



President's Message

Hi NW Fruit members and other NW fruit growers, hobbyists, and fans. As I am writing this in mid June, everywhere I look are recommendations and reports about what's happening and what to do in your orchard right now. Rather than provide you with our (my) version of the same, I thought I would share some very interesting documents I discovered as I was once again lured down the google rabbit hole.

It all started when one of our long-time volunteers brought a 40 page pamphlet to our Thursday work party titled [Pruning the Slender Spindle by Hermann Oberhofer \(1990\)](#). I glanced through it and quickly came to the conclusion that it was one most interesting and useful documents on what is currently my number one interest in apple growing. I've searched for and found many similar horticultural documents over the years and assumed I would be able to find a used copy or pdf file of the document. Think again. It took me quite a while to even find any references to the document; after about an hour as best as I could determine only 6 copies exist and they are all in libraries, the closest being in Wenatchee. I'm still trying to find an available copy, but in the search process, I have found dozens of other useful and interesting fruit growing documents that I will share with you now.

The first document is a presentation slideshow titled ["Apple Botany and History" by M. Elena Garcia](#) from the University of Arkansas Division of Agriculture Research & Extension. The slide show is high quality with many graphics documenting the recorded history of the apple from the 10th century B.C. to current times, including information about apple growing in Arkansas.

Next is a delightful 4 page pamphlet titled ["Illinois Ag Mag Apple An agricultural magazine for kids"](#). Click the link "Apples" on the Illinois Farm Bureau page. It includes shorts on topics including Johnny Appleseed, budding, harvesting, iodine test for ripeness and others. It is colorful, well written and suitable for the fruit novice of any age.

Michigan State University has several documents relating to spring temperatures and freeze damage including an excellent chart ([get the pdf](#)) titled ["Critical Spring Temperatures for Tree Fruit Bud Development Stages"](#). Go to the [MSU Ag website](#) to search for this or any other topic that interests you.

Here's one you probably haven't seen. ["Organic Apple Production in Sweden \(2007\)"](#)

This is a snippet from the introduction. "Consumer interest in organically grown fruit appears to have increased considerably in recent years but the organic apple growing in Sweden cannot match the demand. One objective

of this thesis was to study conversion of an orchard with ‘Aroma’ and ‘Karin Schneider’ from IFP to organic production....”

And finally, here are numerous [web pages, slide shows and videos covering various slender spindle topics](#) on the MSU website mentioned above.

It’s supposed to get up to 90 degrees tomorrow, so I’ll probably be on my computer in the basement follow those links and finding more good stuff.

Hope to see you at our Apple and Pear Sample the Harvest Day in October.

Bob Baines, President

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Fun in the Fruit Garden

Fruit Garden volunteers have many learning opportunities in the Garden. Join the volunteers Thursday mornings at 9:00 am to noon in the Garden for fun, friends, learning, and the opportunity to serve your community.

If you would like to volunteer in the Fruit Garden contact Tom Wake at info@wwfrf.org



Fruit Garden Volunteers enjoy a snack at break time.

Board Meeting

Our next meeting will take place in September. We will put the details on the website when we have decided on the exact date, time and location.

PLEASE SEND YOUR DONATION ALONG WITH THIS FORM

Enclosed is my gift of:

☐ \$5000 ☐ \$1000 ☐ \$500 ☐ \$100 ☐ \$50 ☐ \$25 \$_____ (Make check payable to WWFRF or NW Fruit)

To make a donation by credit card go to: NWFruit.org and click on support.

Please designate my monetary gift toward: ☐ Where it is needed most!
☐ Fruit Garden

I would like to volunteer! ☐ In the Fruit Garden
☐ At the Winter Field Day
☐ On sampling days
☐ By doing work that can be done from my home

Name _____
Address _____
City _____ State _____ Zip _____
Email address _____ Phone # _____

Please make my gift: ☐ In Honor of: ☐ In Memory of:
(Name of person) _____
Address of person or person's family (So we can notify them) _____

Thank you.

Please send to: NW Fruit
C/O Kim Siebert, Secretary
7904 56th DR NE
Marysville, WA 98270

August 8 Volunteer Appreciation Day

On Thursday, August 8, we will have our volunteer appreciation day at the south end of the Fruit Garden with a luncheon served at noon after the normal volunteer work day. Both Fruit Garden volunteers and volunteers in other areas are encouraged to come.

2019 Saturday Volunteer Work/Study

June 15 Fruit Thinning

July 20 Summer Pruning

August 17 Chip Bud Grafting

September 21 Espalier Maintenance

9:00 AM to 12:00 PM

This is a great opportunity to learn about growing fruit and also help out in the Fruit Garden, especially for people who work during the week. You don't need to already be a Fruit Garden Volunteer to come to these events. These events will give the attendees the choice to attend 1 hour of hands on instruction and practice in the garden followed by two hours of volunteer work, or a shorter instruction period followed by volunteer work. We will usually have two instructors available. The instruction will be modified according to the interests and skills of the attendees. The volunteer work will consist of pruning, thinning, netting, planting or whatever the garden manager assigns for that month. The summer pruning and chip bud grafting days may be switched – we will post on our website. Go to NWFruit.org for more information and for a link to the sign up page.

There is no fee for these events, since the attendees will be doing volunteer work after the workshop.

Sprays, Weed Control, and the Roundup Controversy

NW Fruit serves many people who have various ideas about how they want to grow fruit. Our Fruit Garden volunteers are also a group of people who have differing ideas about how to grow fruit. Some strongly prefer organic or no-spray while others use sprays in their gardens at home. The Fruit Garden has a no-spray section to explore and demonstrate culture techniques that avoid sprays. Sprays are used in the rest of the Garden. For a few years we did not spray at all, and a very large part of the apple crop became unusable due to high levels of pest damage.

In this issue we will take a look at the issue of using Roundup for weed control, with contributions from volunteers on both sides of the issue. In our September issue we will have contributions about other spray issues and one article from Jay Scott about glyphosate that wasn't quite ready for this issue. (Kim Siebert, Editor)

Letter from Celeste Frisbee: I would also fall in the category of avoiding roundup. I think this is something that will continue to come up in the future, so I am glad that you invited everyone to contribute and discuss it further.

Letter from Bill Davis:

Whether the problems with Roundup are a result of the Glyphosphate or the inert ingredients that make up the liquid, the use of the product has grown exponentially over the years world-wide and traces of it are being found accumulating in animals and in our bodies. Who really knows what it is doing to us in the long term. Below is just a small sampling of the articles I've read on the subject that reflect concern of not only scientists, but the thinking public also! I am against using it in the Fruit Garden!

[Weedkiller products more toxic than their active ingredient](#)

[New evidence about the dangers of Roundup](#)

[Weed whacking herbicide deadly to human cells](#)

[Glyphosate's Suppression of Cytochrome P450 Enzymes](#)

[15 Health Problems Linked to Monsanto's Roundup](#)

Letter from Dennis Davenport: This is my input on the use of Roundup herbicide in the Fruit Garden. I prefer to base my positions on data and facts whenever possible, so I have spent some time searching the Internet for “hard evidence” on the benefits and risks of using Roundup. I am attaching a [three page document](#) that I think reasonably presents many of the key facts and issues on the subject. I would like to share these additional personal views of my own based on the information in the document.

- 1) After more than 40 years of extensive use in the field, and hundreds of studies, there is no overriding, compelling evidence that has caused regulatory agencies in the U.S. to declare Roundup unsafe. That said, it may potentially take decades to accumulate enough information to arrive at some definitive future conclusion that alters the current status that it safe when used according to its label.
- 2) Lack of compelling data means that each person is free to come to his own conclusions based on whatever information is available to that person. There is no right or wrong personal conclusion at this point in time. Everyone is entitled to his/her opinion.
- 3) There is a clear alternative to using Roundup in our garden. It's called “applying elbow grease” to the problem. In our case, this means hand-mowing or string trimming the areas under trees that cannot be reached by our John Deere mower. This situation is aggravated once the tree branches sag from fruit load. This method HAS been used in the past at WWFRF, but current volunteer availability has not allowed this method to be used in the last few years.

Volunteers who USED to do this task are still available to coach those who would like to volunteer for this method.

- 4) It is clear that both of the court cases described in the attachment involved individuals who had been applying Roundup for decades. What is NOT clear is whether these people diligently followed the mixing and application directions and PPE required by the label. In the case of the WWFRF garden, Roundup is applied by professionally licensed people from WSU who are well trained in following the label, using proper PPE, and posting proper ReEntry Intervals. For ALL pesticides – Roundup included- the most significant risk occurs in mixing and applying the pesticide. Because WSU does pesticide applications for us, no volunteers or members are ever exposed to this risk.

(We welcome Dennis to the Board of Directors as our new Treasurer! More about this next issue.)



Volunteers plant a special type of clover under several trees in the No-Spray section of the Fruit Garden.

Sustainable Weed Management

Nourish the soil and it will nourish you

By Mike McWilliams

I grew up on a dairy farm in Wyoming and in the summer my dad would be out spraying our various Canada thistle patches with 2,4-D systemic broad leaf herbicide. The thing that I found most interesting was that there was always more or less the same amount of thistle to be controlled in more or less the same locations. But my dad did *not* apply herbicide to our lawn. He said it was a waste of money and that clover and dandelions didn't hurt anyone. So clearly in his mind there were two types of weeds. Noxious weeds and harmless weeds. Thistle was "noxious" because the cows wouldn't eat it. I use the same sort of approach today.

During my life I have been becoming increasingly aware of the burden that our increasingly unnatural agricultural and lifestyle practices have placed on our planet's ecosystem. I have also grown to appreciate the complexity of that ecosystem where everything has a role to play. Agriculture has lost touch with that ecosystem. Edible broad-leaved plants like plantain and dandelion

are characterized as invaders to be repelled at all costs. In my lawn they are emergency rations in case we have the big earthquake and the food distribution network goes down. Dandelion root also brings up nutrients from down in the subsoil. I also have nettles growing in the blackberry patch which is a haven for caterpillars and butterflies. I try to mow the nettles before they go to seed. However I don't try to remove them because they are edible and supposedly they may have some health benefits. Any nettles I find outside that patch get removed since they can sting the unwary.

When we bought our current property the west fence was covered with blackberry with the area on the other side of the fence being natural growth protection area (NGPA). There was also a big patch covering where the farmer who had owned the property had abandoned some farm implements. Now blackberries, like most things, have their good points and bad points. We love blackberry pie so we left them. This results in blackberries coming up in my magnolia wood. I just go round and grub them out once a year. I have noticed now that in the NGPA the alders and multiplying domestic plums are shading out the blackberries so that they are going away on their own. I suppose the plums could be considered a weed too since they are growing where I didn't plant them.

Another "weed" we have is ranunculus repens, the creeping buttercup. I first became aware of this beauty in 1985 when I bought my first house. I tried to have a garden and the buttercup was an obvious thug in the perennial borders which I battled faithfully. 2006 when I bought my current 5 acre property it was nearly all pasture and most of that pasture was infested with buttercup. The thing about buttercup is that its seeds can remain viable for at least 20 years so even a scorched earth policy with Roundup would not solve the problem. I was in the process of installing an "eventually" low maintenance landscape with lots of trees and shrubs including lots of blueberries. I decided to take advantage of the buttercups as green mulch. I let them grow to where I see the first bloom buds. Then I weed whack them as close to the ground as I can. See photo to the right for an example where the area around a blueberry I planted a two years ago has been weed whacked.



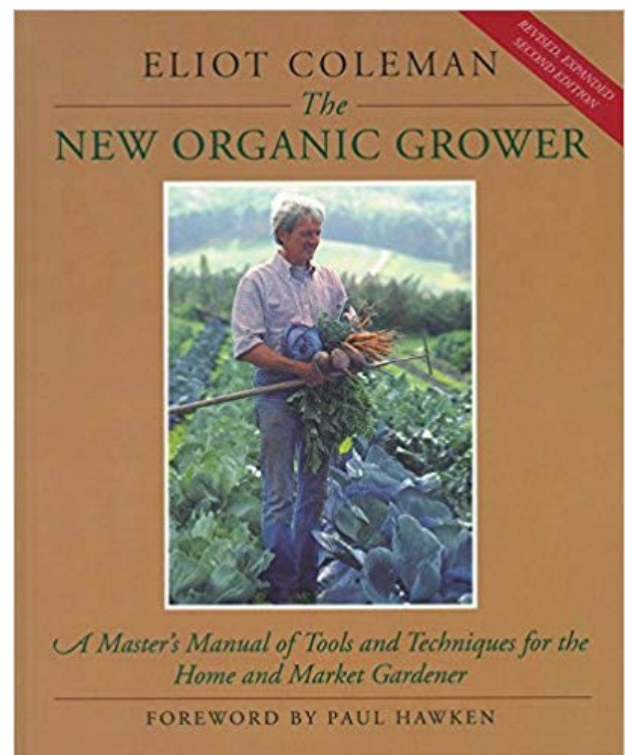


I hand pull the tops of the buttercups that are too close to the stem of the shrub to weed whack, leaving the crowns and roots undisturbed. I pile them in close around the berry stems and rake in the dried weed whacked material. This mulches the berries and retards the growth of the buttercup crowns. I do this cycle about once a month after the initial weed whacking. As the shrubs and trees grow up the buttercup eventually disappears. This green mulch should be pulled 6 inches back from the plants after the first frost to avoid making a vole heaven around the stems. The photo to the left is the same blueberry after the hand pulling.

This story illustrates my philosophy which is to work with the existing biology of the property and make it work for me instead of trying to fight it.

Elliot Coleman's classic book "The New Organic Grower: A Master's Manual of Tools and Techniques for the Home and Market Gardener" expresses "my" philosophy of finding a way to work with nature, not against her, ever so much more elegantly than I can. He regards it as being plant positive rather than pest negative.

My neighbor uses a typical weed and feed on his lawn and usually bags the clippings. He hasn't done anything to his lawn this spring to my knowledge besides mow. On the next page on the left is his lawn mowed three days ago. My lawn is on the right mowed yesterday. You can see broadleaf weeds in both pictures. Our lawns used to be the same pasture. My lawn stays greener longer and I don't pay for weed and feed.





For large areas like my gravel driveway I use a flame weeder. I am sure that the discerning reader will note that approach has it's own issues due to the nonrenewable fuel which generates CO2 when burned. When I balance the chemical solution vs burning I chose burning because herbicides have effects in the soil and my soil is my gold. There is also no risk to my health unless I start a grass fire.

There is one last point I want to bring up here. That is community. We live in an ever more crowded world. The fact that my neighbors planted a hawthorn hedge row along the main road means that I have little hawthorn trees sprouting up under my trees. Since I am bird friendly I have taken one or two and transplanted them to more favorable locations. I pull the rest. My dandelions blow seeds on my other neighbor's grazing pastures. Periodically he goes out and sprays his pastures with some sort of broad leafed herbicides. I am sure he doesn't appreciate my approach to weeds but we have discussed it. I point out to him that the reason we both have an NGPA is the spring drainage goes into a salmon stream so he really shouldn't be spraying at all. I also point out that his cows will eat the dandelions and clover like grass. There are certain weeds his sprays aren't killing and the cows won't eat so they are spreading. Yet he won't mow them. It is interesting to watch. I would feel bad about the dandelions except they are everywhere in this area that used to be farm and is now R5 suburb. I asked him about my leaving the blackberries to be crowded out naturally and he said they were fine with it but would we mind if the came over and picked some during the season. I gave him standing permission. We are a community even if our approaches to weed control are drastically different.

I welcome further discussion about this article and my approaches to controlling weeds at my place.



In early 2016 the blueberries were mulched with sawdust over a layer of compostable mulching paper. Perennial weeds such as buttercups quickly returned, but mummyberry was reduced.



Fruit Garden Report

Hello everyone,

We have expanded the no spray portion of the fruit garden to experiment with various methods to mitigate and control the weeds at the base of the fruit trees. Instead of using Roundup, we're trying to use an alternative called **Weedslayer** which is derived from an organic herbal oil. We're also using micro-clover, which is a very dwarfing white clover that crowds out weeds.

We are continuing to expand our trials using the bee netting, and some of the Jonagold apples will be covered with bee netting this year. Bill Davis has grafted 10 Cosmic Crisp® apples onto the very dwarfing root stocks Bud 9 and M 27 to compare how successful they are within the "mini-dwarf espalier system". Using dwarfing rootstocks allows for extremely easy pruning and bee net application, perfect for the homeowner. This trial is very similar to the newly planted trial on the Western espalier where we are using Karmijn de Sonnaville apples grafted onto rootstocks of Bud 9 and M 27, creating a mini-dwarf espalier system.



Netted Espalier Apple trees

Richard Fairfield has been working diligently to come up with a design to replace the aging Kiwi trellis, and has done a wonderful job. We hope to pass this project through the Fruit Garden Committee and the WWFRF Board of Directors soon, and hope to construct the new Kiwi trellis this summer.

We are looking for someone to help Richard Fairfield maintain Fruit Garden's irrigation system. If you want to learn about drip irrigation, it's an excellent opportunity to join Richard. This would help to satisfy our desire of having at least two people actively working on each facet of the garden. Bill Davis and Larry Crum have been busy with new top-grafting projects, adding multiple varieties to older single variety trees. We started doing this a few year's back with the "Keeper" pears and currently they are reworking 2 apple trees to help create a collection of Macintosh varieties.



The old kiwi trellis



New bird netting support system

Jay Scott and James Wiss are trying out a new type of PVC armature to support the bird netting on the cherries (which has issues with getting snagged and torn on the branches).

Lastly, we are working on making more signs for the fruit garden.

Hope to see you at the Fruit Garden soon,

Kristan Johnson

WWFRF Annual General Membership Meeting followed by the Annual Board meeting

March 2, 2019

Held at the Winter Field Day

General Membership Meeting

Financial Report – Mike Ewanciw – We currently have around 40K.

Fruit Garden Update - Kristan Johnson gave a brief review of the bee netting being used on the Karmijn de Sonnaville apples, the Honey crisp apple espaliers, and a Rubinette apple tree.

We will do a thinning experiment by staggering application of bee netting to Karmijn's to interrupt pollination to see if we can cut down on thinning labor, Larry Crum will be in charge.

We will trial a couple of new yellow cherries that may not need bird netting.

We are looking into testing an organic weed control spray called "Weed Slayer," and also a test using micro-clover beneath trees.

Mike McWilliams has been working on a new data system for the plant inventory, which will also include specific pruning methods for each tree.

Questions from members – A member asked whether we have external audits done. It was explained that we have an internal financial review each year by a committee with several non-board members on it. An external audit is very expensive and our organization has insufficient income for an external audit to be feasible.

Outreach to children – Travis Alexander (WSU Research Associate) brought up the possibility of our having outreach event for children cooperating with WSU. Bob will explore the options with Travis.

Presentation/Vote of Board nominees by the Nominating Committee

Kim nominated John Keefe, Larry Hedgepeth and Celeste Frisbee for the Board of Directors. Kristan Seconded. Passed unanimously.

Mike, Ira, JoeAnne, Bob and Kristan were re-elected to the Board of Directors. Passed unanimously.

Board Meeting

Board Members present: Bob Baines, Kristan Johnson, Sam Benowitz, Kim Siebert, Ira Collins, Peter Jackson, Joanne Hilgart, Mike Ewanciw, Jay Scott, John Keefe, Celeste Frisbee and Larry Hedgepeth.

Nomination of Officers – The following slate of officers was unanimously elected.

President – Bob Baines

Vice President – Ira Collins

Treasurer – Mike Ewanciw

Recording/Corresponding Secretary – Kim Siebert



Western Washington Fruit Research Foundation

Membership Form

DATE: _____
NAME: _____ EMAIL ADDRESS: _____
ADDRESS: _____
CITY: _____ STATE: _____ 9-DIGIT ZIP: _____
TELEPHONE: (_____) _____

Please check all applicable lines to designate type of membership and/or extra donation:

_____ \$25 FOR ANNUAL **INDIVIDUAL** MEMBERSHIP (*One person only*)
_____ \$40 FOR ANNUAL **FAMILY** MEMBERSHIP (*Parents with their minor children*)
_____ \$ _____ FOR **GIFT** MEMBERSHIP FOR: (Please note for Whom Above)
_____ \$60 FOR ANNUAL **SUSTAINING** MEMBERSHIP (*Individual or family membership with higher level of financial support*)
_____ \$125 FOR ANNUAL **COMMERCIAL (List Only)** MEMBERSHIP (*Includes 3 people, and also includes business name on our website*)
_____ \$200 FOR ANNUAL **COMMERCIAL (Full)** MEMBERSHIP
(*Includes 3 people, and also includes a link from our website to the commercial members' website*)
_____ AN **EXTRA DONATION** of \$ _____ FOR **GENERAL FUND** **FRUIT GARDEN**

I would like to volunteer to help as follows (please check all applicable lines):

_____ FIELD WORK IN THE **WWFRF FRUIT DISPLAY GARDEN** (usually held every Thursday from 9am-12noon; March-Nov.)
_____ HELP AT THE **WINTER FIELD DAY** (1st Saturday in March)
_____ **NORTHWEST FLOWER & GARDEN SHOW** in Seattle (usually held in February every year)
_____ **BY DOING WORK I CAN DO IN MY OWN HOME USING MY COMPUTER OR TELEPHONE**

Please make your check payable to: WWFRF and MAIL your completed membership form and check to:

WWFRF
C/O Joanne Hilgart, Membership
6160 Everson Goshen Rd
Everson, WA 98247-9766



The cherries are ripening on the tatura trellis.



In This Issue

Workshop Opportunities!
The Roundup Controversy!
Sustainable Weed Management!

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.