

## the BeeLine

Winter 2015

Newsletter of the Western Cascade Fruit Society



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**WCFS Board Members and BIFC Attendees  
Bainbridge Island Grange Hall, 9/13/14**

The New Club has arrived! On September 13, 2014, Bainbridge Island Fruit Club (BIFC) was officially approved into the greater Western Cascade Fruit Society (WCFS). The following photo shows some of those WCFS members as well as BIFC attendees at the last quarterly meeting.

Starting up a new chapter of the WCFS—to say the least—has been quite an adventure. Having been a member of the Peninsula Fruit Club (PFC) for over 10 years, one of the things I missed more than anything was the extensive support network and resources an established club has (especially one like PFC). Nevertheless, as a new start-up club, we've been very fortunate. Some noteworthy examples include:

For starters, we got some much appreciated advice/help from WCFS members—with a special nod to Bekie Jackson (SCFS President), Denise Syrett (PFC President), Jean Williams (former PFC President), Ron Weston (WCFS President), Jerry Gehrke (WCFS Treasurer), and Steve Butler (PFC Treasurer). Their assistance has been instrumental in helping us move our dreams/ideas into an actual, working club. Thank you!

The local Grange Hall was very eager to have our club meet at the Hall, including giving us free rent for our initial start-up period. As most of you probably know, the largest cost for any club (outside of sponsoring some events) is obtaining a meeting space...so the Grange's offer was a huge plus for our club.

The number of folks interested in joining and participating in the new club has been very gratifying. To date, we have around 15 new enrollees (both on and off island) and many others planning to join. The talent, energy, and creativity they bring to the new club are truly amazing!

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The BeeLine is a quarterly publication of Western Cascade Fruit Society, a non-profit 501(c)3 corporation in the State of Washington.

**WCFS Teleconference Board Meeting**

The Teleconference meeting will be held January 10, 10am. Let President Ron Weston know in advance if you have any items to discuss.

The Agenda will be firmed up prior to the meeting.

Follow OOS lead and encourage your Chapter to have a round table discussion at this Teleconference.

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**Bainbridge Island cont.**

The new club certainly isn't at a loss of locals seeking the club's assistance. We already have a growing list of Islanders wanting advice on how to prune their unruly old fruit trees or treat various disease/pest problems.

We will be adding a fair number of new members to the WCFS because of all the BIFC folks we are bringing in.

Finally, I have to put in a special plug for the BIFC board members...all of whom have dedicated a significant amount of time and creative energies in helping set up the new club, including drafting the by-laws, setting up our bank account, designing the club's web-site, and recruiting and enrolling new members. Great job team!!!

To date, our club has sponsored a number of speakers on such topics as Spotted Wing Drosophila or SWD, Micro-Farming, and Physical Therapy for Gardeners. In the coming year, we plan on getting down to the basics, including grafting, pruning, and pest and disease control (no surprises here). We also plan on working closely with the PFC on their annual grafting and fruit tree shows...helping them out as we can (as well as continuing to learned from them). So overall, it has been a wonderful start for the new club—with the coming year offering a great deal of promise and opportunity. So please feel free to join us at one of our future meetings or "liking us" on our new Facebook page!

Darren Murphy, BIFC President

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**About WCFS**

Western Cascade Fruit Society (WCFS), formerly Western Cascade Tree Fruit Association (WCTFA), was founded in 1980. Its primary objective is to bring together new and experienced fruit growers who will promote the science, cultivation and pleasure of growing fruit bearing trees, vines and berry plants in the home landscape. We provide the public with the knowledge and ability to cultivate their own fruit-bearing trees and plants. Local chapters in geographical areas of Western Washington, disseminate information through education, fruit shows, orchard tours, meetings, workshops, publications, and give financial and other support to fruit research organizations.

As a 501(c) (3) Non-Profit organization WCFS is Parent organization to eight affiliated Chapters. The newly formed Bainbridge Island Fruit Club will make nine. WCFS provides 501(c) (3) Non-Profit status to Chapters via IRS group exemption, provides liability insurance for Chapters, maintains financial records, and makes annual reports to IRS. A Board of Officers and Directors manage WCFS.

WCFS publishes a quarterly BeeLine newsletter to inform members of events, tours, articles, and reports; a Web site — <http://wcfs.org>; and, a digest forum: <http://lists.ibiblio.org/mailman/listinfo/wcfs>. Members receive automatic membership in WCFS after joining an affiliated Chapter. A portion of chapter dues go to WCFS. Please refer to <http://wcfs.org> for chapter membership and dues structure.

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**Become a Volunteer**

Volunteer opportunities abound in all WCFS Fruit Club Chapters. These Chapters are non-profit organizations, run entirely by volunteers. Do you have a special skill or great ideas to share, or just like to visit with other fruit-growers while helping out with organized events? Please contact any Chapter Board members or officers, and let them know how you would like to be more involved.

The BeeLine Gathering Editor always welcomes your fruit-related articles. Thank you for contributing.

Marilyn Couture, OOS

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## Mollie's Delicious Apple Richard Fahey, Singing Tree Acres, Oxford, NY (Nafex, December 2014)

When you have 450 varieties of apples and over a hundred of them ripen in September you have to make choices on which ones to use and not use. In any given year an apple tree might give 500 apples or more. Five hundred times 100 September varieties equals 50,000 apples that could be used, and most of them will begin rotting in a few weeks. In these circumstances the cream of the apple crop quickly rises to the top.

For my family, the top apple of the season is easily **Mollie's Delicious**. It is a large, shiny, red apple with a yellow green background. It probably took on the name Delicious because it is conic-shaped like the Red Delicious. But other than the shape, it is distinctly different from Delicious.

In the first part of September it is the ice cream of apples with a melting texture and a rich sweetness. In the orchard I am always sampling a bite or two of an apple here and an apple there, but when I come to **Mollie's** I inevitably keep biting until the apple is gone, and often I go for a second one.

We also use **Mollie's** in cooking. I chop up some in pancakes, and they come out just right with a short cooking time. It also makes superlative unsweetened applesauce, and has surpassed all other apples we have tried for this purpose.

For a larger apple, **Mollie's Delicious** hangs on the tree well. Each day in September some drop, yet going into October quite a few apples are left on the tree. These hangers-on become almost a different kind of fruit and a unique taste experience. The flesh becomes drier but retains a certain crispness. The taste and feel in the mouth are like a cross between a watermelon and cotton candy!

This variety was an up-and-coming commercial apple in the 1980s and then seems to have faded out, probably because it does not keep long and may be too susceptible to bruising.

The tree is a strong grower with good strong branching, and it is easy to care for. It is probably a triploid, and may not be a good pollinator for other trees. The fruit is relatively disease and insect free in our no-spray organic orchard. Apples vary in size, but all are on the large side. The tree comes into bearing early.

Editor's note: **Mollie's Delicious** is Couture's favorite apple.

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## WCFS NEW MEMBERS



### PFC

Mary Thorley

Nenita Arcega

Luke Toman

Jim & Amelia Egerer

Lynette Herr

Angela Talamonte

John & Pamela Alcantra

Ken Tuomi

Toni Fuller

Tom & Jean Fu Caddy

Allan Limbocker

Connie Morgenstern

Nihad Delic

Jason & Rossana Holyoak

### TAHOMA

Victoria Bower

R. Conley

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### OOS

Jim Williams

Bill & Sharon Larsen

Marianne & Chris Burton

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The Winter 2014 BeeLine was produced by Gathering Editor Marilyn Couture, with input from membership. Please contribute your articles for our next Winter issue!

**Issue Deadlines:**  
**Winter December 15;**  
**Spring February 15;**  
**Summer May 15;**  
**Fall August 30**

Email your articles to: [couture222@msn.com](mailto:couture222@msn.com)  
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## What Old Home Never Told Farmingdale

Ethan A. Natelson, Pomona, Fall 2014

The recent combined meeting of North American Fruit Growers, The Home Orchard Society and The California Rare Fruit Society in the Portland, Oregon area allowed us to hear many outstanding lectures on a wide variety of fruit- and nut-related issues from rootstock to cider production, quince in the kitchen, and beyond. We also had a number of tours of orchard evaluation of possible new dwarfing pear rootstock from the quince and amelanchier families and nut and pollination evaluation of hazelnut cultivars from around the world, currently under study at the Corvallis USDA repository. However, one of the most singular pieces of new information came from Joseph Postman, about a revelation concerning old, alleged plant parentage, now succumbing to the sub-microscopic focus of modern genetic analysis. Such modern DNA studies can provide proven linkage over many generations and bring definitive closure to both human and plant mysteries. In my own circumstance, my older brother has done extensive classic genealogical studies, even visiting Russia, to learn if the only two Natelson families in the United States are genetically related. Both families here are progeny of male Russian immigrants arriving in the United States at different times in the 1800s and genealogy records prove the two families lived very near each other in Russia, but they could not be linked as relatives. In the United States, the first and second names of descendants of the two families are quite similar, as are their professions. However, the oral history of the two families related over many generations in Europe was quite different. The two families knew each other in the New York area as young adults in the 1920s and 1930s, but definite genetic linkage eluded my father when he questioned my grandfather about his grade school teacher, circa 1915, who was a Natelson. To finally solve this mystery, we recently submitted my DNA and the DNA of my cousin, who is a PhD physicist at Rice University, for a possible match with the DNA of a PhD who is a Rice University graduate and from the other extended Natelson family. Our paternal DNA was not a match. However, my nephew's and my DNA did match the oral history of my family detailing a trek probably over hundreds of years initially from North Africa, to Spain, to France and to Russia with Napoleon's defeated army remnants, some of whom, including my forbearer, remained in Russia. The other family originated in Russia, as both their DNA and oral history suggested.

Joseph Postman pointed out to the group that most of the pear trees in the repository were originally grafted on Old Home (OH) x Farmingdale (F)-333 rootstock cross, hoping to induce dwarfing. In 1997, Kim Hummer summarized the origin of the

the OH x F crosses, which began with Professor Reimer of Oregon State University visiting Mr. Benjamin Buckman's orchard in Farmingdale, Illinois in 1915. Mr. Buckman had obtained a scion of what was later to be named Old Home by Dr. Reimer from a Mr. Curtis of Paris, Illinois. Old Home had blight resistance, a good branching habit and was directly compatible with quince. Dr. Reimer selected another tree from Mr. Buckman's orchard, also with blight resistance, naming it Farmingdale. Five hundred seeds from an alleged cross of Old Home and Farmingdale were obtained and Dr. Westwood later studied these with a nurseryman, Mr. Lyle A. Brooks, at Forest Grove, Oregon. Mr. Buckman had many trees in his orchard, however, and now as Joseph Postman and his associates are studying the DNA of these OH x F crosses, while all of them have Old Home parentage, none contain Farmingdale genetic material. From preliminary study, Joseph thinks it is possible most of these crosses were actually with Bartlett, and he correctly opines that it is too bad that they were not made with Farmingdale, as this cultivar has outstanding blight resistance. Thus, solving the 100-year-old mystery of the Natelson family has some parallels with finally solving the 100-year-old mystery of the OH x F legend. Perhaps someone wants to start anew with a real OH x F cross.

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The Edmonds Community College Horticulture Dept. continues it's successful Sustainable Agriculture Education program of study in Urban Agriculture.

Winter quarter courses include:

- Agroecology (Hort 104)
- Soils and Plant Nutrition (Hort 109)
- Vegetable Production I (Hort 241)
- Fruit Production I (Hort 247)
- Horticultural Careers (Hort 192)

We are pleased to announce three new Urban Agriculture Certificates. Two are short certificates (28-30 credits) and the third, Urban Agriculture Systems (41.5-43.5 credits), combines the other two.

- Crop Production
- Whole Systems
- Urban Agriculture Systems

The entire curriculum occurs over the course of three quarters: winter, spring, and summer. Students may obtain any one certificate, or all of them, in just three quarters, depending upon whether attending part-time or full-time.

Together we can cultivate a sustainable future for agriculture, food systems, and the environment!

Edmonds Community College | Horticulture Department  
425.640.1739 | [horticulture@edcc.edu](mailto:horticulture@edcc.edu) | Sustainable Agriculture

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## Navy Hires AppleCorps to ID Old Orchard

**Emily Macrae, Vashon Island**

Back in 1940, the Navy acquired land on the Kitsap Peninsula in order to establish a submarine base. At the time, the seven-acre parcel was homesteaded by a half dozen families, each with their own home orchard. In 2013, the Navy decided this property, neglected for 53 years, would be better used as a construction parking lot. Before being able to do so, they needed to determine whether the old fruit trees found on the site were biologically significant.

Bob Norton's consulting company AppleCorps successfully bid for the job. We worked as subcontractors to a Leidos team, headed by Bernice Tannenbaum, to compile a report for the Navy. Architectural Historian Chrisanne Beckner also contributed to the project.

For the past year Bob led a field team of fellow fruit club members Emily MacRae, Steve Butler conducting an evaluation of the Bangor Orchard site. Jean Williams, Wes Cherry, Shaun Shepherd and Lori Brakken contributed to our efforts to identify fruit.

All told, we've visited the site eight times in the past 12 months, tagging a total of 115 fruit trees, evaluating their vegetative condition and fruit loads. We made the distinction between original trees and seedling trees, that sometimes grew in clusters. We collected young leaf sample from 39 trees we identified as likely to bear fruit, and had DNA analysis done by Foundation Plant Services (FPS), at the University of California, Davis and National Clonal Germplasm Repository, USDA Agricultural Research Service, in Corvallis, Oregon. We returned to collect fruit samples, identify, photograph them, and then comment on their biological and historical significances.

Fifty-five years of neglect made for some challenging conditions in the field. We bushwhacked our way from tree to tree. As the year wore on, we encountered tame deer and fresh bear scat. Luckily, we never saw any bears, but Emily stepped on a bee nest in shoulder high sword fern, incurring 9 bee bites. Steve, expertly de-bee'd her, preventing more stings, so we were able to complete our day's work.

All in all we identified most of the cultivars in the orchard either by the fruit on the trees, or by DNA analysis. As expected, most were varieties commonly available at the time, such as Gravenstein, King, Winter Banana, and Baldwin Apples, Bartlett Pear, Bing cherry and Italian Prune plum.

We will be returning to collect scion wood from 4 trees we determined to be worthwhile. One is a Japanese style plum, another is a promising perry pear that Wes Cherry pressed,

and analyzed for us. The other two are apples; one was determined by DNA analysis to be "Reinette da Mana", an obscure French variety, though more likely to be Golden Sweet according to Shaun Shepherd. The other apple is probably a seedling, but a nice apple.

We will propagate those four varieties in our Vashon Island Fruit Club Orchard at Sunrise Ridge, which was once an Army Base, later deeded to the people of Vashon. So the project has a certain full-circle symmetry.



Bob Norton and crew

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## Check Out this link to Wind

It's a wind map of what the wind is doing at just this minute. The center of the country is always very windy, up or down or both.

<http://hint.fm/wind/>

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## SWD per Michael Phillips By Ethan Russo, MD, Vashon Island

I've seen SWD here on fall raspberries three seasons ago, which I sprayed once with Entrust (Spinosad) and then frosts came. These fruit flies apparently don't overwinter as of yet and so must blow into Zone 4. The organic spray regime currently pursued by berry growers is rotations of Entrust and PyGanic ... pretty harsh and desperate and certainly expensive. Foremost, you must count on optimal nutrition and fungal ecosystem health to produce the kind of plant metabolism not attractive to pests. There's a guy named [Bob Wilt growing organic blueberries in Oregon](#) who speaks of SWD not being a problem whereas surrounding blueberry growers are being devastated ... precisely because he makes this holistic investment. Neem oil in sprays might help over time but the fact that there is a mere eight days between generations makes this less guaranteed in an immediate sense. There are monitoring traps for SWD which would help you know when to intensify efforts.

Good luck!  
Michael Phillips  
Holistic Orchard Network  
[www.GrowOrganicApples.com](http://www.GrowOrganicApples.com)

Ethan Russo, MD  
20402 81<sup>st</sup> Avenue SW  
Vashon, WA 98070

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Helpful Hint: Rake for drying Garlic

## Scionwood Sources, WSU Extension

For sources of tree fruit material for propagation, try the following:

- Clean Plant Center of the Northwest
- National Clonal Germplasm Repository – Corvallis, Oregon  
(pears, small fruits, unusual fruits)
- National Clonal Germplasm Repository – Geneva, New York  
(apples, tart cherries, hardy grapes)
- National Clonal Germplasm Repository – Davis, California  
(stone fruit, grapes, nuts, unusual fruits)
- NAFEX (North American Fruit Explorers)

### Home Orchard Society

Nick Botner, 4015 Eagle Valley Road, Yoncalla, OR 97499, (503) 849-2781. Will sell or trade scions from collection of apples, pears, plums, and grapes.

Bluebird Orchard & Nursery, Tim Strickler, 550 Lovett Ave SE, Grand Rapids, MI 49506, 616-458-1609. email [stricklt@gvsu.edu](mailto:stricklt@gvsu.edu). Sells apple scionwood.

Neighbors Nursery, Joyce Neighbors, 1039 Lay Springs Rd., Gadsden, AL 35904, (256) 546-7441. Sells scionwood of old southern apples and other antique varieties. Free list of scions available for shipping in February and March. e-mail [jneighbr@internetpro.net](mailto:jneighbors@internetpro.net)

The Apple Branch, PO Box 281 Portland, MI 48875, (517) 648-2443. Email [applebranch@sbcglobal.net](mailto:applebranch@sbcglobal.net). Rootstock and apple scion wood.

Vintage Virginia Apples, PO Box 210, North Garden, Virginia 22959, (434) 295-5382 Rootstocks, young trees and scionwood.

Maple Valley Orchards & Nursery, Maxine and Tony Dembski, 11541 Claywood Road, Gillett, WI 54124, (920) 842-2904 Rootstock and apple scion wood.

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## Use Winter Weeds to Improve Soil

By Judy Tisdall and Bas van den Ende, Good Fruit Grower, Dec. 14, 2014.

Winter weeds are a cheap way of improving and adding organic matter to soil. It is costly and difficult to sow a cover crop on the tree row, so let winter weeds do the job for you. Most weeds support beneficial arbuscular mycorrhizal (AM) fungi, as do most other flowering plants. The hyphae (filaments) of these AM fungi grow in the soil and in the root. In return, the plant supplies the fungi with organic carbon from photosynthesis, all continually mixing organic matter with soil without cultivation. The hyphae and roots hold particles of sand, silt, and clay together into stable soil aggregates. To see this, pull a clump of weeds out of moist soil, where you will see aggregates of soil clinging to the hyphae and roots (Figure 1). The hyphae also help the root to take up nutrients and water. As with other normal healthy plants, there is a high turnover of weed roots and hyphae (especially grasses). The hyphae and roots do not live long, but are replaced by new hyphae and roots, so continually add organic matter to the soil. Roots also exude simple organic materials that are quickly used by soil organisms close to the roots, i.e. in the rhizosphere. Simply and cheaply allow weeds to grow in winter (Figure 2), but kill them with herbicide in spring (Figure 3) so that they will not compete with the tree roots for nutrients, water and space. Slash the dead weeds in the alley, and throw the slashings to the tree row to mulch the surface soil. Fauna such as earthworms will gradually mix the organic residues with the soil. In this way you will build up organic matter in the tree row and protect the soil surface from heavy raindrops. That is, the stable covered soil will not erode, water and nutrients will not be wasted in runoff, and a dense hard impermeable crust will not form on the soil. The organic mulch of dead weeds in the tree row:

Cools the top 50 mm of soil in summer, and avoids temperatures that are lethal to roots; decreases evaporation from the surface of the soil, although some of the water saved is lost by deep drainage; stores more water in the soil; keeps the soil well aerated; provides extra storage space for tree roots that grow up into the mulch; improves soil structure; and, protects the soil from lethal high temperatures in summer.

Straw mulches are costly to apply, but also mulched soil without fine roots from live weeds or a cover crop also becomes hard and restricts tree roots, even though the soil is stable.

**Figure 1**

Aggregates of soil cling to the hyphae and roots of weeds.



**Figure 2**

Volunteer weeds have covered the entire orchard floor during winter in this Open Tatura orchard with Granny Smith trees.



**Figure 3**

Weeds in the tree rows were killed with Roundup (glyphosate) in the spring (mid-August in the southern hemisphere) so that they will not compete with the trees for water and nutrients, and the mulch and dead roots of weeds will continue to improve the structure of the soil.



Dr. Judith Tisdall is editor of the journal *Soil & Tillage Research*, and soil scientist at La Trobe University, Melbourne, Australia. Bas Van den Ende is a tree fruit consultant in Australia's Goulburn Valley.

## Powdery Mildew - Tree Fruit

There are several species of powdery mildew that attack tree fruit. Apple and pear are affected by *Podosphaera leucotricha*, while stone fruits are affected by *Podosphaera clandestina* and *Sphaerotheca pannosa*. Mildew can infect both the leaves and the fruit, and may render fruit unmarketable.

### Apple Powdery Mildew (*Podosphaera leucotricha*)



#### Symptoms:

The fungus produces a white powdery growth on new terminal growth and developing fruit. Later in the spring, as the fungus dries and is sloughed off, a network of russet appears on the infected surface of the fruit.

#### Life Cycle:

On apples, the fungus overwinters in terminal buds and is most severe in a season following a series of mild winters. Severe winter temperatures can reduce mildew pressure by killing infected buds, which are more susceptible to winter injury than healthy buds. As infected buds open in the spring, powdery mildew spores (conidia) are released to initiate primary infections on blossoms, young leaves and fruit. Infections causing fruit russet can occur from about 3 weeks before bloom to 3 weeks after bloom. Additional conidia are produced on infected leaves and fruit which cause secondary infections. There are multiple generations per year, with trees susceptible as long as they are actively growing. Powdery mildew is favored by moderate temperatures (50-70 °F) and high relative humidity.

The number of mildew sprays required on bearing trees prior to blossom can be predicted by estimating the percentage of one-year old shoots showing white fungus on the bark surface during the dormant season. If more than 15% of one-year-old shoots have mildew, two pre-bloom sprays are required. Spray once prior to bloom for mildew levels between 5 and 15%. No pre-bloom spray is needed if the mildew level is below 5%. Note that eliminating all pre-bloom sprays may increase the risk of damage on highly susceptible varieties.

Powdery mildew-induced russet on apple



#### Cultural Control

Avoid overcrowding of trees and branches. Prune out twigs with white fungus growth on the surface.

#### Chemical Control

Early spring applications of fungicide (beginning no later than tight cluster) are necessary to prevent secondary spread of powdery mildew in susceptible apple varieties. Neglecting control early in the year will result in poor control during the season.

**Fruit** - To prevent fruit infection and subsequent russetting, apply a pink spray of Fontelis (penthiopyrad), Luna Tranquility (fluopyram + pyrimethanil), Nova (myclobutanil), Sovran (kresoxim-methyl), Flint (trifloxystrobin), Pristine (boscalid + pyraclostrobin), Kumulus or Microthiol (sulphur). Sena tor (thiophanate-methyl) and lime sulphur are also effective for the control of powdery mildew. Inspire (difenoconazole), Serenade Max (*Bacillus subtilis*) and PureSpray Green Spray Oil 13E are registered for suppression of powdery mildew.



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**Foliage** - A single pink spray will not protect the foliage of susceptible varieties such as Honeycrisp, McIntosh, Granny Smith, Gala, Jonagold and Ginger Gold. Two pre-bloom sprays are needed for good control of powdery mildew where disease levels are high. Fungicides registered for apple powdery mildew must be applied at 10-day intervals or as labels direct, from tight cluster stage until terminal growth ceases, to keep foliage free of mildew and to reduce carry-over to the next season. Control of foliage powdery mildew is particularly important in nurseries and on young trees needing growth stimulation. On more resistant varieties such as Red and Golden Delicious, damage from moderate amounts of mildew on terminal growth is relatively minor and does not warrant an extensive spray program.

**Resistance management** - Rotate between different chemical groups to help prevent the development of fungicide resistance. Use recommended rates for powdery mildew control. Reduced rates will result in poor control and an increased risk for resistance development. Limit sprays of group 3 (Nova, Inspire) and group 11 fungicides (Sovran, Pristine, Flint) to 2 per season for each group. Refer to the apple fungicide table for more information on fungicide resistance groups.

**SPRAY INJURY WARNING** - Sovran may severely injure certain varieties of cherries. Do not allow drift onto cherries. Be sure to clean all residues of Sovran out of your spray tank before spraying cherries.

**Non-bearing trees** - In addition to other registered fungicides, Funginex (triforine) may be used for powdery mildew control on apple nursery stock and non-bearing trees. Funginex is not registered for use on bearing trees

**For information on pear powdery mildew, apricot, peach, nectarine, sweet cherry, and also the apple fungicide table, please refer to:**

<http://www.agf.gov.bc.ca/cropprot/tfipm/mildew.htm#apple>

[http://www.apsnet.org/publications/PlantDisease/BackIssues/Documents/1984Articles/PlantDisease68n04\\_326.pdf](http://www.apsnet.org/publications/PlantDisease/BackIssues/Documents/1984Articles/PlantDisease68n04_326.pdf)

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## Thirsty? Try a Shrub by Patti Gotz, OOS

A few years ago, shrub drinks were all over internet blogs. This old drink became a new one with recipes that included some very complicated ingredients to add complex flavors. My favorite recipe is found in the book Homemade Root Beer Soda & Pop\* by Stephen Cresswell. His chapter on Switchels, Shrubs, Vinegar Drinks & Mulled Beverages has this description:

“When the leaves began to turn orange and a chill was in the air, farm wives across the country turned their attention to harvest drinks. It was critical to have on hand thirst-quenching, rehydrating, non-intoxicating beverages as neighbors and hired help showed up to work long hours at the harvest. Many traditional harvest drinks had vinegar as a key ingredient, substituting it for the rum or brandy that was present in even older recipes.”

The Raspberry Shrub recipe has this description: “In the 19<sup>th</sup> century, cool places on the farm were at a premium. Yet cold storage was a necessity, since at room temperature spoilage was likely, especially if fruit juice was one of the ingredients. Recipes such as this one produced a concentrated drink that would occupy little room in the springhouse, but made quite a bit of drink when mixed with water. The presence of vinegar helped prevent spoilage and also added a pleasant bite that sometimes seemed to be missing from more tame, nonalcoholic beverages.”

### Raspberry Shrub

2 cups raspberries (fresh or frozen)

½ cup white wine vinegar

2 cups sugar

1. Place raspberries in a small pot, then cover with vinegar and mash with a potato masher. Begin heating on low heat, adding the sugar gradually until all of it has been dissolved. Bring to a boil and then remove from heat.
2. Strain into another vessel, allowing to drip so as to extract as much liquid as possible. Allow to cool somewhat, but pour into a bottle just before it reaches lukewarm temperature. Refrigerate.
3. To make a glass of drink: Stir ¼ cup of syrup mixture into a glass of water, then add ice. 12-14 servings.

My notes: I doubled the recipe because I had frozen plums that were approximately 4 cups. The ratio of fruit to sugar should stay 1 to 1. I also made it from frozen raspberries that had extreme freezer burn and it turned out just fine. I felt like the ¼ cup (4 tablespoons) was too sweet for my taste so I lowered it by half to 2 tablespoons but you can add or subtract the syrup according to your taste. It works well with carbonated water to add a little bit of zip. As a syrup it is very thin but you could use it over pancakes or boil it down to make it thicker. I have had shrub syrup in my refrigerator for over a 2 months with no sign of spoilage. The vinegar cuts the sweetness of the syrup and makes it possible for me to drink several glasses in one sitting. Give it a try and reach into your freezer for some of this year's fruit.

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## 250 Varieties of Apple on One Tree

Craig Mackenzie and Luke Salkeld for the  
Daily Mail, September 2013.

Thanks to a bit of hard grafting over the years Paul Barnett has been growing his 'family tree' for over 20 years. It is jam-packed with apples of all shapes, colours and sizes including rare cooking apples dating back to 1883.

From Granny Smith and Golden Delicious to Brownlee's Russet and Wadhurst Pippin, if you like apples then Paul Barnett is your man. He has 250 varieties available to pick – and astonishingly, they're all growing on just one tree. The horticulturist has spent 24 years meticulously developing the tree in his back garden in Chidham, near Chichester, West Sussex, grafting on new varieties every winter.

The tree's fruits now include rare cooking apples such as the Withington Fillbasket, which originated in 1883, and Eady's Magnum, from 1908, as well as more recognisable favorites. Mr Barnett, 40, said: 'I started working at a nursery with acres of land and around 90 varieties of apple trees in rows. 'I wanted to grow my own trees but I didn't have the area to plant that number so I started a "family tree" where I can have all the different varieties in a smaller amount of space. I add to it each year by budding in the summer and grafting in the winter.'

For budding, a bud is cut from another apple tree and inserted into the bark of Mr Barnett's tree, while grafting involves the same process but usually with a small branch carrying more than one bud. Over time the buds and branches grow to become part of the main tree and eventually produce even more varieties of apple. Mr Barnett added: 'The tree has cooking, eating and cider apples on it but I normally only get a few of each variety of apple each year. It's great to see all the different colors and sized apples on the tree this time of year.' He has had to prop up some of the branches with planks because of the sheer weight of the fruit growing on the tree, which stands some 20ft high. He will gather his unique harvest when they are at their juiciest, and show them at horticultural fairs.

Mr Barnett said: 'My favorite eating apple is Winter Gem because it has a really nice flavor. It's crunchy, crisp and sweet.' He said that he adds to his collection either by buying fruit from the home of the National Fruit Collection in Kent – which has about 2,200 of the 6,000 known varieties – or swapping them with other apple enthusiasts. He said: 'It's really important for people to know what kind of apples they are growing, to know when they should be picking, eating and storing them. 'There have been some varieties which have been lost over time. I don't want to see any disappear. You don't know what will happen in the future with global warming or pesticides. 'You may need to crossbreed apples with older varieties to make them resistant to such things. 'That's why every type of apple is worth preserving.'

Mr Barnett also has nine smaller family trees growing plums, pears, cherries and apples. He said: 'My family have always been into horticulture, so it's in my genes. My parents help me pick and tend to my garden.' My great-grandfather was particularly good with fruits so I have always grown up with people passionate about gardening. Last week it was predicted that this autumn's harvest of apples will be one of the biggest and best tasting ever. British apples are some of the sweetest and most colorful for years, according to Richard Capper, of Stocks Farm in Suckley, Worcestershire. 'The good weather and summer heat has upped the sugar levels in the fruit,' said Mr Capper, who expects to gather in almost 2,000 tons of the fruit from his orchards. Gala, Bramley and Braeburn apples from the farm's 100 acres will be sold to all the major supermarkets after they have been gathered by a team of 36 pickers over ten days.



Paul Barnett, near Chichester, West Sussex, on which two hundred and fifty different apple varieties grow.

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### Attention WCFS Members

Want to know instantly what's happening in the organization?

Subscribe to the WCFS Forum. It's a benefit of membership. The Forum is private and closed to the public. It keeps us together and on top of what's happening in our chapters. Click on this link and follow the prompts:

<http://lists.ibiblio.org/mailman/listinfo/wcfs>

Judi Stewart, Forum Administrator



## Chapter News WCFS

### Seattle Tree Fruit Society

Greetings fellow orchardists. We have to concede that western Washington's summer has been one for the books. And the heat keeps coming, with a new all-time December record at Seatac. Many of us consider the heat to be a significant factor in this summer's fruit pest explosion. Several members shared their harvest stories of almost total infestation, even with good maggot barrier coverage. More of us are planning to try the powdered clay on the footies this year. Linda Sartnurak has it available with footies. My apples have also seen serious damage from what I believe is from earwigs. That led to the suggestion that we try plastic bread bag closures to tighten pest access to fruit along the stem. I have about 5000 from Kwik Lok Company and I'll share. Another factor in pest damage may be drought stress. In my bog location I tend to forget how tenaciously peat and clay hold on to water, requiring more frequent summer watering than I have practiced.

On a more positive note STFS has had some productive activities this year including a series of work parties in Magnuson Park. To facilitate mowing by the city crews we rebuilt wood chip beds bracketing the rows of fruit trees and protecting the drip system. We also used the site for the summer pruning phase of our year-round fruit maintenance program. This ongoing gift to Seattle by STFS is the nucleus of our contribution to Seattle's home grown fruit culture.

Our Fall Fruit show in October turned out to quite successful. The variety of fruit available for tasting was exceptional. I have to admit that I was bowled over by paw-paw, a fruit common in my home state of Illinois but one that I have never before tried. Our focus this year was on berries and we especially appreciate one person who is a big fan of berries, Laure Jansen. She is also the editor of our exceptional newsletter, The Urban Scion Post. If you are not receiving it you ought to, if just for the recipes.

At one of our summer get-togethers we were also treated to some very tasty Cornelian Cherry dishes during a comprehensive presentation on this too-little appreciated fruit. It's a type I'm looking forward to adding to my own plot soon. Enough on food though, it's making me hungry. I was happy to see so many at our December 13<sup>th</sup> Party and I wish all a very Happy Holiday Season. Paul Mallary, President.

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### Olympic Orchard Society

After a Holiday potluck and program, OOS decided to take a break in January. An intensive demonstration in pruning begins February 7 at the Lazy J. Farm. March 10 Erik Simpson will discuss rootstock, and elections will be held. A grafting workshop at the Lazy J. Barn is scheduled for March 21. Later in March OOS will present a grafting workshop to Sequim High School Ag students.

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**Links**

Here is a list of sites on the web that may be of interest to you.

**Related Organizations**

Backyard Fruit Growers

[www.sas.upenn.edu/~dailey/byfg.html](http://www.sas.upenn.edu/~dailey/byfg.html)

California Rare Fruit Growers

[www.crfg.org](http://www.crfg.org)

East of England Apples and Orchards Project

[www.applesandorchards.org.uk](http://www.applesandorchards.org.uk)

Indiana Nut Growers Association

[www.nutgrowers.org](http://www.nutgrowers.org)

Midwest Fruit Explorers

[www.midfex.org](http://www.midfex.org)

North American Fruit Explorers

[www.nafex.org](http://www.nafex.org)

Northern Nut Growers Association

[www.northernnutgrowers.org](http://www.northernnutgrowers.org)

Oregon Sustainable Agriculture Land Trust

[www.osalt.org](http://www.osalt.org)

Western Cascade Fruit Society

[www.wcfs.org](http://www.wcfs.org)

Western Washington Fruit Research Foundation

[www.wwfrf.org](http://www.wwfrf.org)

Home Orchard Society

[www.homeorchardsociety.org/](http://www.homeorchardsociety.org/)

Seattle Tree Fruit Society

[www.seattletreefruitsociety.com/](http://www.seattletreefruitsociety.com/)

Seattle Tree Fruit Society—Apple ID program

[www.seattletreefruitsociety.com/appleid.php](http://www.seattletreefruitsociety.com/appleid.php)

**Fruit Research**

National Clonal Germplasm Repository

[www.ars-grin.gov/cor](http://www.ars-grin.gov/cor)

Tree Fruit Research and Extension Center, Washington State.

[www.tfrec.wsu.edu](http://www.tfrec.wsu.edu)

Northwest Berry and Grape Infonet.

[berrygrape.oregonstate.edu](http://berrygrape.oregonstate.edu)

Pedigree: A Genetic Resource Inventory System

[www.pgris.com](http://www.pgris.com)

Oregon Department of Agriculture

[www.oda.state.or.us](http://www.oda.state.or.us)

**Government Sites**

US Dept. of Agriculture

[www.usda.gov](http://www.usda.gov)

USDA Agricultural Research Service

[www.ars.usda.gov](http://www.ars.usda.gov)

**Helpful Sites**

Orange Pippin

[www.orangepippin.com](http://www.orangepippin.com)

Kiyokawa Family Orchards

[www.mthoodfruit.com](http://www.mthoodfruit.com)

Red Pig Tools

[www.redpigtools.com](http://www.redpigtools.com)

Friends of Trees

[www.friendsoftrees.org](http://www.friendsoftrees.org)

Cornell Gardening Resources

[www.gardening.cornell.edu](http://www.gardening.cornell.edu)

[http://www.fruit.cornell.edu/tree\\_fruit/GPGeneral.html](http://www.fruit.cornell.edu/tree_fruit/GPGeneral.html)

The National Arbor Day Foundation

[www.arborday.org](http://www.arborday.org)

UBC Botanical Garden

[www.ubcbotanicalgarden.org](http://www.ubcbotanicalgarden.org)

The Reckless Gardener

[www.recklessgardener.co.uk](http://www.recklessgardener.co.uk)

Farm & Garden

[www.farm-garden.com](http://www.farm-garden.com)

SeeMeGarden.com

[www.seemegarden.com](http://www.seemegarden.com)

GardenGuides.com

[www.gardenguides.com](http://www.gardenguides.com)

VitiSearch: Helpful Resources about Grapes

[www.vitisearch.com](http://www.vitisearch.com)

Avant-Gardening: Creative Organic Gardening

[www.avant-gardening.com](http://www.avant-gardening.com)

The Hardy Plant Society of Oregon

[www.hardyplantsociety.org](http://www.hardyplantsociety.org)

Ask the Berry Man

[www.asktheberryman.com](http://www.asktheberryman.com)

BackyardGardener.com

[www.backyardgardener.com](http://www.backyardgardener.com)

Tom Brown's website

[www.applesearch.org](http://www.applesearch.org)

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