

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.

July 5, 2011

Table of Contents

- [Regional Reports](#)
- [Pest Alerts](#)
- [SWD Report](#)
- [Pest Management Info](#)
- [Industry News/ Resources](#)
- [Classifieds](#)
- [Meeting Information](#)
- [Crop Work](#)

Featured Editorial: [“It Gets Even Worse”](#) (7/2, N.Y. Times)

“If you thought the do-it-yourself anti-immigrant schemes couldn’t get any more repellent, you were wrong. New laws in Georgia, Alabama and South Carolina are following — and in some ways outdoing — Arizona’s attempt to engineer the mass expulsion of the undocumented, no matter the damage to the Constitution, public safety, local economies and immigrant families. The laws vary in their details but share a common strategy: to make it impossible for people without papers to live without fear...”

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

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, 7/5) Some heat the next few days should move the blues along. Looks like harvest won't start till 18th--20th depending on how the weather treats us the next little while. Lots of weevil activity out there. Some fields have been really impacted by root feeding and are showing the stress as fruit fill and vegetative growth demands increase.
- **Raspberries:** (Tuesday, 7/5) Raspberries have really filled out but it's going to be a late start maybe around mid-month which will take the harvest well into August. Malahats are just under way for fresh pick. Watch for two spotted mites--levels are starting to quietly rise.

Northern Washington, Whatcom County

- **Blueberries:** (Friday, 7/1) Watch for aphids, they are really spreading now, also time to begin bird harassment. The start of Duke harvest--end of July?
- **Raspberries:** (Friday, 7/1) Lots of root rot symptoms, and all kinds of funky leaf coloring for a multitude of reasons. Harvest may begin around the 10th or 12th of July for Willamettes, 5-7 days later for

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

[US Highbush Blueberry Council](#)

Meekers, wow. Watch for aphids here too, they are showing up in nearly every field.

- **Strawberries:** (Friday, 7/1) I believe I found one SWD female in a trap near a strawberry field. The cleanup bifenthrin application should take care of them. Strawberry weevils are at or near emergence. Harvest is going along well with only one day of rain so far. Next week looks real good. Quality has been excellent.

Eastern Washington

- **Blueberries:** (Thursday, 6/30) Picking of Duke is just getting started in Eastern Washington. The first picking started south of the Tri-Cities about five days ago, the first picking in the Columbia Basin on June 30th. Volume is low, but will quickly kick into a higher gear next week when the Yakima Valley joins in. Yields in the Eastern Washington appear to be good to heavy. I was in a field today (June 30) that was estimated to have over 20,000 pounds--and it was an organic field. Growers seem to be optimistic.

Willamette Valley, Oregon and SW Washington

- **Blackberries:** (Tuesday, 7/5) **Processed:** Silvan king berries are showing color as are some of the Marions. Black Diamonds are right there with the Silvans. The mild, great weather is turning a little warmer with highs in the mid 80's a couple of days this week, but the crop size and quality are both looking better than expected a few weeks ago. Nothing like a good, long weather break. Leafrollers are showing up and some SWD sprays are going on. Some Marion fields could start harvest as early as Sunday, the 17th. The rest will get going sometime later that week. **Fresh:** Both Obsidian and Metolius started picking this last Friday. Crop quality is very good.
- **Raspberries:** (Tuesday, 7/5) Some machine harvest has started up although most will be this coming week. So far...some decent fruit. No major insect or disease issues. The weather has helped a lot.
- **Strawberries:** (Tuesday, 7/5) There's been some excellent quality fruit picked this last week, but the size looks like it's falling off fast in a lot of fields. Not a deep crop or any big yields. Some older fields were finished after one pick.
- **Blueberries:** (Tuesday, 7/5) Some Duke fields will start this coming Friday or Saturday but most look like they'll be waiting until Monday (7/11) at the earliest. Other than the heavy Shock toll in some Duke and Liberty fields, no major issues are going on that should affect what looks like a very good crop. Guys need to keep on their watering!

Pest Alerts

Blueberries, Strawberries, Caneberries – Spotted Wing Drosophila—[See Update Below](#)

Blueberries, Strawberries, Caneberries – Root Weevils

These insects remain a chronic, long-term problem in all our berry crops in all regions. Again this year, there are continual reports of major economic injury caused by weevil larvae by root feeding and, as we get into harvest, the adults will be a major crop contaminant. WE NEED NEW APPROACHES TO WEEVIL MANAGEMENT!

General lifecycle: After emergence, it takes about 30 days before an adult (and they're all female) begins laying eggs. So, treatments for these adults should take place before that 30 day window is up, but after sizable amounts have emerged. Monitoring the larvae and pupae development is the best way to know the status of these pests. It's also very time consuming and difficult to quantify. In addition, there are a number of factors that complicate weevil management, A couple of those factors are:

Some weevil adults overwinter and emerge early in the season ready to lay eggs. These overwintering adults would not be controlled before they lay eggs under the usual management regimes.

There many different weevil species affecting our crops. Each one has its own unique lifecycle. Management activities and timing of control applications need to be geared to the particular species.

For more information on our major pest weevil species, click on the following: [Black Vine](#), [Rough Strawberry](#), and [Strawberry Root Weevils](#).

Northern Raspberries – [Aphids](#)

High aphid populations are being reported in many fields and should be evaluated to see if insecticide applications might be needed.

B.C. Blueberries – [Aphids/Scorch Virus](#) vector (aphid) management

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.

Northern Raspberries – [Two-spotted Spider Mites](#)

Mite populations are being reported in many fields and should be evaluated to see if miticide applications are needed.

[Click here](#) to go back to the top of this newsletter.

Strawberries (SW Washington & Oregon) – [Strawberry Crown Moth](#) *We are recovering SCM adults in pheromone traps. Control treatments should be timed to go on 10-14 days after first consistent trap catches.*

Raspberries & Blackberries (SW Washington & Oregon) – [Orange Tortrix Leafrollers](#) *The larval hatch that causes our major crop contaminant problems has started in area caneberry fields with very small leafroller larvae being found in some fields. Fields that have been recording high adult pheromone trap counts are at high risk of having larval contaminant problems at harvest. Control materials, containing active ingredients specifically targeted at leafroller larvae such as *Bacillus thuringiensis* and *Spinosad*, are much more effective on these larvae when they're small and should be used at this time.*

Blueberries - [Alternaria Fruit Rot](#)

*As blueberry bloom starts to finish, it's time to consider whether you need to prevent *Alternaria* and *Anthracnose* problems from showing up in the fruit. *Alternaria* can infect the fruit beginning at the end of bloom and throughout the fruit development stage, up until harvest. Infections remain latent until the fruit ripens. Infected fruits exhibit a shriveling or caving-in of the side of the berry and can become watery in storage.*

Blueberries - [Anthracnose Ripe Rot](#)

*If you've had problems with *Anthracnose*, prevention of a reoccurrence needs to begin at petal fall. Symptoms: first, blighting of shoot tips, then, a few flowers turn brown or black. Leaf spots, when they occur, are large or small and roughly circular. As infected berries ripen, the flower end may soften and pucker. Under warm and rainy conditions, salmon-colored spore masses form on infected berries. After harvest, spore masses form rapidly on infected fruit when in cellophane-covered baskets or in plastic clamshell packs.*

Spotted Wing Drosophila Update for 7-5-11

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](#)

New developments this week

Strawberries

- **SW Washington/Willamette Valley:** This last Thursday (6/30), using the salt solution protocols listed below, we recovered three drosophila species larvae from a strawberry field in SW Washington.
- In consulting with our regional public & private entomologists and extension agents, we found there are other species of *Drosophila* that can be infesting strawberries in the field as they get over-ripe.
- There's no way at this point to identify *Drosophila* species from larvae. Larvae would need to be recovered alive and reared out to identify to species.
- *As it was before we had SWD in the area*, it is possible that over-ripe strawberries could have varying levels of *drosophila* infestation, just re-emphasizing the point that all fruit should be harvested in a timely manner.

Cherries

- **Willamette Valley:** A cherry orchard that has not received any insecticide applications this spring was found to have a significant infestation of SWD larvae.

Caneberries

- **Willamette Valley:** An early ripening fresh market caneberry variety that has ripening berries and has not received any insecticide applications has also been reported to have a low infestation of SWD larvae.

Comments

- Trap counts continue to rise at a relatively slow rate over the previous week but are anticipated to rise more quickly over the next few weeks.
- Please take a very conservative approach to SWD management decisions. Our ability to accurately assess the risk posed by this insect on an individual field basis is still very much a work in progress.
- Once ripe fruit is present in the field the traps' ability to attract adult flies is much diminished.
- In view of this, growers & fieldmen are advised to rely more on regular sampling of the fruit using the salt solution method to monitor SWD once there is ripe fruit.
- 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.

[Click here](#) to go back to the top of this newsletter.

Draft 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.

Present PCM Method:

- Collect a sample of fruit to be tested (Strawberries: 25-30 per sample, Caneberries/blueberries: 75 per sample)
- Put fruit in a gallon size sealable plastic bag.
- Pour in the salt water solution (1 cup of salt per gallon of water).
- Mark bag with field code/date and then check all baggies at the same time at the end of the day.
- 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.
- Holding the baggie up to light helps to see the larvae in the solution
- At the office/lab we also pour them 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.
- The smaller the larvae and the lighter the infestation, the more difficult it is to see the larvae.

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 County: (Off Station) Strawberries (3):** 6 males/**14 females**. **Cherries (4):** 4 males/**34 females**. **Blueberries (2):** 2 males/**21 females**. **Caneberries (1):** no males/2 females. **Peaches (3):** no males/**19 females**. **Wild Blackberries (2):** 3 males/**12 females**. **Wine Grapes (3):** none. **Garden (1):** no males/2 females. **(On-Station) Fig (1)** (*not checked this week numbers for week before*): **20 males/69 females**. **Table grape (1):** none. **Pears (1):** no males/1 female. **Wild Blackberries-fence row (1):** 3 males/**12 females**. **Wild Blackberries-riparian (1):** **13 males/18 females**.
- **Lane County: Strawberries (1):** none. **Cherries (2):** no males/1 female. **Wild blackberries (5):** none.
- **Linn County: Strawberries (6):** none. **Blueberries (37):** 1 male/5 females. **Raspberries (5):** none. **Honeysuckle (1):** none.
- **Marion County: Strawberries (13):** 1 male/3 females. **Cherries (3):** none.
- **Clackamas County: Strawberries (2):** none. **Tayberries (1):** none. **Honeysuckle (1):** none.
- **Yamhill County: Strawberries (8):** none. **Cherries (3):** no males/3 females.
- **Washington: Strawberries (1):** none. **Blueberries (2):** none.
- **Multnomah County: Strawberries (5):** none. **Cherries (1):** none. **Raspberries (5):** none. **Blueberries (2):** none. **Blackberries (1):** none. **Salmonberries (3):** none.

Southwest Washington Public Scouting Program

- **Clark/Cowlitz/Lewis Counties: Strawberries (7):** 1 male/no females. **Cherries (2):** none. **Blueberries (10):** none. **Raspberries (30):** no males/4 females. **Blackberries (5):** none.

Eastern Washington

- One SWD adult was picked up in Yakima and another in Finley. Neither were from berry crops.
- [Click here](#) for the WSU Eastern Washington SWD reporting site.
Latest report from the WSU site: "**Monday, June 27:** *Three regions have now caught flies, although numbers are very low. Expect more regions to have first capture in the next few weeks. With (cherry) harvest underway in some of the earlier areas, most of the later areas are close to, if not at, the susceptible stage for attack (blush). Continue cherry fruit fly control in the meantime even if your area has not yet caught flies.*"

Northern Washington

- An industry fieldman reports a suspected SWD female was recovered from a trap near a strawberry field in the Lynden area.

[Click here](#) to go back to the top of this newsletter.

Western British Columbia

- **From the July 3rd B.C. Blueberry IPM Newsletter:** “No SWD flies were caught in the 28 Fraser Valley blueberry fields monitored this week. No sprays are recommended for SWD at this time.”

Featured Information Resource: [Spotted Wing Drosophila in Western Washington](#)

WSU-Mt. Vernon NW Research Center

- Some of their information resources:
 - [SWD Biology](#)
 - [SWD Monitoring & trapping](#)
 - [Caneberry Management recommendations](#) (last updated 5-26-11)
 - [Blueberry management recommendations](#) (last updated 5-26-11)
 - [Strawberry management recommendations](#) (last updated 5-26-11)
 - [Additional resources](#)

Pest Management & IPM Information

Diseases

- [Blackberry Rust](#) (Phragmidium Rust): evergreen blackberries.
- [Yellow Rust](#) raspberries
- [Phytophthora Root Rot](#) raspberries.
- **Prime Time to scout for:** [Mummyberry](#) blueberries. [Click here](#) for a Mummyberry fact sheet from MSU.

Viruses

- [Aphids/Scorch Virus](#) British Columbia blueberries – [see alert above](#).
- [Shock Virus](#) blueberries *Reports this season indicate a much higher level of Shock Virus symptoms than usual. If plants are suspected of showing symptoms in successive seasons, send in a test to make sure it isn't [Scorch Virus](#).*

Insects/Mites

- [Orange Tortrix Leafrollers](#), southern raspberries & blackberries. [see alert above](#).
- [Two-spotted Spider Mites](#) northern raspberries. [see alert above](#).
- [Raspberry Beetle](#) northern raspberries.
- **Prime Time to scout for:** [Twospotted Spider Mites](#) raspberries, strawberries. [see alert above](#).
- [Azalea Bark Scale](#) blueberries.
- **Prime Time to monitor for with pheromone trap:** [Obliquebanded Leafrollers](#) in [Blueberries](#),
- **Prime Time to monitor for with pheromone trap:** [Raspberries](#), [Blackberries](#).
- [Leafroller larvae](#) blueberries, caneberries.
- **Prime Time to scout for:** [Blueberry Gall Midge](#) blueberries.

Industry News/Resources

Newsletters/Blogs

- [British Columbia Berry Grower magazine](#) (Summer, 2011)
- [B.C. Blueberry IPM Newsletter for July 3](#)
- [New Jersey Blueberry Bulletin \(6/27/11\)](#)
- Market scope: [blueberries](#) [blackberries](#) [raspberries](#) [strawberries](#)
Recent stories & fresh market pricing for the various berries from The Packer.
- [‘The Source’](#) (6/29) *Market updates from The Produce News.*

Immigration/Labor

- [Are we looking at a train wreck?](#) (July, Florida Grower) *More on the state immigration laws being enacted.*
- US [Labor Department’s initiative in South Florida results in nearly \\$800,000 in fines](#) (6/27, US Dept of Labor press release) *These are the folks now presently active in SW Washington.*

[Click here](#) to go back to the top of this newsletter.

West

- [B.C. berry farmers hope summer doesn't put too much heat on crops](#) (7/4, Calgary Herald)
- [B.C. strawberries are at their peak](#) (6/30, Richmond Review)
- (CA) [Lygus in blackberries?](#) (7/4, UC Extension Strawberries & Caneberries blog)

National

- (North Carolina) [Drought puts dent in Cape Fear region blueberry crop](#) (7/5, Fayetteville Observer)

International

- (U.K.) ['Elegance' \(new variety\) strawberry available for planting](#) (7/4, FreshPlaza.com)
- (Chile) [Blueberry price abroad up from last year](#) (7/4, FreshPlaza.com)
- (S. America) [Polar cold wave hits South America](#) (6/29, FreshFruitPortal.com)

Classifieds

I've tried running classifieds like this in the past without much response. If this is a service you'd like to see in the Update, let me know! If you've got something to list, send it along. Email me by clicking [here](#). T.P.

- **1973 model BEI picker:** We have picked with it for 20+ years for cost of less than \$.10 per pound. Basically picked 20 acres at about 1/2 days. Waukesha engine. Hydraulic + electric. Machine will be field ready. Asking \$20,000, FOB our farm at Mossyrock, WA. Call 360-983-3138 or 360-561-6494 or email galdrich@tds.net. Glenn Aldrich, Aldrich Berry Farm & Nursery, Inc. (1st week running)
- **1986-87 BEI over the row full size rotary harvester:** Customized to new style BEI with all fruit going up to top deck of picker. Can fill either Tote boxes or flats. Aluminum Littau picking heads with 3/8" fiberglass rods. Korvan catcher plates, Cummins engine with 3,411 hrs, all hydraulic motors. 2 new tires plus many spare parts. Asking \$30,000; email craigduyck@yahoo.com for pics or questions. (3rd week running)
- **Boysenberry liners:** We are a nursery in central Florida with a fairly large berry program and are looking into adding boysenberries to our mix. We're seeking information/ sources for liners. We also would like any information on tissue culture labs working with boysenberries. Contact [Valerie Cooper](#), Dewar Nurseries Inc. 1-800-329-1188. (2nd week running)

Meeting Information

For more comprehensive meeting schedule, [click here](#).

July 6 — North Willamette Research Station Caneberry Open House ~ 1pm. 15210 NE Miley Road, Aurora, OR 97002. [Click here](#) for the agenda and other information.

July 13 — North Willamette Research Station Blueberry Field Day ~ 1pm. 15210 NE Miley Road, Aurora, OR 97002. [Click here](#) for the agenda and other information.

July 20 — Raspberry Machine Harvesting Selection Evaluation ~ 1-3pm. Sakuma Brothers Farm, Mt. Vernon, WA. Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

July 20 — Berry Grower Field Day ~ 3-5pm. WSU Mt. Vernon Research Station, WA. Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

July 21 — Raspberry Machine Harvesting Selection Evaluation ~ 11am-1pm. Randy Honcoop's farm in Lynden, WA. Fumigation Field Day to follow. Time TBA. Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

July 22 — B.C. Berry Field Day 1-4 pm. Contact [Chaim Kempfer](#) for more information: 604-853-1551 or 604-819-0175.

July 22 & 23 — "Eat Your Berries! - The Oregon Berry Festival" ~ 11am- 6pm. Portland, OR. Ecotrust Building, 721 NW 9th Ave (NW 10th & Johnson). Taste and buy some of the season's best berries and also sample amazing products made with Oregon's berry bounty. [Click here](#) for details.

[Click here](#) to go back to the top of this newsletter.

Summer Field days

Oregon State – OSU North Willamette Research Station

15210 NE Miley Road, Aurora, OR 97002. Call 503-678-1264 for more information.

- **July 6 — Caneberry Open House** ~ 1pm. [Click here](#) for the agenda and other information.
- **July 13 — Blueberry Field Day** ~ 1pm. [Click here](#) for the agenda and other information.

Washington State – Mt. Vernon

Call Pat Moore at 253-445-4525 or Tom Walters at 360-848-6124 for information.

- **July 20 — Raspberry Machine Harvesting Selection Evaluation**~ 1-3pm at Sakuma Brothers Farm, Mt. Vernon.
- **July 20 — Berry Grower Field Day**~3-5pm at the WSU Mt. Vernon Research Station.
- **July 21 — Raspberry Machine Harvesting Selection Evaluation**~ 11am-1pm at Randy Honcoop's farm in Lynden.
- **July 21 — Fumigation Field Day** following the mechanical harvest trial at Randy's ~ Lynden location TBA.

British Columbia

- **July 22 — B.C. Berry Field Day** ~ 1-4pm. Contact [Chaim Kempler](#) for more information or call 604-853-1551 or 604-819-0175.

Crop work

All crops

- Scout for voles and treat as needed.
- Weed management.
- Can put out monitoring traps for Spotted Wing Drosophila.
- As fruit begins to ripen, can sample fruit for SWD.

Blueberries

- Scout for leafroller larvae feeding.
- 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.
- After petal fall, can treat for Alternaria and Anthracnose prevention if needed.
- Scout for fruit disease symptoms and/or disorders.
- Plan for/Maintain bird damage management.
- Can apply SWD management insecticides.
- Can apply clean up insecticide just before harvest for crop contaminant management.

Blackberries

- 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 clean up insecticide just before harvest for crop contaminant management.
- Scout for aphids and treat as needed.

Raspberries

- 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.

[Click here](#) to go back to the top of this newsletter.

- Can apply SWD management insecticides.
- Can apply clean up insecticide just before harvest for crop contaminant management.
- Scout for aphids and treat as needed.

Strawberries

- Watch for weak growing areas and check plants for weevil larvae, root rot and/or cold damage.
- Scout for weevil adults and notching.
- (Southern strawberries) Can treat for Strawberry Crown Moth. Adults are now flying.
- Can apply slug bait.
- 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.
- Plan for post-harvest treatments for SCM, SWD and/or weevils as needed.

[Click here](#) to go back to the top of this newsletter.

Archived Small Fruit Updates

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

[06-28-11](#)

[06-22-11](#)

[06/14/11](#)