

Reducing pesticide use, with help from WSU Extension by Bill Pierce, Soaring Swallow Farm

We have a young orchard. In its third year our apple, pear, plum, and cherry trees are just beginning to produce the odd piece of fruit. While the trees are young, they are susceptible to pest problems that would probably not be serious for older ones.

This summer, I noticed some of the leaves on our Akane apple mini-dwarf were curling, particularly on one branch. On closer inspection, I saw... ants! I knew these ants because I had found their nest last summer, near our home. With help from WSU Snohomish Extension entomologist David Pehling, we identified them as thatching ants (Formica sp.). Having previously read that ants were generally not a problem pest for orchards, I shrugged and made a mental note to keep an eye on it.

A week later, the ants had spread to two of the tree's five branches. Looking closer, I noticed that they were not alone. The cause of the curl was actually some small green aphids. Time to do something. I looked up aphids at http://pep.wsu.edu/hortsense/, and it suggested (along with other solutions) spraying the leaves with a stream of water to wash them off. I did this several times over the next few days, but a week later, the ants and aphids were still there.

This is the point at which many people would have gone to the local home and garden center and found a broad-spectrum pesticide to apply. But having had some training in Integrated Pest Management through a course at WSU Extension, I wanted to see if I could get help and avoid using pesticide. So I called David, and he explained that the aphids were sucking the juice from my tree's leaves while their ant overlords had gone into the aphid farming business. The ants eat the honeydew the aphids produce and provide protection from predators in exchange. The solution was to wash the leaves once more and then wrap several inches of the trunk with a felt-like Tree Wrap fabric and smear on a band of Tanglefoot (a sticky, gooey substance) to stop the ant traffic up and down the tree. Having lost their protectors, the aphids would be controlled by natural predators, David said.

Two weeks later it had worked. The ants and the aphids were gone. I removed the band of tanglefoot and my tree continued its summer growth. I did not need to buy or use pesticides.

We have repeated this process a few times with pests and disease in our orchard. While I treat all instances of anthracnose canker that I find by regular inspection, I have been battling pear slugs for the last three years. Each year, I ratchet up my pear slug control plan from no-action, to a simple mechanical solution of wiping them off (sometimes it is sufficient), to one year when, after seeking

advice from Extension, I decided to use an organically approved spray.

Though I am of a generation who was taught to think there is an industrial solution to every problem, I think these experiences demonstrate a few principles of post-industrial agriculture. At its core, Integrated Pest Management is about "walking around" your orchard, observing pest damage, and acting only when damage exceeds thresholds for acceptable fruit loss or tree health. Otherwise, you learn to ignore it and assume natural mechanisms will restore balance.

Reason and information replace fear and brute force chemical application. In our small orchard, it makes environmental and economic sense. We enjoy being observant and learning more about interesting natural processes, we keep ourselves and our environment healthier, and we save money by not applying pesticides. Extension makes this all possible.

Maintaining an orchard is a long-term prospect. We expect we will sometimes run into problems requiring chemical intervention. But we don't fear pests and diseases because we have a process that prepares us to deal with them with cool-headed confidence, knowing that we are doing our best to minimize pesticide use.

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Seattle Flower and Garden Show!

February 5-9, 2014

Western Washington Fruit Research Foundation will be at the 2014 Northwest Flower and Garden show (booth 2018, adjacent to the Cascade Tree Fruit Society in booth 2020. This is your opportunity to promote fruit growing to the general public from all over the Puget Sound region. The show is a lot of of fun and volunteers get **free admission** to the show for the entire day. There may still be some slots open, so for more information, or to volunteer, please send an email to **info@wwfrf.org**.

Keeper Apples and Pears

Offered as Scionwood at the Winter Field Day

Newtown Pippin, scab susceptible
Beni Shogun Fuji, scab susceptible
Braeburn, scab susceptible
Roxbury Russet,
Arkansas Black,
Ashmead's Kernel, russetted apple, scab resistant and very tasty
Melrose, scab susceptible

Pears
Conference
Concorde
Rescue.

Northern Spy,

Yellow Bellflower, scab susceptible

Tompkins King, scab resistant, historical cultivar for the Pacific Northwest.

Karmijn de Sonnaville, scab susceptible

Ben Davis,

Fall Pippin

Belmac,

Enterprise, scab resistant

Boskoop

Ark Black and **Ben Davis** are pretty marginal for our area and need a warmer micro-climate, but if some folks have a great micro-climate they can be fine apples.

HISTORIC FOWLER PEAR TREE

CA: 1863 Mukilteo, WA

The historic Fowler Pear Tree was planted in 1863 by Mukilteo co-founder Jacob Fowler. It is located in a tiny park at 802 Mukilteo Lane in an area called Old Town. The Mukilteo Way Garden Club has maintained the tree and tiny park for about 60 years. The Mukilteo Way Garden Club, the Mukilteo Historical Society, the South Everett Rotary Club and Mukilteo City Officials became concerned that the Fowler Pear tree might potentially be lost as a result of the extensive damage sustained by the elements and other factors during its lifetime. The most serious damage that had occurred at some point in its past, had been a very large vertical scar which exposed the tree's interior where a huge branch had apparently been lost in a windstorm. This had prompted the Garden Club to arrange for a local tree consulting company to analyze and report on the condition of the tree. Funding for the consulting work was provided by the City. The resulting report stated that the Fowler pear tree would be fine for from 1 to 5 years, or possibly longer. Given the advanced age of the Fowler pear tree the report wasn't very reassuring to the Garden Club and the City. The pear tree however, is showing an amazing ability to maintain its health through extensive re-growth and it still produces an abundance of pears every year.

While teaching a grafting class at Edmonds Community College during the 2011 Winter Quarter, I was contacted by Jean Skerlong, president of the Mukilteo Way Garden Club. Jean related to me that several attempts had been made by others to propagate a clone of the Fowler Pear, but none had survived and I was asked if I'd be willing to try my hand at grafting a clone of the Fowler Pear. Since I

had a few extra pear rootstocks from the grafting class, I told Jean that I'd attempt grafting a few trees in hopes that at least one would survive. I then collected scionwood from the Fowler Pear and made three grafted trees. The grafted pears were then left in the EDCC greenhouse in an attempt to get a head start on growth. All of the grafted Fowler Pear trees have survived. In 2012 Jean Skerlong contacted the City to see if they wanted to plant one or more grafted trees of the Fowler Pear at their new Rosehill Community Center. The City stated they were interested, but needed recommendations on planting locations and an estimate of funding requirements. A meeting was held in mid August 2013 with members of the Mukilteo Way Garden Club, City representatives and myself to discuss the planting plan developed by the Garden Club. Three locations were discussed as possible sites for the grafted Fowler Pear Trees. Two were recommended to be planted at the Rosehill Community Center and one at the pioneer cemetery where Jacob Fowler is buried. The recommended plan was then presented to the City Council in September 2013, receiving unanimous Council approval and funding. Planting of the grafted trees was accomplished on October 23, 2013, by Mayor Joe Marine, Jean Skerlong of the Mukilteo Way Garden Club and myself, with many interested City Officials and residents in attendance.

However, the story continues! I had previously made email contact with Dr. Joseph Postman, curator of the USDS/ARS Pear Germplasm Repository at Corvallis, OR concerning the Historic Fowler Pear Tree and had provided him with a picture of a ripened Fowler pear (mid August) and a description of my involvement in the project. He agreed to add the Fowler Pear to the historic pear accessions at the Repository. Dr. Postman also stated that he thought the Fowler Pear looked like another historic pear in their repository which predated the Fowler Pear by approximately 15 years called the Hager Grove Pear which is located just off northbound Hwy 5 in Salem, OR. The Pear Repository has a DNA profile of the Hager Grove Pear and Dr. Postman wanted to do a DNA profile of the Fowler Pear for comparison. So in early December 2013 I collected additional scionwood from the Fowler Pear and mailed them to Dr. Postman. Hopefully, sometime in the Spring or Summer 2014 we should know whether or not the source of the Fowler Pear was the Hager Grove Pear. Persons interested in The Hager Grove Pear can do a Google Search for information on the tree. (See photos on page 10.)

Bill Davis, WWFRF



Learn to Prune at the Winter Field Day!

PLEASE SEND YOUR DONATION ALONG WITH THIS FORM

Enclosed is my gift of:\$5000\$1000\$500	<u>\$</u> 100 <u>\$</u> 50 _	_\$25 \$	(Make check payable to WWFRF)
To make a donation by cred	it card go to:	NWFruit.org and	click on support.
Please designate my monetar	y gift toward:	Fruit Displ Fruit Varie	ay Garden
I would like to volunteer!		On sampli	olay Garden th Summer Fruit Festival ng and field days vork that can be done from my home
Name			
Address			
City		State	ZIP
Email address		Pho	one #
Please make my gift:In Ho (Name of person) Address of person or person's			
(So we can notify them)			
Thank you Please send to:	WWFRF C/O Christy 2609 Cedar Bellingham		

Your gift is tax-deductible to the fullest extent allowed by law. Please consult your tax accountant for details.

Credit cards accepted!

Here's how to donate to WWFRF or renew your membership through Network for Good:

- 1) Go to www.networkforgood.org (we now have a direct link on our website to Network for Good.)
- 2) On the first screen, type 'Western Washington Fruit Research Foundation' in the box labeled 'charity'
- 3) On the second screen click 'donate now'
- 4) On the third screen, type in the amount you wish to give and specify whether this is a one-time or recurring donation. Also, in the box labeled 'designation', please specify whether you are paying membership dues or giving a donation, or giving a donation specified for the demonstration garden.
- 5) The fourth screen gives you the option to change the information you have given. Click 'proceed to checkout'.

- 6) Subsequent screens ask you for your email address, credit card information and other relevant data. You also have the option to add an additional 4.75% of your donation to your total to cover the amount we pay Network for Good for processing.
 - 7) You will receive an acknowledgment of your donation by email.

WWFRF Board Meeting

November 23 , 2013 9:00pm – 3:00pm Held at NWREC

Board members present: Sue Williams, Bob Baines, Kim Siebert, Kristan Johnson, Mike Ewanciw, Ira Collins, Christy Nieto, John Valentine, JoeAnne Hilgart, Hazel Sittner, Jay Scott, Darlene Granberg

Members present: Tom Wake, Bill Pierce

WSU Advisor present : Carol Miles

Treasurer's Report — Mike — Our balance as of October 31st, 2013 was \$42,392. We have a net income so far for this year of \$5,080. Each board member needs to send information about their particular areas for the budget for next year.

Membership - Christy – September newsletter was sent to 200 members. Soon after the newsletter was sent out we had our Apple and Pear Harvest Day which was more successful than in years past due to wide publicity. The event was publicized to other fruit groups from King County up to Whatcom County, the Master Gardeners, Facebook, newspapers and our membership newsletter.

Field Days - We are setting a yearly theme to help with planning events. The theme for 2014 will be Waste not, Want not, Preserving the Harvest. We will have educational talks about how to best use fruit and which varieties are best for storing, and which ones are best for preserving with an additional emphasis on nutritional value and cultivating techniques for the most nutritional fruit. We also plan to have a presentation on the uses of Apple Juices and have a panel on fruit value. Cherry Day will have information of preserving stone fruit and training cherry trees. The Apple and Pear Day will have information about identification and how to store apples and pears. *Orchard to Plate*. We will try to have culinary students make presentations at events.

The proposed theme for 2015 is Revitalizing Old Trees.

Newsletter – The February newsletter will have a summary of 10 of the varieties that will be available as scionwood at the Winter Field Day and which are also good keepers. The purpose is to give people some information about some of the less well known varieties. It will also have pictures of the BOD. The June newsletter will have recipes for stone fruit and information about pitting cherries and bird netting.

Research on Keeper Varieties – Kristan suggested that we plant more keeper varieties in the Fruit Garden to gather information on which ones do well in Western Washington.

Kiosks – We have 3 empty spaces still to fill. An issue has come up with the longevity of the irrigation kiosk and it will need to be replaced in addition to the need to have a long lasting media for the new panels when they are ready to be made. Kristan is gathering information on various types of media and the costs for each. The next kiosk will be the Apple and Pear.

Publicity Points – In order to have effective publicity we need to define who are target audience is and what differentiates us from other groups.

What we have to offer to our membership and the public:

- 1. We have a Fruit Garden which gives unique opportunities for hands on experience in pruning, grafting and pest control.
- 2. We have a large collection of fruit with many unique varieties in our Fruit Garden.
- 3. We have weekly work parties for learning.
- 4. We have education vetted by WSU.
- 5. We have a premier espalier.
- 6. We have opportunities to sample many varieties of fruit.

Target Audiences:

- 1. Fruit tree owners.
- Potential volunteers.
- 3. Related businesses.
- 4. Agricultural students.

Publicity – We need to try to have publicity every month. Sam can put notices on Raintree Facebook 2 weeks before events. We can get Facebook advertising for \$1-2 a day. We will revise our business cards and make a small handout with our publicity points. Nurseries could put us on their websites.

Publicity – Power Point presentation and Fruit Garden tour template. In order to be able to have members who are able to give garden tours and speak about our organization to groups at other locations we will make a Power Point presentation and garden tour template that will include our publicity point and expand on them.

Feb 8th Board Meeting 1 AM – 4 PM

In the Atrium of the Convention Center

If you enter the main entrance on Pike Street (just East of Eighth street), go South and up the main lobby escalators to the 2nd floor landing and continue to the South end of the lobby where you will find our meeting place.

Agenda

Status on the Action Items we had from the Retreat
Web Site
Publicity
Final Budget for 2014

All members are welcome to attend board meetings.

In Remembrance of Bill Pihl

In life we run across many different types of people, and in my experience, Bill Pihl was very generous! Not only did his smile light up a room, he always had a wonderful, long joke for a fellow Swede. He gave so much using his talent for operating his old back-hoe to help move many, many trees within the WSU field trials, consolidating WWFRF successes as the trees were winnowed down to the very best fruit varieties. Many of those trees ended up in the Fruit Garden.

Eventually, as Bill's health became an issue, he would generously allow me to drive his old back-hoe down the road to the field trials to move the selected trees myself. He would warn me about the multitude of idiosyncrasies involved with making the old back-hoe run! Of course Bill could do all of that in his sleep, having spent so much time on it over the years. Yet I'll never forget his expression; he

was so gentle and kind as he watched me grinding the gears as I tried to drive away in his old back-hoe.

He donated much in dollar donations over the years as well. I'll remember bringing him a bag of fresh-picked Rubinette apples, one of his new favorite apples (recently discovered in the research trials), and he'd tell me he wanted to plant one of those too.

Bill embraced life and it's bounty fully, and never slowed down in sharing his appreciation of it's beauty.

In warm remembrance, Kristan Johnson



WWFRF Bill Pihl Celebration with Kristan Johnson and De Arbogast



Pruning gooseberries at the Winter Field Day

Western Washington Fruit Research Foundation (WWFRF) February, 2014 Newsletter

Western Washington Fruit Research Foundation

In cooperation with Washington State University, Northwest Washington Research and Extension Center

Winter Field Day and Open House: March 1, 2014

16650 State Rt. 536, Mt. Vernon, WA 98273

8:30 AM and after: Registration (required for all attendees)

Admission free for WWFRF Members: (included in annual dues)

Non-Member Admission: \$15.00/Individual; \$30.00/Family (including non-adult children)

ROOTSTOCK & SCIONWOOD SALES (West Room) 8:30 -1:00 PM

GRAFTING OF PURCHASED SCIONS & ROOTSTOCK (West Room) 9:00 - 1:30 PM

Workshops, Lectures and Panels

(Held in the Auditorium):

Welcome 9:00 - 9:10 AM

Grafting by the Numbers – Bernie Hilgart 9:15 – 9:55 AM

Organic Apple Production - Harry Burton of Salt Spring Island 10:00 - 10:50 AM

Panel on "The Best Apples You can Grow in Western Washington" 11:00 - 11:55AM

Harry Burton, Dr. Robert Norton, Sam Benowitz, Jacky King, Bill Davis Illustrated with Lori Bracken's photos

Lunch and Social Time

12:00 – 12:30 PM, Auditorium (Please bring your own lunch & beverage)

Annual Business Meeting and Board Meeting

12:30 – 1:30 PM, Auditorium (Election of Officers and Board Members)

Fruit Varieties and their Health Benefits – Preston Andrews 1:30 – 2:30 AM

Fruit Varieties from Around the World - Sam Benowitz of Rain Tree Nursery 2:40 – 3:30 PM

Grafting Workshops

(Held in WSU classroom):

Session A (Top Working for Disease Resistance) 11:00 – 12:00 Session B (Bench-Grafting) 12:15–1:15

Pollination with Mason Bees – Missy Anderson (held in the WSU classroom) 1:30 – 2:30 PM

Demonstrations in the Fruit Garden

1:30 - 2:20 PM Fruit Garden Tour

Winter Pruning (Ingela Wanerstrand)

2:30 – 3:20 PM Pruning Bush Fruit (Zsofia Pasztor)

Espalier Training (TBA)

3:00 - 3:30 PM Fruit Garden Tour

Western Washington Fruit Research Foundation (WWFRF) February, 2014 Newsletter





The Fowler Pear Tree

BENEFITS OF MEMBERSHIP

Annual memberships cost \$25/year for Individuals and \$40/year per Family (Parents with their minor children). Membership entitles you to the newsletter, participation at all Field Days/Open Houses and Sample the Harvest Days, at no additional charge; other types of memberships are also available. Visit nwfruit.org to download the membership form OR use the membership form found on page 11 of this newsletter.

The WWFRF Newsletter is printed 3x/ year in February, June, and September and mailed to all members.

FIELD DAYS/ OPEN HOUSE is free to members, and open to non-members for One-Day only fees of @ \$15/ Individual and \$30.00/ Family (Parents with their minor children) for each event.

• The Winter Field Day/Open House is the first Saturday of March, and consists of hands-on pruning, grafting and budding, talks on insects and pests, scion wood sale, and root stock sale.

<u>HARVEST DAYS</u> are free to members, and open to non-members @ \$15/ Individual and \$30.00/ Family (One household only) at **each** event:

- Sample the Harvest Days are held in July and October. The following fruit is harvested in season: cherries, pears, plums, and apples. Paid members and non-members are allowed to keep their portion of the harvested fruit.
 - Special Volunteer Harvests occur on an as-needed basis to assist the WSU NWREC staff in harvesting specific fruit for data collection. This harvest is open to paid members only, and paid members are allowed to keep a portion of the harvest.

Have you renewed your membership yet? WWFRF membership is valid for 12 months from the date your check is received. Your membership expiration date is printed above your name on the mailing label indicating the month and year that your membership expires. Renew your membership before it expires by completing the Membership Form and mailing it in. You can also renew online.

WWFRF would like to thank our commercial members.

Bee Diverse - www.beediverse.com
Beez Neez - www.beezneezapiary.com
Northwoods/One Green World - www.onegreenworld.com
Raintree nursery - www.raintreenursery.com
Skagit Farmers Supply - www.skagitfarmers.com



Western Washington Fruit Research Foundation Membership Form

www.	Please check one box ONLY: ☐ Renewal ☐ New Member
NAME:	DATE:
ADDRESS:	
CITY:	STATE:9-DIGIT ZIP:
TELEPHONE:_()	EMAIL ADDRESS:
	of membership, extra donation, and/or individual or family open house/field day:
\$25 FOR ANNUAL INDIVIDUAL MEMBER	RSHIP (One person only)
	P (One immediate household only; maximum 4 persons)
	RE STUDENT MEMBERSHIP (1st year only; must show student ID card)
\$FOR GIFT MEMBERSHIP FOR	
	RSHIP (Individual or family membership with higher level of financial support)
	Only) MEMBERSHIP (Includes 3 people, and also includes business name on our website)
\$200 FOR ANNUAL <u>COMMERCIAL (Full)</u> (Includes 3 people, and also includes a link	MEMBERSHIP k from our website to the commercial members' website)
AN EXTRA DONATION of \$	for WWFRF
\$15 FOR INDIVIDUAL One-Day OPEN HC	OUSE/FIELD DAY ONLY
\$30 FOR FAMILY One-Day OPEN HOUSE	E/FIELD DAY ONLY (Parents with their minor children)
I WOULD LIKE TO VOLUNTEER TO DO THE FOL	DLLOWING FOR WWFRF (please check all applicable lines):
	VWFRF FRUIT DISPLAY GARDEN (usually held every Thursday from 9am-12noon; March-
Nov.)	
TO HELP WITH FIELD WORK AT THE WS	SU NWREC in Mount Vernon
TO HELP SET UP THE DAY BEFORE THE	E WINTER FIELD DAY (FEBRUARY)
TO HELP AT A SAMPLING DAY : Please	e check ALL applicable boxes: $\ \square$ Parking $\ \square$ Registration $\ \square$ Bags Distribution
TO HELP AT FRUIT TASTING/ROOTSTOO	CK SALES
TO HELP WWFRF ON AN ONGOING BAS	SIS
TO HELP WWFRF AT THE NORTHWEST	FLOWER & GARDEN SHOW in Seattle (usually held in February every year)
TO HELP WWFRF AT VARIOUS DISPLAY	Y BOOTHS presented inCOUNTY
TO HELP WWFRF SELL FRUIT at the FAL	LL FRUIT SHOW
TO HELP BY DOING WORK I CAN DO IN	N MY OWN HOME USING MY COMPUTER OR TELEPHONE
Please make your check payable to: WWFRF and	nd MAIL your completed membership form and check to:

WWFRF C/O Christy Nieto, Membership 2609 Cedarwood Ave Bellingham, WA 98225

Western Washington Fruit Research Foundation (WWFRF) C/O Christy Nieto 2609 Cedarwood Ave Bellingham, WA 98225

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Please check your label to see if your membership needs renewing.



In This Issue

In Remembrance of Bill Pihl! Historic Fowler Pear! Winter Field Day!

Check out our wonderful website at: Nwfruit.org, where you can see the color version of this newsletter

Mission: WWFRF exists to advance fruit horticultural programs for our unique Western Washington maritime climate through advocacy, research, education, and demonstration for the benefit of the general public and the small farmer.