



Western Washington Fruit Research Foundation

January, 2010

President's Message

By Kristan Johnson, WWFRF President

Well, I certainly hope that the new decade we are entering brings us peace and happiness. What better way to experience calm and balance with nature than by growing great fruit! It helps to bring our small piece of the cosmos into serene order, where we can live simply, harvesting our safe, healthy food that we have raised in a sustainable way. In an era where "energy audits" and "locally grown" are all the buzz words, we can appreciate that we, too, are doing our part.

Toward that goal, WWFRF has been busy putting together an excellent educational outreach program to help fruit growing enthusiasts such as yourself who visit the Fruit Garden and our new NWFRUIT.org website. Speaking of the WWFRF website, we have worked very hard to make it as internet accessible as possible, and have even reformatted the WWFRF newsletter to that end. We have also been creating many new handouts for use in the Fruit Garden Kiosks. Those handouts will also be available at both of our FruitBooths and on our website.

If you would like to become part of the FruitBooth team and help spread the "Growing Great Fruit" message to emerging fruit enthusiasts, then hop on board and contact Christy Nieto, our new Volunteer Coordinator (see page 10). You don't need to be an expert, and you meet the nicest folks who want to share their memories of fruit growing from when they were children and they would love to experience it again, but they just don't know how. They are so thankful that we have publications and handouts specific to our area.

As you know from the letter contained in our mailing to each of you (including the [Tree Fruit Care Calendar](#)), we have had to reevaluate our focus concerning the Fruit Research part of our mission due to the budget cuts (following my message is a new article from Carol Miles which details the current status). We are preserving some plum and peach trials in the field, and other trees we are moving into the Fruit Garden. We will address some of these issues in the general membership meeting. The letter we mailed to you was intended to keep you apprised of the situation and to assure you that we are still committed to continuing on with our 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.



**Fall Field Day participants are greeted
at the new FruitBooth**

We will continue to have all of our events, and plan for a bigger Summer Fruit Festival this year, (go see the new Festival commercial on our website, you might be in it!) as the Fruit Garden is becoming even more prominent in our educational outreach efforts. So I hope to see you at the March 6th Grafting, Scionwood/Rootstock Sale, Vole Control, Slender Spindle Training Technique, and other pruning demonstrations; bring a friend to join in this unique opportunity!

Kristan

Letter from Carol Miles

The Fruit Horticulture Program at WSU Mount Vernon NWREC was eliminated July 1, due to budget cuts in the Department of Horticulture and Landscape Architecture. These cuts were part of the overall cut to WSU due to state budget reductions. These state budget cuts have negatively impacted many state programs and personnel. It is not possible for Gary or the WSU Mount Vernon NWREC to continue to provide support to clientele when his position has been eliminated.

One of my goals for 2010 is to work with county Extension offices to convert the Fruit Horticulture Program website maritimefruit.wsu.edu into an information resource center for fruit crops for western Washington.

Many of the fruit trees Gary has worked with over the years are in the Fruit Garden which was established by the Western Washington Fruit Research Foundation (WWFRF) in 1996, and is adjacent to the Discovery Garden at WSU Mount Vernon NWREC. I am currently working with WWFRF to ensure that all trees that were highly promising in Gary's trials are included in the Fruit Garden. In addition WSU and WWFRF are developing handout information about each fruit type in the Fruit Garden as well as primary issues that impact fruit production in the region. It is our hope that the Fruit Garden will be a living tree fruit resource center.

Sincerely,

Carol Miles [former supervisor Fruit Horticulture Program, WSU Mount Vernon NWREC]

Seattle Flower and Garden Show Needs Volunteers!

February 3-7, 2010

Come represent the Western Washington Fruit Research Foundation at the Northwest Flower and Garden Show:

<http://gardenshow.com/seattle/tickets/index.asp>

This is your opportunity to promote fruit growing to the general public from all over the Puget Sound region. There are currently shifts available on all days, but the spots fill up fast. The show is a lot of fun and volunteers get **free admission** to the show for the entire day. For more information, or to volunteer, please contact Rachel Petrich at brunarp@hotmail.com.



In 2008 WWFRF won "best of show" for an educational display at the Flower and Garden Show!

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WWFRF Financial Report: 12/31/09

By Walt Kropp, WWFRF Treasurer, Board Member

Non-Restricted Funds

Operating Expenses

Income

Interest	\$ 8.21
Membership Dues	<u>\$7739.00</u>

Total Income **\$7747.21**

Expenses

Bank Charges	\$ 10.00
Booth Rentals	\$ 91.25
Computer Consultant	\$ 650.00
Insurance - D & O	\$ 783.00
Insurance - Liability	\$ 927.00
NW F&GS Expenses	\$ 889.08
Printing & Mailing	\$ 2267.80
Spring Field Day Expenses	\$ 693.00
Wash. State Filing Fees	\$ 30.00
Website	<u>\$ 1197.00</u>

Total Expenses **\$ 7538.13**

Difference **\$ 209.08**

Foundation Sponsored Research

Income

Donations	\$4343.47
Expenses	<u>\$1500.00</u>

Difference **\$2843.47**

Fruit Garden Funds Summary

Income

Scionwood Sales	\$ 1136.00
Apple Sales	\$ 2067.00
Interest from CD's	\$ 523.88
WWFRF Fruitbooth	<u>\$ 3357.73</u>

Total Income **\$ 7084.61**

Expenses

Fruit Garden Expenses	\$ 7469.61
Store' Expenses	\$ 5382.20
Canopies Purchase	\$ 479.14
Printing and Mailing	\$ 1605.85
Purchase Mower	\$ 10601.44
Safety Vests	\$ 345.02
Summer Fruit Festival Expenses	\$ 4550.90
Volunteer Awards	<u>\$ 335.00</u>

Total Expenses **\$ 30769.16**

Difference **\$-23684.55**

Current Funds

Non-Restricted **\$ 3914.57**
(Operating plus research)

Fruit Garden **\$ 40,369.04**

Total **\$ 44,283.61**

Totals

Total Income (All Categories) **\$ 19175.29**

All Expenses (All Categories) **\$ 39807.29**

Difference **\$-20632.00**

**We owe WSU \$8600 for Addendum #20 (2009).
We have given WSU a \$1500 grant for maintaining
the cherry block this year.
Summer Fruit Festival Receipts (\$2045.50) are
included in income figures.**

**All donations to WWFRF, unless otherwise
designated, will be applied to foundation sponsored research.**

Winter Field Day / Open House: March 6, 2010

Western Washington Fruit Research Foundation
in cooperation with



Washington State University, Northwest Washington Research and Extension Center
16650 State Route 536, Mount Vernon, WA 98273

8:30 - 9:00 AM	Registration–All members & non-members must first register & pay <i>Admission Fee for WWFRF Members: Included in annual paid dues Admission Fee for Non-Members: \$15.00/ Individual; \$30.00/ Family (Parents with non adult children only) Free/ Caregivers</i> Please be on time for each talk so as not to disrupt the presentation.
8:30 – 9:00 AM	ROOTSTOCK AND SCIONWOOD SALES
9:00 – 9:50 AM	GRAFTING – BILL DAVIS
9:55 – 10:25 AM	VOLE CONTROL – DAVE PEHLING
10:30 – 11:15 AM	SLENDER SPINDLE Training method for apples – TOM THORTON
11:20 – 11:50 AM	SLENDER SPINDLE – TOM THORTON – demonstration in Fruit Garden
11:30 – 12:30 PM	ROOTSTOCK AND SCIONWOOD SALES –
12:00 – 1:00 PM	GENERAL MEMBERTSHIP MEETING – election of officers. <div style="border: 1px solid black; padding: 2px; text-align: center;">Members please attend</div>
11:50 – 1:00 PM	LUNCH BREAK Time to meet, and join in the informal fruit growing discussions with fellow Foundation members <i>(Please bring your own lunch and beverage)</i>
1:00 – 3:00 PM	DEMONSTRATIONS IN FRUIT GARDEN – hands on Bill Davis – Grafting, top working older trees into new varieties Dave Pehling – Vole control De Arbogast – Pruning blueberries, gooseberries, and currants Kees Calissendorff – Pruning espalier Dr. Bob Norton – Pruning young trees and stone fruit Jim Taylor – Pruning grapes
11:30 – 12:30 PM	ROOTSTOCK AND SCIONWOOD SALES

Pre-order Your Rootstocks! Deadline February 15th, 2010

This year there will be a limit of 3 rootstocks of each variety per person UNLESS you pre-order. There is a limit of 10 each if you pre-order. Please email your rootstock pre-orders to Shirley Kropp at TADPOLEBWG@peoplepc.com including how many of each rootstock you wish to purchase, along with your name. Available varieties are:

(apple from smallest to largest)EMLA 27, BUDAGOVSKY 9, EMLA 26, EMLA 7, MM 111, ANTANOVKA,

(plum) MARIANNA 2624, KRYMSK 1, LOVELL,

(pear) OHxF 513, QUINCE BA29C (more dwarfing than OHxF 513, but you must graft an interstem (Comice works well) for many European pears),

(cherry) KRYMSK 5 .

A Quick Overview of the Slender Spindle Training System

Condensed from the article by Terence L. Robinson and Stephen A. Hoying

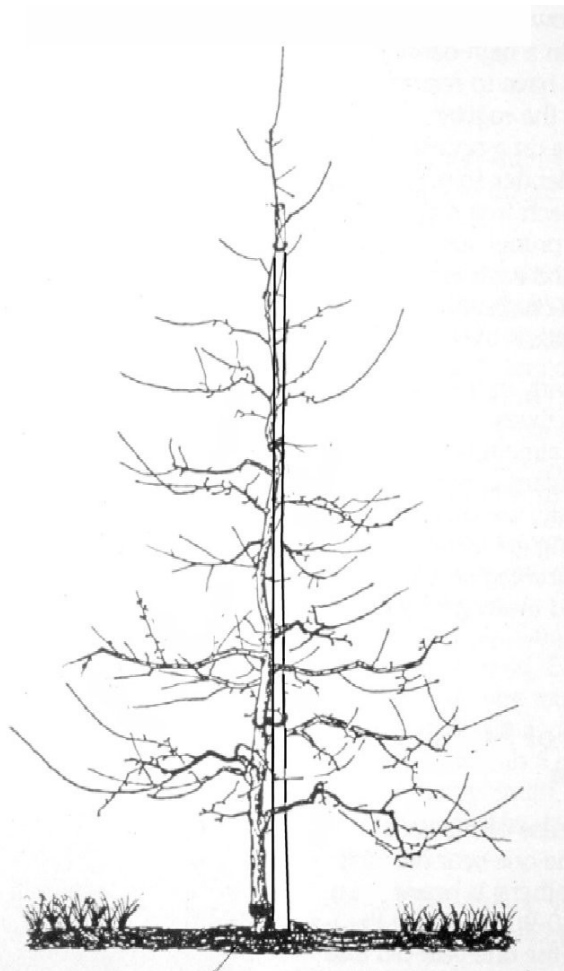
The Slender Spindle training system keeps a tree small and productive. Although the following article recommends using a mini dwarf tree, the pruning techniques can also be helpful on somewhat larger trees. I have a Fiesta apple on M.26 rootstock in rather infertile, sandy soil that is trying to be a slender spindle (or maybe a somewhat fat spindle). Its branches all want to droop and in its third leaf last summer it was very productive and the new growth is not vigorous and should be quickly fruitful. Kim Siebert, Editor

Trees used in the Slender Spindle system should be on a dwarfing rootstock such as M.27, Bud 9 or G65. For best results they should have a trunk that is at least 5/8 inches in diameter and they should have 8-10 spaced out feathers (branches) with a maximum length of 1 foot starting at a height of about 30 inches. Feathers larger than two-thirds of the trunk diameter are removed. If there are many feathers then remove the ones with a diameter larger than one-half of the trunk diameter. Do not head back (cut the tips) of the remaining feathers. The main trunk is only headed (at 5 feet) if there are no feathers. A support pole must be installed by the time the tree leafs out. The leader is supported with the pole and is not headed until year four or five.

Branch Angle Manipulation

The most important method of inducing early cropping is tying down of the larger feathers below horizontal right after planting. The Slender Spindle tree typically has no permanent lower tier branches.

- all large feathers (more than 10" long) are tied or weighted below the horizontal at planting to induce cropping and prevent development of substantial lower scaffolds.
- The pendant position results in a weak fruiting branch instead of a scaffold branch.
- Smaller, less vigorous feathers usually bend with cropload without any tying.
- This tree management allows long-term cropping of many feathers and little invasive pruning for the first 5-8 years.
- After the initial tying or weighing down of feathers at planting, new lateral branches that arise along the leader do not need to be tied down. If moderate vigor lateral shoots arising along the leader are not pruned, often cropload in the second or third year will bend branches down below horizontal and a natural balance between vigor and cropping will be established without additional limb positioning. Thus with the Slender Spindle, no additional limb tying is needed after the initial tying or weighing down of the feathers at planting.
- In vigorous conditions and/or warmer climates where winter chilling is insufficient, often limbs become too large before they set sufficient croploads to bend the branches down. In these situations, tying down of all vigorous limbs must be done annually for the first 3-5 years until the tree settles down and begins to crop



- heavily.
- The precocity of the rootstock induces heavy cropping and a natural balance is established.

Annually remove one to two upper branches completely. To assure the development of a replacement branch, the large branch should be removed with an angled or beveled cut so that a small stub of the 'lower' portion of the branch remains. From this stub, a flat weak replacement branch often grows. If these are left unheaded, they will naturally bend down with crop. Repeated annually, the top of the tree will be composed completely of young fruitful branches. Since large branches contribute to the development of large trees, the Slender Spindle trees that have no large scaffold branches remain small.

Be sure to come and hear Tom Thorton's presentation on Slender Spindle pruning at our Winter Field day on March 6, 2010. Tom is the owner of Cloud Mountain Farm and has extensive experience with this type of pruning in our area.

WWFRF Board Meeting

November 21, 2009 10am – 3:00pm

Thank you to JoAnn Alidina who hosted this meeting and lunch.

Board members present: Kristan Johnson, Bill Davis, Tom Wake, Kim Siebert, JoAnn Alidina, Richard Fairfield, Rachel Petrich, Sam Benowitz

Other WWFRF members present: De Arbogast, Christy Nieto

DVD's: Sam will put the Anthracnose DVD in Raintree's catalog. We are working on making an antique apple DVD which will feature Dr. Norton. A DVD on how to prune old apple trees might be a good idea.

Volunteer coordinator: Christy Nieto is filling the general WWFRF volunteer coordinator position. She is working on a better method for recording volunteer hours for hours worked outside of the Fruit Garden. The Fruit Garden volunteer hours will be sent to her so that she will have records of total volunteer hours for WWFRF.

Archive Project: Ellen Cooley has been working to pull out the missing data from NWREC research that has not yet been digitized. The goal is to have a complete set of annual fruit research reports from 1991-present digitized. It was proposed to do a small publishing of the data by fruit type. This information is intended to be available on the existing NWREC website possibly in a search-able database. It is hoped that Jacky King's large collection of fruit slides in conjunction with Lori Bracken's fine photos will supplement this database.

Winter Open House Speaker: We hope to have a speaker on the Slender Spindle System – most productive fruit tree system. Kristan will contact potential speakers. De has agreed to start working on a slender spindle system handout for this event.

Information Dissemination Policy – WWFRF needs an Information Dissemination Policy to avert any future conflicts.

Motion made by Richard Fairfield, as follows:

1. We should include at the Fruit Booth a posting that all approved materials contain the WWFRF logo.
2. Anything offered in the Fruit Garden is to be vetted by WSU.
3. A Handout Committee will be established.
4. The Committee will provide to the board guidelines for non-WWFRF info to be sanctioned at Fruit Booths.

Seconded by Tom Wake and passed unanimously.

Moving Trees: A committee will meet to decide what trees to move in or out of garden.

Summer Fruit Festival

The Summer Fruit Festival committee is looking at August 28th. Kristan has been talking to chefs about their fresh fruit interests. Board is looking for a Summer Fruit Festival Chair. Christy will consider the position.

Skagit Valley Festival of Farms: The Skagit Valley Festival of Farms is well established and has thousands of attendees. To participate a \$100 fee due by January 30th. It takes place the 1st weekend of October so it would involve having volunteers on back to back weekends. Tom W. motioned that we try to set up the booth at another farm the first year. Seconded by Rachel. Passed unanimously.

Fruit Research Program: Steve Jones sent letter regarding termination of NWREC and WWFRF had an emergency meeting on Thursday (11/19) to learn more about this situation. WSU has decided to eliminate the fruit horticulture position so now Gary Moulton is working on wheat but he is available to us part time (we will pay hourly for his services). There may be a new WA state Ph.D. Fruit research position. A committee is to be created to interview for this position and WWFRF will participate in this process if they decide to hire for this position. Steve Jones and Carol Miles strongly support the continuing work of WWFRF. A letter will be mailed to the membership about this situation as soon as possible.

Vole Control

Condensed from the article by Dave Pehling

These pictures were taken in the Fruit Garden which has had a number of trees severely damaged by voles in the last year or two. Check out this newsletter on our website to see larger color versions of these pictures.



Voiles are 4-7 inches long with short legs and tails. The Townsend vole can be up to nearly 9 inches in length with longer tails.

When the populations of meadow voles are high they cause a great deal of damage to fruit trees. Most vole damage in western Washington is caused by the Oregon vole (*Microtus oregoni*) or the Townsend vole (*M. townsendii*). These rodents occasionally undergo huge increases in population, reaching as many as 500 per acre.

Often, the first signs of vole trouble are bulbs and seeds that don't sprout, or trees that begin to look "off color" and feel loose in the ground. The tunnel entrances can be seen in the turf and trails can be found under boards and tarps that have been left of the ground. Actual feeding damage to plants can be identified by the multitude of criss-crossing 1/8-inch wide tooth marks made by the rodents' two incisors. Most damage occurs underground, so you will need to clear away the soil from the base of the plants to find vole damage. Above ground feeding happens when you allow tall grass to grow around plants or when there is a blanket of snow that lasts for several days. Girdling damage to trees



usually occurs in fall and winter.

Keep grass mowed, and eliminate it from within a circle of at least three feet from the trunk. Place vole guards of ¼ inch mesh hardware cloth around the tree trunks, burying the bottom edge at least a few inches deep to protect the crown as well as the trunk. Do not use a thick soft organic mulch that can provide cover for the voles. Voles love to tunnel under weed-barrier cloth, so do not use it.

Smaller voles may be trapped with mouse traps; larger ones may need rat traps. Traps should be placed in or near active tunnels and can be covered with curved cardboard or roofing shingles. Use at least one trap per 100 square feet. After setting traps, check them every few hours for the first day, remove voles, and reset traps as needed. When handling dead rodents and traps, wear disposable gloves and wash your hands well afterwards. Bury the dead rodents immediately. After a week of intensive trapping, the number of voles caught daily should be near zero and you don't need to check the traps as often. Leave covers over the tunnels and recheck for voles by periodically placing apple slices in the tunnels. If toothmarks appear on the apples, repeat the trapping process.

WWFRF Demonstration Garden Vole Eradication Program

1. The WWFRF volunteers, here after referred to as "V", will remove all the existing mulch from under the fruit trees in the garden and will deposit it in the NWREC compost. The V will no longer deposit mulch under the fruit trees.
2. Once the mulch has been removed, V will develop a program to control the grass and weeds under the fruit trees. This will be an on going program.
3. V will fabricate the vole bait traps and locate the best areas for placement based on vole activity and safety from non-target species. The locations will be flagged.
4. NWREC designated staff will bait the traps.
5. V will check the traps on a weekly basis and dispose of any dead voles.
6. V will notify NWREC designated staff of bait status so re-baiting can take place, as necessary.
7. V will place pieces of apples in trap areas to monitor for vole presence and will notify NWREC designated staff accordingly.

Poison baits are the quickest means to control an established population of voles. There are fast-acting zinc phosphide and slow-acting anticoagulant chlorophacinone and diphacinone poisons. The site/crop and method of placement must be on the label to comply with FIFRA regulations. For instance, if a mole/gopher ZnP bait label says it may be used in garden situations, one can legally apply it for voles (which are not specifically on the label) in that site and it may well be effective. If the label only says to use it in tunnels, it may not legally be used in above-ground bait stations. Always carefully follow the instructions on the label to avoid injury to yourself, other people, pets, and wildlife. Baiting is more effective during the fall and late fall bait applications reduce vole populations just before winter, when they do the most damage. Winter is also ideal because of natural food shortages.

Bait stations can be made from beverage cans, PVC pipe, split tires, or wood. Bait stations help keep the bait dry and fresh much longer. A simple board, securely staked to the ground, makes an adequate bait station to protect the bait and attract voles. Bait stations can be made from discarded beverage cans by enlarging the opening so that it is about 1-1/2 inches in diameter and denting the side of the can so it will not roll. Place bait in the can and place the can dented side down in the area to be protected. Mark the bait stations with flags or stakes so you can relocate them. Bury the dead rodents.

Voles can quickly repopulate so it is important to carefully monitor vole population, especially in the fall, by placing apples under board or shingle covers in random vole tunnels. Check after 24 hours to see if they were eaten or removed, showing vole activity.

**Come hear Dave speak on vole control at our
Winter Field day March 6, 2010.**

Fruitbooth Volunteers

Do you enjoy supporting a good cause? Are you enthusiastic about the work that WWFRF is doing? If so, consider volunteering at one of our events. We always need help at Fruit Garden events and we especially are looking for people who would like to man the WWFRF table at the events of other organizations. This is a great way to teach people who are already interested in growing fruit about the work our organization is doing. We'll teach you all you need to know and we'll supply the table and all the necessary gear. We currently need volunteers for the Seattle Tree Fruit Spring Event (Mar 14) and the Tilth Plant sale (May - usually mother's day weekend) We also need volunteers to help man the tasting tables for tasting preserves, cider and apples at events.

If interested in volunteering please contact our Volunteer Coordinator, Christy Nieto, at fieldofgreens@earthlink.net.



Rose Hamre shows off a giant Wolf River apple near the Fruitbooth.

[How to Join WWFRF](#)

[Donate to WWFRF](#)



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.