to zones 3-8 or 5-8, depending on cultivar:

'Earliglow' (early, small size, excellent flavor)  
'Annapolis' (early, maintains size, good flavor)  
'Cavendish' (very large, good flavor)  
'Honeoye' (week later, large, good flavor)  
'Allstar' (very large, excellent flavor)







Honeoye

Annapolis



Photos: courtesy Nourse Farms

**Cultivars (E. Oregon):**  
June-bearers

'Darselect' (large, excellent flavor)  
'Clancy' (+5 days, large, dark red, good flavor)  
'Lateglow' (+ 9 days, large, excellent flavor)  
'Jewel' (+ 10 days, large, excellent flavor)  
'Ac Valley Sunset' (+ ~ 10 days, good flavor)



Clancy



Jewel



Ac Valley Sunset




Photos: courtesy Nourse Farms


**Day-neutral cultivars**

Continuous ripening  
(breaks in hot temperatures)


Seascape





Albion





Monterey






San Andreas

**Know the cultivar you are buying!**





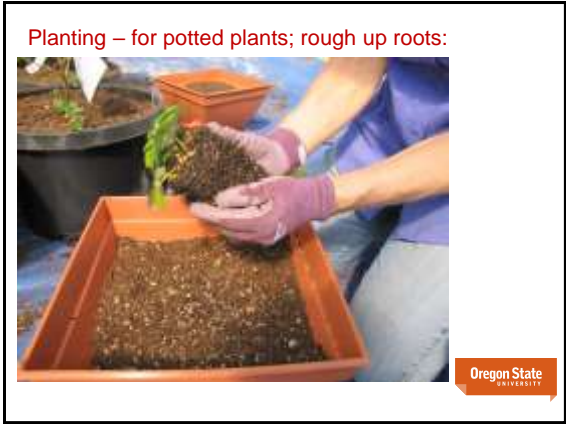
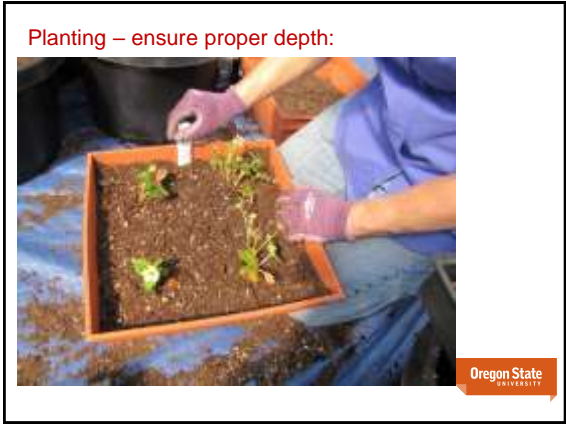
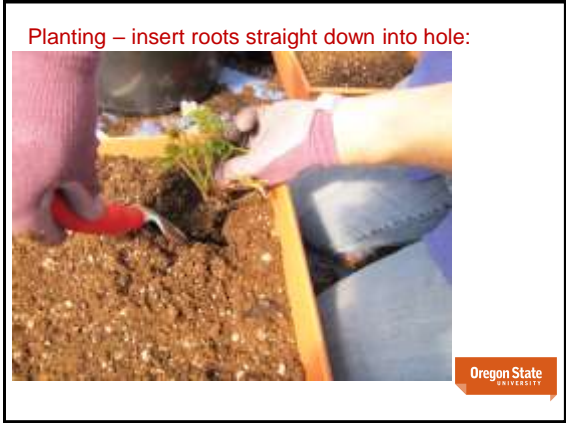
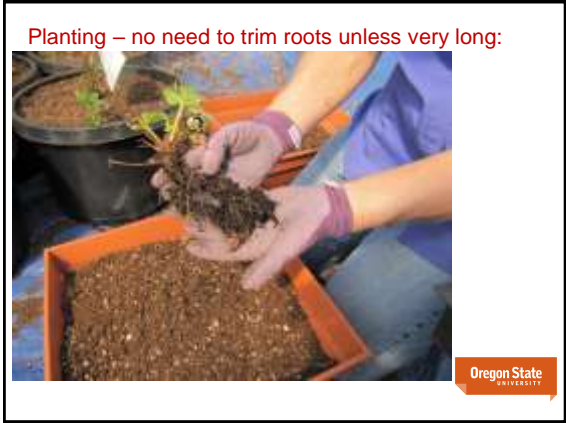
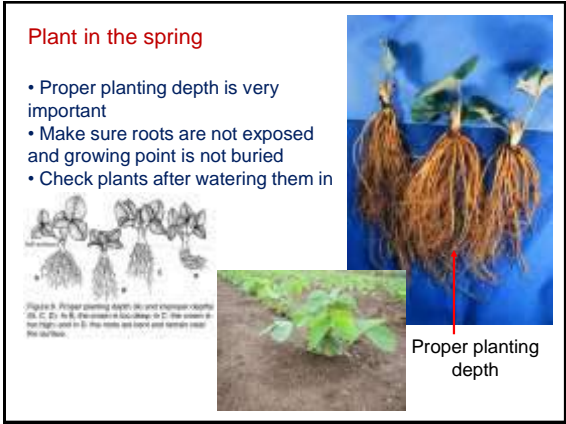
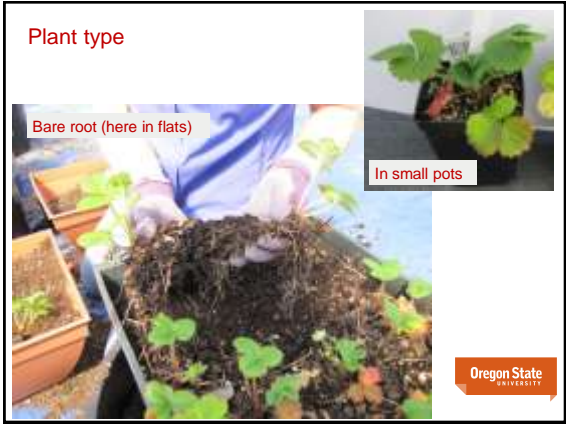
Fred Meyer, Bend, Oregon (March)

**Planting**

- Most plants are available in spring (order early from mail order catalogues)
- Do not add fertilizer to the planting hole
- Grow berries with similar needs in your yard plot or a larger raised bed







Planting – remove flowers to improve growth:  
Just do once



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Growth:



April 7

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### Planting Systems in your yard:

Plants can be established on flat ground but raised beds are recommended



A well-drained soil with a neutral pH, pest-free, sunny site is recommended

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### Planting Systems in yard – June-bearers

“Matted Row” (they runner a lot)

- 15” in the row; 3-4’ between rows
- runners root
- Rows will form a “mat”



Planting Year

Mature matted row



FIGURE 2. Floor spacing in the matted row system.

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### Maintaining matted rows

- Runners will grow to fill in aisles
- Rake early-formed runners into the row
- Till or hoe to maintain aisles



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### Planting Systems in yard – June-bearers

“Matted Row”

To encourage growth & runnering

- Irrigate well
- Remove weeds
- Fertilize frequently with small amounts of nitrogen fertilizer



Planting Year

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### Strawberry plantings

Planting -- "year 1"  
 ↓ No fruit except in day-neutrals  
 "First fruiting season" -- "year 2"  
 ↓  
 "Second fruiting season" -- "year 3"  
 ↓  
 "Third fruiting season" -- "year 4"  
 ↓  
 Planting removed after harvest

Yield and fruit size decrease as plantings age

### Renovation – only done in June-bearers

Done 2 weeks after last harvest

"Tired" plants after harvest in July

- Mow plants just ABOVE crown
- Narrow rows (improved aisles)
- Pull weeds; irrigate
- This is time to fertilize mature June-bearers

### Planting Systems in your yard

Grow day-neutrals in a "Hill System"

- 12" in the row (single or staggered double rows)
- Remove runners
- Remove weeds or use plastic
- Fertilize frequently

Mature hill system

### Mature Hill Systems

- Do not renovate (mow) day-neutrals (continuous fruiting)
- May clean up some older leaves in winter, but not necessary
- Remove runners before they get too large

New hill system planting  
Remove runners

Mature hill system in winter

### Growing in containers

- Requirements are for excellent drainage and a good soil porosity (air); potting soil or compost not ideal
- If bringing in soil for a raised bed – be careful; may still need to amend with good organic matter
- Can buy or make specialized medium
- Ensure good downward drainage below raised bed so it doesn't behave like a "bath tub"
- Raised bed should be at least 1 ft deep
- Containers can vary but use about 14 inch x 14 inch and 12 inch deep (for 4-5 plants)

Neil Bell, OSU

### Potting media:

What I've used for strawberry:

- 33% bark
- 33% peat moss
- 33% perlite (pumice)

### Producing in a container?

Choose a day-neutral cultivar



### Growth:



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### Pruning runners:



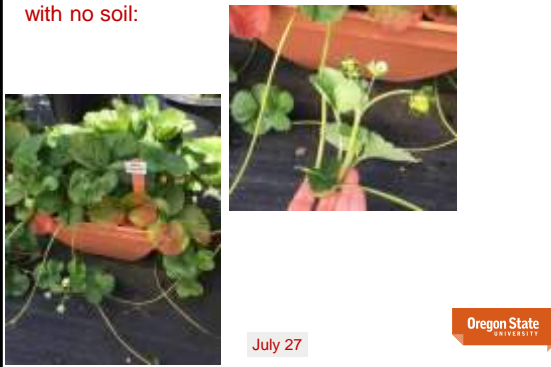
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### Pruning runners – continue to remove all season



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### Pruning runners – “daughter plants” will fruit even with no soil:



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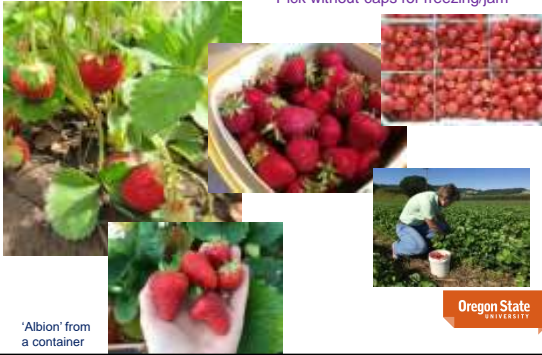


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## Harvesting

- Harvest for fresh with "caps"
- Pick without caps for freezing/jam



'Albion' from a container

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<http://extension.oregonstate.edu/catalog/>

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## Common Problems

### Frost damage



Normal flowers



Partially damaged flowers

Rowcover for frost protection  
[www.commercialappeal.com](http://www.commercialappeal.com)

Monkey face

No fruit

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### Cold damage

Crowns damaged in 10 to 20 °F range depending on time of "winter"



Damaged/dead crown



Healthy crown

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### Cold damage

In cold regions with little winter rain, straw may be used for winter cold protection

- Use 3-4 inches of "fluffy" straw to protect from winter injury
- Place on after few hard frosts
- Remove just as spring growth starting
- Rake into aisles



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### Poor pollination/fruit set

- Caused by:
- Cold weather
  - Wet weather



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### Insects feeding on developing achenes



Lygus bug



Boron deficiency may cause malformed fruit also  
add boron to the soil in fall – rate based on B test



### Fruit rot

#### Botrytis (gray mold)

- Very common problem
- Aggravated by dense canopy and wet weather during bloom & spring N fertilization



#### Anthracnose (leather rot)

- Humid, warm weather disease
- Aggravated by dense canopy



### Root Rot

Photos: OSU Plant clinic



Black Root rot



Red stele



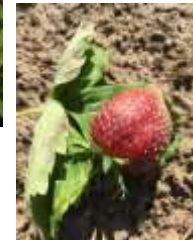
- Plant disease-free stock
- Avoid susceptible cultivars
- Plant on well-drained sites
- Use raised beds
- Avoid over irrigating



### Powdery Mildew



Not considered an important problem in strawberry



- Curling and “bronzing” of leaves usually not seen until late in season

- Symptoms sometimes on fruit



### Root Weevils

- Hand pick adults
- Spray approved chemicals at night



Adults notch leaves



larvae

Larvae eat roots and crowns



### Slugs



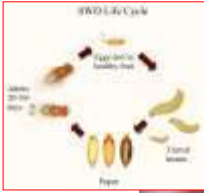
- chickens, ducks; hand pick slugs
- remove any hiding places
- stale beer traps
- caution with slug baits (for pets)





## Spotted Wing Drosophila (SWD)

Mainly a problem in late-season fresh strawberry

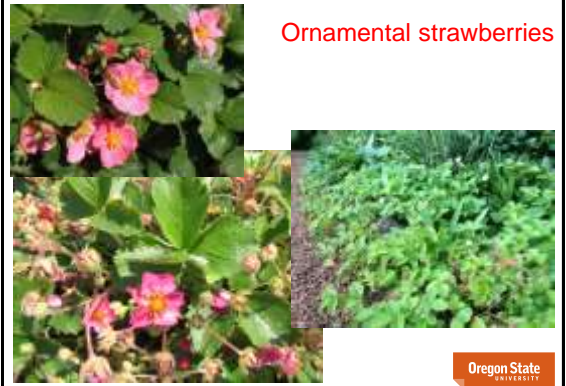


[ncsmallfatsipm.blogspot.com](http://ncsmallfatsipm.blogspot.com)

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<http://spottedwing.org/>

## Ornamental strawberries



Pink Lipstick

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# The End



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