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## Strawberries for the Home Garden


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### Native strawberries




*Fragaria chiloensis*  
(beach strawberry)



*Fragaria vesca*  
(woods strawberry)



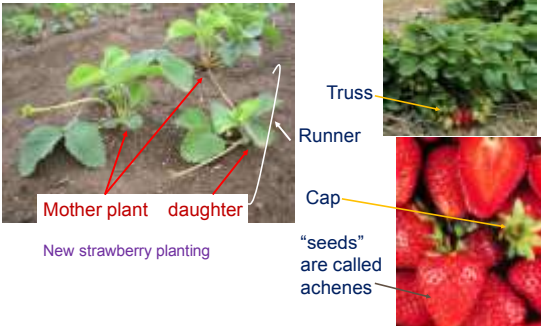
*Fragaria virginiana*  
(mountain strawberry)



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### 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



Everbearers:

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

Day-neutrals:

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

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### Publication:

"Strawberry Cultivars for Western Oregon & Washington"



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



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### Cultivars:

June-bearers



Shuksan



Totem

Puget Reliance




Benton

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

Sweet Sunrise



Sweet Bliss



Puget Crimson



Charm



Moore




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)








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



**Plant type**

Bare root (here in flats)

In small pots

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**Plant in the spring**

- Proper planting depth is very important
- Make sure roots are not exposed and growing point is not buried
- Check plants after watering them in

Figure 8. Proper planting depth. A) and B) proper depth. C) the growing point is buried. D) the roots are exposed and remain near the surface.

Proper planting depth

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**Planting – no need to trim roots unless very long:**

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**Planting – insert roots straight down into hole:**

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**Planting – ensure proper depth:**

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**Planting – for potted plants; rough up roots:**

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Planting – remove flowers to improve growth:  
Just do once



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Growth:



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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

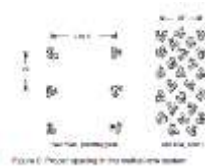


Figure 2. Floor spacing in the matted row system.

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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:



June 3

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### Pruning runners – continue to remove all season



July 5

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



July 27

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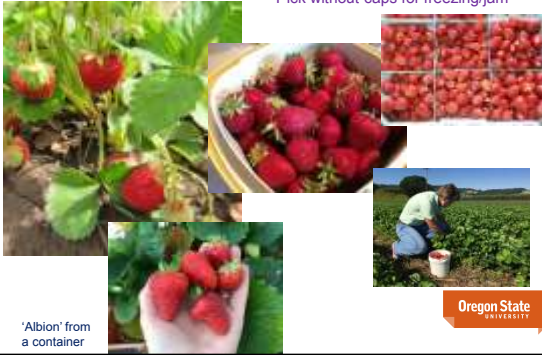


Aug. 10

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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



No fruit

Partially damaged flowers

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

Monkey face

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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

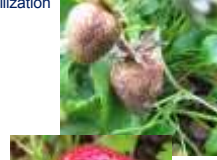
Boron deficiency may cause malformed fruit also add boron to the soil in fall – rate based on B test



### 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



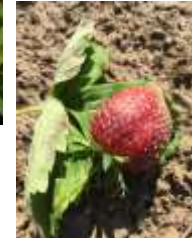
- Plant disease-free stock
- Avoid susceptible cultivars
- Plant on well-drained sites
- Use raised beds
- Avoid over irrigating



### 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



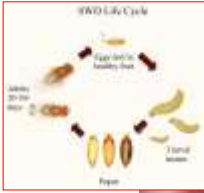
- chickens, ducks; hand pick slugs
- remove any hiding places
- stale beer traps
- caution with slug baits (for pets)





## Spotted Wing Drosophila (SWD)

Mainly a problem in late-season fresh strawberry

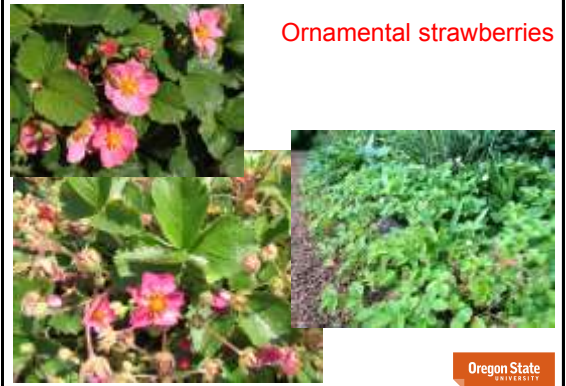


[ncsmallfruitsipm.blogspot.com](http://ncsmallfruitsipm.blogspot.com)

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<http://spottedwing.org/>

## Ornamental strawberries



Pink Lipstick

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# The End



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