

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.

July 8, 2015

Week 28

Table of Contents

[Regional Reports](#)

[Berry Day Events](#)

[Blueberry Bud Development](#)

[Industry News](#)

[Grower Resources](#)

[Pest Alerts](#)

[Crop Work](#)

- [Blueberry Birthday Celebrations Crop Up Across the Nation](#) (7/2 Grocery Headquarters) They're dancing in the streets.
- [Blueberry quality and plant nutrition](#) (7/2/14, MSU Extension) Excellent information on calcium, urea and late fertilizer applications in blueberries.

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

News from the hot zone:

- I went north this week (Abbotsford & Lynden events) so this week's SFU is a little abbreviated.
- It's cooling off!...and in the wake of the heat--
- The blueberry, raspberry and blackberry crop yield estimates for the 2015 season have been lowered across the board.
- While some good quality fruit has and will be picked, the overall quality has taken a hit.
- The crop cycle has been accelerated over and above our already 'earliest ever' start to the season.

Believe it or not, it's only July 8th. We've still got a lot of berries to get in. Sure feels a lot more like August 8th doesn't it?

Tom Peerbolt, SFU editor

For the SWD resources and other crop management information go to the [Grower Resources](#) section.

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](#)

Regional Berry Field Day Events

- **July 8 — Washington Raspberry Machine Harvesting Field Day, 2-4, Lynden, WA at Randy Honcoop's Farm.** [Go here](#) for details.
- **July 8 — OSU Blueberry Open House 1-5:00** [Go here](#) for details
- **August 18 — Oregon Strawberry Commission Fresh Strawberry Plasticulture Workshop and Demonstration 9:30-5:00** [Go here for the agenda](#).



Albions growing in plasticulture – photo by Lora Liegel

Regional reports

British Columbia, Fraser Valley

[Go here](#) for the B.C. Blueberry Council's Blueberry IPM Report for 7/3.

British Columbia, Fraser Valley (Monday 7/5)

I have been amazed as to the quality that the blueberries and raspberries have been able to maintain in the face of this unrelenting hot dry air that seems to go on and on.

- **Blueberries:** Dukes are pretty well machined for the first time with some to go early this coming week. Not a lot left behind for subsequent picks. While quality has been good, the size of fruit has been off, with some exceptions. The more moderate western parts of the Fraser Valley near the coast have seen some pretty good sizing. The burning upper valley is where we have some issues. Bluecrop is coming on but is suffering softness with the high heat. Today (5th) it is 36C, 97F. Haven't seen much sunburn yet but that may change after this afternoon. I agree that the fruit seems to have acclimated to the continuing conditions. However, fresh is done for the time being.
- **Blueberries:** Part way through second harvest on Duke by Machine. Size has been good on this round. There will be an additional cleanup on some fields. Should be finished well before "normal" start time for machine harvesting. Blue crop hand harvest has begun in the idle of the valley with a lot of the fruit nicely sized. Some soft but generally pretty good shape. I've heard that wind storm today has knocked some of the ripe fruit off. Reka first harvest off by machine with size being quite good. Growers have begun machine harvest of Hardyblue over the last few days. First ripe Elliott appearing in the middle of the valley a few days ago with eastern end showing some ripe fruit a week ago. Sizing is excellent.

- **Comments:** Most growers irrigating pretty regularly with some having issues getting enough water as all types of farm operations irrigating steady. SWD controls being applied regularly. Seems to be an increase in bird pressure the last few days. Haven't seen any sunburn this year yet. Is it ever going to rain?
- **Raspberries:** Raspberries continue to pick, but volumes are falling off as the temp goes the other way. Quality has been exceptional. But like the blues, size is seriously off. We're probably 50-60% through and I am worried that today's really high temps will seriously impact the early week picks. The crop is certainly going to be down. But much more significantly than I thought a month ago.
- **SWD:** I see that the wild Himalayan Blackberries are ripening now (why not? Everything else is early). So SWD populations will get a new boost.

Northern Washington, Watcom County

- **Blueberries:** (Monday 7/5) I am amazed at how the BB quality has stayed good with the scorching temps. Like others, I have seen no sun burn (!!!!!) Those that started early and kept the water going, have pretty good size to the Duke. Stressed fields and poor h2O mgt has the size very variable with many smalls. Grade A large process could be a premium. Blue Crop is going to have a tough making fresh at all. Liberty and others have a LOT of sizing to do. Draper, in general, look very good this year. Hope market cleans up for later fruit. Although, it is not as much "later" as usual.

Northern Washington, Skagit County

Extremely high winds today harvested quite a bit of fruit in central and eastern Whatcom today. Heard maybe a little of the same across the border. This should reduce overall harvest costs and reduce those pesky trips to the bank to make deposits.

- **Raspberries:** (Tuesday, 7/6) We went hunting for Botrytis in the raspberry fungicide trial, which has misters running 16 hours a day. That should make for terrible disease pressure, but we had a tough time finding any. It's a nice year for mold-free raspberries, if you can get them off the plant. We did see some blackened receptacles, possibly latent Botrytis.
- **Blueberries:** The Skagit and Whatcom blueberry fields I've seen in the past week have looked pretty clean. The most common problem was small size, due either to overproduction/underpruning or to inadequate irrigation. Maybe both; it was definitely worst in plants with too few leaves for their berry load.
- **Caneberries:** RB quality has been good, but sizing is an issue. High temps will mean trouble for the IQF this week, I fear. BLK's coming on.
- **SWD:** Little SWD pressure so far!!! But wild fruits ripening early may change that soon.
- I'm not saying it's hot up here, but one of those road working guys in the orange suits burst into flames yesterday :(

Eastern Washington (Monday 7/6)

- **Blueberries:** Continuing our streak of 100 degrees or higher. Dukes almost done, well into Bluejay, Bluegold, Draper, and even Legacy. Quality not bad, size ok, still a bit of shrivel and leaf burn to contend with. Insects not an issue, but weeds just won't stop growing.

Western Oregon, Willamette Valley

- **Blackberries:** (Tuesday 7/7) The heat has really taken a toll in the Marions. Yields are off, berries are small. In some cases, it's worse than last year. We'll be done by the end of next week. Columbia Star has really impressed me. The quality is great. Wish we had 5 million tons of them. Still picking Black Diamond and still looking pretty good.



Strawberry harvest – photo by Jason Myer

Blueberry Development Comparisons for the Western Willamette Valley

Protocols for these photos: 1) Each Friday I take 5-7 cuttings from the same fields in the NW Willamette Valley. 2) Later in the day I look over the cuttings and choose what seems the most 'representative' (not the most advanced or the least advanced). I'm aiming for the development stage that best represents the fruit that would be the first harvested. **We continue ahead in development over the last two years.**

Northwestern Willamette Valley Top – 7/3/15 Middle – 7/4/14 Bottom – 7/5/13

Patriot

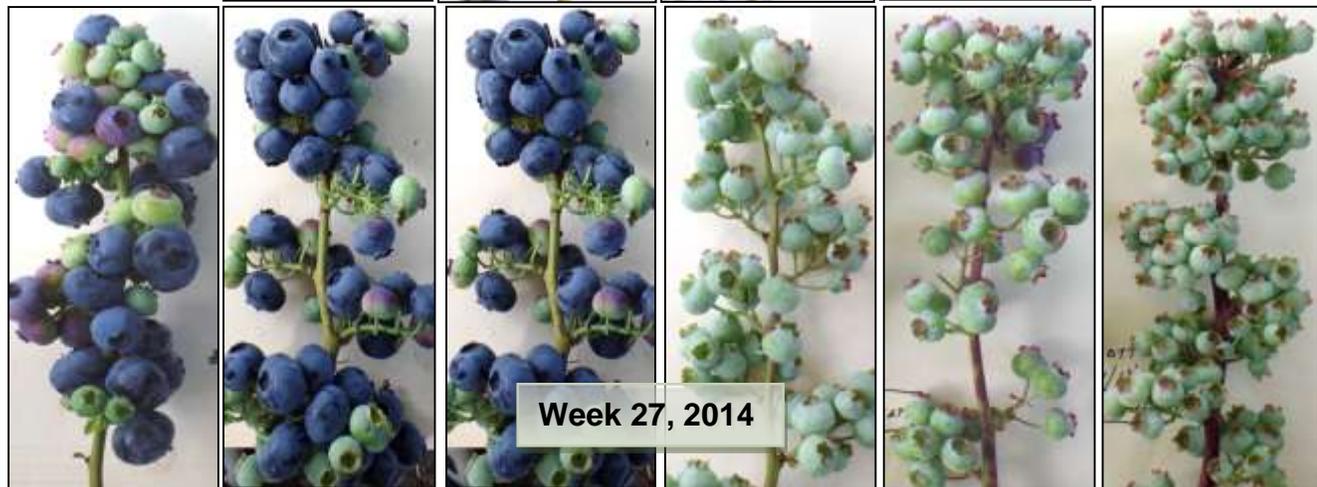
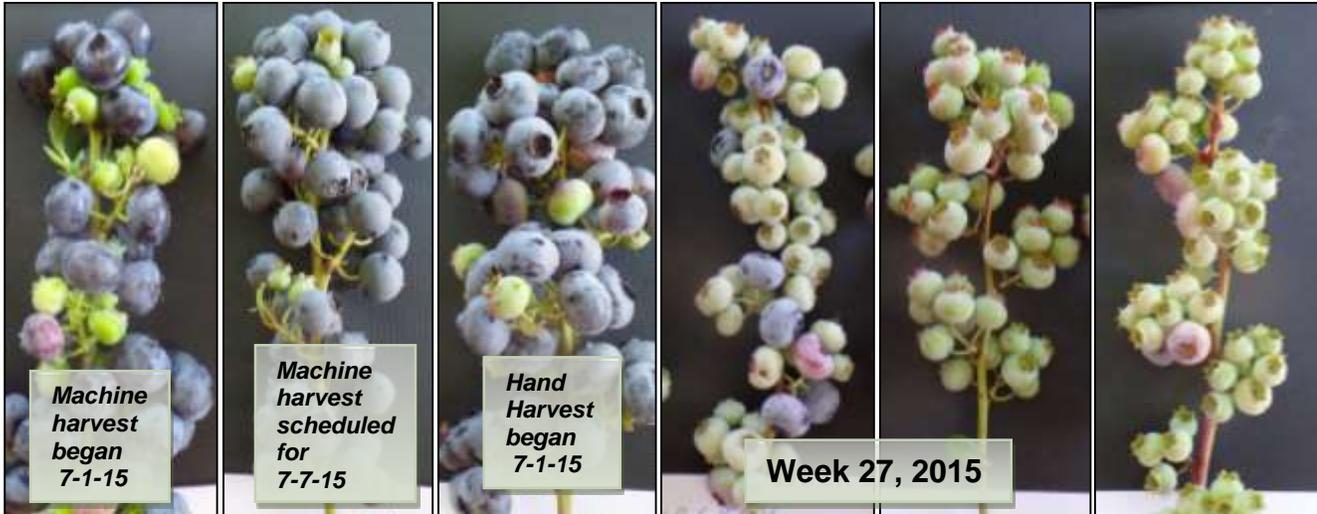
Bluejay

Draper

Liberty

Aurora

Elliott



Patriot

Bluejay

Draper

Liberty

Aurora

Elliott

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.
- [Market Report from General Produce for Week 27](#) (7/6)
- [The Source](#) from Pro*Act (7/6)
- [USDA Market News \(Fruits & Vegetables\)](#)

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. 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.

Business/Marketing

- [Blueberry market update](#) (6/30, andnowyouknow.com)
- [Blueberry promotion marks centennial](#) (7/2, The Packer)
- [Food art sweepstakes touts Driscoll's berries](#) (7/2, The Packer)

North America

- [First pick marks start of Michigan blueberry harvest](#) (7/2, The Packer)
- New Jersey: [Great start to blueberry harvest](#) (7/1, Fresh Plaza)

International Plant Breeding

- China: [Blueberry processing has massive potential for growth](#) (7/1, Fresh Plaza)
- Argentina: [Over 300 blueberry industry producers/ professionals meet in Argentina](#) (7/1, Fresh Plaza)
- Peru: [Peruvian blueberries could meet high demand in China](#) (7/2, Post Online Media)

Grower Resources ---- Week 28

Pest Alerts

Monitor & apply preventative insecticides as needed:

Spotted wing drosophila

SWD Resources

- [SWD I.D. Card](#) (UC Extension)
- [Spottedwing.org](#) Information from the 5 year SCRI regional project that just concluded. Cooperating organizations: OSU, WSU, Agri-Foods Canada, UC Davis, UC Berkeley, Peerbolt Crop Management & the USDA.
- [Spottedwing.org/SWD external links resources](#)

British Columbia

- [BC SWD Management](#) (Updated June 19, 2015) It has 2015 spray options.
- [Weekly Monitoring Reports](#) (Updated every Monday)
- [SWD information brochure in English](#) (Published June, 2015)
- [SWD information brochure in Punjabi](#) (Published June, 2015)

Oregon and Washington (last updated 2/24/14)

- [USpest.org SWD Extension Documents](#) Many of Amy Dreves' generated SWD materials on managing and monitoring SWD.
- Blueberries: [SWD pesticide options and information](#)

- Raspberries and blackberries: [SWD pesticide options and information](#)
- Strawberries: [SWD pesticide options and information](#)

Monitoring berries for SWD larvae in the field

[We have created a video of the larvae-checking method.](#) It's from 2010 but still pretty good.

- Put a sample of fruit to be tested in a gallon size sealable plastic bag.
- Pour in enough salt water solution to allow the fruit to float (solution is: 1 cup of salt per gallon of water). Mark bag with field code/date. Gently crush/break open fruit.
- For a quick check in the field after a designated period of time (at least 15 minutes) hold the baggie up to light. This helps to see the larvae in the solution.
- For a more thorough examination, after a designated period of time (at least 15 minutes), pour the fruit and salt solution out into a shallow tray and use a piece of wire mesh screen to hold the fruit down making it easier to separate the larvae from the fruit.

Scout for: [Silver leaf disease](#) symptoms in **blueberries**.

- *This is a recently identified disease that has so far been confirmed only in a few Draper variety fields in western Oregon. It's unknown how economic this disease will be.*



Silver Leaf disease symptoms—Draper blueberry field, Willamette valley 5/22/15. Photos by Tom Peerbolt

Additional, Ongoing Pest Information

Diseases

- **Scout for:** [Phytophthora root rot](#) raspberries. Look for primocane collapse.
- **Scout for:** [mummyberry](#), blueberries. [mummyberry primer from MSU](#).
 - Infected fruit is now becoming easy to distinguish from healthy fruit.
 - The infected fruit colors earlier, shrivels, whitens and drops from the bushes easily when disturbed.
 - Right now this fruit could be mistaken for green berry botrytis infected fruit.
 - The inside of an infected berry will be filled with white fungal mycelium.
- **Scout for:** [blackberry rust](#), (Phragmidium Rust) **Evergreen blackberries**.

Insects/Mites

- **Scout for:** [azalea Bark Scale](#), blueberries. This scale's telltale bright white egg sacs on the lower branches of infested plants are now apparent in some southern blueberry fields.
- **Scout for:** **Root Weevils, strawberries & blueberries.** Larvae & adults of [black vine](#), [rough strawberry](#), and [strawberry root weevils](#) are now being recovered from some fields.
- **Scout for:** [blueberry gall midge](#), blueberries. tip damage from this midge is showing up in blueberries. damage is usually deemed to not be economic except in specific situations like new vigorous fields where gall midge can occasionally cause too much stunting of new growth.
- **Scout for:** **Mites in raspberries (northern growing areas):** [twospotted mites](#) [yellow mites](#)
- **Scout for:** [strawberry crown moth](#) southern strawberries: Infested plants will have a weakened crown and will often break off with a pull on the top growth.

Crop Work

All crops

- **Sample for & treat as needed for SWD fruit infestation.**
- Vole management.
- Weed management.
- Fertilizer program.
- Water management.

Blueberries

- *If ripe/coloring fruit is in field, can begin treating for prevention of SWD infestation.*
- Scout for [mummyberry](#) infected fruit.
- Stay on top of aphid management where Scorch virus transmission is an issue.
- Scout for [leafroller larvae](#) & treat as needed.
- Scout for virus symptoms & send in samples for testing as needed ([shock virus](#); [scorch virus](#)).
- Scout for scale insects.
- Scout for weevil notching.
- Scout for [azalea bark scale](#) in southern blueberries
- Scout for blueberry [gall midge](#) damage.
- Can put out pheromone traps to monitor for leafrollers. ([orange Tortrix](#) and [oblique Banded](#))
- Scout for berry symptoms like green fruit botrytis, hail damage, mummyberry, etc.

Blackberries

- *Treat for prevention of SWD infestation.*
- Can put out pheromone trap to monitor for leafrollers. ([orange Tortrix](#) and [oblique Banded](#))
- Can apply fungicides for [fruit/blossom rot](#) from 10% bloom through the end of bloom.
- Scout for virus symptoms and send in samples for testing as needed.

Evergreen Blackberries

- Scout for [blackberry rust](#) and treat as needed.

Raspberries

- *Treat for prevention of SWD infestation.*
- Scout for [yellow rust](#) and assess treatment options.
- Scout for yellow mites and [twospotted mites](#).
- Scout for virus symptoms & send in samples for testing as needed.
- Can put out pheromone traps to monitor for leafrollers. ([orange Tortrix](#) and [oblique Banded](#))
- Scout for [cane blight](#) and [cane botrytis](#) symptoms.

Strawberries

- *After harvest, can treat for SWD control if field is adjacent to other susceptible, ripening, crops.*
- (Southern strawberries) Can scout for [strawberry crown moth](#) larvae.
- Scout for fruit damage symptoms like cat facing, slug damage, anthracnose, etc.
- Monitor ripe and ripening fruit for [SWD larvae](#).
- Scout for weevil adults & notching.
- Scout for [powdery mildew](#) and treat as needed.
- Scout for [two spotted spider mites](#) and predatory, beneficial mites.
- Scout for [aphids](#).
- In day neutral varieties scout for [lygus bug](#) and assess need for treatment.

Degree Day Updates

- [WSU Extension—Whatcom County](#)

- [Regional sites—Updated by Len Coop, OSU-IPPC](#) *click on the link, go to right hand column & click on the Degree day icon.*

Events

Upcoming Regional Events & Commission Meetings

[Go here for Full Event Calendar](#)

Upcoming National & International Berry Events

- **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.
- **October 13-15 — 6th Biennial Berry Health Benefits Symposium** ~Madison, Wisconsin. [Go here](#) for all the details.

Archived Small Fruit Updates

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

[26-SFU06-24-15](#)

[25-SFU06-17-15](#)

[24-SFU06-10-15](#)