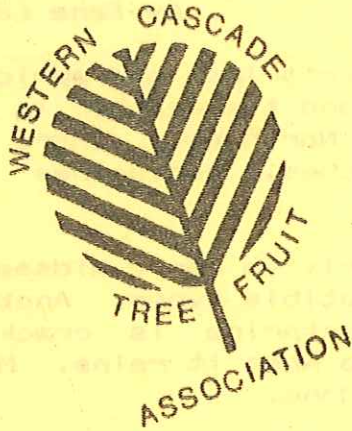


- P. 2 Peaches, Nectarines & Cots--G. Lewis
- 6 Pears in Puget Sound Area--McDonald  
(includes rootstock compatability list)
- 11 When to Pick Pears--Norton
- 13 1902 Hanford Nurseries catalog--W. Lyon
- 15 Winter Injury, Shothole Borers--S. Collman



# WCTFA

## NEWSLETTER

### SUMMER 1988

*10:00 A.M. WCTFA Board Mtg.  
Drinks not as Secretary  
for Paul D.*

#### TOURS AT MT. VERNON SCHEDULED

WCTFA members can <sup>Friday</sup> tour the Mt. Vernon Research Station at noon Friday, July 15th and August 19th. The first tour we should be able to sample and see apricots, cherries and everbearing strawberries. The second tour will cover prunes, plums and peaches.

This is a basic, no frills tour--no band, no salmon barbecue, no catered lunch or speakers--just an opportunity for WCTFA members to get together and tour the orchard with Dr. Norton and eat too many cherries and plums. Bring a sack lunch and a dessert to share (finger food type).

There will be no general open house at Mt. Vernon this summer. The station has planned three seminars primarily for nursery and garden center people and county extension agents. Dates are July 13th, August 24th and October 12th. Members can attend these seminars, but there is a fee and you need to register. For more information, contact Dr. Norton, Northwestern Washington Extension Center, 1468 Memorial Highway, Mt. Vernon 98273; 424-6121.

WCTFA members are welcome to stop by and visit the station at any time, according to Dr. Norton. *(Editor's Note: Don't expect a guided tour--budget cuts in extension mean staff shortages.)*

The research station is located on State Route 536 about 3 miles west of Mt. Vernon. Take exit 226 (Kincaid St) and follow Route 536 (Memorial Hwy) toward Anacortes.

Summer 1988

## TRY PEACHES, NECTARINES & APRICOTS by Gene Lewis

For years we have been told that "peaches, nectarines and apricots won't do well here, they are too much work and the weather is too cold and wet". As with any fruit in the Northwest, there are certain cautions to be observed, but peaches, nectarines and apricots will do fine here.

With peaches and nectarines pick the early to early midseason ripening varieties and avoid brown rot susceptible types. Another possible problem with the smooth skinned nectarine is cracking when nearly ripe--the same as cherries do when it rains. More evaluation on crack resistant types will be done.

With apricots--if you have frost in mid March as much of the area north of Seattle had in 1988--avoid Perfection and Blenheim. In some years, frost knocks off many blossoms. This year I tried a water spray at 10 pm on clear, frosty nights. I hope that will help.

Insect pests are not a major problem here. I have not had any "crawlers" except for leaf rollers. I do check for borers at the ground line once a year.

Fungicides are the important spray in the Puget Sound area. Peach leaf curl and brown rot cause the most problems and do need to be sprayed for. Check WSU Extension spray guides for controls. Don't use lime sulfur on apricots. Nectarines can tend more to brown rot problems, but I have not used a blossom spray and have had no problems so far.

### GENE'S RECOMMENDATIONS

**PEACHES**--Veteran (latest ripener for here), Red Haven (the standard), Harken (tasty), Velvet (good also), Pacific Gold (fair), Early Glory (finest, very early), Frost (peach leaf curl resistant--for the lazy). Don't try Elberta or Hale.

**NECTARINES**--We are breaking new ground here, but these seem ok. The following are all "cilings": June Glow (good), Cherokee (quite good), Harko (cracks some), Red Good (good). Avoid Goldmine (too late). Several other Stark varieties are being tested at the Mt. Vernon research station.

**APRICOTS**--Perfection (large fruit--blossoms early), Copeland-Puget Gold (dependable cropper, tasty, canner, the only one I would plant.)

### ROOTSTOCK:

standard--Lovell, Halford  
dwarfing--St. Julian, Siberian C., Citation (preferred),  
Prunus besseyi

The dwarfing rootstock induces earlier fruiting.

The training system for peaches, nectarines and apricots is generally open center with 3 or 4 main branches. Both dormant and summer pruning is used.

For good eating, try some of the above varieties. And don't be afraid to try some of the newer stone fruits, along with some tried and true old timers.

One final problem--watch your dog! Mine loves nectarines. She got as many June Glo as we did last summer.

*Editor's Note: Gene is a member of the Seattle chapter of WCTFA, a former board member of WCTFA, and is well known for his enthusiastic endorsement of peaches, nectarines and apricots. He does live in the balmy Seattle area, though. If you live near Granite Falls, Seattle is balmy.*

### OOPS!

Unfortunately, misinformation regarding power sprayers was given at the WCTFA spring meeting. It is not illegal for a backyard orchardist without a pesticide license to use power spray equipment on his own property.

A pesticide license from WSDA is required if you use "restricted use" pesticides or spray commercially--advertise and earn money from spraying. If you have questions, contact WSDA in Olympia, 206-753-5064.

### FROM THE BOARD OF DIRECTORS . . .

WCTFA President John Parker mentioned that all members are eligible to shop at Teufel Nursery, Inc. even though it's now wholesale only. Members must pay Washington State sales tax. Teufel's is located west of the 128th Street exit from I-5 in south Everett.

The board agreed that the WCTFA membership list would not be sold or given to other organizations, with the exception of WSU Extension. It was agreed that WCTFA members could advertise in the newsletter, if it was pertinent to fruit growing.

The spring meeting and rootstock/scion wood sale will be held together next year since attendance was poor for this year's spring meeting. It will be the first Saturday in March at the WSU/Snohomish County Extension Education Center in south Everett. Have an idea for a speaker? Let one of the board members know.

Board members voted to donate \$1000 to the Mt. Vernon Research Station. In reply, Dr. Norton said, "We are tremendously appreciative of this large grant which represents the dues and contributions from a large number of people...the majority of this money is used for paying the salary of part-time Technical Assistant, Jacky King, who spends all of her time on the tree fruit project gathering data and assisting in the culture of the fruits here at the station."

The newest WCTFA chapter is the Tahoma Chapter, which is meeting monthly at the Washington State University Extension Research Station in Puyallup. If you're interesting in joining, contact President Bob Kuper, 847-7213, or Secretary Betty Kinnaman, 458-7078.

Summer 1988

WCTFA and the Home Orchard Society in Oregon are discussing mutual area of cooperation. HOS board members made a presentation to WCTFA board members regarding possible merger of the two groups. Benefits would include access to Pome News, HOS library and video library, speakers, publications and joint fruit shows. Primary disadvantages are distances between the 2 groups and climate differences. Talks will continue.

Now that both groups have chapter organizations, some sort of territorial understanding is needed. At the moment, the WCTFA board is considering focusing on chapters in the Puget Sound area - any chapters south of Olympia would benefit more from belonging to HOS due to logistics and climate differences. President Parker stressed that only chapter organization is under discussion. Many tree fruit enthusiasts belong to both organizations. Also, WCTFA is considering a name change to more accurately represent our organization. Any changes will have to be voted on by the general membership.

Questions, Comments? Contact a board member listed below or attend the next board meeting, June 20th, 10 am, at the WSU/Snohomish County Extension Education Center in south Everett. Main topic of discussion will be final planning for the fall fruit show.

#### 1989 WCTFA OFFICES AND BOARD OF DIRECTORS

John Parker, President (NOFC President)  
60 Tala Shore Dr, Port Ludlow 98365; 437-2313

John Davey, Vice President (1989)  
3519 SW 171st St, Seattle 98166; 246-6144

Paul Donaldson, Secretary (1989)  
916 NW 122nd, Seattle 98177; 364-0161

Walt Lyon, Treasurer (1990)  
19717 80th NE, Bothell 98011; 483-5574

Nancy Jo Cushman, Newspaper Editor (not a board member)  
9210 131st NE, Lk. Stevens 98258; 659-6087

Dave Battey, Historian (not a board member)  
40404 SE 70th Dr, Snoqualmie 98065; 888-2504

Dr. Robert Bordeau (1990)  
15211 Wash. Av NE, Bainbridge Is. 98110; 842-4865

Kristan Johnson (San Juan Island President)  
2308 N 59th St, Seattle 98103; 522-3663

Robert Kuper (Tahoma Chapter President)  
28316 80th AV E, Graham 98338; 847-7213

Ben LaLonde (1990)  
491 Lotzgessel Rd, Sequim 98382; 683-4055

Summer 1988

Emory Leland (1987--replaces Gene Lewis who  
resigned--Seattle Tree Fruit Society President)  
7014 29th Av NE, Seattle 98115; 523-6363

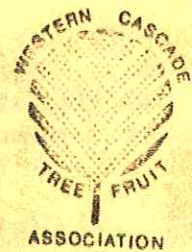
Ed Lewis (1991)  
9615 NE 14th, Bellevue 98004; 454-3615

Don McDonald (Kitsap Chapter President)  
1213 SE Lider Rd, Port Orchard 98366; 876-8785

Pat Rothenberg (1991)  
744 Wallin, Bremerton 98310; 377-0652

Ron Schaevitz (Piper Orchard Chapter President)  
1227 NW 117th St, Seattle 98177; 362-1227

Dick Tilbury (1991)  
4916 52nd Av S, Seattle 98118; 723-9009



## WCTFA CALENDAR FOR 1988

- |                                |  |
|--------------------------------|--|
| June 20th<br>Monday            | Board Meeting--10 am--WSU/Snohomish County<br>Extension Education Center in south Everett  |
| July 15th<br>Friday            | WCTFA Tour of Mt. Vernon Research Station for<br>apricots, cherries and strawberries--noon--bring a<br>sack lunch and a dessert to share |
| August 19th<br>Friday          | WCTFA Tour of Mt. Vernon Research Station for<br>prunes, plums and peaches--noon--bring a sack<br>lunch and a dessert to share           |
| October 1st<br>Saturday        | (tentative)--Fall Orchard Tour   |
| Oct 29th, 30th<br>Sat & Sunday | Fall Fruit Show--Jefferson County fair grounds,<br>Port Townsend   |
| March 4th<br>Saturday          | Spring Meeting and Scion Wood/Rootstock Sale--9 am--<br>WSU/Snohomish County Extension Education Center in<br>south Everett              |

Summer 1988

## PEARS IN THE PUGET SOUND AREA

by D.B. McDonald

Many home fruit growers have the misconception that pears are a high risk fruit in the Puget Sound area.

Pears will tolerate wet soil conditions better than most fruits, the trees have a more attractive foliage than an apple tree, and are less prone to scab and insect damage than the apple. In fact, a couple of our chapter members find pears easier to raise and care for than apples. The fruit itself doesn't require a good "finish" as many apples do. European pears are normally picked while still on the green side of the ripening process.

The reason that pears are not a more popular fruit, nationwide, is because of fireblight. Fireblight, basically, has to have warm (over 80 degrees), humid weather (over 70% humidity) to thrive. To put it bluntly, you have to have hot, sultry weather and the Pacific Northwest doesn't have it. This is why the northern half of California, Washington and Oregon produce 95% of the commercial pears in the United States. Generally when they raise pears in eastern area of the country, the major consideration is to grow only the fireblight resistant cultivars. Most of these cultivars are often lacking in flavor.

The Pacific Northwest is a totally different situation. I've often told some of our chapter members that the Pacific Northwest is the Valhalla for amateur pear growers. If there is a pear cultivar which pleases your taste buds, try growing it!

The one critical item with pears is something you have no control over--the weather. Pears need temperatures over 45 degrees to get a good fruit set and also good early fruit development. It is said that fruit which are still small 60 days after fruit set, will remain small. Rootstock can also affect fruit set. Quince and *Pyrus calleryana* increase fruit set, *Pyrus betulæfolia* decreases fruit set.

Generally it is recommended that you have 2 pear cultivars with similar or corresponding bloom periods for better pollination. Some cultivars are self-unfruitful, others are partially self-fruitful, and others are self-fruitful. It can get quite involved. I've listed a chart below which, hopefully, will be self-explanatory.

<u>CULTIVAR</u>	<u>BLOOM PERIOD</u>	<u>SELF-UNFRUITFUL</u>	<u>PARTIALLY FRUITFUL</u>	<u>SELF FRUITFUL</u>
Butirra Precoce				
Morettini	early	X		
Conference	early	X		
Beurre Anjou	early		X	
Packham's Triumph	early		X	
Flemish Beauty	early			X

Summer 1988

Bartlett	mid	X	
Clapp's Favorite	mid	X	
Seckel	mid		X
Doyenne du Comice	late	X	
Beurre Bosc	late		X

If there is one thing that gives many home fruit growers problems, it is knowing how and when to pick pears. Pears have to undergo a ripening process in storage in order to develop the proper flavor.

My own personal method, which I've come up with after reading a variety of publications and experimenting, is basically a 3-step process. I might add that it also pays to know the season of the cultivar that you are picking. (*Editor's Note: See Dr. Norton's article on picking pears in this issue.*) Initially I look for a slight color change in the fruit from green to a yellow-green hue. The next step is to take your thumb and gently press in on the neck of the fruit. If it is ready, it should give a little. If the fruit has the color change and gives under slight pressure, it could probably be picked.

But I have a third step (which I read about a few years ago) that I like to use. I take the fruit and swing it 90 degrees towards me and then 90 degrees to the left or right. Usually, if the fruit is ripe, it will separate from the fruit spur on the tree. I've noticed that pears have a distinct knuckle type joint where the stem of the fruit attaches to the fruit spur. Of course, you have to use a little common sense when picking pears. If the fruit is becoming quite yellow or is becoming quite soft, then by all means pick it!

Many commercial growers use a plunger tip pressure tester to test the ripeness of the fruit. I've also been told that a lot of commercial growers have their fruit analyzed for sugar content to confirm that it is ripe and ready to pick.

Pears like moderate temperatures (55-65 degrees) during the 6-week preharvest period. Cool temperatures tend to ripen the fruit too fast in storage--plus the fruit is more susceptible to friction bruises. Warm preharvest weather often causes the fruit to drop prematurely and the fruit may not ripen in storage.

Pears should be handled gently while being picked and should be stored in a cool place immediately after harvesting. Early season pears, like early season apples, don't keep as well as the late season varieties. Early season cultivars will keep at least 2 months if stored in a cool area where the temperature is 30-35 degrees. Most late season cultivars will keep at least for 4 months under the same conditions.

Late pears are resistant to ripening after harvest and should be placed in cold storage for awhile. To ripen pears, which have been in cold storage, place them in an area where the temperature is between 60 and 65 degrees.

Summer 1968

At this time, I would not hazard a guess as to which are the best cultivars. I do have approximately 60 cultivars, but only 3 are bearing age trees. I plan on evaluating the different cultivars to see which seem to be most suited for my locale.

There are what I consider to be 4 major groups of pears:

1. the old standard European cultivars
2. the seedlings of the Pacific Northwest & northern California
3. American cultivars which originated outside of the Pacific Northwest & northern California
4. the newer cultivars developed in Italy.

Italy is the leader in world pear production and, at this point in time, is expending the most effort in the development of new cultivars.

I have the groups listed below with some of the more desirable cultivars of each group.

**OLD STANDARD EUROPEAN CULTIVARS**--Bartlett, Beurre Anjou, Beurre Bosc, Beurre Dumont, Beurre Giffard, Beurre Superfin, Doyenne du Comice, Doyenne Gris, Duchesse Bronzee, Flemish Beauty, Marie Louise, Monchallard, Triomphe de Vienne

**NORTHWEST SEEDLINGS**--Bennett, El Dorado, Grand Champion, Nye Russet Bartlett, Orcas, Rescue, Thornley

**AMERICAN CULTIVARS**--Gorham, Highland, Lucy Duke, Magness, Maxine, Seckel, Surrine, Tyson

**ITALIAN CULTIVARS**--Butirra di Roma, Butirra Precoce Morettini, Butirra Rosata Morettini, Coscia, Itala Pirovano, Santa Maria, Williams Precoce Morettini

Pears can be dwarfed on quince rootstock. However, only certain cultivars are compatible with quince. For non-compatible varieties, use an interstem. Not all pear cultivars will dwarf on quince. Many will be semi-dwarf.

Max Meyers and myself got together last year and compiled a list of cultivars which are said to be quince compatible. The one thing we were not sure of was the ultimate size of some of the cultivars. In the following list, you will note we did not list the tree size for all cultivars.

I would say that if you don't mind having a semi-dwarf tree and the cultivar you desire to graft is not quince compatible, put it on Old Home Farmingdale #333 rootstock.

In closing, I would like to say that after the apple I think the pear is the most suitable fruit to have in your orchard.

If anyone has any information, I would appreciate hearing from you. If capable, I'll gladly answer any questions provided you send a self-addressed stamped envelope. Write to D. B. McDonald, 1213 SE Linder Rd, Port Orchard, Wn 98366.

*Editor's Note: Don McDonald is the president of the Kitsap Chapter of WCTFA. Max Meyers is vice president.*



This is a compatability list of pears on quince .  
 \* indicates highly recommended.  
 dwf, sd, st, indicate size on quince.

Amelie Baltet dwf	Elizabeth
Barillet Deschamp sd	Eva Baltet sd
Baronne Leroy sd	Flemish Beauty
Bergamote d' Automne dwf	Fondante de Moullins Lille
Bergamote Poiteau	General Galliene
Bergamote Sageret sd	Glou Morceau
Besi de la Motte sd	Gorham
Beurre Alexandre Lucas	Gregoire Bordillon sd
Beurre Auguste	Howell
Beurre d' Amonlis	Highland
Beurre de Bollwiller sd	Kieffer
Beurre d' Esperen	Le Brun sd
Beure de Nates dwf	Lieutenant Poidevin sd
Beurre de Saint Nicolas st	Longue Verte sd
Beurre Dumont	Louis pasteur sd
Beurre Easter dwf	Louise Bonne de Jersey
Beurre Fougueray sd	Louis Vilmorin sd
Beurre Giffard	Madame Carolin d' Aireles
Beurre Hardy	Madame Favre sd
Beurre LeBrun sd	Madame Hutin sd
Beurre Phillippe Delfosse dwf	Madeleine
Beurre Superfin	Maxine
Bloodgood	Messire Jean dwf
Bon Chretien Bonnamour sd	Monchallard sd
Buffum	Old Home
Chasseurs sd	Omer Pacha sd
Colmar	Osband
Colonel Marchand dwf	Passe Crassane
Comte Lambertye dwf	Petit Blanquet sd
Comet Lelieur dwf	Phelps
Covert	Petmaston Duchess
Delices d Harden Pont de Anger dwf	Poete Berganger dwf
Delices d' Avril sd	Pound
Directeur Hardy dwf	Frenices de Maria Leseur dwf
Docteur Despartes sd	President Barabe
Douenne de la Griffereye dwf	Professeur Grosdemage dwf
Doyenne de Soumur sd	Pulteney
Doyne du Comice sd	Rosteizer
Duchesse Bronzee dwf	Roi Charles de Wurtemberg st
Duchesse d Angouleme sd	Rousselet de Reims st
Duchesse de Berry d Ete sd	Saint Andre dwf
	Saint Ghislain sd

Summer 1988

Duchesse de Brissac sd  
Duchesse de Mouchy sd  
Duron deau

Senateur Belle dwf  
Serruvier sd  
Success de Milleraye dwf  
Tyson  
Urbaniste  
Uvedale St. Germain  
Vicar of Winkfield  
Winter Bartlett  
White Doynne

## FALL FRUIT SHOW DATES SET

The 1988 fruit show will be at the Jefferson County fair grounds on the Olympic Peninsula, October 29th and 30th. Times are 10 am to 5 pm on Saturday, 10 am to 4 pm on Sunday. Since we have to pay for the use of the fair grounds, there will be a \$2 admission charge, good for both days. Workers, exhibitors and speakers will be admitted free.

Since there will be plenty of room for fruit displays here, each exhibitor will have his own area. We'll group chapter members together. A minimum of 3 apples per plate is needed--so start planning. Commercial booths will be available for \$50. Non-profit exhibitors will be asked to post \$50 to reserve a booth, but the deposit will be refunded if they display both days.

Camping space is available at the fair grounds--hook-ups for \$6 a day, tent space for \$4 a day. Master Gardeners will be staffing a Country Kitchen so meals will be available. For more information, contact a board member.

## VISIT THE DEMO GARDEN

If you're in the Marysville area--sort of halfway between Seattle and Mt. Vernon just off the freeway--do stop and see the Master Gardener Demonstration Garden. There's approximately 40 varieties of apple trees--espallier, spindle, hedge row and free standing--and some pears, Oriental pears, peaches, pie cherry and a nectarine. There's also a berry patch with strawberries, raspberries, blackberries, blueberries, grapes and kiwi; a compost demonstration, herbs, ornamentals, and a vegetable section.

The garden is located in Jennings Park. Take the Marysville exit from the freeway, drive east 3/4 of a mile on 4th Street to a stop sign. Turn left on Liberty Avenue and continue 1/2 mile, bearing right at the Y. The park is on the right at 7027 51st Av NE. The garden is open 8 am to dusk every day. Master Gardeners are on hand to answer questions from 11 am to 3 pm Tuesday through Saturday. If you would like a tour, contact Nancy Cushman, 659-6087, or WSU/Snohomish County Extension, 338-2400.

When to Pick Pears

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

WASHINGTON STATE UNIVERSITY

A frequent question at garden centers and extension offices every year as fall approaches is "When should I pick my pears?" Most people know that if you let pears ripen on the tree, they are likely to break down at the core and be soft and mushy when eaten or canned.

Commercial growers use a pressure tester to determine proper pear maturity for harvest. By determining the pressure necessary to puncture the flesh, they can determine when pears are ripe enough to pick, but not overripe. What do you do if you don't have such an instrument?

In most years we can determine within a week or two, when individual pear varieties should be getting close to proper maturity. The following chart should cover western Washington fairly well. Choose the earlier dates for southwest Washington and the later date for more northerly or colder areas.

Clapp Favorite	Aug 20 - Sept 1
Bennett	Aug 22 - Sept 3
Bartlett	Aug 25 - Sept 5
Aurora	Aug 19 - Sept 9
Rescue	Aug 25 - Sept 10
Orcas	Aug 28 - Sept 15
Sirrine	Sept 4 - Sept 12
Flemish Beauty	Sept 10 - Sept 26
Seckel	Sept 25 - Oct 9
Comice	Sept 19 - Oct 9

Summer 1988

Highland	Sept 25 - Oct 12
Anjou	Sept 25 - Oct 15
Bosc	Sept 25 - Oct 15
El Dorado	Oct 1 - Oct 21

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

Certain late ripening pear varieties eg. (Anjou, Bosc and Comice) may not ripen properly if just picked off the tree and allowed to ripen naturally. These varieties, particularly Anjou, need 3-4 weeks of storage at 32 - 45°F. This can be done in the refrigerator or possibly in a root cellar. Some kind of wrapping to reduce shrivelling is a good idea.

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

Summer 1988

*Does anyone remember?*

*by Walt Lyon*

At one of the earliest "All About Fruit Shows", I think it was the second one at the Seattle Center, a lady stopped at our table to talk. She told me that her grandfather had owned a nursery in Oakesdale, Wash. around the turn of the century, and she showed me one of his price lists for the year of 1902-3. I asked her if I could make a copy of the list, and she just happened to have a copy which she gave me. I have shown the list to a few people, and all who have seen it thought it was interesting. Perhaps the rest of you might also think it interesting.

I'm sorry to say that I failed to write down the name of the lady who gave me the list, and so haven't the faintest idea who she was. Could it be that she was one of our members? And could it be that she is still one of our members? In the unlikely case that she should read this, please call me collect, or write. I have a lot of questions I'd like to ask. Perhaps one of our members might know of the old nursery, or the lady in question.

Walt Lyon, 19717 80th NE, Bothell, WA 98011, (206)483-5574.

HANFORD NURSERIES  
Oakesdale, Wash.

The best that money can buy -

- List of Apple Trees for 1902-3

WINTER VARIETIES

Cano  
Johnathan  
Wagener  
Rome Beauty  
Yel. Newton Pippin  
King  
Blue Pearmain  
Northwestern Greening  
Northern Spy  
Palouse  
York Imperial  
Ben Davis  
White Pippin  
Arkansas Black  
Rhode Is. Greening  
Palawater  
Dickinson  
Stark  
Wine Sap.  
Scarlet Cranberry

Baldwin  
Iser Spitzenberg  
Esophus Spitzenberg  
Genetin  
Ryles Red Winter  
Rabbitt  
Aikens  
Mammoth Black Twig  
Golden Russet  
Lady Apple  
Lady Sweet  
Swaar  
Yel. Belleflower  
Salome  
Mann  
Nero  
Porter  
Wolf River  
Hubbardstons Nonsuch  
Switzer  
Hass

FALL VARIETIES

Wealthy  
Twenty Ounce  
Western Beauty  
Maiden Blush  
Beitighiemer  
Rainbow  
Waxen  
Snow  
Cornells Fancy  
Mother  
Benoni  
Chenango Strawberry  
Stump  
Ortley Belleflower

SUMMER VARIETIES

Yellow Transparent  
Charlotten  
Red Astrichan  
Duchess Oldenberg  
Graveinstein

SPECIAL VARIETIES OF WINTER APPLES, 35¢ EACH

WINTER BANANA - The most popular apple of recent introduction and sold by many nurseries at \$1.00 each. FRUIT - Large size, golden yellow beautifully shaded with red, quality excellent, a good keeper. TREE - Very strong grower and early bearer, very valuable for market.

BELLE OF PARIS - Tree the strongest grower we know of among apples. Fruit regular and large, heavily streaked with red. High quality and a long keeper.

Summer 1988

JOHN APPLE - Resembles Duchess Oldenberg in size, shape and color, but is months later, keeping all winter.

VIRGINIA BEAUTY - Grown from scions from Virginia. FRUIT - is the handsomest we have ever seen. QUALITY - Best - Said to keep all winter.

The above list of trees is the choice of one hundred and forty-five different kinds fruited in our two hundred and twenty acre orchards. All being selected for thrift, fruitfulness, hardiness and profit, and propagated from the very best stock of their kind. Our trees are all grown on high ground without irrigation and while not as large as irrigated stock, are sure to give better satisfaction in all respects; for they are hardier, have better roots and are better adapted to all soils.

People buying from us run no risk of receiving infected stock, as the wooly aphid, codlin moth, San Jose scale, or other like injurious pests are unknown in this locality. The only pest we have is the common green aphid.

GUARANTEE - While we exercise the greatest care and diligence to have our trees, etc., true to label, and hold ourselves in readiness, on proper proof, to replace all trees, etc., that may prove untrue to label, free of charge, or refund the amount paid, yet it is mutually understood and agreed to between purchasers and our selves that our guarantee of genuineness shall in no case make us liable for any sum greater than that originally paid us for said trees, etc., that prove untrue.

All orders from unknown correspondents must be accompanied by remittance or satisfactory reference, or if parties prefer, they may make their remittance to the "Commercial State Bank", to be held by it until the goods are delivered.

#### PIPER ORCHARD CHAPTER NEWS -- PETE SVYNTH DONATES NUT TREES

The Piper Orchard Chapter has been soliciting shrubs and plants to contribute to the edible landscape of the Orchard (see WCTFA Newsletter, Summer 1987). Ed Lewis planned to purchase walnut trees from Pete Ssynth; Pete, however, insisted on donating four walnut trees (a Cascade, two Chopakas and a seedling) and four hybrid tree hazels (Turkish filberts). Ed and John Davey retrieved the trees from Pete's nursery on Vashon Island and a special work party consisting of Ozzie Moe, Gil and Carolyn Schiaber, Jim Koch and Ed planted them according to the Chapter's Master Plan for the Orchard.

WCTFA members who participated in the recent Fall Orchard Tour will remember Pete Ssynth's "Family Trees, Orchard and Nursery" on Vashon Island where Pete is doing fruit and nut tree research.

The Chapter meets at the Orchard on the second Saturday of all except summer months and prunes, grooms and plants. The third annual Piper Potluck was enjoyed March 7 by the Chapter when it also planned the next year's goals and elected officers.

Participation and/or membership in the Piper Orchard Chapter is open to all WCTFA members, who may phone 364 0161 or 454 3615 for information.

Summer 1988

## WINTER INJURY SHOWING UP

by Sharon J. Collman  
WSU Cooperative Extension

It seems odd to discuss winter injury after so mild a winter. Yet we've had several reports of apple trees, especially gravenstein, which suddenly wilt and die.

Dr. Ralph Byther, plant pathologist at WSU Research and Extension Center Puyallup, has observed similar conditions on apples, dogwood and raspberry which he is attributing to winter injury. He has noted that: "Many apples this year flowered on one year old wood. Normally apples flower only on 2 year old and older wood. This would suggest that sometime in late summer or fall the apple trees experienced a false dormancy."

Dormancy could be triggered by a period of drought. Late summer watering or fall rains started the trees growing again and they set buds. This spring the trees blossomed profusely, but the blossoms on the 1 year old wood were smaller, weaker and failed to set fruit.

When we first saw tree death this spring shothole borers were the suspected cause. The first evidence of shothole borer is a hole at the base of a bud. However in the one sample I looked at, the beetle was just entering the bud as evidenced by a single tunnel straight in 1/8 inch, then a verticle tunnel in the center of the stem. This is a nuptial and egg gallery. When the larvae hatch and tunnel away, their combined tunnelling usually girdles the stem, causing the death of the twig or branch at the end of the brood cycle. They exit via multiple holes--a second clue.

It is possible that the entry tunnel could cause enough disruption to kill that bud, but less likely other buds or an entire branch would be killed at the beginning unless the tissue were already killed or severely damaged before the attack of the beetles.

Keep this in mind before setting out on an all out war against bark beetles.

"Bleep" if you do, and "bleep!" if you don't.

Growers that did not water enough over the last four hot, droughty summers may have severely drought stressed trees which will be vulnerable to shothole borers as well. Drought stressed as opposed to winter injured--but both set the tree up for attack by shothole borers. And may I add flatheaded borers and other boring (zzzzzzz!!) insects.

Summer 1988

Since there will be many wild, and garden, trees suffering these conditions and possibly serving as breeding grounds, there may be a buildup of shothole borers. When there finally are more beetles than stressed trees, they will have no "choice" but to attempt to establish in healthier trees. Trees in good vigor can "pitch" the beggars out. Growers should burn all prunings quickly to prevent a buildup of shothole borers in the orchard.

Shothole borers, then, are an insect that home in on weakened trees. We have two species (that we know of): Shothole Borer (*Scolytus rugulosus*) and European Shothole Borer (*Xyloborus dispar*). (We are seeking verification of this species at the WSU Maurice T. James Insect Museum.) The European Shothole Borer carries a stain fungus which grows in and discolors the galleries. The shothole borer's galleries are clean.

Dave Pehling has written an article on the European Shothole Borer, which he has compiled from the literature and reports and observations from growers. But we have very little information available on local (western Washington) life cycles.

Dare I suggest that growers who think they have shothole borer do this.

1. Cut samples in 1 inch length pieces and place them in a zip lock plastic bag. One bag per tree, please.
2. Leave the bag unzipped to allow wood to dry.
3. Place bag near a window with only indirect light.
4. If beetles emerge they will fly to and die on window sill. (At first sign of beetles, return escapees to bag and zip up bag--but watch for any sign of condensation which creates a mold problem.)
5. Place a card or paper in the bag with  
your name                      phone                      type of tree  
address                          date collected              cultivar  
  
any notes or comments on damage, symptoms, etc.

6. Mail samples to WSU/Snohomish County Cooperative Extension or bring samples to any of the tours and give to Nancy Cushman.

If the beetles emerge from the wood and are not crushed and don't mold, we can tell which species you have. If the wood has galleries we may be able to glean information from them as well. I have not yet figured out how this will get done, but if we have the samples we can work on it this winter if necessary. If you need an immediate response, please so indicate.

*Scolytus rugulosus*





Summer 1988

EUROPEAN SHOTHOLE BORER (*Xyloborus dispar*)

by Dave Pehling, Extension Assistant

European Shothole borer (not to be confused with Shothole Borer, *Scolytus rugulosus* the fruit tree bark-beetle) is a small, wood-boring beetle that has been accused of causing a great deal of trouble in some local orchards this spring.

Adults are a pitchy brown-black with reddish wing-covers. The wing-covers have rows of punctures and the antennae are club-shaped. The thorax is "granulated" (having little "teeth") and the legs are red-brown. The female beetle is seen more often than males. She is about 1/8 inch long with a hump-back thorax, the head being mostly hidden underneath.

Quite often, the first noticeable sign of European shothole borer in an orchard is that of dying, wilting trees in the spring (April or May). On closer examination, one will see tiny holes, usually at the base of a twig or spur and sometimes a powdering of fine wood dust. Adult beetles can be found in the tunnels at this time and you can also often find them on the foliage or blossoms. Shortly the overwintering adults emerge and fly to new trees.

After mating, the female finds a suitable tree (they attack healthy as well as stressed trees) and bores straight into the wood. She then makes a horizontal branch tunnel along a growth ring and, from that, vertical tunnels. The beetle then lays 7 to 10 eggs at the mouth of each of these vertical runs. The eggs hatch sometime in May or June and the larvae, which do not tunnel themselves, feed on fungus. As the beetle tunnels, fungus spores on her body invade the wood and germinate. The fungus, called ambrosia, grows on the sides of the tunnels, discoloring them.

The larvae feed and pupate in a line in the tunnels. By mid-June the first adult beetles appear. There are probably two generations a year, the second egg-laying taking place in August and September. We have little documentation on life cycles in the Northwest. Observations and samples can be sent to Sharon J. Collman, WSU Cooperative Extension, 600 128th St. S. E., Everett, Wa. 98208.

The adults of the August-September brood over-winter in the tunnels, tightly packing themselves together, and emerge the following spring.

Control:

It is most important to keep trees as healthy as possible to help reduce the incidence of this pest. Our dry summers have stressed many orchards and, no doubt, has led to an increase of shothole infestation. Accumulated prunings may also have contributed as beetles can develop and emerge from them. In addition, many trees (mostly vigorous varieties) went into our last cold season in a still-growing condition, leading to severe winter damage. It is now believed that winter damage was the main cause of tree death in these instances. According to the available literature, *Xyloborus* will also attack apparently healthy trees. Dead and dying trees should be removed and burned as soon as possible as

WESTERN CASCADE TREE FRUIT ASSOCIATION  
9210 131st N.E.  
Lake Stevens, WA 98258

Bulk Rate  
U.S. POSTAGE PAID  
Marysville, WA 98270  
Permit No. 16



Address Correction Requested

Mr Richard P Tilbury  
4916 52nd Ave S  
Seattle WA  
98118-2102

should any prunings.

We are still trying to find a legal recommendation for shothole borer. With all the laws this isn't easy. Richard C. Maxwell, WSU Extension Agricultural Chemicals Specialist, says: "There are no insecticides registered specifically for European shothole borer. WSU recommends endosulfan for shothole borer in commercial orchards and lindane for shothole borers on flowering cherry. We don't know if these chemicals are effective against the European shothole borer." Check pesticide labels for possible use. If you have had a problem with shot hole borer this spring and think you may need to use an insecticide, call WSU/Snohomish County Extension, 338-2400, or check with us at tours.