the BeeLine

Volume 28 Fall 2008

Newsletter of the Western Cascade Fruit Society

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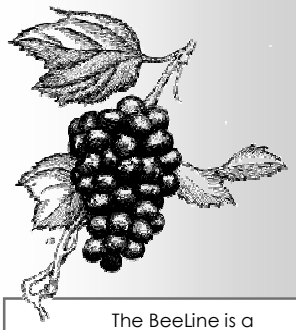

The BeeLine is a quarterly publication of Western Cascade Fruit Society, a non-profit 501(c)3 corporation in the State of Washington.

WHEN TO PICK PEARS

by R.A. Norton, J. King, and G.A. Moulton

A frequent question at the extension office at this time of the year is: When should I pick my pears? Most people know that if you let pears ripen on the tree, they are likely to break down at the core and be soft and mushy when eaten or canned. Commercial growers use a pressure tester to determine proper pear maturity for harvest. By determining the pressure necessary to puncture the flesh, they can determine when pears are ripe enough to pick, but not overripe.

What do people do if they don't have such an instrument? In most years we can determine within a week or two, when individual pear varieties should be getting close to proper maturity. The following list should cover western Washington fairly well. Choose the earlier date for Southwest Washington and the later date for more northerly and colder areas.

Clapp Favorite	Aug 20-Sep 1	Bennett	Aug 22-Sep 3
Bartlett	Aug 25-Sep 5	Aurora	Aug 19-Sep 9
Rescue	Aug 25-Sep10	Orcas	Aug 28-Sep15
Sirrine	Sep 4-Sep10	Flemish Beauty	Sep 10-Sep 26
Seckel	Sep 25-Oct 9	Comice	Sep 19-Oct 9
Highland	Sep 25-Oct 12	Anjou	Sep 25-Oct 15
Bosc	Sep 25-Oct 15	El Dorado	Oct 1-Oct 21

The next step in determining picking is ease of fruit removal. If you notice several pears dropping from the tree, it may already be too late, but it's a sign they should all be picked. Better yet, every few days as you approach the harvest period shown above, give the pears a "lift test". Put your index finger on the stem and lift the pear from the normal vertical orientation to a horizontal or flat position, with a slight twist. If the fruit snaps off between the stem and the twig, the pears are ready to strip from the tree. If you have to wrench off the fruit either breaking the twig or the fruit stem, the fruit is probably not ready. In larger trees, fruit growing in the top often ripens earlier than fruit in the shaded interior.

Certain late ripening pear varieties such as Anjou, Bosc and Comice, may not ripen properly if just picked off the tree and allowed to ripen normally. These varieties, particularly Anjou, need 3-4 weeks of storage at 32-45 degrees Fahrenheit in the refrigerator or possibly in a root cellar. Some kind of wrapping to reduce shriveling is a good idea.

Asian pears? These are easy since they ripen on the tree. Simply sample them from time to time as they ripen from greenish to various shades of yellow or orange. When they taste good, pick them. You don't have to harvest them all at once, but if they are left on the tree too long, they may develop a "wine," taste you may not like.

Fruits which do not ripen after picking: blackberries, blueberries, cherries, grapes, plums, raspberries, strawberries, and watermelons. Fruits which do ripen after picking: apples, apricots, peaches, and pears.

MESSAGE FROM OUR PRESIDENT

Mark Youngs, Seattle Tree Fruit Society

We have three young Jonagold apple trees in a trellised fruit tree row spaced three feet apart which looked identical when planted. Now one is beautiful and bearing fruit, one looks good, but the middle one looks terrible. This ugly little tree has been warned that if it does not shape up it will be replaced! (I also tell my hens that an egg a day keeps the hatchet away). We plant and care for our orchards with great expectations, but ultimately individual trees have variable results.

The point is we all want whatever we propagate to be healthy and productive. The same holds true for any organization, including WCFS. The next board meeting is September 13, 2008. If you have any questions or concerns, please forward them to your local chapter president. I also want to encourage all of us to attend local chapter events and consider attending other chapter events as well. These should all be posted on the WCFS website by the local chapters.

While attending our Seattle chapter meeting, I was impressed by the artistic touch of Lori Brakken displayed in her yard plantings. Tending to be a linear or block planter, her garden has inspired me to plan my future plantings so that they integrate better together. We also attended a Vashon chapter meeting at the Norton's house and learned how to keep cherries on G5 rootstock at eight feet maximum height. This information, along with observations at the WWFRF display garden, has me redesigning the way I grow cherry trees. It is easy to go on and on about the display garden, but you need to experience this for yourself.

Aronia juice sweetened with Stevia was another treat provided at the Norton place. Perhaps I won't let the birds have our Aronia berries this year! I am eager to hear all of your adventures also, perhaps you could send them to the Beeline.

Mark Youngs, President WCFS

About WCFS

Western Cascade Fruit Society (WCFS), formerly Western Cascade Tree Fruit Assocation (WCTFA), was founded in 1980. It's 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. 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.

Dick Tilbury has suggested that each issue should contain a brief boilerplate section explaining what WCFS is, its founding date, purpose and functions. Editors welcome your suggestions to improve this section.

Fast-Spoiling Pear Mystery Solved

Darren Osborne, ABC Science Online, July 15, 2008

As Different as Apples and Pears... After being picked from the tree, pears find it harder to "breathe" than apples, suggests new research.

Pears spoil more quickly than apples because they're out of breath, according to European researchers.

The finding could lead to new ways of storing pears to prevent them from rotting on the way to the fruit bowl.

Pieter Verboven and his colleagues from the Catholic University of Leuven in Belgium and the European Synchrotron Radiation Facility (ESRF) have published the findings in the journal *Plant Physiology*.

After being picked from the tree, apples and pears continue to 'breathe.' To keep the fruit healthy, a minimum level of oxygen must be supplied to all of its cells. If this does not happen, the fruit turns brown.

To understand why pears spoil more quickly than apples, Verboven and his team placed samples of each fruit in the path of a synchrotron beam. The beam was used to create 3D images that have a resolution of one thousandth of a millimeter.

Researchers have hypothesized that apples and pears contain microscopic pathways between each cell, thereby allowing oxygen to pass into the fruit. The synchrotron images revealed that apples contain large, irregular cavities between cells, while in pears the cavities have the shape of tiny, interconnected channels.

They found the voids in apple were often larger than the surrounding cells, and some cells were not connected to voids. In comparison, the voids inside pears were smaller than the cells. Each cell was surrounded by a tight and continuous network of voids.

"It is still unclear how airways in the fruit develop and why apples have cavity structures and pears micro-channel networks," said Verboven. "The micro-channels are so small that oxygen supply to the fruit core is very limited, and cells are quickly 'out of breath' when oxygen levels fall below the safety threshold," he added.

The researchers believe their results provide a better understanding of how the fruit degrades after harvest and explain why pears are more susceptible to decay during storage.

It is hoped the research can also be used in computer models to calculate oxygen concentration in individual cells of fruit tissues.

Submitted by Marilyn Couture, Co-Editor.

Seed Saving and Fermentation

Marilyn Couture, Editor

If your vegetable seeds have a gelatinous resin attached, place them in a small bowl of water. Keep them covered for a week, maybe ten days, and remove the scum on top once or twice. At the end of that time, rinse them thoroughly through a tea strainer and spread them out on a paper towel to dry. That jelly that otherwise glues them together will be gone, and they will dry soft and clean, easily brushed apart. Fermenting is a practical method for dealing with tomato seeds. When dry, place them in a labeled dated Zip Lock bag and refrigerate.

The Fall 2008 BeeLine was produced by Editors Marilyn Couture and Carlyn Syvanen, with input from membership.
Please contribute your articles for our next issue!
Issue Deadlines:
Winter December 15; Spring February 15; Summer May 15; Fall August 15

Email your articles to:
Carlyn Syvanen at: **carlynbee@teleport.com** or to Marilyn Couture at: **couture222@msn.com**

WCFS 20 Year History
By Dick Tilbury, STFS

March 29, 2000, marked the 20th Anniversary of Western Cascade Fruit Society (WCFS), formerly known as Western Cascade Tree Fruit Association (WCTFA). **Dick Tilbury** prepared a History in commemoration of this event. Tilbury and his wife **Marilyn** joined the organization in February 1985. Based on their collection of newsletters and **Ed Lewis'** WCTFA history file, a fairly complete history of the organization exists, except for the initial founding year, 1980.

Dr. Robert Norton is credited with stimulating the establishment of WCTFA. Bob started a tree fruit research program at the Washington State University, Mt. Vernon Research and Extension Station about 1964. His efforts to evaluate and bring attention to tree fruit varieties that could be established successfully in the Puget Sound region and to educate growers in fruit production brought about a revival in growing tree fruit in Western Washington.

WCTFA was Created

"The nucleus of our organization was conceived at a field day at Wax Orchards on Vashon Island in March 1979. Following this a Western Cascade Tree Fruit Meeting was held at Mt. Vernon. "Purpose: This group is being founded to bring together people – commercial and amateur – interested in all phases of tree fruits, culture, processing and marketing. Special attention will be given to such areas as selection of varieties, rootstocks, high density planting, spray programs and cider. We also intend to disseminate information to the general public and to serve as a referral service among members." From 1980, WCTFA produced and distributed Newsletters to inform their membership of events, tours, articles, and reports.

WCTFA Articles of Incorporation were signed by the Secretary of State, State of Wash-ington on June 8, 1981. The initial Board of Directors included **Thomas F. Perkins**, Sedro Woolley; **Robert Sestrap**, Burton; **James R. Anstis**, Everett; **Dalbert Leaf**, Port Townsend; and, **Walter Lyon**, Bothell. The first election was held at **Tom Perkin's** orchard on April 18, 1981 – **Walt Lyon** was elected President, and **Jim Anstis** was elected secretary-treasurer. The Bylaws were published in 1982 and were approved April 24, 1983. There have been many revisions to these by-laws over the years.

WCTFA/WCFS Life Members

"Life memberships were instituted by the board to honor members who have shown exceptional dedication, provided exceptional service to the association and have performed unusual services in promoting the goals of the association." In March, 1986, **Jim Anstis, Ed Lewis, Walt Lyon, John Parker**, and **Bob Sestrap** were honored; and, the following year **Dal Leaf, Emory Leland, Dr. Robert Norton, Gerald Pate, Tom Perkins**, and **Tom Thornton** were added. Twenty-nine people were honored with the distinction of Life Member by 2000.

Fall Fruit Shows

1980-1999 Fruit Shows abounded at Fairgrounds, Cooperative Extension Offices, Pavilions, Tacoma Dome, and U. Washington and Community College Campuses. In the early years these events were well attended and hundreds of cultivars were displayed.

Name Change

After discussion and in order to accommodate and make welcome all types of fruit growers, the name was subsequently changed from Western Cascade Tree Fruit Association (WCTFA) to Western Cascade Fruit Society (WCFS) in 1999.

Nonprofit Status for WCFS

Tilbury led the action for securing nonprofit status for WCFS and for group exemption status for all chapters. It took a two year endeavor to complete the IRS requirements and to update the bylaws. On July 19, 1991, IRS granted group exemption for all chapters.

WCTFS/WCFS Chapter History

North Olympic Fruit Club (NOFC) Chapter. NOFC, founded by **John Parker**, was approved as the first WCTFA chapter May 22, 1982. WCTFA bylaws were subsequently amended to reflect chapter additions and to split membership dues between WCTFA and the chapters. In 2000 the President was **Erik Simpson**.

WCFS 20 Year History (cont.)

Piper's Orchard Chapter. This Chapter was formed in 1985 as part of the Seattle Park Department's Adopt-A-Park program. **Daphne Lewis** and many WCTFA members were volunteers in re-claiming the homestead orchard from blackberries and alder.
Seattle Tree Fruit Society (STFS) Chapter. In the spring 1985 this Seattle-urban Chapter was formed by **Emory Leland**, WCTFA member and WSU Master Gardener.
San Juan Island Chapter. This Chapter formed in 1987 by **Kristan Johnson** and functioned until 1992 when it was disbanded.
Peninsula Fruit Club Chapter. Formed in 1987 by **Don McDonald**, Chapter members were interested in any kind of fruit raising.
Tahoma Chapter. Formed in 1988, This Chapter met monthly at the WSU Extension Research Station in Puyallup.
South Puget Sound Chapter. Fruit enthusiasts from Lewis, Thurston, Mason and Grays Harbor counties formed this Chapter in 1988. It disbanded in 1998.

Historical Ramblings by Tilbury
Mr. WCFS – **Walter Lyon** is the most deserving member for this title. He served as a Charter Board Member, first elected President, and Treasurer. He is remembered for his orchard tours; his collection of fruit varieties; his rootstock coordination for the annual spring meetings; and, his wonderful display of apples and pears for tasting at the Fall Fruit Shows.
Second WCTFA President – Ed Lewis was awarded life membership; served as President; Newsletter Editor; active in the Piper's Orchard Chapter; was one of the first to use orchard mason bees as pollinators; and, was the first person to detect eastside apple maggot infestation.
They Really Don't Make 'Em Like John Parker Anymore – Among his achievements were the founding of the first Chapter, NOFC in 1982. He served as WCTFA President; exhibited expertise in identifying apple varieties; and, organized and conducted the 1986 WCTFA bus tour to the Summerland Fruit Research Station, B.C.

Noted Women of WCTFA/WCFS include:
Daphne Lewis who spearheaded the effort to restore the Piper's Homestead Orchard in Carkeek Park, Seattle.
Helen Zuelow, horticultural instructor at Edmonds C. C., served as WCTFA President and was active in organizing orchard and field tours.
Nancy Jo Cushman, WSU Master Gardener coordinator for Snohomish County, served as WCTFA Treasurer, Secretary, Newsletter Editor, and organized fall orchard tours.
Pat Rothenberg and her husband **Dick**, pioneered orchard mason bee propagation and apple maggot fly trapping; **Pat** served as President of Peninsula Fruit Club and was on WCTFA Board.
Marlene Falkenbury, founding member and President of STFS Chapter.
Evelyn Troughton, served as WCFS Treasurer and Newsletter Editor 1994-2000.
Marilyn Tilbury, active in STFS, assisted with Newsletters, acted as membership chair, and assisted in obtaining IRS nonprofit 501(c) (3) status for WCFS and its Chapters.

The Historian – Dave Battey is credited with writing frequent historical fruit articles for the Newsletter; compiling lists of all fruit varieties displayed at fall fruit shows; and was the first to computerize WCTFA labels in 1984.

Nationally prominent horticulturist – Dr. Chester Schwartze, WSU faculty**,** is credited with developing six different varieties of red raspberries and nine varieties of strawberries; he helped develop strains of fruit that could be used successfully by the frozen-food industry; wrote more than 125 publications on fruit culture and disease; helped organize the Western Washington Horticulture Association and the Pacific Northwest Blueberry Growers Association; and, he received the Wilder Medal of the American Pomologist Society for his hybridizing strawberry research.

Thanks to **Dick Tilbury** for triggering our memory. This is an abstract – for Tilbury's complete colorful historical review, the BeeLine Editors refer you to: http://wcfs.org/.
Marilyn Couture, Co-Editor

Bud Grafting
By Jim Hunziker, Vashon Fruit Club

Bud grafting is the primary type of grafting done during the summer months, and it is one of the easier types to do. In short, this graft is made by inserting a bud from this year's growth under the bark of a young branch of a similar species, then sealing it until the union has "taken". This graft can be used with apple, pear, plum, cherry, apricot, and peach trees.

To successfully bud graft there are a few rules that need to be followed; they are:

1. The bark must easily peel away from the cambium layer ("slip"). In the Northwest this usually occurs from mid-July to mid-August. (This is also the time of year, when working around the base of your trees, it is easy to peel the bark off the trunk with a weed eater or mower.)
2. Select a bud from this year's growth from the donor tree. Look for a "plump", healthy-looking bud. If you will be grafting onto a tree a distance away from the tree you will be grafting onto (with the tree owner's permission), cut a scion from the donor tree. The goal is to keep the bud you will be grafting moist until it is grafted. If you are budding from a tree close by, you should just be able to cut it from the branch on the tree and place your bud graft.
3. Select a branch to graft onto that is 1" or less (although larger branches can be used).
4. To prepare the graft site, cut a T on the branch where you will be placing the bud, facing the direction you ultimately want the bud to grow. The T should not be too deep – it should just go through the bark – and be long enough to accommodate the bud.
5. From the "donor" branch, with a sharp knife, start 1/2 to 3/4 inch below the base of the bud, making a smooth, slicing cut upward that extends 1/2 to 3/4 inch above the bud. The area under the bud should be as flat as possible, so the cambium layers will have good contact. This is what you will be inserting into the T cut on the branch you have previously selected. Cut the leaves from the bud.
6. Gently peel the bark back from the cambium layer (try to not damage the cambium layer). Place the bud directly onto the cambium, with the top of the bud pointing up. Push the bark back down over the top of the bud.
7. To keep this new union from drying out, it must be sealed. Do this by wrapping your grafting tape from just below the bottom of the T to just above the new union, completely covering all cut surfaces (as well as the short stems of the leaves you cut off). There are a variety of budding tapes that can be used. Two common ones used are professional budding tape, or a plastic vegetable bag cut into 3/8" - ½" wide strips. Whatever you use will be removed in 4-6 weeks.
8. The two most common causes of union failure are contamination of either the bud or cambium layer with dirt or drying of the cambium layers of either the bud or donor branch. Keep the cut surfaces clean, washing with water if dirt contaminates them. Try to minimize the time between making a cut and inserting the bud into its new home.
9. Tag your graft so you know what it is in the future!!

If you follow these directions, you should have fun starting to graft. It is important to remember that not all grafts take – even professional grafters have failures, although practice will reduce the number of failures you experience. Good luck! The following web sites are great resources for more information:

http://www.gardening-guy.com/stories/storyReader$461
http://ag.arizona.edu/pubs/garden/mg/propagation/grafting.html
http://www.ext.nodak.edu/county/cass/horticulture/fruit/graft/bud.htm
http://www.ehow.com/how_2051060_bud-graft-fruit-tree.html
Videos:
http://www.youtube.com/watch?v=ovNuOG4ZFjw
http://midfex.blip.tv/file/346153/

Erik Simpson, OOS
Bud Grafting
Clallam County Fair

Photos by Couture

WCFS NEW MEMBERS

Olympic Orchard Society
Joe Rizzo

Peninsula Fruit Club
Dana Berg
Linda Bero
Barb Davis

Seattle Tree Fruit Society
Charterrmember
Marlene Falkenbury

Mike Donahue

South Sound Fruit Society
Barbara Gimenez
Roman and Rosemarie Pitka
Lynn J. Moses
Sandy Moore

Vashon Island Fruit Society

Jay Becker
Bruce & Sarah Chapman
Nancy Giske
Josh Goldfinger
Martin Cieri
Judith Hinderer
Terry Hershey
Frances Hogan
Amy Beth
Toby Holmes
Elizabeth & B.J. Parrish
Mary Alice Sanguinetti
Jan Leonard
James Scott
Maryam Steffen
Bill & Susan Tobin
Melodie Woods

WCFS Life-Time Members

Battey, Dave (Piper)
Boggess, George (Peninsula)
Cushman, Nancy Jo (at large)
Davis, Bill (Seattle)
Donaldson, Paul (Piper Orchard, Seattle)
Falkenbury, Marlene (Seattle)
Jessen, Leonard (Tahoma)
Jones, Ed (Tahoma)
Knudson, Lyle (North)
Lowery, Donald (Peninsula)
Norton, Dr. Robert (Vashon)
Parkman, Charles (North)
Pate, Maxine (North)
Schutt, Norm (at large)
Sestrap, Betsy (Wax Orchards) (at large)
Simpson, Erik (Olympic, North)
Thornton, Tom (at large)
Tilbury (Dick & Marilyn) (Seattle, Vashon)
Troughton, Evelyn (Seattle)
Vanderhoek, Paul, Seattle
Zeppa, Joseph (Seattle)
Zuelow, Helen (at large)

LETTER FROM THE EDITORS

Marilyn Couture and Carlyn Syvanen

The BeeLine will be posted electronically onto our website *www.**wcfs**.org*. Site administrator Patti Gotz announced the addition of most archived newsletters onto the website. She has added a page called "Archives" which is password protected. Once you have entered the password, you can access all of the archived newsletters as well as Dick Tilbury's history. Chapter News will be posted on the website. The WCFS has updated its web site with a new, interactive and dynamic design. Add your comments to articles and information, download the newsletters in PDF format, find new resources, keep current on upcoming events with the new calendar, contribute information and photos.

The BeeLine is our vehicle for communicating with each other. Let us keep it interesting and timely. Send in your articles and news by December 15, 2008 for the Winter edition.

Marilyn Couture and Carlyn Syvanen

WCFS Board Meeting Highlights

The June 14, 2008 board meeting was held at Silverdale Fire Station.

President Mark Youngs brought the meeting to order at 10:10 am.

Board members present were: Mark Youngs; George Moergeli; Hildegard Hendrickson; Henry Carney; Bill Horn; Ron Weston; Steve Vause; Dr. Roger Eichman; Loretta Murphy; Mike Shannon; Jean Williams; Leonard Fuller; Guests: Renae Carnay (Tahoma); Jerry Gehrky (Vashon)

The Board does not have a secretary. Hildegard Hendrickson volunteered to take the minutes.

It was moved and seconded to accept the minutes of the March 22, 2008 Board and Annual Meeting as e-mailed.

Hildegard Hendrickson distributed a copy of the year-to-date financial report as of May 31, 2008.

Website and BeeLine
Some Members are still having difficulty accessing the BeeLine, and there is a need for complete instructions on how to access it. The BeeLine will be restricted accessed by Members Only on the website. Each chapter is responsible for getting the BeeLine to its members who do not have a computer or who want the hard copy. The Peninsula Chapter makes a PDF file of the BeeLine, and then sends it to all of its members

Life-time Memberships Life-Time Members pay no dues to WCFS or to a Chapter. The original intent was that life-time members are only excused from WCFS dues. The By-Laws (Article 2) are ambiguous. Motion: Life-Time members are exempt of all dues. Motion carried with 2 abstentions.

Life-Time members remain members of their original chapter (but are also exempt from paying chapter dues). But it is WCFS's responsibility to take care of its Life-Time members, i.e to make sure they get the BeeLine electronically or as a hard-copy. If a Life-Time Member chooses to join a second (or more Chapter(s), he/she is not exempt from dues to the second (or other) Chapter(s).

Reduction in WCFS Dues
Ron Weston moved, seconded and it was unanimously approved that starting with a member's next dues period, the dues paid to WCFS will be $8.00 per year per member, effective date Jan. 1, 2009.

Meeting adjourned at 11:55am.

The next Board Meeting will be held September 13, 2008 at 10:00 at the Firehouse in Silverdale.

Hildegard Hendrickson, Treasurer & rotating secretary for this Board Meeting.

We look forward to the next column of the MAD SCIENTIST

Roger Eichmann, North Olympic Fruit Society

JAPANESE PLUMS IN SEATTLE

JOHN REARDON, VICE PRES., SEATTLE TREE FRUIT SOCIETY

Why are Japanese plums an ideal fruit tree to plants in Seattle's urban and not-so-urban gardens? Easy to grow, prolific, tasty and relatively low maintenance, that's why. The local favorites seem to be Shiro, a large, juicy and prolific yellow plum, and Methley, my personal favorite. Methley is smaller, equally abundant, with purple skin and red-purple flesh, and is very sweet and early, although all of them ripen by the end of July, sometimes early August. Everyone seems to enjoy the Methley plum..

Japanese plums produce an abundance of fruit as long as there are two or more varieties nearby. The fruit is produced so early they do not need summer watering. When things get really dry around here, they are all done fruiting—very convenient and perfect for an urban yard. Like most other fruits, they like full sun. I have found that they are not too particular about the soil they are planted in, although they are slower growing and less productive in sandy soil.

Currently Japanese plums have few insect pests, but you will find the birds leaving peck marks in some of the ripe fruit. In nutritious soil, such as the clay I have, Japanese plums can grow quite vigorously, which I see as their only potential drawback.

I prune my Japanese plums a lot, while they are growing, spring, summer and early fall. The one I have planted on Bainbridge Island in sandy soil requires very little pruning. The one in clay, in the middle of the lawn, requires lots of pruning. Much of the pruning can be done without tools. Simply break the branches off by hand at the base in the spring and early summer before they harden up. If I have let something go too long and it is large diameter, a lopper or saw works great. My tree has always healed without problems and comes back with lots of vigor. The same pruning rule applies as to most plants. Cut to a branch or leaf bud, give the branches room, and get rid of anything higher than I can reach. I've let the main branches go horizontal about twelve feet out (on each side) at about six and one-half off the ground. The tree takes well to an "open spreading" formation. My Japanese plum combo (it started with four varieties grafted onto the rootstock) produces a lot of fruit that I try to thin by at least 50 percent. When fall comes around it stops growing, the fruit has been harvested in July, and I am done pruning. I have enjoyed an abundant harvest of delicious fruit and am looking forward to my apples and kiwis. We use the plums in a variety of ways, including gifts to friends, having the neighborhood kids sell them, blending them in smoothies (we pit them and freeze the resulting mash). Many people make jellies and jams. I just bought some jam at the farmers' market and it is very good. I am not a canner. Mostly I think these plums are best fresh off the tree. A Japanese plum is a fresh fruit that is well adapted to Seattle's climate of rainless summers.

Order your Japanese plums from one of the excellent Washington mail-order nurseries or graft one yourself at your Chapter's spring scion sale. If you live in an urban area, plant two varieties of Japanese plums or make sure there is another early plum nearby that can pollinate yours. Try Shiro and something else; ask a Chapter friend for suggestions. Mine is a "combo graft" that had four varieties on it. I did not like the way it looked as the different plum varieties have different habits of growth. I also did not like the flavor of one of the plums, so I eventually removed one limb completely, and now it is a three-way plum tree. The other varieties have filled in nicely and the tree looks fine. Branches of different varieties will grow with different vigor and have different leaf characteristics on trees with multiple grafts. Some are vigorous and some slow, one has this leaf, the other has that leaf. Next time I will plant two separate trees so they are prettier.

From Urban Scion Post, STFS, July 2008

Caterpallor (n.): The color you turn after finding half a worm in the fruit you're eating.

Understanding Lichens

By Jeanette Stehr-Green, WSU Clallam County Master Gardener

Common items brought to Master Gardener plant clinics are branches of tree and shrubs covered with lichens. Lichens can be leafy, flaky, or crusty growths that are colored gray, green, yellow, white and even orange. Multiple lichens can grow next to each other creating a patchwork effect. Lichens are actually kind of pretty. But, gardeners often become alarmed when they notice these growths on their trees and shrubs. Typically, the growths have been there for a long time, but the gardener finally notices them for some reason. Gardeners should be concerned about a heavy growth of lichens on their tree or shrub, but not for the reasons you might think.

Lichens are harmless organisms that consist of a fungus and a green or blue-green alga which live in association with one another in a symbiotic relationship. The alga converts sunlight and carbon dioxide into food for the fungus. The fungus, in return, protects the alga from drying out. For lichens to thrive, they need sunlight and moisture. Lichens do not have roots, although they do have structures (rhizines) that allow them to attach to trees, shrubs, rocks and the ground. They do not draw nutrients or water from the plant to which they are attached. They gather water and nutrients from the atmosphere through rain and dust.

Excessive lichen growth on a plant is a sign, but never the cause, of poor plant health. Sickly plants tend to lose leaves resulting in a more open canopy. The more open canopy allows increased penetration of sunlight into the plant and subsequent lichen growth. If you see lichens growing on your tree or shrub, you should consider what might be lacking in that plant.

Are the growing conditions right for the plant? Does it receive enough light and water? The latter can be a problem in our dry summers. Does the soil need fertilizer or the addition of lime or an acidifying agent such as sulfur or organic matter? Is there a disease inhibiting the growth of the plant such as a fungus or an insect?

A clloser look with a hand lens might help. Control of lichens is not necessary.

You can remove the lichens from your plant by hand or with a stiff brush, but they will probably re-appear if you do not determine the cause of the plant's decline and correct it. Improving the health of the tree or shrub should increase the size and number of leaves, decreasing the amount of light penetrating to its limbs and branches. With healthy leaf growth, the lichens will gradually disappear.

Lichen on a Fruit Tree

Lichens play a key role in the web of life. For example lichens:

- Are often the first species to colonize newly exposed surfaces.
- Stabilize the soil by forming crusts over the surface.
- Contribute to the formation of new soil by excreting weak acids that help break down rocks and wood, thus paving the way for other species to invade the area.
- Along with mosses and liverworts, regulate the moisture in the environment by absorbing large quantities of water from fog, dew and rainfall and providing it back as humidity, aiding in the growth of other vegetation.
- Some contribute to the nitrogen cycle by converting nitrogen in the air into a form that can be used by plants when the lichens die and decompose.
- Provide shelter and nesting materials for animals and birds. Provide winter forage for deer and small mammals.

What isn't to like about lichens?

Reprinted with permission from WSU Clallam County Master Gardeners
Marilyn Couture, Editor

Salt Spring Island

The 10th Annual Salt Spring Island Apple Festival
Theme: Celebrating Red-Fleshed Apples
THE APPLES OF THE FUTURE
Growing over 350 varieties of apples organically.
Sunday, Sept 28, 2008
9 AM to 5 PM
Fulford Hall plus 15 farms.
A chance to visit Apple Heaven
while still on earth!
http://www.saltspringmarket.com/apples/

Salt Spring Island Sept. 28

Reservations are closed for this year's WCFS excursion to Salt Spring Island. There is a waiting list for last minute cancellations.
Contact:
Judi Stewart" js@olympus.net

Correll Cider Press, Just for You

STFS has an unused cider press made by Bob Correll in Oregon. At his shop it costs about$750.We tried for bids at our own fairs but don't have the foot traffic of the Puyallup Fair. There is a long wait if you order directly from Mr. Correll. We have it now. To break even, the club needs a bid of $900. Offers above and below will be considered. Drop us a line at:

seattletreefruitsociety@hotmail.com.
We'll keep the bidding open through our Oct. 18 meetng. We will deliver free of charge in the greater Seattle area or you can pick it up.

Leonard Fuller, President STFS

Western Cascade Fruit Society's 2007 Gelato Tour on DVD

Tour northern Italy orchards and vineyards with Dr. Bob Norton, members and friends of WCFS. Send for your narrated, full color 60 minute DVD audio tour and relive the trip.
Send check for $13 for first DVD and $11 for additional copies. Mail your check to: Judi Stewart, 1170 Beckett Point, Port Townsend, WA 98368

The WCFS Forum is a private email list for members only. Find out about a certain cherry, ask how to spray or prune, offer scionwood or come by and pick up a bag of apples. Send me an email and I'll add your name to the WCFS Forum.

Judi Stewart js@olympus.net

Calcium Foliar Spray for Cherries, Apples and Pears

Marilyn Couture, Editor

Extracted from **NUTRIENT SPRAYS** *by Dr. Frank Peryea & Dr. Kathleen Willemsen,* WSU-Tree Fruit Research & Extension Center
http://www.tfrec.wsu.edu/Horticulture/nutspray.html

Fertilizers can be applied to fruit trees as nutrient sprays. Although only limited amounts of nutrients can be absorbed by the tree through foliar application methods, such spray applications can be timed for maximum effect in overcoming or preventing certain mineral deficiencies or to enhance tree performance and fruit quality.

Caution: Nutrient sprays can cause severe injury to fruit, leaves, shoots and buds. Their use should be considered as hazardous. Do NOT apply unless a deficiency or low level of a specific nutrient is known to exist and has been confirmed by visual symptoms or tissue tests. Use dilute sprays and as low a rate as possible. Concentrates can cause serious injury. *Note:* Nutrients should NOT be combined with pesticides unless permitted on the product label. Use of products not labeled for nutrient sprays may result in crop injury.

Calcium: Calcium sprays applied to fruit during the growing season may reduce the incidence of certain fruit disorders such as bitter pit of apples, cork spot and alfalfa greening of Anjou pears, and cracking and firmness of cherries. Calcium may also improve fruit quality.

Calcium chloride is most commonly used. Use either food-grade product or specifically formulated for use as a foliar spray. Construction-grade calcium chloride impurities can severely damage fruit. Calcium chloride can cause leaf burn and fruit injury, and has limited compatibility with pesticides. Calcium nitrate has also been successfully used to reduce bitter pit of apple; however, it is more likely to cause fruit injury than calcium chloride. Calcium nitrate sprays applied at the rates and frequencies for bitter pit control will not improve green color of green apple varieties and may produce a duller red color in red apple varieties. The practice of using calcium nitrate during the first half of the season then switching to calcium chloride for the latter half has not been tested in Washington but may have merit. Foliar sprays of calcium sulfate may increase bitter pit and should not be used. Calcium-containing chelates and organic complexes have not been found to be more effective than calcium chloride. Use only chelates and organic complexes that are specific for foliar application to tree fruits.

Caution: The risk of calcium chloride or calcium nitrate causing fruit russett increases with increasing number of applications, high rates, and when applied at less than 100 gallons per acre. The possibility of injury is highest where droplets coalesce and pool on the lower part of the fruit. The hazard is reduced by using low rates and dilute sprays. Avoid spraying calcium chloride or calcium nitrate under slow drying conditions or at temperatures above 80 to 85ƒF. Fruit size of cherries may be reduced by calcium chloride sprays.

Bitter pit of apple is a physiological disorder often related to low calcium levels. Five to eight applications of calcium chloride or calcium nitrate applied at periodic intervals from early June through late August will significantly reduce the risk of bitter pit development. Effectiveness varies with variety, location and growing season. If severe bitter pit is common, more frequent applications may be required. Calcium sprays are not required in orchards that have not produced fruit with bitter pit.

Cork spot and alfalfa greening of Anjou pears may be reduced by foliar calcium chloride sprays. Pears are more susceptible to calcium injury than are apples. Do NOT use sprays of calcium nitrate on pears. Apply no more than 4 lb. calcium chloride dissolved in 400 to 800 gal. per acre (800 gal. rate is for larger trees). Make 4-5 applications at 3-week intervals from June-Aug.

Fruit firmness and rain cracking of cherries are influenced by calcium chloride sprays. three or more sprays applied at weekly intervals before anticipated harvest are likely to reduce fruit softening, postharvest injury and minor rain cracking.

Table for foliar applications of calcium during the growing season.

Spray Guide recommendations:

Nutrient	Alternate materials or combinations	Amount per acre	Amount per 100 gallons (dilute sprays)	Remarks and restrictions
FOLIAGE - After bloom and before harvest				
Calcium (cherry fruit firmness and reduced cracking)	1. calcium chloride, dry, 34-36%Ca	8-12 pounds	2-3 pounds	Limited effect and can reduce fruit size. Three or more applications are needed at weekly intervals before anticipated harvest. See text.
	2. calcium chloride liquid, 12% Ca	4 quarts	1 quart	
Calcium (bitterpit of apple)	1. calcium chloride, dry, 34-36%Ca	6-8 pounds	1.5-2 pounds	All products - Apply five to eight applications from early June to late August. Dilute sprays are most effective. Can cause fruit injury. See text.
	2. calcium chloride liquid, 12% Ca	4 quarts	1 quart	
	3. calcium nitrate liquid, 6-11%Ca	4 quarts	1 quart	
Calcium (alfalfa greening of pear; cork spot of Anjou pear)	1. calcium chloride, dry, 34-36%Ca	6-8 pounds	1.5-2 pounds	Both products - Apply four applications from early June to August. Dilute sprays are most effective. Can cause fruit injury. See text.
	2. calcium chloride liquid, 12% Ca	4 quarts	1 quart	

For the complete article, please refer to Nutrient Sprays, contributed by Dr. Frank Peryea and Dr. Kathleen Willemsen, WSU – Tree Fruit Research & Extension Center, 2000.
Nutrient Sprays article provides detailed information on deficiencies and on specific nutrients Boron, Calcium, Copper, Iron, Magnesium, Urea (N), and Zinc. The Spray Guide explanation of recommendation includes: *Dormant and Delayed Dormant*; *Prepink or Pink* (Apple), *First white/full white* (Pear); Foliar – *After bloom and before harvest*; and *Postharvest – Apply after harvest and while leaves are still green and active*. Washington State University, Tree Fruit Research and Extension Center 1100 N. Western Ave., Wenatchee WA 98801, phone: 509-663-8181

Dutch Oven Cooking

Erik Simpson, OOS

If you are baking or roasting you will want to have about 2/3 of your coals on top of the oven. If you are frying you will want 2/3 on the bottom. When cooking a recipe that will rise or expand (such as eggs or cake) remove the coals on the bottom after 2/3 of the cooking time. This will prevent the bottom from burning and help the food rise as it cooks from the top. The chart below tells how many briquettes to use for a desired temperature. As a rule of thumb to achieve 325 degrees use the following method. Take the size of the oven and take that number of briquettes less three for the bottom and that number plus three for the top. For example with 12" oven you would place 9 briquettes on the bottom (12-3) and 15 briquettes on the top (12+3).

Temperature	8" Oven		10" Oven		12" Oven		14" Oven		16" Oven	
Degrees F	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
300	10	4	12	6	14	8	16	10	18	12
325	11	5	13	7	15	9	17	11	19	13
350	12	6	14	8	16	10	18	12	20	14
375	13	7	15	9	17	11	19	13	21	15

Note: Adding one set of briquettes (one on top and one on bottom) will raise the temperature of the Dutch Oven approximately 25 degrees. Or conversely removing one set of briquettes will lower the temperature by 25 degrees.

Dutch Oven Fruit Cobbler

From American West Dutch Oven Cooking
Submitted by Erik Simpson, OOS

14" Dutch oven
18-20 top coals
11 bottom coals
1 cup butter
4 cups flour
½ tsp. salt
2 Tbs. baking powder
4 Cups sugar
3 Cups milk
2 quarts of fruit of choice with juices – especially delicious made with **cut up peeled pears**
dash of cinnamon and sugar

Mix all ingredients, except fruit, cinnamon and sugar, to make batter and pour into the ungreased Dutch oven. Pour fruit with juices over the top of the batter and sprinkle with cinnamon and sugar (DO NOT STIR). Cover and add all coals to top and bottom. Bake for 50-60 minutes, rotating oven and lid in opposite directions every 10 minutes to prevent burn spots. Serve hot or cold with ice cream or whipped topping.

Los Rios Apple Crisp— by Del Simpson

From Sunset Magazine, September, 1997
Note: NOT recommended for Dutch Oven
8 C peeled, cored, and thinly sliced apples such as Gravenstein, Granny Smith or Winesap.
1/2 C granulated sugar
3/4 C plus 2 Tbs. all-purpose flour
2 tsp. ground cinnamon
1 C regular rolled oats
3/4 C firmly packed brown sugar
1/2 C butter or margarine, cut into 1/2 " chunks
3/4 C chopped pecans
Vanilla ice cream (optional)

Mix apples with sugar, 2 Tbs. flour and cinnamon.

Combine rolled oats, brown sugar, butter, and 3/4 C flour. Rub with your fingers until butter pieces are no longer distinguishable. Stir in chopped pecans. Sprinkle topping evening over apples.

Bake in 9" square baking dish and bake in middle of 350 degree oven until apples are tender and top is brown, 45 min. to 1 hour. Top with ice cream or non-dairy topping.

Western Washington Fruit Research Foundation
Fall Field Day/Open House
October 11—9:00-12:00

*Apple ID: Graduates of Systematic Pomology
*Anthracnose Report: Chang-Lin Xiao (TFREC)
*Sample the Harvest: Apples & Pears 1:00

Always Check this Website Before Attending
http://www.wwfrf.org/html/main_frame.htm

Event is held at WSU, Northwest Washington Research and Extension Center, 16650 State Route 536, Mt. Vernon, WA

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