the BeeLine

Volume 26 Fall 2006

Newsletter of the Western Cascade Fruit Society

Inside:

www.wcfs.org

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

PERMACULTURE AND FRUIT TREE GUILDS

by Chuck Estin, North Olympic Fruit Club

Permaculture is a subject that is becoming increasingly popular now, as the price of gas rises and folks become more interested in growing their own food locally rather than transporting it from far parts of the globe.

Permaculture (permanent agriculture, leading to permanent culture) in its simplest form is a design methodology to help us realize more sustainable human communities. It is a harmonious integration of people into the landscape in such a way that the land grows in richness, productivity and aesthetic beauty.

A thriving and rapidly growing international grassroots movement, permaculture is being taught and practiced in every country on the planet, in both rural and urban environments. Its straightforward and elegant approach to the design of human habitat is inspiring a new generation of visionary and capable leaders in edible landscapes, natural building, alternative energies, water catchments, animal husbandry, agro-forestry, soil building and the arts. It holds a reverent appreciation for nature, and strives to empower people to connect to the ecosystem in which they live, understanding that we are necessary and active members in that community of people, plants, animals, fungi, water and air.

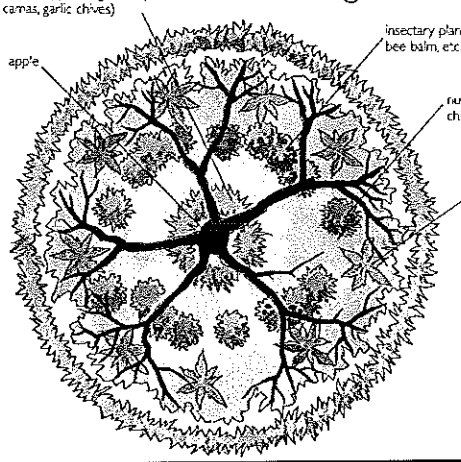
Permaculture draws on patterns of nature as a means for achieving more efficient yields from perennial fruits, nuts and vegetables.

One example of an easily observed and easily applied lesson from nature for your home garden is the concept of guilds. A fruit tree that is planted with shrubs, perennials, bulbs, and groundcover will be healthier than one that is planted alone. The tree will benefit from the plants that provide mulch, shade, nutrients, attract pollinators and block the wind, while eliminating weeds and pests.

The word "guild" refers to an association of people with common aims and interests. Typically we think of guilds as groups of merchants and artisans from the medieval time period. Plant guilds are associations of plants working together for the overall health of the garden, similar to companion planting. The plant guild, however, is designed around one central plant, usually a fruit or nut tree, with other plants selected to minimize maintenance.

In a forest, trees, shrubs, vines, groundcover, and bulbs all grow together. A fruiting shrub like black currant provides the under story, taking advantage of the protection and growing space underneath the tree. Comfrey is planted in a ring, as a ground cover to reduce root competition from grass and provide a source of nitrogen in its leaves. The comfrey can be regularly cut to create mulch under the tree. Flower bulbs planted inside the comfrey circle provide early spring colour, attract bees and repel weeds.

A small vine, like raspberries or sweet peas, can be grown up the fruit or nut tree. Plant the vine inside the comfrey circle with the bulbs. Grapes or kiwi vines can climb up larger trees.



A typical apple-centered guild. Below the apple tree, a ring of attractive and grass-suppressing bulbs encloses flowering and food-producing plants that also provide mulch and habitat for beneficial insects. The apple tree is nurtured by this community of multifunctional plants, making less work—and more food and flowers—for the gardener.

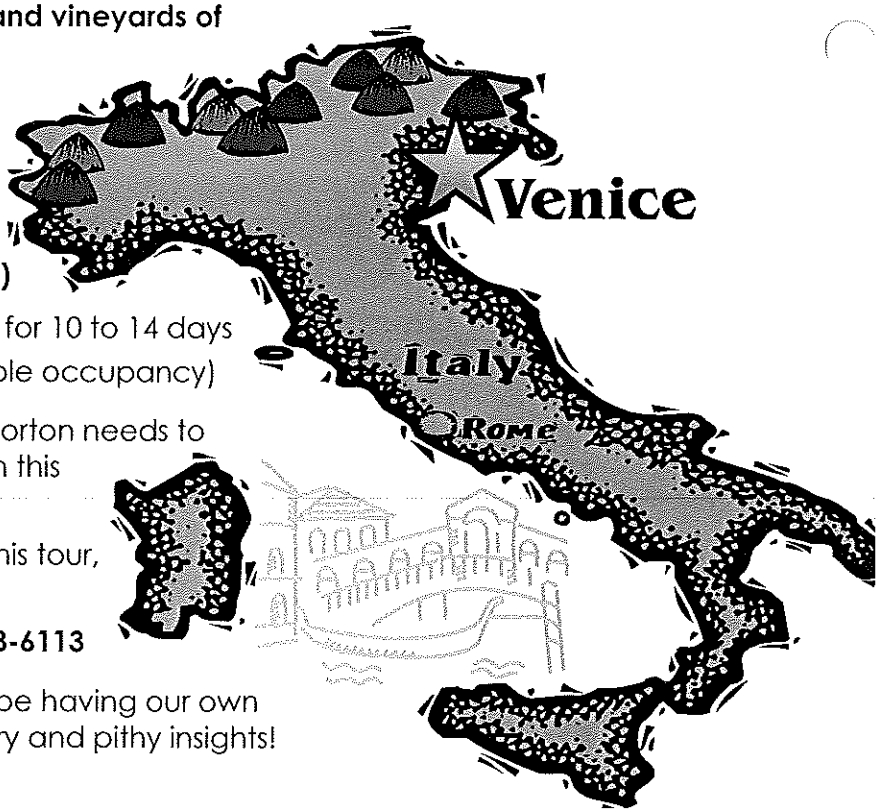
Illustration from Gaia's Garden: A Guide to Home-Scale Permaculture – Toby Hemenway

TOUR NORTHERN ITALY!

Join WCFS members on a tour of orchards and vineyards of the Po River valley led by Dr. Bob Norton.

Trip includes:

- **Tours of apple & pear orchards**
- **Visits to research facilities**
- **Sight seeing in Venice**
- **Side trips to the Alps & Austria (possibly)**



Proposed dates: mid-to-late September 2007 for 10 to 14 days
Cost: $3,000 approximately per person (double occupancy)

Currently in the initial stages of planning, Dr. Norton needs to determine whether there is sufficient interest in this proposal so that he can firm up the details.
If you would be interested in participating in this tour, please contact him without delay:

mauryapples@juno.com or call 206-463-6113

Of course, one of the highlights of this trip will be having our own inimitable fruit expert along for his commentary and pithy insights!

WCFS COMING TO SNOHOMISH COUNTY

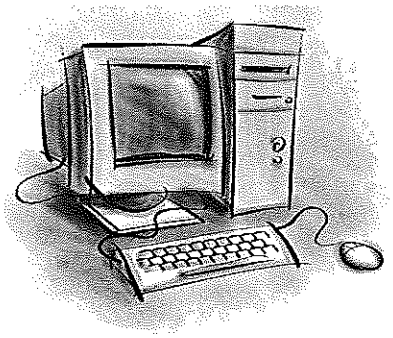
Snohomish County will very shortly have its own WCFS chapter. Covering 2,090 square miles, Snohomish County is the 13th largest county in total land area in Washington State. Puget Sound is to its west, Skagit County to the north, Chelan County is east and King County is to the south. 5% of Snohomish land is in agriculture. Snohomish County has 251 acres in orchards.

As a starting point, we're asking all WCFS members living in Snohomish County for comments and suggestions in deciding where to meet. Please get in touch with Judi Stewart. Her contact information is listed elsewhere in this issue on the 'Board Members' page. Please send Judi contact information for anyone who might be interested in this new chapter. Judi will get in touch with all WCFS members living in Snohomish County concerning the initial meeting.

Acreage in Orchards by County:

County	Acres	County	Acres
Skagit	438	Clallam	121
Whatcom	350	Thurston	95
Snohomish	251	Island	77
San Juan	178	Kitsap	57
King	178	Mason	53
Pierce	136	Jefferson	51

Members find that a mailing list is the best way to communicate between meetings.



Please subscribe to the **WCFS Forum** in order to keep current with any information. Go to our website, **www.wcfs.org** and click the link that says **Fruit Forum** or send an email to **js@olympus.net** with the word **subscribe.**

MESSAGE FROM OUR PRESIDENT
by Ron Weston, Vashon Island Fruit Club

How can Western Cascade Fruit Society better serve our diverse and growing membership? That's a question that has been much on my mind recently. If you're like me, you probably are a member of WCFS (and reading this issue of the Beeline) because it was part of the deal when you became a member of your local chapter. Most of our contacts with other fruit growers are through the events of our local chapters—so what's the value of WCFS to our membership? Is it simply the Beeline? I wonder if there isn't more that we should be doing to more fully realize the potential value of WCFS. What could we do to provide a more tangible sense of benefit to our members? What do you think?

Should we encourage more involvement across chapter lines when we have events that may be of interest to other neighboring chapters? What about more joint field trips like the recent visit to Tom Wood's growing operation in Chehalis or the Salt Spring Island day trips of years past? Or would you be interested in more ambitious trips, i.e. to Europe?

How about greater emphasis on sharing the wealth of knowledge residing within WCFS across our organization? The experienced growers among us are a priceless treasure and invaluable resource to the entire organization, and maybe we could do a better job of sharing them. Increasing the level of participation in the WCFS forum is one way of accomplishing that goal, but participating in other chapters' events may be another more personal and satisfying way of spreading that expert knowledge and enthusiasm.

It is up to you, our members, to keep us on track. Let us know what you'd like to see us become—or to keep things the same, if that's your view. Page 5 has a list of all the Board members of WCFS, some of whom are undoubtedly fellow members of your local chapter. Give them some feedback on what you like or don't like about WCFS, or call or write me. I am interested in hearing some ideas about how we're doing and how we could be better.

Since this is my first column in the Beeline as President, I think it might be helpful for readers to know a little bit about my background as a fruit-growing enthusiast. My home on Vashon Island is on roughly 20 acres of heavily forested land. At one time several acres of that land were planted with apple trees, but virtually all of them were overtaken by the forest and died out before we arrived in the mid-80's. The most successful original planting on our property is a large raspberry patch that has survived much neglect over the years and continues to produce bumper crops. The success of those berries has gone a long ways in soothing our disappointments with some of our other fruit-growing efforts. We've established plums, kiwis, pears, cherries and a variety of other fruits in the last several years but are still working on mastering the formula for success. Our major challenges are topography, large fir trees and pest/disease control. In other words, we're like many other would-be fruit growers, struggling to learn what it takes to succeed.

Although I spent several years in the early 80's as a member of the predecessor to Western Cascade Fruit Society, I was absent from the region for most of the intervening years and so I am still "learning the ropes" of our organization. However, I am very pleased to have such knowledgeable and able companions on the WCFS Board available to help me come up to speed and to further the evolution of WCFS. Thanks to the efforts of the volunteers who serve on the Board, our organization's future looks bright indeed. In particular, I want to acknowledge the specific service of Judi Stewart, who has been a stellar leader these past several years. I look forward to her continuing contributions as a Director on our Board.

WCFS NEW MEMBERS

Peninsula Fruit Club
Stan & Lois Barker
Jeanne Dykstra

North Olympic Fruit Club
Janet Hobart
Mary Robson

Olympic Orchard Society
Brian Burns
Don Dieckhoff
Myrna Dieckhoff
Betty Robertsen
Lowell & Carol Wickersham

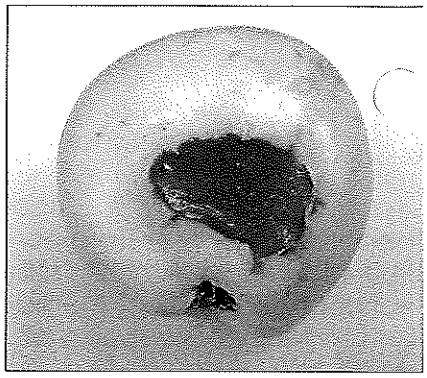
Seattle Tree Fruit Society
Terry Barr
Anne Cady
Sarah Cooke
Jeff Dixon
James Kussy
Kathy Mendleson
Don Meyers
Ron Ricks
Richard Rust
June Schumacher
Pat Stimac
Jerry Suder
Ted &Tin Victa
Liz Vonckx
John Werner

South Sound Fruit Society
Emmi Wood

Tahoma Chapter
Betsy Shultz

SUNBURN

by Jean Williams, Peninsula Fruit Club



Do you realize your plants can get sunburned? This past June we had exceptionally hot weather for so early in the year. Coupled with the heat, we also had very low humidity and fairly strong winds. This combination of factors can lead to problems with sunburn. Your pruning practices, plant vigor, age of new growth, watering practices and type of soil can also influence the probability of sunburn.

For example, my plants are growing in very loose, sandy soil. On a hot, dry, windy day even with the irrigation system on, things wilt because they can't take up the water fast enough. Without proper hydration, sunburn occurs easier. I had some fairly severe sunburn on the newest growth of my raspberries and even on the berries themselves. The leaves look scorched, and the berries had white but otherwise normal druplets on the sunny side.

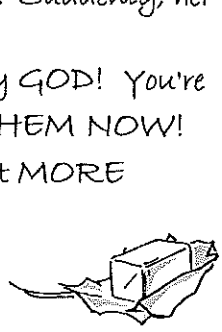
Larry E. Schrader, Professor of Plant Physiology at WSU, has done quite a bit of research on sunburn on apples. He has discovered that anytime the temperature is over 86°F, there is the potential for sunburn. According to his research, the temperature of the skin surface of fruit can actually be at least 18°F. and up to 29°F. above ambient temperature on a clear day in Washington.

There are two types of sunburn in apples. The less serious type results in a yellowing or bronzing of the sun-exposed area. Professor Schrader's research has shown that this occurs when the skin surface temperature reaches 115° to 120°F. in the presence of sunlight. The more serious type of sunburn actually causes the cells in the peel to die in the sun-exposed area. This happens when the peel temperature reaches 124° to 128°F.

So remember that your plants can get sunburned too. Keep them well watered in the hot weather, and if you have consistent problems, try to give them some evaporative cooling or shade cloth or even spray with a particle film like Surround.

A wife was making a breakfast of fried eggs for her husband. Suddenly, her husband burst into the kitchen.

"Careful," he said, "CAREFUL! Put in some more butter! Oh my GOD! You're cooking too many at once. TOO MANY! Turn them! TURN THEM NOW! We need more butter. Oh my GOD! WHERE are we going to get MORE BUTTER? They're going to STICK! Careful...CAREFUL! I said be CAREFUL! You NEVER listen to me when you're cooking! Never! Turn them! Hurry up! Are you CRAZY? Have you LOST your mind? Don't forget to salt them. You know you always forget to salt them. Use the salt. USE THE SALT! THE SALT!! THE SALT!!!"



The wife stared at him. "What in the world is *wrong* with you? You think I don't know how to fry a couple of eggs?"

The husband calmly replied, "I wanted to show you what it feels like when I'm driving."

WHAT'S THE DIFFERENCE BETWEEN A 'OGANBERRY AND A BOYSENBERRY?

by David Conners, Seattle Tree Fruit Society

On July 14, I was invited to speak to the Vashon Island Fruit Club about my Belgian Fence of espaliered apple trees. The weather was lovely and the barbecued salmon dinner was superb. Thanks to Dr. Bob Norton and Ron Weston for inviting my wife and me. For a different but interesting appetizer table, they asked the invitees to bring a jar or two of some homemade preserves which were displayed on a long table and served with crackers. Lots of delicious jams, jellies and wonderful preserves were available for tasting. When Dr. Norton and I were both noshing near the table, someone turned to Dr. Norton and asked, *"What's the difference between a Loganberry and a Boysenberry?"*

Now Bob and I knew that they were both Raspberry x Blackberry crosses, but the specifics eluded us.

This led me to do some research on the subject. What follows is similar to what Paul Harvey calls "the rest of the story."

Of the two, the Loganberry actually came first, and was propagated – accidentally, no less – by James Harvey *Logan* (1841-1928), who was both a horticulturist d a jurist in Santa Cruz, California.

About 1880 or 1881, Logan, who had been dissatisfied with the existing varieties of blackberries, attempted to cross two different cultivars of blackberries in hopes of producing an improved blackberry cultivar. Like most gardeners, Logan did not have oodles of extra space in his garden. Consequently, the blackberry plants were inadvertently planted too close to an old variety of red raspberry plant that was also growing in his garden. Because the blackberry and raspberry plants flowered and fruited at approximately the same time, they cross-pollinated one another and produced hybridized berries. Believing all the while that he was producing only new blackberry varieties, Logan carefully gathered the seeds and planted them. The seeds grew into fifty seedlings, and 49 of the 50 produced the expected product: blackberries. But one was different from the others in color, shape, size and taste.

The vines or canes of the Loganberry grow entirely unlike either the blackberry or raspberry. They trail or grow upon the ground more like the dewberry. They are exceedingly strong growers, each shoot or branch reaching a growth of eight to ten feet in one season without irrigation, the aggregate growth of all the shoots on one plant amounting to between forty to fifty feet.

The canes or vines are very large – without the thorns of the blackberry bushes – but have very fine soft spines, much like those of raspberry bushes. The fruit is as large as the largest size blackberry, is of the same shape, with globules similar to that fruit – and the color, when fully ripe, is a "dark bright red." It has the combined flavor of both berries, pleasant, mild, vinous, delightful to the taste and peculiar to this fruit alone.

Over time, this different variety came to be known as the Loganberry.

While some claim that the true origin of the Loganberry remains a mystery since Logan's time, crosses between the cultivars of raspberry and blackberry in question have confirmed the parentage of the Loganberry.

The Boysenberry was propagated some four decades later in Napa, California by a botanist named Rudolph *Boysen* (1895-1950) – who, like Logan before him, also desired an improved berry. Perhaps encouraged by the success of the Loganberry, Boysen began experimenting with three different berries: blackberries of course, red raspberries, and yes, Loganberries. The most well known product of Rudolph Boysen's berry experiments was a large reddish-purple berry with a unique taste.

As promising as it was, the berry that Boysen discovered in 1923 did not become well known until the next decade, when it was commercialized by Walter Knott, long after Boysen had sold his farm.

Though Rudolf Boysen had moved on, the lore of his delicious berry remained. Eventually, the lore piqued the interest of a USDA horticulturist named George Darrow – who began the dual search for the farm that had belonged to Rudolph Boysen, and for Boysen's delicious berry.

Darrow sought the assistance of Walter Knott (1899-1991), whose knowledge of berries was well known in the region long before his berry farm became famous. When these two men searched the old Boysen farm, all they found were several frail vines barely surviving in a field full of weeds. With very little to lose and much to gain, they nevertheless transplanted the scraggly plants to Knott's farm, where he nurtured them back to fruit-bearing health.

In an effort to stave off Depression hardships, the Knotts began selling the berries at their farm's fruit stands in the 1930s, and soon noticed that people kept returning to buy the large tasty berries. When asked what they were called, Walter referred to them simply as "Boysenberries" (after the berry's originator). As their popularity continued to grow throughout the region and beyond, Mrs. Knott began to make and sell preserves and pies from the berry that would become the signature fruit of Knott's Berry Farm.

Today, all Boysenberries in the world can trace their roots to Knott's Berry Farm.

So now you know "the rest of the story."

REAL GARDENERS GROW WITHOUT MIRACLES!

Miracle-Gro® is a synthetic fertilizer that contains ammonium phosphate and several other chemicals that can be toxic to your soil and plants. It is prohibited from use in certified-organic farming.

Here's what soil expert Robert Parnes, Ph.D., says in his book *Fertile Soil:* [Ammonium fertilizer] acidifies the soil, and thus it is probably more harmful to soil organisms than any other nitrogen fertilizer. The application has to be timed carefully and placed properly to avoid burning the leaves and roots.

In addition, ammonium tends to inhibit the release of potassium. Ammonium fertilizers are deliberately manufactured to be spread at high application rates in order to obtain maximum yields with no regard to adverse effects on the soil. Probably nowhere is the conflict between the mass production of food to feed the world and the preservation of the soil more obvious than in the confrontation over the use of either ammonium fertilizers or liquid ammonia.

And there's more: long-term studies at the University of Wisconsin have shown that acidic chemical fertilizers are causing serious, permanent damage to our soils. Usually these fertilizers are also highly soluble, so they leach away and pollute our water systems, too.

Soil fertility authority Garn Wallace, Ph.D., of Wallace Laboratories in El Segundo, California, points out that Miracle-Gro® contains muriate of potash, which contains excess chlorine that will burn plants and inhibit the uptake of nitrogen. He also warns that products such as Miracle-Gro® often contain unsafe levels of zinc and copper that will be toxic to soil life.

And if all that's not enough to convince you to avoid this stuff, consider this: you have to mix Miracle-Gro® with water and apply it every *7 to 14 days!*

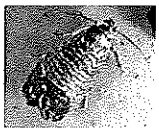
If you opt to fertilize organically, on the other hand, all you have to do is mix a ½-inch layer of grass clippings into your beds before each crop. As the grass decomposes, it will improve your soil's texture and stimulate microbial life and help prevent disease, all while releasing plenty of nutrients to feed your plants.

[For full details on organic fertilizers, see How to Fertilize Your Garden, in Organic Gardening, July/August 2000. - Kathy Baumgartner, Fremont, Michigan]

SYRUP MADE FROM THE POMEGRANATE SEEDS IS KNOWN AS GRENADINE.

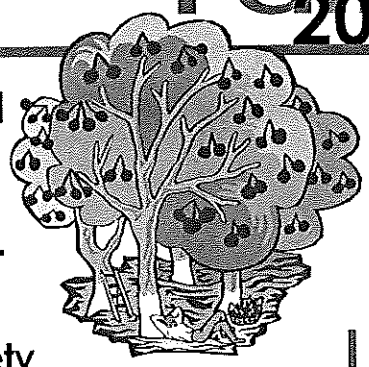
THE HAPPIEST PEOPLE DON'T NECESSARILY HAVE THE BEST OF EVERYTHING; THEY JUST MAKE THE BEST OF EVERYTHING THEY HAVE.

THE FIRST SHERBET WAS MADE FROM SNOW MIXED WITH POMEGRANATE JUICE.



CODLING MOTH BROTH

To catch codling moths, use a mixture of 2 parts vinegar and 1 part molasses. Place this mixture in a tin can and hang it in the apple tree. Clean out the moths and plac more mix in the can when needed.

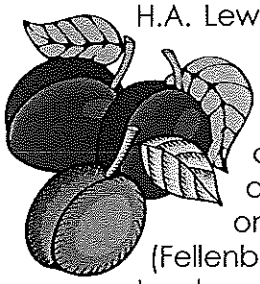


HISTORICAL SEARCH FOR PRINLEW PLUM, MULTNOMAH APPLE AND LEWIS APRICOT

by Marilyn Couture, Olympic Orchard Society

My great grandfather, H. A. Lewis (1862-1959) developed the Prinlew plum, Multnomah apple, and Lewis apricot beginning in the 1920s, and sold them commercially. Through our recent move to Sequim on property with a small orchard and our association with Erik Simpson of the Olympic Orchard Society, I was prompted to research my great grandfather, pomologist and nurseryman H. A. Lewis, his cultivars, and the Russellville Nurseries he founded. Thanks to my mother, Marian T. Dunlap, we have a recorded family history. My parents, Marian and Orval Dunlap, were Charter Members of the Home Orchard Society (HOS) and Marian was the Board Secretary for eleven years. She still maintains the blueberry collection at HOS arboretum which is located on the Clackamas Community College campus, 19600 S. Molalla Avenue, Oregon City, Oregon 97045. It is either adjacent to or part of the Environmental Learning Center.

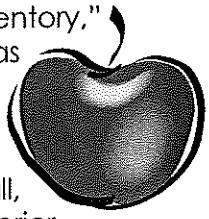
A pioneer fruit man, H. A. Lewis, founded the Russellville Nurseries in 1907. Together with his sons Clayton and Dee, he formed a corporation. Herman held Oregon State License #1 and was noted as a chief consultant. The home and nursery were six miles east of Portland near Baseline Road and 97th Avenue. He was one of the original founders of the Pacific Coast Nurserymen's Association, which was later incorporated into the American Nurseryman's Association.



H.A. Lewis selected the Prinlew plum after cross breeding the Italian prune and Bradshaw. He did not introduce it to be sold commercially until 1923. This fruit of considerable merit was used as one of the parents of Seneca (Fellenberg x Prinlew), a desirable prune developed by Cornell University, The New York State Agricultural Experiment Station at Geneva. Reportedly, it is one of their best to date.

According to the "1997 Register of New Fruit and Nut Varities," 3rd Edition by Brooks and Olmo, the Prinlew is large and juicy, has firm flesh, good flavoring, and fine texture as well as shipping well. The Prinlew is my favorite plum. It is a large, violet/yellow, juicy, sweet plum. It is not a heavy bearer, but is worth waiting for. It might ship well if harvested when mature before being fully ripe.

Another fruit almost lost to pomology is the Multnomah apple (Red Rome Beauty x Newtown Pippen), a late fall golden-yellow apple that is firm, attractive and flavorful. According to HOS pomologist Larry McGraw (now deceased), the tree and its foliage are one of the best. The stiff uncurled leaves thwart the aphid for they cannot establish themselves on the smallish ends of terminals nor laterals. The waxy apple's season is late September and into November. Few apple varieties have a more ceraceous, glabrous leaf than this one. The Multnomah has been described as a yellow fruit with yellow streaks through the flesh. It has exceptional flavor and is an excellent keeper according to "Fruit, Berry and Nut Inventory," Second Edition. Marian Dunlap has grown many Multnomah trees and described it as a golden yellow fruit with pink streaks in the flesh, a good fresh eating apple harvested in late fall, but not appropriate for cider. The interior pink streaks come from the Red Rome Beauty.



The Lewis apricot was a juicy, orange colored apricot. A dying tree near St. Johns, Oregon, was discovered about 15 years ago. The owners remembered purchasing it from Russellville Nurseries. There do not appear to be any records of the Lewis apricot. If anyone has any information for a source or scion, please contact me.

Lewis was an accomplished nurseryman and did much to improve pomology. As far as usefulness and quality were concerned, he was a past master, being in the nursery business up to his death in his 90s. In the later years of the Oregon Nursery Company he was one of the owners. McGraw considered the Prinlew plum and the Multnomah apple as great additions to the critical list of fine fruits. Lewis is to be remembered for these fine contributions to pomology.

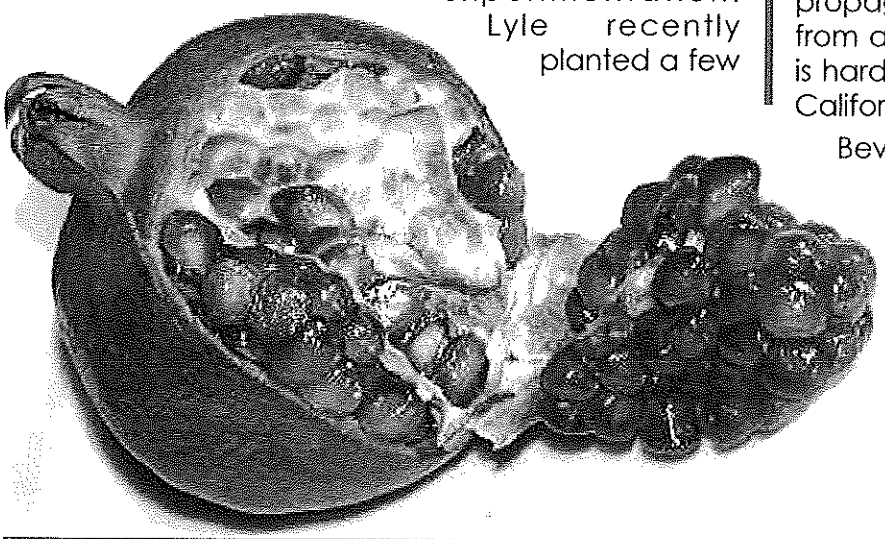
The Prinlew plum and Multnomah apple are widely distributed among HOS members and are on the HOS arboretum inventory. We have two trees of Prinlew that we are testing in Sequim, and scion wood may be available in a couple of years. The Lewis apricot appears lost.

THE HARDEST WORKING FRUIT IN THE WORLD

by Judi Stewart, North Olympic Fruit Club

We've all been reading or listening to the stories about our warming climate. Agricultural news reports are spewing doom and gloom prophesies for California's wine industry, saying that a warmer climate could spell disaster for much of the multibillion-dollar wine industry by the end of this century. This season saw a wide swath of Oregon blueberry growers unable to save their entire crop due to high temperatures near berry maturity. We're told these are not merely short-term heat blips - we are facing the future. Scientists have been predicting that the west coast would experience one of the biggest changes in seasons compared to the rest of the country. Climatologists have already predicted higher than normal temperatures for the spring and summer of 2007. Parts of Washington will eventually be able to grow California wine grapes. Our weather is changing and so must we. As backyard fruit growers, what are our options?

It's time to carefully review chilling hour requirements and evaluate new plantings. When you do this, consider growing a pomegranate. This is an incredible fruit and one we usually wouldn't find growing in our backyard unless in a greenhouse. Pomegranates, persimmons, figs, Asian pears and jujubes are now found growing in a broader selection and in larger numbers. The pomegranate though, is grown for its showy flowers as well as its flavorful fruit. Watching our changing weather pattern, forward thinking Lyle Knudson of NOFC, felt the time was right to try some experimentation. Lyle recently planted a few pomegranates which he purchased from Raintree. Always testing, Lyle is also interested in exploring other tropical fruits.



History

The pomegranate originated in the region from Central Asia to Turkey, most likely in Persia. In ancient Persia, they were a symbol of fertility, abundance and temptation. They were also cultivated in ancient Greece and referred to by Greek writers several hundred years B.C., even before the almond, apricot or peach. Some believed a pomegranate and not an apple to be the fateful fruit Eve plucked from the tree. Even Greek mythology describes how Persephone had to marry Hades and spend part of each year with him, creating winter, because she nibbled on pomegranate seeds in the underworld. King Solomon was fond of them too and had a grove of pomegranates. Some attributed his wisdom to their consumption.

Along with grapes, figs and olives, pomegranates were one of the most important fruits of antiquity and are mentioned prominently in the Bible. The Israelites in the Sinai desert longed for the refreshing pomegranates they remembered from Egypt and the robes of Jewish kings were embroidered with images of the fruit. Today, they are customarily consumed at the Rosh Hashanah, Sukkot and Tu B'Shevat holidays.

The Spanish brought pomegranates to the New World, and in the late 18th century, Franciscan friars planted them at California missions. Although the fruit was common in early California gardens, commercial cultivation began just a century ago, soon after the introduction of the Wonderful pomegranate. A Porterville, California farmer propagated the Wonderful pomegranate in 1896 from a Florida cutting. The common pomegranate is hardy on the eastern coast of Maryland although California and Florida are better suited.

Beverly Hills billionaires, Stewart and Lynda Resnick, have planted 6,000 acres of Wonderful pomegranates in the San Joaquin Valley. Recent medical studies convinced the Resnicks that the fruit

IN ANCIENT TIMES PHARMACISTS MADE AN ASTRINGENT MEDICATION FOR TREATMENT OF DYSENTERY FROM THE BLOSSOMS.

could be the "next big thing." Their orchards stretch for 15 miles along a strip west of I-5 between Ttleman City and Lost Hills, in Kings and Kern Counties. Irrigation is provided by the California Aqueduct which flows through the property. The trees are pruned into free-standing trees with single trunks, having been grown from cuttings in the farm's nursery. Workers search through the thorny branches for the reddest ripest fruit in October which they clip into canvas bags and then release into plastic bins. This planting will almost quadruple United States production of pomegranates.

The Resnicks own Paramount Farming Company and Paramount Citrus Association, which also grows navel oranges, pistachios and almonds. Together, the two firms rank as the nation's largest fruit and nut growing operation with 125 square miles of farms. The president of the Paramount Farming Company, Joseph MacIlvaine, estimates that when the farms' million plus trees mature in 2007, they will yield 15 tons an acre or 180 million pounds of pomegranates per year, almost one fruit for every American. Paramount owns POM fruit, the line of popular pomegranate juice in the glass hourglass-shaped bottle.

The company spent $2.6 million in advertising in 2004 and $10 million toward medical research on the effects of pomegranate juice on cardio-vascular health. Also committed is another $5 million for continuing health research into other areas being conducted by scientists all over the world.

Dee Slayman, whose family dominated the pomegranate business for 50 years beginning in the 1920s, is concerned about the Resnick's influence. "The Resnicks have the power to bankrupt virtually every pomegranate grower in the state," he said. Slayman farms 470 acres of the fruit in Kern County. His family got their start when they furnished pomegranate trees to citrus growers to plant in the low-lying parts of their groves that were too cold for oranges. The Slaymans gave the growers the trees free if they planted five or ten vacant acres and in turn gave the Slaymans a picking contract. Most of the fruit went to eastern cities. When the family sold its packing house, they had 2,500 acres planted in pomegranates. Dee Slayman is the king of early-season pomegranates. He grows early varieties in a hot, early-maturating climate and ships his first fruit in the last days of July through August to the first week in September.

John Chater was a legend among California rare fruit growers. Chater bred pomegranates in his Camarillo backyard for several decades until his death. He was a maintenance worker at a local hospital and wrote unpublished books of philosophy while remaining passionate about pomegranates. His best-known variety, Eversweet, which is patented, is available at some nurseries. Dee Slayman took clippings of a half dozen of Chater's varieties which he has propagated for their commercial potential.

Another grower at his home in Alamo near Oakland, Hossein Khodaddad operates a specialty fruit nursery growing Iranian fruit. Iranians living in California shun the Wonderful pomegranate. Khodaddad's eyes twinkle when you mention Saveh, Iran's most popular variety, named for a city south of Tehran. He says this fruit is as big as a baby's head with shiny purple skin and is very sweet. The international market is increasing rapidly for this cultivar.

Health Benefits

Pomegranates are well named - the word means "apple of many seeds." The pomegranate is beautiful, sensual, healthy, timeless and exotic. It also comes in gorgeous colors. More popular now than ever before, they're in the spotlight as one of the hot "new" trends. Pomegranates are also a worldwide symbol of fertility and abundance. Considering their 5,000 year history, their delicious juicy seeds, and the documented health benefits, there's little wonder that this fruit of old is back.

Pomegranates are high in potassium, vitamin C, folic acid, fiber and polyphenols. According to Ayurveda, the pomegranate improves intellect and strength. The fruit is known to counter the effects of bronchitis, oral inflammation, diarrhea, tapeworms, dysentery and hemorrhages.

More recent research has found promising health benefits in a number of areas. Studies have shown that patients drinking pomegranate juice every day for two weeks lowered their systolic blood pressure by about 5% and lowered certain enzymes causing high blood pressure, heart disease and stroke by 36%.

The heart cells of mice that were given pomegranate juice had a 50% increase in nitric oxide and nearly a 30% reduction in plaque. Recently, researchers have found that patients likely to be posted for coronary bi-pass surgery can be saved to a great extent simply by drinking pomegranate juice. Another study is being

replicated among a group of 300 patients in Chicago and Dallas to demonstrate plaque reduction. Benefits of drinking pomegranate juice were observed without changes in cardiac medications, blood sugar, weight, or blood pressure in test groups. They concluded that daily consumption of the juice may improve stress-induced myocardial ischemia in patients who have this coronary heart disease.

Men with recurrent prostate cancer showed that when they drank 8 ounces of pomegranate juice each day, it took longer for their PSA levels to rise. Also, cancer cell division was decreased and cancer cell death was increased in these men. A larger 250-patient prostate cancer study is now under way to study the 'synergy effect,' demonstrating that it may be more effective in eliminating prostate cancer cells to use pomegranate juice, its oil and peel than to use any one individually.

A research team presented two studies at an international conference indicating that pomegranate seed oil triggers apoptosis, a self-destruct mechanism in breast cancer cells. Furthermore, pomegranate juice can be toxic to most estrogen-dependent breast cancer cells, while leaving normal breast cells largely unaffected. A cancer study at an American Association for Cancer Research conference showed that pomegranate extract will fight skin cancer.

Pomegranate juice is one of nature's most powerful antioxidants. It has more naturally occurring antioxidant power than any other drink - more than red wine, green tea, cranberries or blueberries. The American Journal of Clinical Nutrition researchers have shown that 2 ounces of juice drunk each day for one week increased the body's antioxidant activity by 9%. Pomegranate juice can also be used as an antiseptic on small cuts. Juice sales have gone up almost 40% this year alone. This fruit is being touted as a miracle drug for the aging population.

The pomegranate harvest in 2004 was one of the largest ever because of the hype and hysteria generated by the news of the spectacular health improvement that can be expected by drinking only 2 ounces of juice per day. Here's a fruit they say lowers the risk of heart disease by preventing plaque, helps regulate blood flow and maintains healthy blood vessel health, combats free radicals that cause Alzheimer's disease, helps prevent premature aging and may slow or even prevent the development of cancer.

It's important to understand that when you juice a fruit, you tend to concentrate the sugars and has the potential to increase your insulin levels. When the fruit is intact and whole, its fiber will somewhat moderate the release of fructose as well as insulin into the bloodstream. Since 85% or so of the American population already struggles with this issue, it is clear that most people should dilute fresh juices with water, even healthy pomegranate juice.

Cultivation

Although a few pomegranate varieties are grown commercially in California, several growers maintain a range of exotic varieties. Several fruit have rich, fruit flavors. The Elf has yellow skin and very sweet translucent blond seeds and juice with a tutti-frutti taste and sparkle. Spanish Sweet is occasionally grown in backyards and has a yellow rind blushed with pink and white light pink sweet seeds. Farmers say that blond pomegranates can't be grown commercially because they're very perishable, but they show up at farmer's markets and are appreciated by Hispanic buyers. Lester Kirksey, who grows 20 trees of Spanish Sweet in Exeter, says people get really excited and want to buy the whole box when he brings them to market.

New pomegranate orchards are being established everywhere. Huge retail markets have developed for the sale of the fruit. The orchard production of pomegranates is concentrated mostly in California, the best areas being interior valleys where hot dry summers mature fruit with good color and flavor. The tree grows well in a wide range of climatic conditions. The pomegranate is also well adapted as an ornamental shrub in cool coastal areas.

Pomegranates are very ornamental small trees or large shrubs growing from 8 to 20 feet. They have breathtaking bright reddish-orange flowers which bloom over a long season. The plants are drought tolerant once established and need a long summer season to ripen. Large showy red fruits hang from the tree in fall.

Pomegranates are hardy to 12° F. and grow in USDA zones 8 to 10. They grow best in full sun and well-drained soil. However, they tend to grow well in almost any soil type that drains well in summer and they are more adaptable to a wider range of soils than most fruit trees. The trees are drought resist and salt tolerant once established. They do best in deep loam but orchards are growing them on

sandy and adobe clay soils. The yield, tree growth and fruit quality are unsatisfactory with poor drainage. For large crops of good quality fruit, pomegranates require about the same amount of water as citrus. Trees need soil moisture throughout the growing season, especially in late summer and early fall. Older trees need from ½ to 1 pound of nitrogen per year. Trees can be trained to a bush, a single or multiple-trunk or espaliered. The bush form works well for backyards. A multiple trunk requires less pruning during the first few years. They bear sooner than trees with only one trunk.

You can start pomegranates in pots and stash them in a garage or greenhouse to over-winter or plant them against a south facing wall. You would more than likely find that your trees would carry a crop to full ripeness in particularly good temperature years. Pomegranates are propagated by cuttings or from seed, but do not necessarily come true from seed.

For cuttings, remove shoots 6 to 8 inches long the thickness of a pencil. Cuttings should be taken in February or March and placed vertically in soil with the top dormant bud exposed. Use a rooting hormone such as Rootone on the cut end to speed root formation. Set out rooted cuttings or seedlings in pre-fertilized pots for one year. Initially, plants are cut back to 24 to 30 inches high. After they branch out, lower branches are pruned to provide a clear main stem.

To propagate pomegranates from seed, wash the seeds thoroughly and let them dry. They need a warm place and about two weeks to germinate. The leaves are a bright, shiny green, about 2½ inches long. The branches are long, thin and will get tangles and droopy if not pruned back occasionally. Though a sizable tree when grown naturally, pomegranates can be dwarfed by growing them in a small, shallow container and allowing the soil to get quite dry from time to time. The slender branches can be trained to form a pleasing shape. Grow them in a south window if you can. Pomegranates like it sunny and warm. A chill or draft will cause them to lose their leaves, but the plant will recover quickly if the chill isn't too severe. Once established, the tree is very low maintenance, needing little water.

The variety Wonderful has been the best fruiting variety, but Granada is gaining ground. Other popular cultivars are Dwarf, Foothill Early, Sweet, Pink Satin, Kashmir Blend, Red Silk and Sharp Velvet. There are over 100 cultivars growing world-wide. Whether grown under cover, against a south wall, potted, or sitting pretty in your orchard, why not plant a pomegranate tree? The pomegranate is long-lived compared to many other fruit trees. Some trees have been reported to be over 200 years old. Pomegranate plants are available at nurseries and garden centers.

The Fruit

You can recognize the pomegranate by its round shape, off-white, hard yellow, purplish, vibrant crimson or brownish outer skin, and by its unusual interior flesh, containing the many small edible prismatic-shaped seeds. The seeds also vary in size and hardness. The seeds are compacted in a layer resembling a honeycomb around the core. The layers of seeds are separated by paper-thin white membranes which are bitter.

A semi-sweet edible pulp surrounds each of the interior seeds. The seeds represent 52% of the total weight of the fruit, so you should try to pick a heavier fruit because most of the fruit's juice comes from the seed. When selecting fruit, make sure there are no bruises and that the skin doesn't have a dull finish. The skin should have no breaks. The pithy membrane around the seeds should not be too prominent and the seed sack should be tender. The pomegranate flavor is like a sour green plum or a firm green apple. For the fullest flavor, the seeds should have an abundance of juice. The seeds burst in your mouth with a delicious sweet-sour juice, leaving you with the delicate nuttiness of the seed. One medium pomegranate will yield about ½ to ¾ cup of juice.

Certain pomegranates almost seem to be seedless, while others are almost inedible because the seeds are so large and solid. The best tasting

EXCAVATING A POMEGRANATE

THE HARDEST FRUIT UPON THIS PLANET
IS EASILY THE POMEGRANATE.
I'M HALFWAY THROUGH THE PUZZLE GAME
OF GUESSING HOW IT GOT ITS NAME.
THE POME PART TURNS MY COWLICK HOARY,
BUT THE GRANITE IS SELF-EXPLANATORY.
-OGDEN NASH

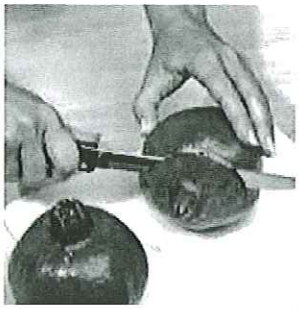
sweet and juicy fruits have the white or pinkish skins. The dark red to brownish fruits are usually more bitter and have larger more solid seeds. The outside skin also varies in thickness. The inner membranes and rind are not generally eaten due to high tannic acid content, but they've been found useful as a skin wash.

Sometimes pomegranates are hard to find and the juice is expensive, about three times more expensive than orange juice. Look for fresh pomegranates on sale from August through December, but peak availability is in October and November when they're ripe and ready to eat. Prematurely harvested fruit never sweetens. The best specimens are large, heavy and dark for their variety.

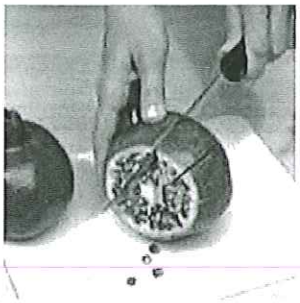
There's an art to filleting a pomegranate, an operation performed best with the fruit submerged in a bowl of water to avoid squirts from its juice, which stains. Scoop out the seeds. Discard pieces of rind, pith and membrane. The seeds can be eaten by hand or served in a bowl with a spoon. They taste great with salt sprinkled on the plump, flavorful fruit. In the Middle-east, they're often sprinkled with sugar, lime juice or rose water. Most aficionados swallow the nutty-flavored seeds after sucking out the juice, but if you find it objectionable, just spit out the seeds. Scientists in Israel and UC Davis have devised a method for mechanically extracting the seeds from halved fruit using jets of air.

Use the seeds for dessert toppings or press them to extract the juice which can be used for wines, salad dressings, syrups and jellies and many delicious dishes. In the Middle-east, the juice is reduced to a thick, dark syrup and used in dishes like fesenjan, a traditional Persian stew made with walnuts and duck or chicken. Turks and Syrians also mix the syrup with walnuts and tomato paste in muhammara or eaten with bread as an accompaniment to main dishes. Sun-dried pomegranate seed, called anardana, are ground and used to give tartness to chutneys and curries in Indian cooking. Pomegranates are also used as a dye.

Pomegranates should keep 2 to 4 months at 32° F. and at a relative humidity of 90%. A report from India indicates they have been successfully stored for as long as 7 months at 32° and 40° F. Though pomegranates keep in the refrigerator, they eventually dry out and lose their sprightly flavor.



CUT THE CROWN END OF THE POMEGRANATE.



LIGHTLY SCORE THE RIND IN SEVERAL PLACES.

IMMERSE FRUIT IN A BOWL OF WATER AND SOAK FOR 5 MINUTES.

HOLD FRUIT UNDER WATER AND BREAK SECTIONS APART, SEPARATING SEEDS FROM MEMBRANE.

SEEDS WILL SINK WHILE RIND AND MEMBRANE FLOAT. SKIM OFF AND DISCARD MEMBRANES AND RIND.

POUR SEEDS INTO A COLANDER, DRAIN, AND PAT DRY.

FESENJAN

This Iranian dish is slowly stewed chicken in a sauce of crushed walnuts, pomegranate and aromatic spices.

1 Tbsp olive oil
4 lbs chicken thighs or breasts
2 medium onions, thinly sliced
6 cloves garlic, minced
1 tsp cinnamon
1/4 tsp nutmeg
2 1/2 cups walnuts, toasted in a dry skillet & finely ground
3/4 cup pomegranate syrup
2 1/2 cup organic chicken stock
2 Tbsp sugar
1 tsp salt
1 tsp freshly ground pepper
1 1/4 tsp saffron threads*
Juice of 2 limes

In a large, heavy-bottomed pot, heat oil until sizzling. Brown chicken pieces. You could skin the chicken before browning, but you'll need more oil. Remove chicken pieces to a plate; refrigerate. If you brown chicken with skin on, spoon some of the fat out of the pot - you should have a couple of tablespoons remaining. (You may want to take the skin off the chicken before you refrigerate it to keep the dish from getting too fatty.)

Add onions to the sizzling fat and cook, stirring, until limp and translucent. Add garlic, cinnamon and nutmeg; sauté, stirring, for another 1-2 minutes. Stir in walnuts, pomegranate syrup, stock, sugar, salt, pepper and saffron (in its liquid). Bring to a low boil; reduce heat and simmer one-half hour. Add chicken pieces; simmer another 60-80 minutes. Halfway through the cooking time, add the lime juice. Taste, and correct seasoning if necessary. The sauce will thicken and darken, and the oil will begin to render out of the walnuts. If necessary, add more stock to prevent scorching.

At this point, you can remove the dish from the heat, cover and refrigerate overnight. The flavors are even better the next day.

Serve over saffron rice (basmati or jasmine rice cooked per package instructions, with the addition of 1/2 tsp saffron threads, prepared as below).

NOTES:

*Saffron needs to be steeped in liquid to release its full flavor. Grind it in a mortar and pestle with a little sugar or salt, depending on the dish, to facilitate grinding. Then steep in hot water while doing the rest of the prep. Add the water to the recipe with the saffron.

POMEGRANATE SYRUP & MOLASSES

To prepare the fruit:

Choose a fruit that's firm and mostly red. (Use pomegranate juice if you can't find fresh fruit.) Roll the pomegranate around on the counter. Cut off the crown end. Cut the fruit in half and put one half in a hand operated citrus juicer. With a strong arm motion, bring down the handle and squeeze out the juice. Repeat with the other half.

Another method is to process the seeds in a blender or food processor or cloth-lined mesh sieve so that you are left with only the juice and none of the tough parts.

POMEGRANATE SYRUP

Use 4 cups of juice, which will give you about 2 cups of syrup. Pour the juice in a sauce pan and bring it to a steady boil over high heat. Lower the heat to keep a low, steady bubbling and cook, stirring occasionally with a wooden spoon for about 20 to 30 minutes. The juice will start to thicken. Dip a spoon in the syrup. If it comes out clean, continue cooking. If the spoon is coated, you've done it. Take the pan off the heat and let it cool. Pour the syrup in a jar and close it. It'll keep in the refrigerator for 6 months.

POMEGRANATE MOLASSES

Pour the 4 cups of pomegranate juice in a sauce pan and bring to a steady boil over high heat. Lower the heat to medium-low and stir in 1 cup of sugar. Maintain a constant simmer. Keep your eye on the pan for the change to syrup consistency to begin. At the very first indication of thickening, stir in 1 tablespoon of lemon juice. Drop a spoonful on a chilled plate and wait a few minutes. If the molasses is a little sticky and moves slowly around on the plate, it's done. Let it cool and pour into jars and close tightly. This recipe makes about 1 cup of molasses. It keeps almost indefinitely in the refrigerator. Pomegranate molasses gives a sharp tangy flavor to food dishes.

SPICY POMEGRANATE BAKED PEARS

4 firm baking pears
1 cup pomegranate syrup
2 Tbsp. lemon juice
1 cinnamon stick, 2 inches in length
4 whole cloves

Pre-heat oven to 350 degrees. Peel pears, halve lengthwise, and core. Arrange pears cut side down in a ceramic baking dish. In a non-metallic bowl, combine pomegranate syrup, lemon juice, cinnamon, and cloves. Pour the mixture over the pears and place in pre-heated oven. Bake for 45 minutes, basting frequently or until pears are tender.

BAKED APPLES

apples
walnuts
honey
cinnamon

Wash and core apples, cutting from the stem end and being careful not to puncture skin at blossom end. Place them close together in a baking dish. Fill apples with walnut pieces and pour a tablespoon or so of honey on top of the walnuts. Sprinkle cinnamon across the tops of the apples and bake at 350 degrees for 30 minutes, or until they are cooked to your preference.

Don't worry about avoiding temptation.
As you grow older, it will avoid you. ~ Winston Churchill

NEW "JEANNE" GOOSEBERRY RESISTS DISEASES

by Laura McGinnis

Agricultural Research Service (ARS) scientists have developed and released a new disease- and pest-resistant dessert gooseberry called "Jeanne."

Sweet and sturdy, this new high-quality, late-fruiting gooseberry was developed by ARS scientists at the National Clonal Germplasm Repository (NCGR) in Corvallis, Ore. Jeanne is named for a former NCGR employee.

Gooseberry production is limited in the United States, partially due to restrictions imposed in the last century. Like other Ribes species, gooseberries are generally susceptible to white pine blister rust. While the disease causes them little harm, it can be devastating—even fatal—to pine trees.

Jeanne gooseberries are highly resistant to white pine blister rust and to powdery mildew, the biggest disease threat to U.S. gooseberry production.

The plant's robustness protects it from insect threats as well. Jeanne is highly resistant to pests like aphids and sawflies. This and its high-quality fruit make it ideal for home plantings or commercial gooseberry production in the Pacific Northwest and similarly temperate climate zones.

How does Jeanne measure up against other cultivars? According to NCGR research leader Kim Hummer, the plant produces green berries which ripen to a deep red as they mature to their full size of about 5 grams. Jeanne also boasts a higher yield than similar cultivars such as Invicta and Captivator, producing about 3.3 pounds of the flavorful fruits per plant during the growing season.

Scientists project that Jeanne, whose dark, sweet berries are well suited to desserts, juices and jams, could extend the production season because it blooms and produces fruit about one to two weeks later than other red gooseberry plants.

The NCGR has provided Jeanne plant material to several nurseries that will propagate the gooseberry for homeowners. Cuttings and rooted cuttings are available for research. Interested scientists should contact Hummer.

APPLE, WALNUT & POMEGRANATE SALAD

2 tablespoons orange juice
1 teaspoon honey
2 cups chopped apples
1/2 cup pomegranate seeds
1/2 cup walnut halves
1/4 cup shaved Romano cheese

Stir together the orange juice and honey, then toss mixture with the apples. Gently stir in the pomegranate seeds, walnuts and cheese. Serve chilled or at room temperature.

BAKED PEARS WITH COCONUT FILLING

2 large pears
(Anjou, Bosc, Comice, etc.), pealed, cored, & halved
½ cup shredded coconut
2 tablespoons sugar
1 teaspoon cinnamon
½ teaspoon ground ginger

Preheat oven to 350 degrees. In a baking dish, place pears cut side up. In a small bowl combine coconut, sugar, and spices. Mix well. Place 2 tablespoons of coconut mixture in each pear half. Bake for 30 minutes or until tender. Serves 4.

OUTWITTING THE APPLE MAGGOT

by Carlyn Syvanen, Olympic Orchard Society

Ted Swensen of Oregon Home Orchard Society was reputedly watching his girlfriend while shoe shopping. He noticed the little nylon footies that are provided by shoe stores for customers as they try on shoes and had a brainstorm. Why not try them on his apples to protect them from apple maggots? He took some home and tried them on some of his apples. Those apples covered by the footies were 100% pest free.

This summer, many members of Western Cascade Fruit Society are also trying out the footie method. Some are trying both waxed paper bags or plastic bags and footies in order to compare results. In our orchard, with one box of 144 footies, I covered some apples on three different trees whose fruit ripens at different times. Others who have tried the footies on their trees have found that the process goes quickly. I followed my husband as he was thinning and was able to move almost as quickly as he did.

Chris Smith, in his column in the Seattle Post-Intelligencer, noted that the footies are cheaper than the waxed paper bags which sell for 100 bags at $17.50 plus tax and shipping. Footies may be purchased from MacPherson Leather Co., 519 12the Ave. S. in Seattle for $6.95 plus tax per gross (144) or from Seattle Tree Fruit Society for $10 per gross or $9 for WCFS members. There is also the possibility that the footies, which are washable, could be reused next year.

Also from Chris Smith:

.... I'll be relying on sticky traps to capture apple maggot flies. My sticky trap regimen will be cheaper and easier this year. Instead of buying rather expensive vials of scent lure and taking the time to install them, I'll hang real apple traps and rely on their scent to attract female flies intent on laying eggs.

I discovered last year that small Red Delicious apples, impaled on coat hanger wire, smeared with brush-on formula Tangle-Trap and hung two to a semi-dwarf tree, caught as many flies as traps hung with scent lures. Apparently the apple scent of my traps is able to escape through the layer of Tangle-Trap goo.

In fairness to "zero tolerance" apple maggot controllers, I should point out that trapping doesn't provide 100 percent control. If I replace the traps when they fill with flies or rot through, I can get reasonable control.

The winter issue of the Beeline should have preliminary reports on what our members have found out about their attempts to outwit the apple maggot.

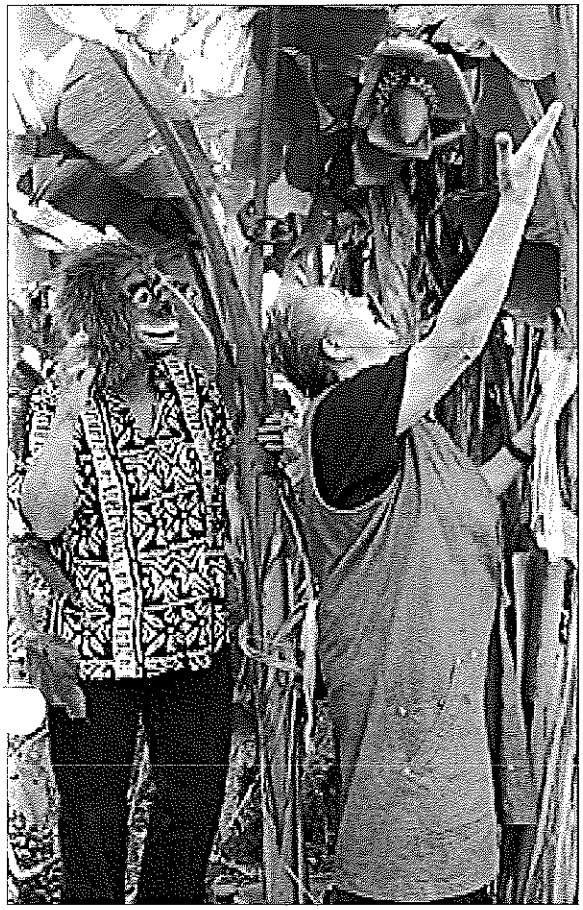
WCFS OFFICERS AND BOARD MEMBERS

OFFICERS					
RON WESTON, President	ronweston@centurytel.net	(206)463-9026	19022 Ridge Rd. SW	Vashon	98070
LARRY KROTZER, Vice President	LSK@olyridge.net	(360) 437-1055	605 Olympic Ridge	Pt. Ludlow	98365
GEORGE MOERGELI, Secretary	magicoho@centurytel.net	(253) 884-3080	P.O. Box 852	Vaughn	98394
PATTI GOTZ, Treasurer	plsgotz@comcast.net	(206) 524-3738	1007 NE 71st St.	Seattle	98115
DIRECTORS					
2007					
ERIK SIMPSON, Olympic Orchard	orchards@olypen.com	(360) 683-6684	162 Creekside Dr.	Sequim	98382
RALPH RUSH, North Olympic	rgrush@olympus.net	(360) 385-4609	5003 Flagler Rd.	Nordland	98358
LYLE F.R. KNUDSON, North Olympic	dansk@olypen.com	(360) 385-6038	532 Schwartz Rd.	Nordland	98358
JUDI STEWART, North Olympic	js@olympus.net	(360) 379-1103	3396 Hastings Ave. W	Pt. Townsend	98368
2008					
PAUL GOTZ, Seattle Tree Fruit	pjgotz@comcast.net	(206) 524-3738	1007 NE 71st St.	Seattle	98115
CAROLINA NURIK, Seattle/Vashon Is.	carolinanurik@comcast.net	(206) 463-7216	4728 SW 244th St.	Vashon	98070
STEVE WHITCHER, Tahoma	master@guru-gardener.com	(253) 536-2898	1631 118th St. S	Tacoma	98444
2009					
DR. ROGER EICHMAN, North Olympic	eichmanrogerdr@webtv.net	(360) 3799566	223 Griffith's Point Rd.	Nordland	98358
PAMELA DRAPER, Tahoma	chipamela@gurugardener.com	(253) 536-2898	1631 118th St. S	Tacoma	98444
LOWELL CORDAS, South Sound	slcordas@yahoo.com	(360) 456-7376	3327 Stikes Dr. SE	Lacey	98503
CHAPTER PRESIDENTS					
STEVE VAUSE, Olympic Orchard	svause@teleport.com	(360) 683-8407	63 Ward Ln.	Sequim	98382
CHUCK ESTIN, North Olympic	cestin@earthlink.net	(360) 379-5319	915 Jackson St.	Pt. Townsend	98368
MIKE SHANNON, Peninsula	mike_58@msn.com	(360) 373-9489	1518 Vue Ct.	Bremerton	98310
PAUL DONALDSON, Piper Orchard	pdpiper@aol.com	(206) 364-0161	916 NW 122nd	Seattle	98177
DAVID CONNERS, Seattle Tree Fruit	applesandmore@hotmail.com	(206) 782-7352	7547 31st Ave. NW	Seattle	98117
LEONARD ESTES, Tahoma	esteslenbevcomm@webtv.net	(253) 927-9038	4802 Tok-A-Lou Ave.	Tacoma	98422
RON WESTON, Vashon Island	ronweston@centurytel.net	(206) 463-9026	19022 Ridge Rd. SW	Vashon	98070
GIZELLE RAYNER, South Sound	Grayner997@aol.com	(360) 426-5401	227 Satsop Ave.	Shelton	98584
BEEL[illegible] EDITOR, CARLYN SYVANEN	carlynbee@teleport.com	(360) 683-8407	63 Ward Ln.	Sequim	98382

GLOBAL WARMING BEARS FRUIT IN PORT TOWNSEND?

By Kasia Pierzga, *Port Townsend Leader* Staff Writer

A patch of hot, dry weather had Linda Rohrs out in the garden watering the dahlias when an unexpected flower caught her eye. Snuggled in amongst the graceful, curving leaves of a towering banana tree was a bloom, a banana bloom.



Blame it on the hot weather that arrived early this year. Blame it on global warming. Blame it on the lush, rich soil that Rohrs and her partner Susan Ambrosius* have been building up since they bought their house in uptown Port Townsend six years ago.

Whatever the reason, finding their banana tree in bloom caught the pair off guard. Rohrs said when she spotted the flower, she did a double take. "I almost got whiplash," she said with a laugh.

The 4-year-old tree came from the Bambu-u, exotic plant nursery on Gibbs Lake Road south of Port Townsend. Marc Hilt of Bambu-u said seeing the banana tree in bloom isn't really all that surprising. But what is unusual about the flower is that it bloomed so early in the season that the tree might actually produce fruit. "The bananas could be ripe by summer's end," he said.

A native of the Himalayas, the cold-hardy *Musau basjoo* banana came to the United States by way of Japan, where it was known as the emperor's banana because it was so sweet only the emperor was allowed to eat it, Hilt said. In the United States, it's popular as an exotic addition to the garden. In Japan, it's grown for its leaves, which are used to produce cloth.

Port Townsend's Chetzemoka Park is home to several banana trees of the same variety, Hilt said. But even though they're only a few blocks from the flowering tree in the garden at the home of Rohr and Ambrosius, there's almost no hope they will ever produce bananas, Hilt said. "I planted two there in 1995 and they have never flowered," Hilt said of Chetzemoka and his days as a city parks crewman. "It's just too cold."

Hilt figures the uptown Port Townsend tree is blooming early because the garden where it's growing has its own little warm microclimate. This year's mild weather probably also had a lot to do with it. "We had such a mild winter and it didn't frost back," he said. "The bananas never defoliated."

Rohrs and Ambrosius said they're pretty excited about playing host to what could be Port Townsend's first-ever crop of bananas.

They're having a lot of fun with it too. Dangling from a banana frond next to the bloom, they've added a touch of whimsy with a small plastic gorilla figurine now basking in the glow of the bananas-to-be.

The little guy's name is "Gorilla in the Midst," Ambrosius joked.

"He wasn't put there to guard the bananas," she said. "He's just hanging out."

Edit. *Susan Ambrosius is a long-time member of North Olympic Fruit Club.

DON'T MISS OUT - JOIN THE WCFS FORUM!

You can use the Forum to ask other members for advice, to give advice or find a ride-share to a meeting or event. The Forum is only for members of our organization and is not open to the general public. It's a benefit of membership. Simply send me an email and let me know you'd like to be on the WCFS Forum. Hope to hear from you soon! Judi Stewart js@olympus.net

WCFS BOARD MEETING HIGHLIGHTS

The meeting was opened by President Ron Weston on July 14 on Vashon Island at 1:27 pm.

Members present were Larry Krotzer, Del and Erik Simpson, Steven Vause, Carlyn Syvanen, Judi Stewart, Dr. Roger Eichman, David Conners, Patti Gotz, Chuck Estin, Ron Weston, Leonard Estes and George Moergeli.

Patti Gotz, Treasurer, reported that we have $4,519.25 in our account. So far this year we have not gone over any budget line. She also reminded us that our ferry costs and mileage are tax deductible, but each person should save his/her receipts.

A brief discussion of the funding for WWFRF, including Judi reporting that she had spoken to Kristan and that Gary Moulton's position was firm until his retirement. Jackie King's position is firm until August. Sam Benowitz had written a 21 page report regarding the work at the experiment station. Judi stated that she would mail a copy of the draft of it to each Board member. Donations are being sought to help continue the work there. Mt. Vernon is not expanding, but is holding its own for now. Gary Moulton is collecting scion wood from all over the world. Roger suggested that spreading the scion wood throughout the region would provide better evaluation. Each chapter could be involved in growing the scion wood.

It was suggested that we schedule one of our Board meetings at Mt. Vernon. Chuck suggested that we have some questions ready prior to going to Mt. Vernon.

There was a brief mention of developing a chapter in Snohomish County. Judi would contact the Master Gardeners' Association there. There would also be a note in the BeeLine regarding forming a club, advising anyone interested to get in contact with Judi (see notice in this issue on page two). David suggested contacting Debra Smith of the Everett Herald. She writes a regular gardening column for the paper. Judi moved. We budgeted $100 for advertising an organizational meeting.

Erik showed samples of WCFS hats which clubs can order. Clubs need to order them soon.

(For reports from the clubs see Chapter News, page 20)

Leonard requested that Tahoma will need help from other clubs to man the Puyallup Fair booth from Sept. 8th to 24th.

George announced that President Mike Shannon of Peninsula offered to obtain the Kitsap Fire Dept Headquarters for our Board meetings. He thought it would be quite centrally located for everyone.

No date or time was agreed on for the next meeting.

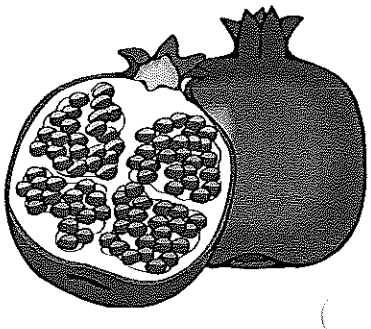
Respectfully,

George Moergeli, Secretary

The Pomegranate

Once when I was living in the heart of a pomegranate, I heard a seed saying, "Someday I shall become a tree, and the wind will sing in my branches, and the sun will dance on my leaves, and I shall be strong and beautiful through all the seasons."

Then another seed spoke and said, "When I was as young as you, I too held such views; but now that I can weigh and measure things, I see that my hopes were vain."



And a third seed spoke also, "I see in us nothing that promises so great a future."

And a fourth said, "But what a mockery our life would be, without a greater future!"

Said a fifth, "Why dispute what we shall be, when we know not even what we are."

But a sixth replied, "Whatever we are, that we shall continue to be."

And a seventh said, "I have such a clear idea how everything will be, but I cannot put it into words."

Then an eighth spoke—and a ninth—and a tenth—and then many—until all were speaking, and I could distinguish nothing for the many voices.

And so I moved that very day into the heart of a quince, where the seeds are few and almost silent.

~ by Khalil Gibran

The Mad Scientist Speaks
GENETICALLY ENGINEERED ORGANISMS
Roger Eichman, North Olympic Fruit Club

This subject is fraught with a lot of emotion to the extent of being considered politically incorrect, so it is time to address genetically engineered organisms (GEO) in its simplest terms. Some types of GEOs are also called GMOs or Genetically Modified Organisms.

Genetic engineering (GE) is the shifting or influence of genetic material in an organism by the intended acts of man. This began tens of thousands of years ago when the first cave man pulled up a nice plant and stomped it into the ground near his cave. If you clone or plant the seed of a superior plant, then you have performed genetic engineering. You have slightly shifted the genetic genome.

A slightly higher form of GE is selective breeding, where you cross one good plant with another to get an even better progeny or an F1 cross. If you then back cross the F1 plant or plants to themselves, then some very nice new plants can be developed from seed in the F2 and F3 generations. I hope you all have or will go this far in GE.

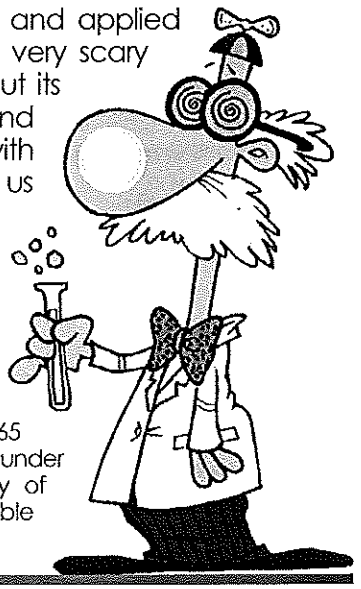
The next level of GE involves changing the chromosome counts. Most plants have two sets of chromosomes or are diploid. Occasionally an accident will occur that will double the count to four, becoming tetraploid. This can even occur again to form octiploids (dinner plate dahlias). The changing of ploidy count occurs naturally and is quite common in some plants such as dahlias and malacoides primroses. One can try to induce this in other plants by soaking seedlings in a solution of autumn crocus or colchicine for 12 hours, followed by a clean water soak for 6 hours. Only 1 to 2% will survive and be converted to tetraploids. You can get a better survival rate by soaking only the tops of the seedlings and not the roots. Colchicine is used as a gout medicine and any drug store has it — one small tablet in a cup of water is about the correct solution.

Other agents such as a very dilute herbicide or even taxol (for breast cancer) may be tried, but the simplest system to use may be nitrous oxide or laughing gas. It's used in a sealed chamber at 120 pounds of pressure for 20 hours. The whole plant can be treated and most plants survive but only a few will become tetraploids. Any residual gas remaining dissolved in the plant acts as a fertilizer. The NO_2 gas cylinder can be purchased at an auto parts store.

Another type of GE is protoplast fusion. This happens when two cells of a plant are fused into one cell and then grown in tissue culture to form a new plant. It adds the total genetic material of both cells together, so the result is similar to inducing tetraploidy - but one can also fuse cells from different plants. I expect in the future to see a cherry plus a peach or a strawberry plus a thimbleberry. One might even have an alder plus a hazel nut. In the future, such plants will be stronger, tastier, easier to grow and bear larger fruit than anything we have had in the past. By using "nano-pipets" and the same equipment used in human fertilization labs, single pairs of chromosomes can be taken from one cell and placed into another. Thus, if a desired trait is on a chromosome and it's transferred into another plant cell, then a new plant may be created that then exhibits the trait. Disease resistance is one area in which such work should show promise.

The last type of GE is used in transferring single genes between plants or animals. Although this occurs naturally all the time, it can now be done in a controlled manner and a million times faster. This is a field of extreme high-tech and is similar to computers in that it is doubling in ability close to Moore's Law* of 18 months! At this rate of GE advancement, herein lies the future of medicine and agriculture. Like it or not, the future is arriving similar to a runaway freight train. In 9 years or just 6 more doubling cycles of GE, our world of medicine, agriculture, and chemical engineering will be turned on its head. This will be a world where one can expect to see 30 or more years of added life expectancy, the start of the obsolescence of medical doctors, little use of chemical nitrogen fertilizers or other chemical spraying of plants, wonderful new carefree plants not dreamed of today, and production of chemicals by growing them in vats or fields instead of large chemical facilities. In a few years, GE, nanotech, and computers will merge, driving a new technological change similar to the internet development we have just experienced.

The 70's saw the rise of computer geeks; the 2010's will be the rise of "bio-geeks." For those who are frightened of high tech and applied knowledge, this could be a very scary time and it will not be without its dangers. New knowledge and change is always fraught with enough danger to make us uncomfortable, as it destroys permanence. The next 10 years could rock our world in all aspects, good and bad, equal to the last 50 years put together.



Edit. *Moore's Law is the 1965 prediction by Gordon Moore (co-founder of Intel) that the transistor density of semiconductor chips would double roughly every 18 months.

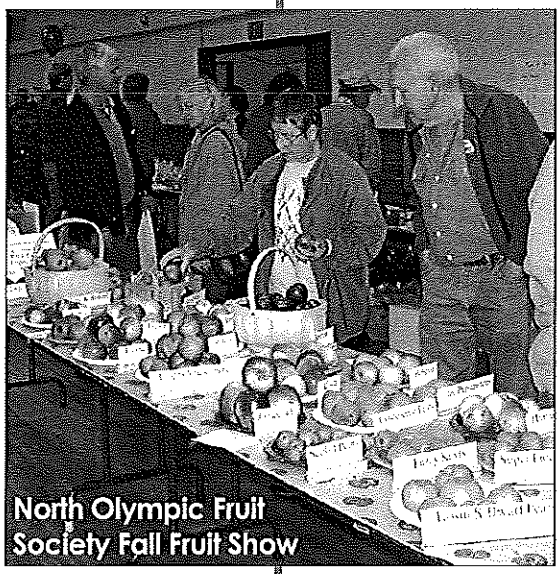
WCFS CHAPTER NEWS

North Olympic Fruit Club has enjoyed some highly informative programs this summer. In their May meeting, Jenny Pell presented a slide show and presentation on Permaculture as a design methodology for enhancing the land's yield in a sustainable way for people and their communities. Particularly useful to orchardists was Jenny Pell's description of perennial polyculture "guilds", which are plant associations that are mutually beneficial. Later in the July meeting, Lige Christian shared the research and visitations he's been doing in preparation for his upcoming "cidery". He has been grafting hundreds of apple trees with desirable cider-producing varieties and experimenting with variations of his favorite cider recipes to develop the best ones for his future cidery.

The NOFC has its annual picnic at the Ackerman's near Quilcene, and everyone is looking forward to the feast of clams and oysters that will accompany the delicious potluck dishes and barbecue for the event. A unique ball-and-pin game will be the highlight of the day, along with swimming in the sun-warmed Hood Canal waters.

A day of summer pruning occurred on the Chapter's adopted "Pate Orchard", which was helpful for those who wanted to learn more about summer pruning.

The premier event of the year will be the upcoming Fall Fruit Show – to be held Saturday, October 21st. at the County Fairgrounds. Featuring guest speakers on a variety of topics, apple tastings, pie contests and more – the Fall Fruit Show promises to outdo even last year's great success (see pictures from last year's show). The Club will be selling its extensive collection of grafted fruit trees that it has been developing over the past year.



North Olympic Fruit Society Fall Fruit Show

Olympic Orchard Society held their annual summer picnic at the home of Ken and Nancy Loghery in Joyce in July. Ken and Nancy not only have a large productive garden, orchard and greenhouse, they also have a meat cooler for processing their own beef. One of the joys of gathering in this group is that folks are always exchanging information about what is working or not working in their orchards.

Jenny Pell spoke at our June meeting about permaculture. (See article in this issue)

At our August 13 meeting Karen Page, past president of NOFC, will speak on rare and unusual fruit and h[illegible] experiences as a landscaper.

Peninsula Fruit Club invited Steve Witcher to our July meeting. He discussed summer pruning and we had a lot of questions for him. We all enjoyed Steve's lecture.

Our Club will be at the Kitsap County Fair for 5 days during the fourth week of August. We will have displays of fruit our club members are growing. We will also have displays of (IPM) Integrated Pest Management. The Display using a Red Delicious apple with Tangle Foot is always attractive for the kids. Why do they always have to touch everything they see? It's funny to see their faces when they give you that look and say "What is that?" We will also have a potted tree with Surround sprayed on it. There will also be displays of fruit tree bark diseases and samples of fruit problems. WSU Master Gardener Extension Bulletins will be available for purchase on most of the displays at our booth.

Our summer burger/weenie fry/meeting will be at John Meyers house in September. A date hasn't been set yet. We will have a tour of John's apple orchard to finalize the days outing. If anyone would like to join us, just let Mi[illegible] Shannon know.

October 7th is the date for our annual fruit show. Hopefully we will have a good display of fruit like we had last year. This is the event where all of our members get to bring what fruit they have been growing. Some of the fruit will be good looking and, maybe a few won't be as pretty. There will be lots of "What did I do wrong" questions. Having our fruit shows is where we all seem to learn from the more experienced fruit growers.

Our School Grafting Chair person Rusty King will be contacting the schools to get a head count for our spring grafting workshops at the High Schools. We normally purchase 300 root stocks for the school workshops.

Seattle Tree Fruit Society has been busy for the past six months. Ciscoe Morris mentioned the nylon foot sox that the Seattle Tree Fruit Society (STFS) has been selling as codling moth and apple maggot fly pe[illegible] barriers for apples, pears, and Asian pears and [illegible] orders kept David Connors busy. Burnt Ridge Nursery in Onalaska. bought several. Sales were also

accelerated by a second Seattle P-I article by Chris Smith in the July 5 edition of his "Good Enough to Eat" column. If you need more information about the ties, contact STFS president David Conners at applesandmore@hotmail.com or 206-782-7352.


Olympic Orchard Society Summer Picnic at Ken Loghery's

With 2006 representing STFS's 20-year anniversary, our chapter decided to do things "bigger-and-better" for this year's Spring Fruit Show, which was again held at Ballard High School on March 25. We invited Western Washington Fruit Research Foundation (WWFRF) to co-host the event. Coordination with another group proved to be more difficult than expected, but we pulled it off, thanks in large part to the numerous STFS volunteers who answered the call. Primary dimensions of this show included an expanded rootstock and scion wood sale, grafting demonstrations, the sale of custom-grafted fruit trees, and an expanded silent auction. Featured speakers included Dr. Bob Norton, Tom Wood (of greenhouse fame), pruning expert Chuck Holland, and a panel of experts who discussed various methods of protecting apple trees from infestations of codling moths and apple maggot flies. Attendance was good, and the show was a huge success.

In mid-April, members joined others on the field trip to Tom Wood's greenhouses near Centralia. Columnists Ciscoe Morris and Chris Smith accompanied us.

In April & May, our members benefited from informative talks from WSU Puyallup's Dean Glawe (on powdery mildew) and Art Antonelli (on bad & good bugs in our orchards and gardens). In addition, David Conners gave talks on "The Art of Espalier" at the UW's Center for Urban Horticulture (CUH) and at the Tahoma chapter's monthly meeting.

On June 10, we organized an "in-the-orchard" workshop at Carkeek Park's circa 1890s Piper Orchard on protecting your apple, pear, and Asian pear trees from codling moths and apple maggot flies, which was very well attended. An entomologist from Oregon's Advanced Pheromone Technologies enlightened us about the behaviors of these orchard pests. We discussed the pros and cons of various control methods. In the nearby Piper Orchard, we also demonstrated various control techniques on different trees with the assistance of a horticulture teacher and her students from Ballard High School. Also, we sold over a hundred boxes of the nylon foot sox that have recently been used with great success as pest-barriers.

In June, we organized a field trip that included walking tours of the grounds of the UW's CUH and the nearby Washington Park Arboretum, and lastly a most interesting indoor tour of the CUH's Miller Library – a full and interesting day, to say the least.

In mid-July, we organized a field trip that included tours of a beautiful park-like 2.3 acre residential orchard of new STFS members Terry & Bruce Larson of Bothell, and included the commercial Broers Berry Farm in Monroe.

In July, we organized the second annual BBQ and picnic at the waterfront retail establishment of Tacoma's Bamford & Bamford, the largest supplier of garden pots in the Pacific Northwest, located at 702 East D Street. Invitees included members of the Tahoma chapter, the new South Sound Fruit Society, and Vashon Island Fruit Club, as well as members of our other WCFS chapters.

We are planning field trips on August 12 to two different orchards & gardens, the Lindroths in Bellevue and the Covals on Mercer Island. On August 26, many of us will be attending an apple-ID workshop in Portland from 1-5 pm, sponsored by Home Orchard Society (HOS). For more information about this *free* workshop, as well as driving directions, please go to their website: www.homeorchardsociety.org. If you would like to join a car-pool, call Greg Giuliani at (425) 788-7573.

On Saturday, September 9, we're planning field trips to Mt. Vernon, to tour Don Balser's nut orchard, the WWFRF demonstration gardens and Drew Zimmerman's apple cider orchard and his tasting room.

On Saturday, October 7, we'll have our first indoor meeting of the season after a summer of field trips. Starting at 9:30 am, we're planning our second annual pot-luck breakfast-brunch at Carkeek Park's Environmental Learning Center. We are meeting on the *first* Saturday of the month instead of the second, so that members can attend the October 4 Fall Field & Harvest Day in Mt. Vernon.

In late October, as part of STFS's 20-year anniversary celebration, we are planning an enlarged and exciting Fall Fruit Show on Sat., Oct. 28, from 10 am – 4 pm, which will be co-promoted with Vashon Island Fruit Club's own "All About Fruit" Show on Sun., Oct. 29, also from 10 am – 4 pm. These very similar events are expected to be highlighted in the October issue of Sunset Magazine as a two-day Fall Fruit Show.

At Seattle's event, numerous tables displaying the impressive bounty of the fall fruit harvest will be featured – as well as samples from Tom Wood's greenhouses. "Taste It Before You Order" will be a new theme of this year's show – whereby attendees will be encouraged to sample apples and pears before placing their orders for both custom-grafted fruit trees and scion wood that will be available for pick-up at the ensuing March 2007 Spring Fruit Show. Other features include the experienced apple-ID team from Oregon's Home Orchard Society who will attempt to identify your "mystery" apples; and STFS will be pressing some fresh apple cider as well. Ciscoe Morris has agreed to be one of our headline speakers. He'll be joined by Mary Robson, Tom Wood, Bob Correll, and STFS's Drew Zimmerman – among others. Many vendors, including Mason bee experts, will also be present.

South Sound Fruit Society's May meeting was very much enhanced by our guest speaker: Todd Murray, Interim Horticulture/Agriculture Educator of WSU Extension in King County. He provided a powerpoint presentation on "All Things Blueberry and Raspberry," including planting, maintaining, and protecting them. He supplied a lot of sound information.

Since the membership voted to have no meetings during these summer months, the next scheduled meeting will be the third week in September, at which time we will vote for new officers.

Tahoma Chapter hosted Dave Conners of Seattle, who gave an outstanding presentation on how to espalier apple trees to form a Belgian Fence in May.

At the June meeting Carmen Franco taught us about fabricating water systems with PVC piping. On June 17th we had a tour to Tom Wood's Greenhouses to see how he grows delicious fruit and vegetables out of season in the most simple practical way. We enjoyed delicious samples of cherries, blueberries, raspberries.

For our July meeting, Wendell Phillips and Bob Friese presented information on bees and pollination. This was followed by a panel discussion in which Harold Anderson also took part.

We're planning the booth for September's 8—24th Puyallup Fair and encourage members from all chapters to help staff. Bob Friese at (253) 537-4827 is coordinating your sign up to help in this important outreach for WCFS. There will be a raffle for a Correll cider press.

July 29th at Bamford and Bamford Pots and Plants will be a pot luck BBQ picnic for WCFS members on Foss Waterway.

In October Dan and Sandy Nesper are planning a tour of Wade Bennett's Rockridge Orchards.

Vashon Island Fruit Club held tours of orchards at the homes of several members on May 20th and June 24th. These backyard plots ranged from high-density orchards or layouts with neat compost syste and rainwater-storage irrigation systems to plots of natives, ornamentals, and edibles arranged in soothing, natural patterns. The tours allowed members to view different approaches to pest and deer control, training of young trees, irrigation, and management of various fruit trees.

Vashon Island's annual Strawberry Festival on July 5th included a parade that featured our chapter's tractor-pulled "float" filled with kids and fresh berries. Members accompanying the float handed out berry samples to parade watchers along the way. The fresh berries were warmly received and made for a unique handout. The Festival was an opportunity to raise community awareness of our group, which has now grown to over 100 members.

The club held its annual summer picnic and quarterly meeting at the home of Doug and Kathleen Tuma on Friday, July 14th. Appetites were stimulated by a number of homemade jams and jellies, hard cider, and pear brandy. Excellent grilled salmon was served to go along with two brimming tables of potluck salads, casseroles, and deserts. The picnic was also our quarterly meeting, which featured a talk by David Connors, President of STFS, who described the Belgian espalier technique that he has master He also discussed the Seattle chapter's experience with silent auctions, a successful fund-raising method for their club.

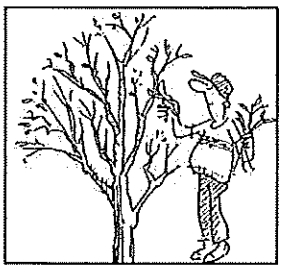
The club will hold a workshop on July 29th on summer pruning and bud grafting at Diana Drayton and Fred Constant's Sleeping Eye Nursery, 15730 SW 115th Ave., Vashon. Members will have the opportunity to bud graft their own tree to be transplanted either in late fall 2006 or fall 2007. Anyone attending should make sure to bring their own selected budwood or be sure it's already available at the nursery.

The club plans to hold a small fruits workshop on August 26th and a display, tasting, and discussion of summer fruits on September 19th. The club will tour the Mt. Vernon Research Center on September 30th.

Finally, on Sunday, October 29th, the club will hold its Fall Fruit Show at the Grange on Vashon, an event that will be billed as a co-event with Seattle chapter's Fall Fruit Show on Saturday, October 28th in Ballard. Hopefully, many of the public will be tempted to attend both shows, which will feature the display of a very large number of apples, pears, and other area fruits as well as fruit identification, practical advice orchard care, and other related activities.

WCFS Member Ads and Announcements

WCFS members send bunches of get well wishes to Tahoma Chapter member Don Stewart for a full and swift recovery.



The Guru Gardener, Expert Advice & Services
Steve Whitcher, Horticultural Consultant
- Fruit Tree Pruning & Care
- Disease & Insect Control
- Plant Problem Diagnosis

ISA Certified Arborist, **(253) 536-2898**
master@gurugardener.com
GuruGardener.com

All Fruit Trees and Ornamentals
Dormant and Summer Pruning

Take control over your landscape!

I can help you.

Mary Hedberg, Ph.D.
(360) 385-2307

Lowell's Tools
Offers superb tools for the avid gardener and backyard orchardist

For catalog, send e-mail request to:
SLCORDAS@YAHOO.COM
or call **(360) 456-7367**

Wanted: I'd like to grow some uncommon stone fruit. I'm looking for cherry, peach, plum and apricot budwood. Appreciate hearing from you. Please email or call me at...
js@olympus.net or (360) 379-1103.
Thank you, Judi Stewart

Permaculture Design Certification Course
Sept 15-30, 2006
Port Townsend EcoVillage
Learn practical hands-on skills for sustainable home and community
fruit tree guilds, edible landscaping/foodforests, alternative technologies, water catchment, whole systems, site design, Ecovillages and more.
Contact **Chuck Estin**
cestin@earthlink.net or 360-379-5319.

North Olympic Fall Fruit Show
October 21, 2006, 10am - 4pm
Jefferson County Fairgrounds, Port Townsend
Display & Tasting Tables, Apple ID, Demonstrations, Exhibits, Seminars.
Cash Prizes for the Best Pie!
Fresh Apples and Cider.
Fruit Trees for Sale.
We Bake Awesome Cakes and Pies!
Admission free to WCFS Members.

Retirement Issues:
I am a licensed agent with Banker's Life.
I provide information and assistance in 4 areas of financial concern: medical expenses, long term care/ home health care, final expenses and retirement income and savings.

Call me for a free evaluation and consult.
Ray L. Wade (425) 273-1846

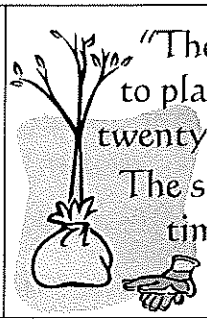
Hartman's Fruit Tree Nursery
Varieties that produce well west of the Cascades
We have apples, pears, plums, Asian pears, and cherries for your yard.
Write or call for details about fruit tasting at the nursery.
See our website **at www.hartmannursery.com** or write to **b-jhartman@juno.com. 253-848-1484**

The Fall 2006 BeeLine was assembled, designed and produced by Editor Carlyn Syvanen, with lots of input from the membership. Please contribute material for our next issue!

Note changes in deadlines: Winter Issue: Submit by Oct. 15. Spring Issue submit by Feb. 1

Write or email your article, comment, suggestion, or question to:
Carlyn Syvanen at: **carlynbee@teleport.com**

All submissions welcome. Some may be edited for length or spelling and grammar.



"The best time to plant a tree is twenty years ago. The second best time is now."
-Anonymous

Western Cascade Fruit Society
1007 NE 71st Street
Seattle WA 98115-5636

Return Service Requested

Non-Profit Org.
U.S. Postage
PAID
Olympic Mailing Services

Spank Your Fruit Tree...

For more fruit production, take a rolled up newspaper and spank the daylights out of the trunk of your fruit trees. This action loosens the cambium layer and more sap will flow up to the tree producing more fruit. This is for more fruit the following year.

133*1/4**********AUTO**3-DIGIT 981
HILDEGARD HENDRICKSON MEM EXP: MAR 2007
2559 NE 96TH ST
SEATTLE WA 98115-2406

CHECK LABEL FOR RENEWAL DATE

WESTERN CASCADE FRUIT SOCIETY MEMBERSHIP APPLICATION

NAME _____

STREET _____

CITY _____ STATE _____ ZIP _____

E-MAIL _____ PHONE ( ) _____

CHAPTERS: ***Check which Chapter you're joining as a ☐NEW MEMBER or ☐RENEWAL. Annual dues are per household.***

- ☐ North Olympic $20
- ☐ Olympic Orchard $20
- ☐ Peninsula-Kitsap $20
- ☐ Piper Orchard $15
- ☐ Seattle Tree Fruit *(includes monthly Newsletter)* $30
- ☐ South Sound $20
- ☐ Tahoma $17
- ☐ Vashon Island *(add $6 for postage if no email address)* $20
- ☐ ***Member-at-Large*** ***$20***

☐ Donation: Western Washington Fruit Research Foundation ..... **Amount $_____ Gift**

$_____ TOTA

Would you like to be a part of the WCFS Forum, an on-line discussion group for members only?

☐ *Yes* ☐ *No* ☐ *Tell me more*

Give this form and a check to your Chapter Treasurer or mail to: WCFS Treasurer, 1007 NE 71st Street, Seattle WA 98115-5636