

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.

March 17, 2015

Week 12

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Duke Blueberry Bud Development Comparisons—

We're .well ahead ahead of 2013 &2014 right now.



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

I'm off in school ('Blueberry School', that is) along with other out-of-the-office business this week so this SFU issue is a bit abbreviated. Of note:

- This season's early blueberry plant development continues. We're seeing some Dukes with at least 5 % bloom along with usual early bloomers like Patriot, Bluegold and Reka.
- Some growers are bringing in bees.
- While blueberry bud development is way ahead of 2013 and 2014 at this point, it's too early to extrapolate that into estimating when harvest will begin. There are a lot of variables that still need to play themselves out.
- Caneberries are also advanced as can be seen by the photos below. Although not as much as blueberries.
- Strawberries are probably the least advanced of the berry crops. They've been more influenced by our more seasonal soil temperatures and cooler night temps.
- No visible winter/cold damage has yet been reported so at this point all the berry crops have good to excellent yield potential for 2015.
- It does have the makings of 'confused' harvest timings that could cause some processing tunnel logjams. Guess I just can't resist that bit of speculation.

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

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

National

[North American Blueberry Council](#)



Ouachita blackberries, Willamette Valley 3-13-13

Classified

Liquidation Sale—Berry Processing Equipment available for a start up processor or small grower:

Mike and Jean Youngquist (Mike and Jean's Berry Farm/Skagit Growers, Inc.) are liquidating. [Go here](#) for the flyer describing what they have available. Contact Mike for further information ([email](#) or call: 360 424-7220/cell: 360 770-4670).

Regional reports

British Columbia, Fraser Valley

- **Blueberries:** (Saturday, 3/14) We didn't get as much moisture this week as was expected, with the most occurring overnight Friday 13th and Saturday morning. Still I think it will stimulate the plants even more than they already are as it continues to be very mild. Development is alarmingly advanced with some varieties. I've seen blossoms popping open in Bluegold, some Reka at 30-40%% early pink bud, Northland with lots of leaf and early pink bud, Dukes at the loose cluster heading towards the early pink bud. Fields are getting greener as leaf buds unfurl into early leaf formation. Considerable number of growers have the second mummyberry sprays on. There is still great variation in locales as far as developmental progress and I hesitate to generalize. But we're all still way ahead of the norm (whatever that is anymore). I'm still not seeing weevil activity but I think this may be the week where clay colours come out of hiding both in blues and raspberries. The big frost window we now have is a concern as things seemingly get closer to an early bloom. No bees being set out but it will happen early this year. And it might be smart to get them set early as there could be a big push for placements.
- **Raspberries:** (Saturday, 3/14) Raspberries are pushing, but not as strongly as blues. Meekers are slowly into bud expansion and tip greening whereas Chemainus and Rudi's have considerable leaf and lateral development. They're early but they've got nothing on blueberries.

British Columbia, Fraser Valley

- **Blueberries:** (Sunday, 3/15) Things continuing to move along and looking like 2-3 weeks early depending where you are. Reka in the Abbotsford area at 50+% pink tip with some showing up in Duke as well. Blue crop and Elliot at tight to loose cluster. Mummyberry and Spanworm applications going on. Some fruit rot fungicides may be starting to go on in the most advanced western areas. Wet weather coming but temperatures not expected to drop. Weed and rodent control programs are being worked on. Some growers starting to think about pre-emergence herbicides as well now that we finally have some moisture. No damage evident at this point. If there is any up to this point from past weather it should be minimal.

Northern Washington, Whatcom County

- **Raspberries & blueberries:** (Saturday, 3/14) We had some frosty mornings and cooler days but then it got warmer again! Not sure the "yo-yo" is good for plants. It's our own form of "March Madness"!!!! Raspberry laterals continue to push, and buds continue to push open in Blueberries. Blackberries are at a very vulnerable stage for cold damage. Hope for the best. Are there going to be bees available early for us? A few bumbles have been around, but certainly not enough for good pollination when the time comes.

Northern Washington, Skagit County

- **Raspberries & blueberries:** (Sunday, 3/15) This latest storm has put the squish back in our steps. About 3/4 inch has fallen so far in Skagit and Whatcom with another 1/2 to 3/4 forecast for tonight. Great news for all of those newly planted raspberries. Long leaf wetness times and susceptible tissue out there means mummyberry inoculation is probably happening right now. It comes with cooler temperatures as well, hopefully that will slow things down.



Reka in Skagit well into early pink bud stage. Photos by Tom Walters

Western Oregon, Willamette Valley

- **Blueberries:** (Sunday, 3/15) Great rain storm the past couple of days however very little snowpack is associated with it. So our developing story line for 2015 continues: Extremely early flower development with continuing questions about overall ag water availability in the West. The crop still looks very good overall but everyone's watching the weather forecast carefully hoping to escape any major frost events. Prime mummyberry infection weather right now with the many fields around first bloom-pink bud, continual tissue wetness and temperatures in the 50's. Guys should be ready to re-apply preventative fungicides when they get a weather break.
- **Blackberries:** (Monday, 3/16) Before the rain this weekend, which was much needed, fertilizer, herbicides and lime sulfur being applied. Some new plantings going in, which is about as early as I have ever seen, conditions usually don't allow this early. Couple of pictures to compare growth in Black Diamonds. Same farm, same field, same row, close to the same plant, first one taken March 14, 2014 and second March 13, 2015. Growth difference is pretty dramatic, remember last year we started about a week early.



Black Diamond Blackberries, same field. Left March 14, 2014/ Right: March 13, 2015 Photos by Bill Dinger

- **Strawberries:** (Sunday, 3/15) Strawberry plant growth is accelerating now that the soil temperatures are warming. No winter damage being seen anywhere. Below are some photo's from a newly planted Hood field. Looking good up to now.



Hood strawberries-new planting Willamette Valley 3-13-15. Photos by Tom Peerbolt

Blueberry Disease Alert

Mummyberry (blueberries) In the Willamette Valley we have open Mummyberry apothecia (see photo's above) and fields being vulnerable to infections. If we have prolonged periods of leaf/tissue wetness with temperatures in the 50's we'll be seeing infections. Get a management program in place in fields at risk. Green tip stage is the plant development stage when they can be infected.

- **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](#)
- **Some critical points:**
 - The optimum temperature for spore release and infection is 50 to 57°F (10 to 14°C). Figure on when temperatures go over 45F in our area you're into the danger zone.
 - **12 hours of leaf/tissue wetness is required for infection.**



Mummyberry apothecia, Willamette Valley blueberry field March 6, 2015



Blueberry Bud Development Comparison for the Western Willamette Valley

Last year the first set of photos were taken on March 13th. We've finally caught up to that date. The top row is 3/13/15. The bottom row is 3/13/14. Same fields. A lot of development just in this last week as we continue on this strange early season. Some Duke fields are at or beyond 5% open bloom now.

Northwestern Willamette Valley Top – 3/13/15 Middle – 3/6/15 Bottom – 3/13/14

Patriot

Bluejay

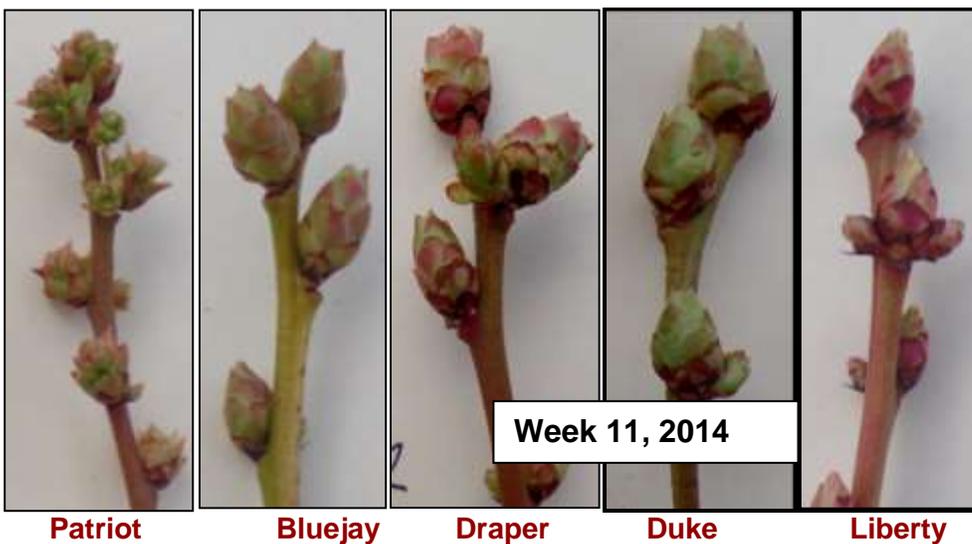
Draper

Duke

Liberty

Aurora

Elliott



WA Berry Grower Workshops on Food Safety & Labor Regulations

Sponsored by the Washington Blueberry & Raspberry Commissions

All Sites: 9 - 5, RSVP Required, [Go here](#) for the agenda and to register.

Purpose:

- What do growers need to know about Food Safety to protect themselves and their customers?
- What do growers need to know about Labor regulations to protect themselves and their workers?

Dates & Locations

- **March 23 — Prosser** ~ WSU-IAREC, 24106 North Bunn Road.
- **March 24 — Battle Ground** ~ Manor Grange # 1101, 17901 NE 72nd Avenue.
- **March 25 — Mt. Vernon** ~ WSU-NWREC, 16650 Highway 536.
- **March 26 — Lynden** ~ NW Washington Fair- Rotary Building, 1775 Front Street.

Upcoming Regional Events & Commission Meetings

[Go here for Full Event Calendar](#)

- **March 17-18 — Precision Farming Expo** ~ Salem Convention Center. [Go here](#) for the event website.
- **April 8 — Washington Red Raspberry Commission meeting.** In Puyallup, WA. Contact Henry Bierlink for more information by [email](#) or phone 360-354-8767
- **New Posting: April 8 — Washington Blueberry Commission meeting.** In Lynden, WA. 10:30 at the Steakhouse 9 Restaurant at the Homestead, 115 East Homestead Blvd. For more information, contact Alan Schreiber by [email](#) or phone 509 266-4305

Oregon State Open House Events

Details to be announced. At the North Willamette Research and Extension Center, Aurora, OR. Contact Bernadine Strik with questions, Bernadine.strik@oregonstate.edu

- **June 10 — OSU Strawberry Open House.** 1-4:30
- **July 1 — OSU Caneberry Open House** 1-5:00
- **June 8 — OSU Blueberry Open House.** 1-5:00

Upcoming National & International Berry Events

- **March 23-25 — Global Berry Congress** ~ Rotterdam. [Go here](#) for their webpage.
- **April 9 — British Columbia Blueberry Council 25th Anniversary** ~ The Royal King Palace, Surrey, BC. 5:30. Call the Council's office at 604-864-2117 for tickets. [Go here](#) for information.
- **May 18-19 — National Processed Raspberry Council** ~ Semiahmoo Resort in Blaine, WA. [Go here](#) to make hotel reservations or call phone 360-318-2000. Be sure to identify yourself as part of the National Processed Raspberry Council. For more information, please contact Tom Krugman, 360-354-0948, TKrugman@redrazz.org
- **June 18-24 — Eleventh International Rubus and Ribes Symposium** ~ Charlotte & Asheville, North Carolina. [Go here](#) for their website with all the details.
- **September 7-9 — 5th Annual International Blueberry Organization Summit**~ Coffs Harbor, Australia. [Go here](#) for meeting information.
- **September 13-16 — International Symposium on Mechanical Harvesting & Handling of Fruits and Nuts** ~ Richland, Washington. [Go here](#) for meeting information.

Early Season Accelerated Development Information

- **Late winter/early spring weather risk information**
 - [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 to 15 F (-12 to -9 C)".
 - **Tight cluster:** "Individual flowers distinguishable. Can tolerate 20 to 23 F (-7 to -5 C)".
 - **Early pink bud:** "Expanding flowers are readily visible & have separated. The pink corolla tubes (petals) are short & closed. Can tolerate 23 to 25 F (-4 to -5 C)"

- **Early spring weather management information links**
 - [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)

Nutrient Management

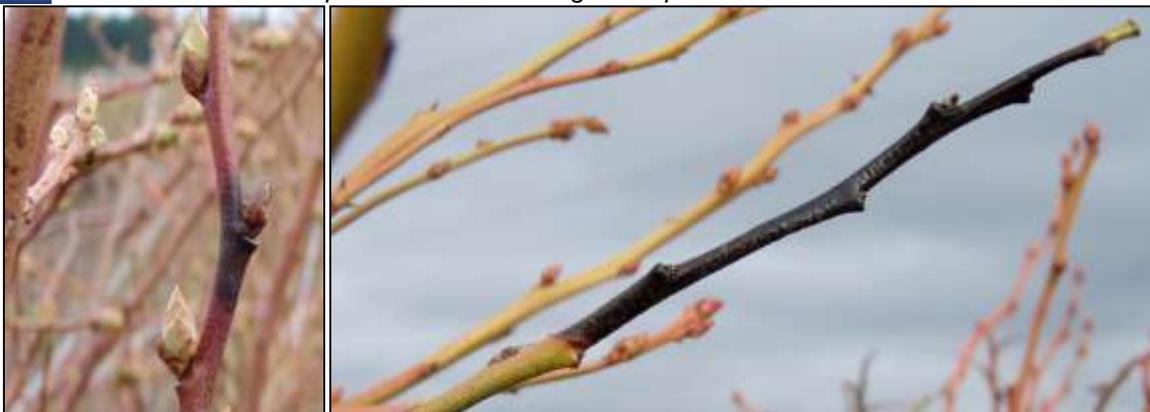
We're getting into a traditional time for applying fertilizer. Many growers still apply the first blueberry application just before the buds break. Research has shown that the plant takes up very little nitrogen before late April. Recommended timing for split applications in the Willamette Valley is 1/3 in late April, 1/3 in mid-May and 1/3 in mid-June.

- [Click here](#) For OSU's "Nutrient Management in Blueberries" (16 page pdf).
- [Click here](#) for OSU's "Nutrient Management Guide—Caneberries" (8 page pdf)

Pest Management

Bacterial Blight (*Pseudomonas syringae*), blueberries.

- [Click here](#) for a PCM Research Update on bacterial blight first posted on 1/3/13.



Pseudomonas syringae (bacterial canker) symptoms in blueberries

- The swelling buds are vulnerable to infection by the ever present bacteria, *Pseudomonas syringae*, especially during warm, wet weather.
- Once infected, those buds are vulnerable to subsequent freeze damage at a higher temperature than buds that aren't infected.
- If warm, wet weather is predicted, applications of copper can help prevent *Pseudomonas* infections
- **Caution:** Many strains of this bacteria are resistant to copper compounds. Avoid over applying to help minimize resistance.

Usual March Pest Management

In most years activities involving the management of the following pests happen during March. They're associated with the warming temperatures and renewed plant growth.

Insects/Mites

- **Raspberry Crown Borer caneberries:** If you've had borer problems in the past, March is the time to drench for crown borer management in caneberries.
- **Strawberry Crown Moth southern caneberries:** In Oregon and Southwest Washington, this borer looks to do as much, if not more, damage in caneberries as the Raspberry Crown Borer. The treatment is the same as for RCB- a spring (or fall) insecticide drench.
- **Clay Colored Weevils southern strawberries:** This early emerging species is usually just considered a pest of raspberries in northern growing areas where it feeds on newly emerging shoots and buds. But in the last few years emerged adult Clay Colored Weevils have been recovered from SW Washington southern strawberry fields and blueberry fields.

- [Redberry Mite](#) **evergreen blackberries**: Dormant sprays of lime/sulfur or elemental sulfur for Blackberry Rust and Redberry Mite are recommended in March.

Diseases

- [Phytophthora Root Rot](#) **raspberries**: March is the time to use a fungicide drench in raspberries. Warm, saturated soils are the conditions that favor this organism, allowing it to spread quickly.
- [Blackberry Rust \(Phragmidium Rust\)](#) **Evergreen blackberries**: Dormant spray of lime/sulfur or elemental sulfur for Blackberry Rust and Redberry Mites is recommended in March to prevent later problems.
- [Cane Blight](#) **raspberries**: A good time to spot symptoms of cane blight is as the buds break. Infected canes will show either no bud break if the cane has been girdled or one-sided bud break if the infection is on one side. Scrape canes to look for rust colored streaks usually coming up from machine harvester scars. There is no treatment for cane blight once it's present, only prevention. The time to prevent next year's canes from getting infected is to apply an appropriate fungicide immediately after harvest when fresh wounds normally become infected.
- [Purple Blotch](#) **blackberries**: Check for cane lesions that are easy to see as the weather warms but the foliage has not yet emerged. It's a good time to assess disease level.

Industry news/resources

Newsletters/ berry reports

- [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](#) (3/4) *Produce marketing news from Pro*Act.*

Magazine/website compilations

- **The Packer**: [blueberries](#), [blackberries](#), [raspberries](#), [strawberries](#).
- **Growing Produce**: [recent berry articles](#).
- **Fruitnet-Eurofruit**: [recent berry articles](#).
- **Fresh Fruit Portal**: [blueberries](#), [blackberries](#), [raspberries](#), [strawberries](#).

Berry research blogs

- [Strawberries and Caneberries](#) by Mark Bolda, UC Davis Berry Extension Agent. **Recent entry (3/13): Organic fresh market strawberry cost and return study now available** *Reports on recent insect and disease research and observations in California.*
- [Team Rubus](#) by Gina Fernandez, North Carolina State Small Fruit Specialist. **Recent entry (3/9): Monitoring flower to fruit development of blackberries** *Reports on issues in blackberries and raspberries from the Southeast.*

Climate/Water

- [Washington governor declares drought in three regions](#) (3/13, Capital Press)
- [Small snowpack in Oregon means big water worries](#) (3/10, Capital Press)

Technology

- Blueberry storage: [Positive response to storage solutions](#) (3/13, Fresh Plaza)
- [Oregon's Ag technology startups receive funding focus](#) (3/13, Capital Press)

The West

- California: [Bountiful California strawberry crop should run weeks early](#) (3/12, The Packer)
- [West Coast port congestion lingers](#) (3/11, The Packer)

North America

- North Carolina: [N.C. blueberry growers approve assessment to fund research](#) (3/12, Sun Journal)
- Pennsylvania: [Winter damage likely to berry crops](#) (3/13, Fruit Grower News)

International

[Global Berry Congress 2015: Future Trends for Berries](#) (3/12, Eurofruit)

Chile

- [Blueberry exports on the rise](#) (3/13, Fresh Plaza)

Australia

- [Why are imported frozen berries cheaper?](#) (3/13, Fresh Plaza)

Archived Small Fruit Updates

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

[11-SFU03-10-15](#)

[10-SFU03-03-15](#)

[09-SFU02-24-15](#)