

# Small Fruit Update



**Providing Northwest berry growers with the information they need when they need it.**

The *Small Fruit Update* is sent out weekly during the growing season by [Peerbolt Crop Management](#) and is funded entirely by the Northwest berry growers and industry through their commissions and councils.

April 8, 2014

Week 15

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## Berry Nutrient Management Guides

- [Nutrient management in blueberries](#) (OSU)
- [Nutrient management in caneberries](#) (OSU)
- [B.C. interactive berry management guides](#)

[The Weather Cafe](#) by Rufus La Lone   [Small Fruit Cold Storage report](#)

*With the warm weather all kinds of things are happening, both good and maybe not so good. A few indicators:*

- *Blueberry bloom is moving rapidly along with, so far, only relatively minor confirmed cold damage being reported (Not so minor if it happens to be your field...).*
- *Cold damage in Marionberry blackberry fields is becoming much more apparent as well as in some other cultivars.*
- *Cold damage in some northern raspberry fields is also becoming more apparent.*
- *Clay colored weevils are being reported as being active in northern area raspberry fields.*
- *Azalea Bark Scale is now easily detectible in southern blueberry fields.*
- *Native pollinators are out and very active in many southern blueberry fields.*
- *Shock virus symptoms are becoming very obvious also.*
- *With the scouts and the monitoring traps now in place—our first SWD catches for 2014 are in.*

Tom Peerbolt, SFU Editor

## Disseminating information for: Washington

[Washington Red Raspberry Commission](#)  
[Washington Blueberry Commission](#)  
[Washington Strawberry Commission](#)

## Oregon

[Oregon Raspberry and Blackberry Commission](#)  
[Oregon Blueberry Commission](#)  
[Oregon Strawberry Commission](#)

## British Columbia

[Fraser Valley Strawberry Growers Association](#)  
[Raspberry Industry Development Council](#)  
[B.C. Blueberry Council](#)

## National

[North American Blueberry Council](#)



## Regional reports

*These reports are from individuals within the region and are their particular observations. They are included to give an impression of the present 'state of the industry' and regional activities.*

### British Columbia, Fraser Valley

- **Blueberries:** (Sunday, 4/6) Blues are starting to really move now with terminal fruit bud clusters loosening and leaf buds expanding into the first visible leaves. We're still focusing on mummyberry control but as foliage levels increase we'll look at starting our first aphid control measures in a week or so. Fertilizing has started and will be in full gear next week.
- **Raspberries:** (Sunday, 4/6) Fertilization has started and will really pick up next week. A lot of primocane shoot burns were done last week and will continue into this coming week. Saw the first signs of clay coloured weevil damage on newly emerged leaves and buds the last few days. Next week's warm weather should see an increasing level of activity. So growers should watch for damage in both raspberries and blues in the coming days. Especially be vigilant in new planting blues where weevil feeding can really be detrimental to development. New raspberry plantings are starting to go in now that the weather is breaking and fields dry out.
- **Blueberries:** (Monday, 4/7) Things moving along. Not too much change. Mummyberry and span worm sprays going on. Some granular fertilizer later in the week. Seeing what should be fruiting buds opening as leaf buds in Duke and Bluecrop on some laterals. Couple fruit buds at end of lateral, but rest tissue. Crop still appears to be decent. Reka looking really good. Expecting some dry weather this week for a number of days which should really get plants moving.

### Northern Washington, Whatcom County

*We're doing an on farm demo of that multi fan, multi row air blast sprayer tomorrow (Wednesday, the 9th) at 9:00 AM, if anyone has interest. Contact Craig Ford at [ch.ford@hotmail.com](mailto:ch.ford@hotmail.com)*

- **Blueberries:** (Tuesday, 4/8) Second mummyberry spays either on, or going on. Better weather this week will facilitate applications. Proline (Bayer product) sounds good from the people in Michigan. Anyone have experience with it on mummy here?  
Buds have been at King's crown stage for over a week. Nice weather should make things pop. Despite rain, most fields are in pretty good shape. Craig Ford [[ch.ford@hotmail.com](mailto:ch.ford@hotmail.com)]

### Eastern Washington (Monday, 4/7)

- **Blueberries:** *From Alan Schreiber, Washington Blueberry Commission Exec.:* "Temperatures on April 8 are expected to reach 80 degrees in the Tri-Cities area with lows in the mid 40s to low 50s. Thus, we should have the first blooms open this week on Duke. Throughout the state of Washington, winter injury has been minimal with the greatest amount in certain areas of Whatcom County. On some farms the level of winter injury will reduce yields significantly, however this reduction in yields will not be noticed overall due to the greater production coming from fields entering production."

## Western Oregon, Willamette Valley

Comments from Albany: Our farm, planted in 2011 and 2012 has Driscoll blackberries (semi-erect types), most of them under steel hoops so we can add shade net or poly film. We also have Draper, Liberty, and several Rabbiteye blueberries.

- **Blackberries:** (Monday, 4/7) The cold event in mid-December was really tough on our blackberries. We dropped to zero with about a foot of snow on the ground.
- Some observations regarding the cold in blackberries:
  - Low areas took the worst beating.....its black death there.....I'll not share the photos. It appears that even some crowns may have died in these areas.
  - Poly film covers left in place through all of November (we picked in these blocks until 11/5) did not allow canes to harden and winter damage is worse.
  - Late summer cane training had slightly less cold injury than canes trained just weeks ahead of the cold but the difference was negligible.
  - Tipping the new primocanes (removing the 5 or 6 ft of small caliper terminal growth) during fall wrapping increased winter damage. I didn't expect this.....maybe some of you can tell me why removing the tip might set the plant up for increased sensitivity to cold?
  - If I had a crystal ball last fall, I would have only removed the spent floricanes in the fall and not touched the new floricanes until late Feb.....I could have saved much training labor by having cold damaged canes removed ahead of the spring wrapping.

**Note from Dr Bernadine Strik, OSU Horticulturist: (Tuesday 4/8)** In my opinion, there was more cold damage on the semi-erect blackberry cultivar that was topped because pruning, and for some varieties training, so late (it was done in Oct-Nov) stimulates the canes and thus delays acclimation (entering dormancy). Since the cold spell came early, any plants not yet fully dormant (still in the acclimation phase) would have been more susceptible to cold damage. For the same reason, leaving plastic on tunnels can delay acclimation and increase susceptibility to early cold spells.



(Left) Secondary blackberry bud pushing after primary bud succumbs to cold damage (photo by Jeff Flake)

(Right) More commonly seen is a sickly primary shoot that promotes breaking of the secondary bud.

--I've also observed that damage to the primary bud will trigger release of both a secondary and tertiary bud. It will be interesting to watch how the plant manages resources for two spurs at a single node.

- **Blackberries:** (Monday, 4/7) Should I keep saying 'continuing to evaluate for cold damage'? That's the main topic of conversation. There is for sure cold damage in every Marion field I have been in, from Corvallis to Forest Grove and most places in between. What impact it will have on the crop is still open to debate. There are fields being cut down and some that most likely will be. Black Diamond still appears to be unaffected. I am not sure about Columbia Star anymore, very uneven bud break but maybe that is normal? Hopefully the cold had the same effect on SWD.



April 4, 2014 Black Diamond blackberries. It will be time for bloom sprays before you know it. (Photos by Bill Dinger)



April 4, 2014. Cold damage in a Marionberry blackberry field. Except for the cold damage, a healthy, alternate year, field. (Photos by Bill Dinger)

- **Blueberries:** (Monday, 4/7) More comments from Albany, OR--Regarding blueberries, the snow weight broke some branches in Liberty and Rabbiteye. A slight amount of cold damaged buds were observed in all varieties (a little worse in Ochlockanee) but nothing that appears economically impacting. We need to observe the Rabbiteye flowers as they open.
- **Blueberries** (Monday, 4/7): The photos below were taken last Friday. We're now into a great warm up with temperatures in the 70's today. This week should see us well into blueberry bloom hitting 10% in Dukes for sure. Lots of wild pollinators at work today.

## Late winter/early spring weather risks

### Pictorial blueberry growth stages with temperature damage thresholds

- [Blueberry growth stages and critical spring temperatures](#) (Michigan State Extension)
- The relevant stages & temperature thresholds from the chart:
  - **Bud Swell:** "Visible swelling of buds; scales separated. Can tolerate 10-15 F (-12 to -9 C)".
  - **Tight cluster:** "Individual flowers distinguishable. Can tolerate 20-23 F (-7 to -5 C)".

### Early spring weather management information

- [Using your sprinkler system to protect blueberries from freezes](#) (Eric Hansen, Michigan State Small Fruit Specialist)
- (All berries) [Frost protection: Tips & techniques](#) (Kathy Demchek, Penn State)
- [Frost & freeze protection: Blueberries](#) ([www.eXtension.org](http://www.eXtension.org))

## Blueberry floral bud development—Western Willamette Valley

Top -- 4/4/14. Bottom -- 4/5/13

Same fields (Photos by Tom Peerbolt)

Patriot

Duke

Draper

Liberty

Aurora



Patriot

Duke

Draper

Liberty

## Insect & disease alerts

### Raspberry & Blueberry Disease Alert

**Phytophthora Root Rot:** As soils warm and saturate, conditions are ideal for the spores of Phytophthora to spread from plant to plant. All precautions should be taken to inhibit the disease in fields at risk with soil drenches of Ridomil and doing whatever you can to keep roots out of the saturated soil zone.

### Raspberry & Blackberry Insect Alert

**Raspberry Crown Borer** If you've had issues or it's been a few years since you've treated, now is the time to consider getting an insecticide crown drench on.

### Blueberry Disease Alert

**Mummyberry (blueberries)-** Time to be in prevention mode! In fields with a history of mummyberry and at green tip stage, now's the time to be implementing your management program and keep it going as consistently as possible all the way through the end of bloom.

- So, what is "green tip stage"? [Click here](#) for a chart from Michigan State of the various stages of blueberry growth development.
- [Mummyberry primer from MSU](#)



## Disease Symptoms Appearing

### Shock virus – southern blueberries.

- Symptoms are just becoming visible in many Oregon fields.
- This disease is vectored by pollinators.
- There is no treatment or cure.
- Infected bushes generally display symptoms for one year and then return to productivity.



## Classified

**Job Opening for Agronomy and Data Management Assistant.** [Click here](#) for job description. Interested individuals should send resume to T.J. Hafner at [tjhafner@agricare.com](mailto:tjhafner@agricare.com).

## Industry news/resources

### Newsletters/ berry reports

- [Washington Blueberry Commission Newsletter](#) (April 7, 2014)
- [Whatcom Ag Monthly](#) *Produced by WSU Whatcom County Extension. Includes excellent berry crop information.*
- [National Berry Report](#) *Daily fresh market berry reports. Hosted by the California Strawberry Commission, this report is generated from data from the USDA Agricultural Marketing Service and is updated daily.*
- [The Source](#) (4/7) *Market reports from The Produce News.*

### Magazine/website compilations

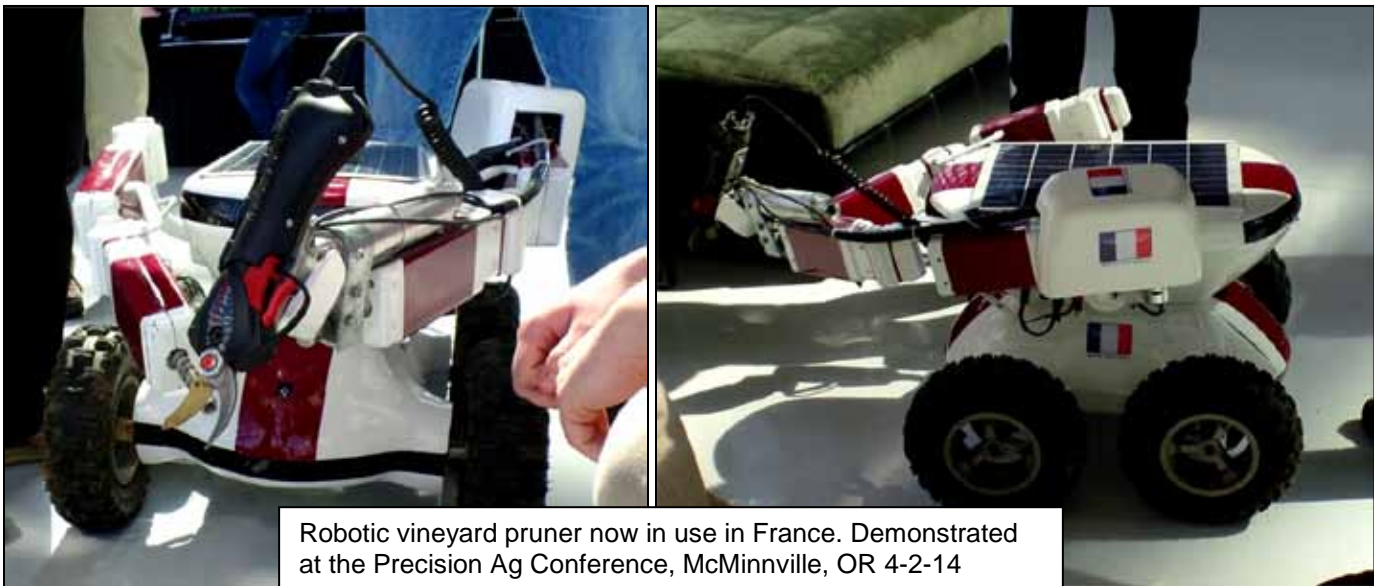
- **The Packer:** [blueberries](#), [blackberries](#), [raspberries](#), [strawberries](#).  
*Recent stories and fresh market pricing for the various berries from The Packer.*
- **Growing Produce:** [recent berry articles](#).
- **Fresh Fruit Portal:** [blueberries](#), [blackberries](#), [raspberries](#), [strawberries](#).  
*Recent stories for the various berries from Fresh Fruit Portal.*

#### **Berry research blogs**

- [Strawberries and Caneberries](#) by Mark Bolda, UC Davis Berry Extension Agent. *Reports on recent insect and disease research and observations in California.*
- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. *Reports on issues in blackberries and raspberries from the Southeast.*

**Editor's Note:** *Due to time constraints and the extended regional reports this week, I've omitted berry industry related story links. They'll return next week. TP*

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## **Crop work/pest management activities**

**Week 15**

### **All crops**

- Vole management.
- Weed management.
- Fertilizer program.
- Can put out monitoring traps for Spotted Wing Drosophila.

### **Blueberries**

- **Treat for [Mummyberry](#) as needed.** (See Alert at top of newsletter) *You can scout for sprouting mummyberries on the ground but they can be very difficult to find. Base treatment decisions on plant stage, environmental conditions and the past mummyberry history of the field and surrounding fields.*
- **Scout for [Pseudomonas \(Bacterial Blight\)](#)** Water-soaked lesions in some fields that then develop into reddish brown to black cankers or dead buds.
  - [Click here](#) for a PCM Research Update on bacterial blight first posted on 1/3/13.
- Scout for [leafroller larvae feeding](#).
- Scout for [Shock virus](#) symptoms in southern area fields.
- Plan for pre-bloom aphid control where scorch virus transmission is an issue.
- Make preparations for bringing in bees around 10% bloom.

- [Winter Moth/ Bruce Span Worm blueberries](#): Scouting for winter moth larvae should start as soon as the buds start swelling. More of an ongoing issue in the northern growing regions but also an occasional, locally severe problem in some Oregon and SW Washington fields.
- [Scale blueberries](#): A dormant oil or Esteem (pyriproxyfen) can be used while blueberries are dormant.

#### Blackberries

- Scout for [Purple Blotch](#) lesions in Marion berries to assess field disease levels for later treatments.
- Can apply lime sulfur for [Redberry Mites](#) and/or disease management.
- Can drench for [crown borer](#) management.

#### Raspberries

- Burn back primocanes as needed.
- (northern areas) Scout for [Clay Colored Weevil](#) feeding and treat as needed.
- Scout for mites.
- Can still apply Ridomil for [Phytophthora root rot](#) management.
- Can still drench for [crown borer](#) management.

#### Strawberries

- Can apply phosphite material.
- (Southern strawberries) Can scout for [Strawberry Crown Moth](#) larvae.
- Watch for weak growing areas and check rots for [weevil larvae](#), [root rot](#) and/or cold damage.

## Food safety meetings

### OR Blueberry, Strawberry, and Raspberry & Blackberry Commissions

#### Free Food Safety "Train the Trainers" Workshops—3 hour program

[Click here](#) for all the information and to sign up

- **New Posting: April 8** — Roths West, Salem
- **New Posting: April 11** — North Willamette Research & Ext Ctr., Aurora
- **April 16** — OSU Seafood Research & Education Center in Astoria
- **April 23** — Unger Farm Store, Cornelius
- **April 25** — Santo Community Center, Medford
- **April 30** — Mary's River Grange Hall, Philomath

## Event calendar

- **April 7- 9 — Global Berry Congress** ~ in Amsterdam. [Click here](#) for the conference's information page and registration.
- **April 8 — Eastern Washington Blueberry Growers: Meet the New WSU Small Fruit Horticulturist** ~ 10 am at the WSU IAREC station near Prosser The WA Blueberry Commission is hosting a meeting with Lisa Wasko DeVetter, the new WSU Small Fruit Horticulturist. For more information, contact the [WBC office](#) (509) 266-4300.
- **April 9 — Washington Red Raspberry Commission ~ Board meeting in Puyallup has been changed to a teleconference.** Begins at 10 am and will be concluded by 11:30 am. [Contact Henry Bierlink](#) for phone number access and more information.
- **April 16 — Washington Blueberry Commission** ~ 11:00 am at the Steakhouse 9 Restaurant, 115 East Homestead Blvd, Lynden, WA. For more information, contact the [WBC office](#) (509)266-4300.
- **April 17 — Korea Fresh Shippers Meeting** ~ 10am, Salem, OR, meeting location TBA. Due to changes in record keeping this meeting is considered mandatory for PCAs, please notify those who will be monitoring your production fields. The mandatory nature of this meeting will help with education documentation for the Korean inspector who will be here again this summer. [Email Bryan Ostland](#) for more information or call 503-364-2944.
- **April 25— Oregon Raspberry and Blackberry Commission** ~ Budget hearing and Committee meetings. Starts at 5pm. Call 541-758-4043 or [Email](#) Philip Gutt for more information.
- **April 29 — Oregon Blueberry Commission** ~ 12 pm (Budget Hearing), at Chemeketa Events at Winema, Building 48, Room 210. Contact Bryan Ostlund for more information at 503-364-2944 or [bryan@ostlund.com](mailto:bryan@ostlund.com).



- **May 11-13 — International Raspberry Organization** ~ Chuzhou, China. [Contact Henry Bierlink](#) for more information.
- **May 29 — National Processed Raspberry Council**, SeaTac Marriott, Seattle, WA. For more information, call Tom Krugman at 360-354-0948. [Click here](#) for the Council's website.
- **June 11 — OSU Strawberry Open House** ~ 1:00-4:30pm North [Willamette Research and Extension Center](#) (NWREC) *A focus on the breeding program & research for commercial growers. Details TBA.*
- **July 9 — OSU Caneberry Field Day** ~ 1:00-5:00pm [North Willamette Research and Extension Center](#) (NWREC) *A focus on the breeding program & research on conventional and organic production systems for commercial growers. Details TBA.*
- **July 16 — OSU Blueberry Field Day** ~ 1:00 – 5:00pm [North Willamette Research and Extension Center](#) (NWREC) *A focus on the breeding program & research on conventional and organic production systems for commercial growers. Details TBA.*

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## **Archived Small Fruit Updates**

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(For older Updates [click here](#).)

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