

Small Fruit Update



News and opinions from [Peerbolt Crop Management](#) and [BerriesNW](#) sent out weekly during the growing season, and sporadically when we have something to share in the off season.

August 3, 2010

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Other links

[Video of the week](#): **Thompson Farms, Damascus, Oregon.** Larry does grow a lot of berries. However this video is more on his great vision and insights on the possibilities of urban farming.
[Upcoming Meetings](#)
[The Weather Cafe](#) by Rufus La Lone
[Small Fruit Cold Storage Report](#)

Alert

[Spotted Wing Drosophila](#), **all berries**: The risk of fruit damage and economic losses to this new fruit pest continue to increase. For any berry crop still harvesting in the Northwest, it is highly recommended to take all appropriate measures to mitigate this risk.

See the more extensive [SWD weekly update](#) below for in-depth SWD information.

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:** (8/3) Blues continue to pick with good quality, heavy on the fresh side. Dukes about done. Well into Bluecrop, 1613s(Hardiblu's), etc. Elliot and Liberty colouring up. Really have to make sure SWD sprays are applied for the late season picks, as well as including a late fungicide because the weather is bound to turn. SWD numbers in the Valley are really increasing, especially as the wild blackberries ripen up, so protective SWD sprays are essential now.
- **Raspberries** (8/3) Raspberries are winding down in the Fraser Valley. One pick and possibly two left on some fields. Haven't got all the figures to back it up, but crop most certainly down considerably probably 20-30%. A weird year. As others mentioned, no real peak for most growers and a lack of IQF quality. Mercifully, the mite situation has been minor even with the dry and incredibly dusty field conditions.

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](#)

Whatcom County, Northern Washington

- **Raspberries:** (7/30) Raspberry harvest is winding down. SWD is backing off after a lot of spraying. Crop looks to be off maybe 20%.
- **Blueberries:** (7/30) Blues are starting machine harvest with good quality but small berry size, and we should be down in tonnage too. Dukes look the best.

Skagit County, Northern Washington

- **Raspberries:**
 - (7/30) Weather in Skagit has been great except for the daily morning fog, which has been very tough on raspberry quality--soft and moldy. The season is winding down on those. Our field will be done by late week.
 - (7/30) We sprayed the entire farm this week with Mustang Max. by Air for the overgrown plants, and by ground where we could get through without crop destruction. Traps were empty next day, and still are. The crop is even lighter than predicted, and process price is beginning to reflect that situation. Fresh is still plugged up, making for an interesting harvest situation.
- **Blueberries:** (7/30) Our Duke is done, Bluecrop is midway through and our Elliot just has a few berries with color. Quality looks fine so far.

Willamette Valley, Oregon and SW Washington

- **Blueberries:** (8/3) Duke are finished and Bluecrop are closing in on finishing. Some good quality fruit coming in but berry size continues to be an issue. Can't complain about the weather—perfect harvest weather. Legacy, Draper, Ozarkblue, Liberty are all being picked. So far SWD management plans are being successful. Hope we can continue that through the Elliotts and Aurora's. Both look like they've got great crops coming.
- **Blackberries:**
 - **Processed:** (8/1) Evergreens continue to look good. Most growers will be putting a cleanup spray for Spotted Wing Drosophila, and any other possible insect crop contaminants, on them late in the week and will start harvest soon after. Most Marionberries and the other mid-season blackberries will be wrapping up towards the end of this week, but some will pick into next week. Yields are off about 30%, mostly due to small fruit size. IQF quality is pretty much over. Never had a peak in the harvest just slow and steady all season. The big pick was 3,000 pounds per pick per acre. We usually get one around 5,000. Good harvest weather continues.
 - **Fresh:** (8/3) Chesters are starting to color and should be picking soon. Other late ripening blacks are also coming on. All growers with late ripening blackberries need to have an SWD management plan in place! They are very much at risk.
- **Raspberries:** (8/3) Processed florican raspberry harvest is finished in Oregon and SW Washington. It followed the same pattern mentioned in other areas. 1) A slow start with poor quality and soft fruit; 2) The heat wave July 6th -- 9th, which left a lot of sunburned fruit and stressed plants; 3) These last three to four weeks, which gave us good quality fruit, great harvest weather and—too little, too late (but we'll take it!). On the late ripening, primocane fruiting raspberry side, fruit is starting to color in some fields. These were hit very hard by SWD last year. *All growers with primocane fruiting raspberries, from 40 acre commercial fields to backyard gardeners need to have an SWD management plan in place!*

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Industry News/Resources

Newsletters

- **The Source**, market updates from The Produce News for 8/2: [Click here](#).
- **Michigan State IPM Fruit Newsletter** for 8/3: [Click here](#).
- **Michigan State Blueberry Newsletter** for 8/3: [Click here](#).
- **New Jersey Blueberry Bulletin** for 7/26: [Click here](#).
- **British Columbia Blueberry IPM Newsletter** for 8/1: [Click here](#).

West

- **Schwarzenegger vetoes overtime for farmworkers:** [Click here](#) (7/29, L.A. Times)
- **Is there a future in farming?:** [Click here](#) (8/1, Mail Tribune—southern Oregon)

National

- **Food safety bill likely delayed until after recess:** [Click here](#) (7/30, The Packer)

New Pest Management Information

- **Light Brown Apple Moth threatens Oregon crops:** [Click here](#) (7/27, Western Farmer-Stockman) This is a pest in berry crops in California. It could develop into a major issue for us.

Ongoing Pest Management Information

- [Birds](#), blueberries.

Insects/Mites

- [Twospotted Spider Mites](#), raspberries. [Strawberry Crown Moth](#), southern strawberries/caneberries.
- [Orange Tortrix Leafrollers](#), southern blackberries and raspberries: The larval hatch that causes our major crop contaminant problems has started in caneberry fields in SW Washington and Oregon.
- [Aphids/Scorch virus](#) northern blueberries, [Root Weevils](#): [Black Vine](#), [Rough Strawberry](#), and [Strawberry Root Weevils](#), [Yellow Mites](#), northern raspberries, [Redberry Mite](#) evergreen blackberries, [Blueberry Gall Midge](#), blueberries.

Diseases

- [Phytophthora Root Rot](#) raspberries. Stress on root systems compromised by root rot is showing up a lot right now, following the first major heat wave of the season.
- [Anthracnose Ripe Rot](#), blueberries.
- [Alternaria Fruit Rot](#), blueberries.
- [Powdery Mildew](#), strawberries, [Blackberry Rust](#) (Phragmidium Rust) evergreen blackberries, [Yellow Rust](#), raspberries, [Scorch virus](#), British Columbia blueberries, [Mummyberry](#) blueberries.

Spotted Wing Drosophila Update for 8-3-10

This Update is a collaborative effort with contributions from OSU, USDA-ARS, WSU, and Peerbolt Crop Management.

- [Click here](#) for information links from PCM.
- [Click here](#) for the OSU SWD website.
- [Click here](#) for the BC Ministry of Agriculture and Lands SWD website.
- [Click here](#) for the WSU, Mt. Vernon SWD website.

General SWD Comments

- All regions continue to report increasing trap counts as well as sporadic larval infestations.
- The majority of processed raspberries and blackberries throughout the region are wrapping up harvest.
- For commercial growers, blueberries that are now harvesting or still to be harvested are becoming the major focus for SWD management, although many late season blackberries are also still at risk.
- Organic, u-pick, fresh market, and other growers who are not treating with insecticides on a regular schedule are also at greater risk. Some of these are seeing major economic losses due to SWD
- SWD trap counts in caneberry fields that are finished harvesting, but still have viable fruit, are showing high increases in trap counts and some fruit infestations.
- Some growers report finding larvae infested fruit even though they had little or no trap catches. The monitoring program for SWD is still very much a work in progress. There are many variables we're still working out, so take this into consideration when making management decision.
- For machine harvesters, this is the time to assess the economic impact of having a lot of fruit on the ground and whether it's necessary to invest more into research/methods of coping with this situation.
- This is also the window in time to evaluate the economic impact of Himalayan blackberries on SWD and, as sanitation, whether it's necessary to invest more into research/methods of coping with blackberries around the fields.
- With the survey in Oregon and SW Washington, we're moving traps out of finishing raspberry, blackberry, and mid season blueberries, and into late ripening fields and Himalayan blackberries in field borders.
- Placing berries in a sealed baggie at room temperature with no liquid added is proving to be an easy monitoring technique for checking for SWD larvae. The larvae generally emerge from the fruit within a day of bagging. Warmth also encourages them to come out.
- As blueberry and caneberry fields finish harvest, a post harvest insecticide treatment is recommended to prevent the field from harboring a breeding population of SWD.

SWD News Stories

- **Oregon berry farmers fight fruit fly:** [Click here](#) (7/31. KGW—Channel 8 Portland)
- **New fruit pest threatens soft fruit, berries, grapes:** [Click here](#) (7/27, Wenatchee World)

- **Beating back the bug, for now:** [Click here](#) (Aug,2010, Oregon Business)

Northwest Monitoring Weekly Update for 7/26-7/30 — North to South

The following information comes primarily from public monitoring programs. Number of crop types, fields, and traps varies greatly so the numbers should be viewed as indicators only. This pest can be very site specific. Any treatment decisions should be based on monitoring data/observations gathered directly from the field to be treated and the individual grower's best judgment.

(Counts of ten to twenty are highlighted in Green, counts over 20 are highlighted in Red)

British Columbia:

- **From the B.C. Blueberry IPM Newsletter for 8/1:** "Mid and late season berries will be very susceptible to SWD. Bluecrop fields should be sprayed between pickings. Late season blueberry varieties (Elliott, Liberty, Aurora, Chandler) should be sprayed at 10-14 day intervals as soon as the fruit starts to ripen."
- [Click here](#) for the entire newsletter that includes a table of regional trap counts.
- **SWD Monitoring Report for Southern Interior of British Columbia for 7/28:** [Click here](#).

Whatcom and Skagit Counties, Northern WA:

WSU Extension in Whatcom and Skagit Counties have organized an SWD public monitoring program placing traps in fields of growers who have volunteered to share information.

- **Whatcom County:**
 - [Click here](#) to go to the Whatcom County interactive mapping site with trap numbers and locations.
 - **Whatcom County: Blackberry:** 0 males, 2 females. **Raspberry:** 21 males, 42 females. **Cherry:** 1 male, 1 female. **Strawberry:** 8 males, 9 females.
- **Skagit County:**
 - [Click here](#) to go to the Skagit Count SWD website with an interactive survey map.
 - Report not received as of 8/3.

SW Washington and Western Oregon (Monday, 7/26 – Friday, 7/30)

The Washington berry commissions and the Oregon Department of Ag. along with the USDA, OSU extension, and Peerbolt Crop Management have supported and organized the survey from which the following information is taken. Grower identification as well as specific field sites are anonymous. There are well over 600 traps in total. [Click here](#) to go to the PCM SWD site for charts of county quadrants being scouted and regularly updated monitoring data from these counties. [Click here](#) to go to the OSU Extension SWD population county mapping site.

- **Clark, Cowlitz and Lewis Counties, Southwest WA:** Blackberry: 7 males, 7 females. Blueberry: 14 males, 22 females. Cherry: 6 males, 6 females. Raspberry: 46 males, 58 females. Strawberry: 16 males, 9 females.
- **Multnomah and Washington Counties, OR:** Blackberry: 11 males, 12 females. Blueberry: 2 males, 4 females. Boysenberry: 1 male, 4 females. Raspberry: 44 males, 27 females.
- **Yamhill and Clackamas Counties, OR:** Blackberry: 6 males, 15 females. Blueberry: 3 males, 13 females. Lonicera: 2 males, 1 females. Raspberry: 24 males, 14 females. Peach: 1 male, 0 females. Strawberry: 1 male. Other caneberry: 1 male, 1 female.
- **Polk and Marion Counties, OR:** Blackberry: 8 males, 7 females. Blueberry: 0 male, 4 females. Cherry: 5 males, 2 females. Raspberry: 3 males, 1 female. Strawberry: 2 males, 1 female.
- **Linn and Lane Counties, OR:** Blackberry: 4 males, 5 females. Blueberry: 4 males, 8 females. Cherry: 5 males, 11 females. Raspberry: 44 males, 34 females. Strawberry: 45 males, 25 females.
- **Douglas County, OR:** Blueberry: 3 males, 5 females. Peach: 3 males, 1 female. Cherry: 3 males, 2 females. Fig: 3 males, 2 females. Strawberry: 2 males, 3 females.
- **Jackson and Josephine Counties, Southern OR:** Blueberry: 15 males, 6 females. Cherry: 1 male, 0 females. Fig: 4 males, 1 females. Peach: 3 males, 0 females. Himalayan blackberry: 1 female. Strawberry: 0 males, 1 female.

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Weekly Summaries of SW Washington/Western Oregon—Public SWD Monitoring Program

This table shows recorded catches over the last 8 weeks. There are survey factors that have varied somewhat over the nine weeks, including number of fields, number of traps, type of crops. There are also field factors such as insecticide treatments and amount of ripe fruit in the field that have impacted the insect trap dynamics. These numbers should be viewed within that context. Still, some overall trends seem to stand out such as the male to female ratios, the increasing overall trap counts.

Dates	Total Males	Total Females	Overall Total	Percent females
6/7-6/11	15	29	44	66%
6/14-6/18	11	51	62	82%
6/21-6/24	16	35	51	69%
6/28-7/2	32	63	95	66%
7/5-7/9	47	44	91	48%
7/12-7/16	75	70	145	48%
7/19-7/23	263	209	472	44%
7/26-7/30	344	334	678	49%

Ongoing Spotted Wing Drosophila Management Information

Timely Harvesting. It is important to harvest fruit in a timely fashion to avoid susceptibility to SWD. The spotted wing Drosophila appears to prefer ripe fruit.

Field Sanitation. A key to managing SWD is going to be keeping fields as clean of potential fruit hosts as possible. Getting improved fruit handling and cull disposal protocols in place early could mean the difference between a successful season and a train wreck. Remove any intact, over-ripe, and/or culled fruit from areas in and around the fields.

Adjacent habitat & Urban Site Infestations. Some habitat adjacent to berry fields and some urban sites in Western Oregon and Washington have been confirmed to have high SWD trap counts as well as fruit that is heavily infested with SWD larvae. There is a high probability of 'hotspots' in both urban areas and unmanaged habitats that can act as a source for a large number of SWD to move into a commercial field when the fruit is at the vulnerable stage.

Pesticide tank mixes. In an effort to manage the risk involved with this new pest, some growers are using combinations of pesticides that they have not used in the past. Before applying an unfamiliar tank mix, be sure to check with your supplier, crop consultant, or other advisor to be sure it won't cause damage. Some mixes have the potential for unexpected, economically damaging effects—just the thing we're trying to avoid by using them.

SWD Management Recommendations Updated 6/22/10

Entomologists from the USDA-ARS, WSU, OSU have collaborated to produce updated SWD management plans for blueberries and caneberries. They've been posted on the OSU SWD website.

- For the blueberry management plan, [Click here](#).
- For the caneberry management plan, [Click here](#).

Other related links on the site:

- SWD Chemical control considerations: [Click here](#). (Includes many links and information including pollinator conservation information and alert postings)
- Insecticides registered in Oregon and Washington along with relevant SWD management information for each: [Click here](#). (includes relevant MRL issues, PHI's, REI's, efficacy, etc.)

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Crop work

All crops—

- Can put out monitoring traps for Spotted Wing Drosophila
- If ripe fruit is in the field, can monitor for SWD larvae by using a 'baggie' test on fruit samples. [Click here](#) for example of the procedure.
- Weed management.
- Post-harvest—soil and leaf test for evaluation of nutrients.
- Post harvest—can treat for SWD management.

Blueberries—Harvest ongoing in all regions

- Scout for fruit disease symptoms and/or disorders.
- Scout for leafroller larvae feeding.
- Scout for aphids and treat as needed, particularly in northern growing areas where aphids vector Scorch virus.
- Scout for weevils and weevil notching.
- Scout for virus symptoms and send in samples for testing as needed.
- Maintain bird damage management.

Blackberries—Harvest ongoing in Oregon and SW Washington

- Scout for virus symptoms and send in samples for testing as needed.
- Can apply post harvest insecticide just after harvest SWD management.
- Can apply fungicides for fruit/blossom rot in late season crops.
- Can apply clean up insecticide just before harvest for crop contaminant management.

- Scout for Phragmidium Rust in evergreen blackberries.
- Scout for Cane and Leaf Rust.
- Scout for leafroller larvae and treat as needed to prevent fruit contaminant problems.

Raspberries—processed harvest wrapping up in SW Washington and Oregon, and ongoing in Northern Washington and B.C.

- Can apply post harvest insecticide just after harvest SWD management.
- Scout for Yellow Rust and assess treatment options.
- Scout for spider mites and treat as needed.
- Scout for virus symptoms and send in samples for testing as needed.
- Scout for aphids and treat as needed.
- Scout for leafroller larvae and other insect crop contaminants.
- Scout for ripe fruit fungal diseases.

Strawberries—Processed harvest is finished in all regions

- Post harvest—Treat post harvest for SWD if needed especially if field is in close proximity to other ripening berry or stone fruit crops
- Have pheromone traps out for Strawberry Crown Moth in southern fields and treat as needed.
- Can treat post-harvest for SWD, root weevils, and/or Strawberry Crown Moth.
- Mow and renovate fields 2-4 weeks after harvest unless pest pressures require mowing and treating sooner than that.
- Take soil tests.
- Fertilize as needed.

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Archived Small Fruit Updates

(for older Updates [click here](#))

[07-27-10](#)

[07-20-10](#)

[07-13-10](#)