

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 & industry through their commissions & councils.

August 2, 2011

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[The Weather Cafe](#) by Rufus La Lone

[Small Fruit Cold Storage Report](#)

Alert

Spotted Wing Drosophila, all berries

We're at a critical stage when the risk of economic losses from this pest has greatly increased.

- As anticipated, the last 7-10 days has seen a big increase in SWD adult trap counts and detections of larvae in untreated soft fruit.
- Western Oregon and SW Washington have seen the greatest increases. This coming week could see a similar increase further north.
- The highest counts and pressure are being found in caneberries but blueberries are also seeing more and higher trap counts.
- The protocols for checking fruit for larvae are listed below. Many growers and processors have now implemented these to maintain fruit quality.
- Be prepared. Be conservative & pro-active. If you or your neighbors had SWD pressure last year, take all reasonable precautions to minimize the risk this insect poses to your crop.

[See the Weekly SWD Update Below](#)

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:** (Tuesday, August 2) We're well into Duke handpicking now and machines will start later in the week. Some early machining today picked too many greens. There are some concerns that the overall Duke crop may be lighter than anticipated. Some fields do not have a large second pick. Warmer, sunnier weather is really helping but an early morning rain on Sunday with half a day of clouds was a reminder of just how unpredictable things are this year.
- **Raspberries:** (Tuesday, August 2) Some more mould issues in raspberries with the rain on Sunday. Daily volumes are declining but pick should continue fairly well for most fields the rest of the week. Next week will see a big drop off.

Northern Washington, Whatcom County

- **Blueberries:** (Saturday, July 30) Some picking has started up here, but most waiting a bit, Dukes getting pretty close. Great fruit size this year; however, there is a lot of scarred fruit to sort out.
- **Raspberries:** (Saturday, July 30) Three nice days in a row, a new record! Raspberries are coming off pretty good, if we didn't have a peak yet, we aren't likely to. Yields are lagging, no surprise given the weather pattern. Check out the fruit drop picture (below) from the second of two strong wind blasts. We're finishing the second round of SWD sprays. The flies seem to recover in about 7-10 days. Finding 1-7 in the traps, all but one have been female. Mites and weevils are under control, but lots of slugs and snails.
- **Strawberries:** (Saturday, July 30) Finishing renovation and Spartan herbicide application, next comes the fertilizer.

Northern Washington, Skagit County

*Labor will be tight next week with blues, raspberries and blacks all coming off at once.
Thank goodness the weather is finally cooperating.*

- **Blueberries:** (Monday, August 1) (WSU Mt. Vernon Research Station) We picked a few blueberries from our variety trials last week, but nothing really significant.
- **Blueberries:** (Tuesday, August 2) Picking Dukes by hand for fresh, no machine harvest yet. Good quality and large fruit on blocks with less winter damage. Slug damage and Mummyberry evident in organic blues. Blueberry market pricing enigma has growers on the fence on harvesting fresh vs. frozen.
- **Raspberries:** (Monday, August 1) (WSU Mt. Vernon Research Station) We hit our peak on Meekers late this past week. The quality has been fine now that we have some drier weather and the slugs are gone. Our yields have been lower than Lynden's, maybe due to the cold damage we had last November and February. Our second sprays for SWD went on last week.
- **Raspberries:** (Tuesday, August 2) Raspberries have peaked, good quality from growers with young fields and solid spray programs. Older fields struggling to make IQF grade and drier weather has helped.
- **Blackberries:** (Tuesday, August 2) Blacks starting up end of this week.

Willamette Valley, Oregon and SW Washington

- **Raspberries:**(Tuesday, August 2) We're finishing up the harvest. The SWD numbers and pressure has climbed dramatically this past week. Pretty much just like last year, right near the last week of picking.
- **Blueberries:** (Tuesday, August 2) At Salem, we just completed our third SWD spray by helicopter. We are trying to stay on a 10-day schedule but may need to tighten up as pressure increases. Our late blueberries can finish as late as mid-October and last fall we had difficulty keeping larvae free at season's end. So far, only a single male SWD has been trapped. We are expanding the trapping effort now to sample over-ripe and soft/injured fruit for the salt water dunk test. Last year we had SWD trouble in the Jersey variety a week ahead of trouble elsewhere on the farm. We are on to second handpick in the Bluecrop variety and just about start our machine pick in Hardiblu. Some early fruit coming into the plant had trouble with aphid predators as a contaminant. Also, some growers struggling with bird peck and slug damage to the fruit. Fruit has been large but in some cases berry firmness is off.

Photos by Jeff Flake



(Left) A cooler full of salt solution and salt dunk vessels greets growers as they unload fruit at PBG. A piece of screen keeps the fruit submerged. (Right) Intense insecticide use for SWD prompted us to establish beneficial insect refuge near our field borders.

Photo by Brian Cieslar
(click on image for larger picture)



Raspberry fruit drop caused by winds this past week in Whatcom County

Event Calendar

For more comprehensive event calendar, [click here](#).

- **August 6 — Mossyrock Blueberry Festival** ~ Mossyrock, Washington [Click here](#) for the website.
- **August 25—USDA-ARS Blueberry Field Day** ~ 1-4 PM Lewis-Brown Horticultural Research Farm, 33447 DE Peoria Road, Corvallis, OR [Click here](#) for the agenda. For more information, call David Bryla 541-738-4094 or email Dave at david.bryla@ars.usda.gov
- **September 15 — Oregon Raspberry & Blackberry Commission meeting** ~ 6pm, Langdon Farms. Call 541-758-4043 or [email](#) Philip Gutt for more information.
- **September 20 — Oregon Blueberry Commission meeting** ~ 12pm. Santiam Room, West Salem Roth's IGA Salem, Oregon. Call (503) 364-2944 for more information or [email](#) Brian Ostlund.
- **September 21 — Washington Red Raspberry Commission meeting** ~ Mt. Vernon, WA. Contact [Henry Bierlink](#) or call 360-354-8767 for more information.
- **October 4-7—NABC & USHBC Fall meetings** ~ Caesar's Atlantic City, Atlantic City, New Jersey. [Click here](#) for the informational flyer and tentative schedule.

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Spotted Wing Drosophila Update for 8-2-11

This Update is a collective effort. It is composed by Peerbolt Crop Management with contributions from OSU, USDA-ARS, WSU, B.C. Ministry of Agriculture and various northwest berry industry people.

SWD Information Websites

[Peerbolt Crop Management](#)

[Oregon State Univ.](#)

[B.C. Ministry of Ag.](#)

[WSU Westside](#)

[WSU Eastside](#)

Comments

- Commercial growers, in general, have been adhering to a spray regime that so far has prevented any major losses, and they have very low trap counts.
- Some fresh market, u pick, and home gardeners have verified infestations and fruit losses to varying degrees.
- It is strongly recommended that growers with fruit coloring and/or harvesting have a SWD management program in place that includes both fruit sampling for larvae and regular control applications.
- Increases in adult trap counts, incidences of larval infestations, and the levels of those infestations are all anticipated from now through the end on the season.
- The salt solution sampling method is a valuable additional tool for growers and processors. Allowing them to determine infestation levels well before the fruit enters the processing plant.

Guidelines for checking the fruit for SWD larvae in the field

These suggestions are based on techniques that various public researchers and industry personnel have been developing over the past year and a half. If any of you have ideas for improvements to these protocols, please pass them along. We're all in this together.

- Depending on size of fruit (strawberries take longer than caneberries or blueberries), the larvae will emerge from the fruit into the salt solution in a short period of time.
- The smaller the larvae and the lighter the infestation, the more difficult it is to see the larvae.
- Excellent lighting when looking for the larvae is critical to being able to see the smaller ones.

Present suggested methods:

For scouts/field checking ([We have created a video of this larvae-checking method.](#)):

1. Collect a sample of fruit to be tested (Strawberries: 25-30 per sample, Caneberries/blueberries: 75 per sample)
2. Put fruit in a gallon size sealable plastic bag.
3. Pour in enough of the salt water solution to allow the fruit to float (solution is: 1 cup of salt per gallon of water).
4. Mark bag with field code/date.
5. For a quick check in the field after a designated period of time (at least 15 minutes) holding the baggie up to light. This helps to see the larvae in the solution
6. 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.

For processors or fruit handling stations:

1. Collect a two pound sample of fruit to be tested.
2. Put the sample into a shallow tray and cover with the salt water solution (1 cup of salt per gallon of water).
3. After a designated period of time (at least 15 minutes) use a piece of wire mesh screen to hold the fruit down to make it easier to separate the larvae from the fruit.

SWD in other regions

- (Michigan) [First SWD trapped in a commercial fruit crop](#) (8/1, MSU News)

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Regional Monitoring (South to North)

Oregon Public Scouting Program (Number of traps checked this week in the crop in parentheses).

This scouting program & reporting system are being funded by a USDA SCRI grant, A Northwest Center for Small Fruit Research grant; the Washington Red Raspberry Commission & the Washington Blueberry Commission.

- **Jackson, Josephine, Douglas Counties:** No report this week.
- **Lane County:** Strawberries (1): no males/1 female. Cherries (2): **5 males/11 females**. Raspberries (1): none. Blackberries (2): no males/5 females.
- **Linn County:** Strawberries (11): **9 males/4 females**. Cherries (2): **37 males/ 15 females**. Raspberries (6): 2 males/2 females. Blackberries (7): **8 males/10 females**. Blueberries (17): 3 males/4 females. Peaches (4):no males/1 females. Honeysuckle (1): no males/1 female. Plum (2): 6 males/1 females. Wild Habitat (20): **78 males/41 females**.
- **Benton County:** Cherries (2): **6 males/6 females**. Raspberries (1): none. Peaches (3):3 males/2 females. Wild Habitat (4): 4 males/no females.
- **Polk County:** Blackberries (5): none.
- **Marion County:** Strawberries (1): none. Cherries (3): 4 males/3 females. Blackberries (4): none. Blueberries (6): no males/2 females. Peaches (1):2 males/2 females.
- **Clackamas County:** Strawberries (2): 2 males/1 females. Raspberries (2): 2 males/no females. Blackberries (2): none. Blueberries (7): 2 males/1 females. Tayberries (1): 1 male/1 female. Honeysuckle (1): 8 males/1 female.
- **Yamhill County:** Cherries (4): none. Blackberries (5): 1 male/2 females. Blueberries (1): none.
- **Washington:** Cherries (1): none. Blueberries (4): none.
- **Multnomah County:** Cherries (1): 3 males/5 females. Raspberries (3): no males/2 females. Blackberries (3): 1 male/no females. Blueberries (2): no males/1 female. Boysenberries (1): none.

Southwest Washington Public Scouting Program

- **Clark/Cowlitz/Lewis Counties:** Cherries (2): 6 males/4 females. Raspberries (28): 18 male/10 females. Blackberries (6): no males/2 females. Blueberries (33): none.

Eastern Washington--WSU Reporting Site

[Click here](#) for the WSU Eastern Washington SWD reporting site.

- Most recent post on the WSU site: **Tuesday, 2 August:** *We all know we are having a late year in terms of fruit maturity; the same is true for insect development. As a basis for comparison, we had caught 277 SWD by this time in 2010; this year we have only caught 28 to date. It is likely that cherry growers have a much tighter spray program in 2011; this may also be contributing to low trap captures.*

Western Washington--WSU Public Scouting Program

This scouting program & reporting system are being coordinated by Whatcom County Extension & funded by the Washington Red Raspberry Commission, the Washington Blueberry Commission & the Washington State Commission for Pesticide Registrations.

Whatcom County

- From Colleen Burrows, WSU Agriculture Special Projects Coordinator, (Tuesday, August 2) "We finally found our first SWD here in Whatcom County (a male). We have 85 traps in 40 fields with 18 farmers. There were a few suspicious SWD catches in the past few weeks, but had them confirmed negative by Bev Gerdeman."

[Click here](#) for the Home site with links to all the counties and site use information.

- [Click here](#) for the demonstration video on how to use this resource.
- Here are individual county links (south to north): [Clark County](#), [Cowlitz County](#), [Lewis County](#), [Pierce County](#), [King County](#), [Snohomish County](#), [Skaqit County](#), [Whatcom County](#).

Southwestern British Columbia

- [Click here](#) for the 7/26/11 SWD Monitoring Report for Southwestern BC from the BC Ministry of Ag.

Management Material Resources

Oregon & Washington

- **Blueberries:** [SWD pesticide options & information](#)
- **Raspberries & blackberries:** [SWD pesticide options & information](#)
- **Strawberries:** [SWD pesticide options & information](#)

British Columbia (6/28/11): [SWD Management in BC Berry Crops](#) (with insecticide options listed)

Pest Management & IPM Information

Weeds: [Respect the Rotation: Glyphosate Resistant weeds one year later](#) (7/26, Growing Produce)

Birds, blueberries.

Diseases

- [Blackberry Rust](#) (Phragmidium Rust): evergreen blackberries.
- [Phytophthora Root Rot](#) raspberries.
- [Mummyberry](#) blueberries. [Click here](#) for a Mummyberry fact sheet from MSU.
- [Alternaria Fruit Rot](#), blueberries.
- [Anthracnose Ripe Rot](#), blueberries.

Viruses

- [Aphids/Scorch Virus](#) British Columbia blueberries *From the B.C. Pest Alert: "Blueberry Scorch Virus is transmitted by aphids. An effective aphid control program should be used by all growers." You can email the B.C. Blueberry Council's research coordinator, [Karina Sakalauskas](#), for further information on testing and/or disease management.*
- [Shock Virus](#) blueberries.

Insects/Mites

- **Blueberries, Strawberries, Caneberries – Root Weevils** For more information on our major pest weevil species, click on the following: [Black Vine](#), [Rough Strawberry](#), and [Strawberry Root Weevils](#).
- [Aphids](#), northern raspberries
- [Orange Tortrix Leafrollers](#), southern raspberries & blackberries.
- [Two-spotted Spider Mites](#) raspberries..
- **Orange tortrix Leafrollers** in [Blueberries](#), [Raspberries](#), [Blackberries](#).
- [Leafroller larvae](#) blueberries, caneberries.
- [Blueberry Gall Midge](#) blueberries.

Industry News/Resources

Newsletters

- [B.C. Blueberry IPM Newsletter for July 30](#)
- [New Jersey Blueberry Bulletin for July 25](#)
- [Michigan State Fruit News](#) (8/2)
- Market scope: [blueberries](#) [blackberries](#) [raspberries](#) [strawberries](#)
Recent stories & fresh market pricing for the various berries from The Packer.
- ['The Source'](#) (8/1) Market updates from *The Produce News*.

Immigration/Labor

- [Federal E-Verify legislation marches on](#) (8/2, Growing Produce)
- (Washington State) [Farmers fear congress might crack down on illegal labor](#) (8/1, News Tribune)
- [Farmers oppose G.O.P. bill on immigration](#) (7/30, New York Times)

West

- (Washington State) [Whatcom County farmers loving cool summer](#) (7/23, Seattle Times)

North America

- [Local, sustainable berries gain favor](#) (8/1, The Packer)
- [Sales of organic berries remain strong, growers](#) says (7/29, The Packer)
- [UC-Davis study raises doubts about "Dirty Dozen" list](#) (8/2, Growing Produce)

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Crop work

All crops

- Weed management.
- Can put out monitoring traps for Spotted Wing Drosophila.
- As fruit begins to ripen, can sample fruit for SWD.

Blueberries—Harvest ongoing in all regions

- Stay on top of aphid management especially where Scorch Virus transmission is an issue.
- Scout for virus symptoms and send in samples for testing as needed.
- Scout for weevils and weevil notching.
- Can treat for Alternaria and Anthracnose prevention if needed.
- Scout for fruit disease symptoms and/or disorders.
- Plan for/Maintain bird damage management.
- Scout for leafroller larvae feeding.
- Scout for Mummyberry.
- Can apply SWD management insecticides.
- Can apply clean up insecticide just before harvest for crop contaminant management.

Blackberries—Harvest ongoing in Oregon and SW Washington

- Can put out pheromone trap to monitor for leafrollers.
- Scout for leafroller larvae and treat as needed to prevent fruit contaminant problems.
- Scout for Phragmidium Rust in Evergreen blackberries
- Scout for virus symptoms & send in samples for testing as needed.
- Can apply fungicides for fruit/blossom rot through the end of bloom.
- Scout for Cane and Leaf Rust.
- Can apply SWD management insecticides.
- Can apply insecticides as needed for crop contaminant management.
- Scout for aphids and treat as needed.

Raspberries—Harvest ongoing in Oregon and SW Washington

- Scout for virus symptoms & send in samples for testing as needed.
- Scout for Yellow Rust and assess treatment options.
- Scout for spider mites and treat as needed.
- Can put out pheromone trap to monitor for leafrollers.
- Scout for leafroller larvae.
- Can apply fungicides for fruit/blossom rot through the end of bloom.
- Can apply SWD management insecticides.
- Can apply insecticide as needed for crop contaminant management.
- Scout for aphids and treat as needed.

Strawberries —Processed harvest is finished in all regions.

- Scout for weevil adults and notching.
- (Southern strawberries) Can treat for Strawberry Crown Moth. Adults are now flying.
- Scout for Powdery Mildew and treat as needed.
- Scout for Two-Spotted Spider Mites and predatory, beneficial mites.
- Scout for aphids and treat as needed.
- Scout for fruit formation issues like cat-facing.
- Scout for fruit quality issues such as mold.
- Scout for virus symptoms/send in sample for testing to confirm.
- **Post-harvest**
 - Treat post harvest for SWD if needed especially if field is in close proximity to other ripening berry/stone fruit crops.
 - Mow & treat for SCM in south if needed.
 - Mow & renovate 2-4 weeks after harvest unless pest pressure require mowing & treating sooner.

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Archived Small Fruit Updates

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

[07-26-11](#)

[07-19-11](#)

[07-13-11](#)