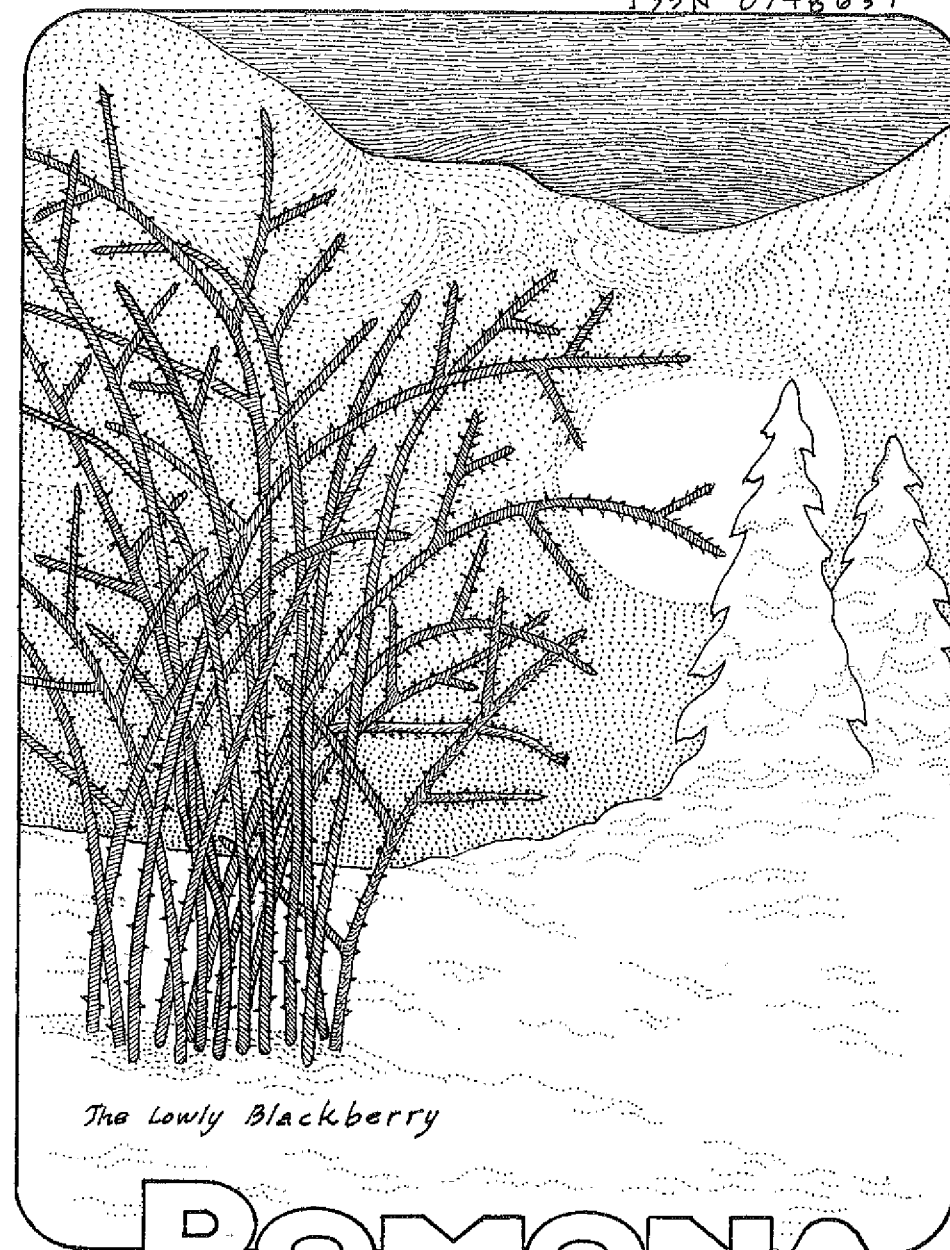


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EDITOR: GRETCHEN RING

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NAFEX Officers & Board:

Ethan Natelson, President
8707 Wateka Houston, Texas 77074
(713) 652-3161 (W) (713) 771-8844 (H)
fax 713-659-1503 natelson@pipeline.com

Richard Moyer, Vice President
King College 1350 King College Rd.
Bristol, TN 37620
(423) 652-6007 (W) (423) 989-3699 (H)
RAMoyer@King.edu

Martha Davis, Secretary
170 La Cueva Los Alamos, NM 87544
(505) 662-7287
martha_davis@earthlink.net

John deReeder, Treasurer
525 New Suffolk Avenue PO Box 1322
Mattituck, New York 11952
(631) 298-9755 (before 10 pm ET, please)
(631) 298-8000 business, most days
john.derceder@prudentialelliman.com

Lee Calhoun (10)
295 Blacktwig Road
Pittsboro, NC 27312
(919) 542-4480 edith_calhoun@msn.com

Lester Davis
1644 Lokey Dr. Columbus, GA 31904
(706) 323 0857 Lhdavis8@knology.net (09)

Felix Cooper (08)
247 N. 2nd. St. Tipp City, OH 45371
(812) 584-0210 felix@GardensAlive.com

Robert Hamilton (09)
2282 Cloversdale, Atlanta, GA 30316
(404) 627-9356 lostman_amiga@yahoo.com

Jerry Henkin
501 Riverdale Ave. (4J)
Yonkers, NY 10705
Sproutnut@AOL.com (08)

Doreen G. Howard (10)
11687 Granary Court
Roscoe, IL 61073
815.623.6533 gardendiva@charter.net

John Mastel
1342 Stagecoach Trail
Afton MN 55001
Jjmsr@starband.net (08)

Barry Nichols
7004 Ethan Allen Way
Louisville, KY 40272 (502) 583-5835 (08)
webmaster@persimmonpudding.com

David A. Osborn (10)
Warnell School-Forestry & Natural
Resources, University of Georgia
Athens, GA 30602 osborn@warnell.uga.edu
706-542-137810

Peter Scott
946 NW Circle Blvd. #314
Corvallis, OR 97330
(541) 753-2919 p.scott@comcast.net (09)

Adam Turtle (10)
"Our" Bamboo Nursery
30 Myers Road Summertown TN
38483-7323 (931) 964-4151
bambooconsultant@aol.com

Corporate Agent
Allan Cosnow
607 Longwood Ave. Glencoe, IL 60022
(847) 835-5278 buonafrutta@aol.com

OTHER CHAIRS:

Lon Rombough, Interest Groups Chair
P.O. Box 365, Aurora, OR. 97002
(503) 678-1410 lonrom@hevanet.com

Jill Vorbeck, Membership Chair
1716 Apples Road, Chapin, IL 62628
(217) 245.7589 vorbeck@csj.net

Editor-in-Chief, *Pomona*; Jackie Kuehn,
PO Box 29, Lucernemines, PA 15754.
(724) 479-0266 jakuehn@verizon.net

SEND POMONA ARTICLES TO:

Spring 2008: By February 15, email articles to jakuehn@verizon.net, or mail articles by February 7 to Jackie Kuehn, PO Box 29, Lucernemines, PA 15754.

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COMMITTEE CHAIRS:

Milo Gibson Award: Peter Letcher, PO Box 21097, Tuscaloosa, AL 35402 (205) 344-5533 letch006@bama.ua.edu

Orchard Visitation: Greg Miller, 424 N. Timberview Lane, Spokane, WA 99204.
(509) 448-7474 gsmiller@cct.com

Interest Group Chair: Lon Rombough, PO Box 365, Aurora, OR 97002 (503) 678-1410 lonrom@hevanet.com

NAFEX Promotion Committee

Robert Hamilton, Chair
David Osborn
Oriana Kruszewski

Felix Cooper

Research Fund:

Anton Callaway
2006 Weehawken Place Apex, NC 27523
marillen@earthlink.net

If you would like a hard copy of the NAFEX bylaws, send a letter and \$1.00 postage to Martha Davis, Secretary, at the address inside front cover. If you would like an e-copy, please email Jerry Lehman at jwlehman@aol.com

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Correcting "Mr. Blackberry"

On p. 18 of the Fall 2007 *Pomona*, we incorrectly attributed the article "Mr. Blackberry" to Anton Callaway. The real author was Donna Hudson. Our apologies to both parties; it's a great article!

Notes from Penn's Acres *Fruit Exploring: The next generation*

The day was cool, crisp, sunny. We packed the little girls into their carseats, and the three of us squeezed in around them—carseats take up a lot of space! Then we were off to the orchard. Friends had recommended Bohlayer's orchard in Troy, PA, to our daughter Carolyn.

"I see apple trees!" I said as we passed the first rolling rows of orchard. We unloaded the girls from their straps and went into the neat old apple barn.

"What kind do you want to pick?" asked the lady in charge.

I jumped in so quickly neither Carolyn nor my husband John had a chance to answer. "What kinds do you have?"

"Well, we have **Jonalicious**, **Empire**, **IdaRed**, some **Macouns**, **Macintosh**, **Melrose**, **Cortland**...tell me what you want, and I'll tell you where to go."

"Do you have a map?"

"I'd have to draw it for you..."

There weren't any other customers at the moment anyway. "That would be wonderful," I said.

So she did. We re strapped the girls and drove up the steep, steep grass track behind the barn. We are just relearning how to handle a manual transmission, and there were a few exciting moments in the middle of the hill before the gas caught up with the clutch and we surged forward instead of rolling backward.

We parked on the flat between two rows. On this clear day, from high up in Tioga County, PA, we could see forever.

Naomi carried a long-handled apple grabber which was about twice as tall as she was. She made a beeline for the first tree. "Look, Grandpa, apples!" she said.

John enjoys anything Naomi enjoys. "That's great!" he said. "You'd better start picking some."

We all picked. Naomi was very enthusiastic, flitting from tree to tree: the apples always look riper on the next tree over. "May I eat one?" she asked.

"As many as you want. Just don't waste them."

Wielding her picker, she untangled its tines from the grass and swung it up into a tree. With only a little help, she managed to snag a crimson **Empire**, but she lost it before it dropped into her basket. She tried again. This time, it landed in the basket of her picker with a muffled thump. "I got it!" she said. She bit into her prize. After four bites, she said, "I'm full, Yaya."

I took it from her. "I'll finish it," I said gladly.

Empires, **Cortlands**, **Jonalicious**... The bags filled up. I finished several more of Naomi's apples. Little Phoebe, not quite able to crawl yet, sat in the grass watching. I chewed a bit of peel of a **Golden Delicious** and gave the apple to her. She latched onto it and gnawed away happily with her third-of-a-tooth.

Naomi took time out from the harvest to run up and down the paths. She somersaulted down the hill: one, two rolls over. She swayed a bit when she stood up again.

"I like to be dizzy!" she said.

At last, I decided we had better stop picking; everyone else would have been satisfied quite some time earlier. But there was always still one more variety

in the next row, a slightly better-looking tree just down the way, and then one more...

Reluctantly, we packed the apples into the car. Some of us rode, some walked back down to the apple barn. And then there were **Melroses** in the retail area—hmm, we never got to any **Melrose** trees, so we had to buy a few outright. Pears and prune plums, too, were ready-picked, and we certainly couldn't pass them up, either.

Carolyn smiled as she saw all the extras I had collected.

"You can't have too much produce, can you, Mom?" she asked. "That's one thing you don't mind spending money on."

"No, I don't." I agreed.

"I want to come again!" said Naomi.

Tired from the fresh air and exercise, the little girls snoozed on the way home. Maybe a few of us did, too.

The Next Generation of fruit aficionados is in training, going where men have gone for centuries before. I love it.

—J. A. Kuehn



Naomi reaching for the best apple.

**Tribute to Bill Schulz:
Fruit Grower, Teacher, Mentor, Friend
February 27, 1921 – September 21, 2007**

Our friend and long-time NAFEX member Bill Schultz passed away recently. Following are some memorial words from Lon Rombough, Dan Ester, and Joseph Postman, prefaced by Bill's obituary from the Corvallis, Oregon, Gazette Times, September 25, 2007.

Bill Schultz was born in St. Paul, Minnesota, on Feb. 27, 1921. He was a Boy Scout and received the Order of the Arrow. After graduating high school in 1939, Bill spent one year in the College of Forestry and then joined the Canadian Army Royal Canadian Corp of Signals attached to the Queen's own Cameron Highlanders. He received an honorable discharge to protect his American citizenship.

Bill continued his college education at the University of Minnesota, majoring in industrial education and graduated in 1945. He joined the 517th Army Ordinance in the fall of 1942. He landed on the Omaha beachhead as a .50-caliber machine gunner. During the Ardennes Offensive, the Battle of the Bulge, he was injured, and was then sent to audit American military records all over the European theater of operations. He considered this auditing experience the highlight of his military career.

After World War II, he returned to Minnesota, married Marion Radke in 1947, and soon after, moved to the Medford area in southern Oregon, where he taught high school and industrial arts.

He had a passion for horticulture, especially unusual fruit such as kiwis, paw paws and figs. Grapes were his specialty and the **Glenora** grape, a seedless variety, was a favorite. He once had the largest private collection of grape varieties in Oregon. He was a past president of Home Orchard Society. Once, as vice president of the North American Fruit Explorers, he hosted the first meeting ever held west of the Mississippi River.

Bill loved to feed cracked corn to wild birds each day. The band-tailed pigeon was a favorite, as were turkeys and doves. He was also a strong supporter of wolves and enjoyed helping Lois White who operates the White Wolf Sanctuary located in Tidewater. Bill is survived by his wife, Marion Schultz; sons Dietrich Schultz and Martin Schultz and Martin's wife, Karen; and daughter Stephanie and her husband, Larry. A memorial service was held on Saturday, September 29 in Philomath, Oregon. Contributions can be made in lieu of

flowers to Benton County Hospice, Grace Center for Adult Day Services, Benton County Humane Society and White Wolf Sanctuary in Tidewater.



Lon J. Rombough

In 1980 I was working at Weeks' Berry Nursery in Salem, Oregon when a funny little man came and wanted to see the old mother block of grapes. At that time, Weeks still had some old varieties of grapes, including a red American grape called **Lucile** (with one "l" in the middle). The fellow was a grape collector named William Schultz ("call me 'Bill' ") who wanted **Lucile** for his collection.

When Bill found out I was also a grape and fruit collector of sorts and had actually gone to school to learn plant breeding and had studied with a grape breeder, his enthusiasm revved into high gear. He came back to Weeks repeatedly to visit with me and brought copies of an odd little sort of cheaply printed magazine, called *Pomona*.

Admittedly, *Pomona* and the North American Fruit Explorers didn't take with me for a couple of years, until Bill brought a copy with an article by Dr. Robert Dunstan. Dr. Dunstan had written several papers on breeding grapes that had actually been included in my thesis. At about the same time, Bill showed me an article by another private grape breeder I had heard of, Elmer Swenson. I joined, just to be able to write to those two people, and then found how many other fruit nuts there were in the group.

Bill had more enthusiasm for fruit and fruit collecting than almost anyone else I've met. He'd be like a little kid trying to drag you over to his latest toy when he wanted to show you a new variety he'd acquired that had come into bearing.

The only time I regretted that enthusiasm was when he and I drove my car to the joint meeting of NAFEX and the California Rare Fruit Growers that was held in Davis, California. Bill wanted to visit a nursery in Sacramento and be back in time for a presentation. I'd been doing most of the driving, but Bill insisted on driving to Sacramento, and he proceeded to go over 90 mph, weaving in and out of traffic. Bill said not to worry, that he'd been a driving instructor in the military. We got back in time for the presentation, but I insisted on driving the rest of the time we were together.

At least Bill is with a lot of stalwarts who share his fruit growing enthusiasm now.



Dan Ester Eugene, Oregon

I first met Bill Schultz the summer of 1991 during a Home Orchard Society summer tour. He looked over at me with his hand stretched out for a welcome handshake. From that day forward Bill and I traveled to most Home Orchard Society events together. I drove, he rode shotgun and we yap-yapped at each other the whole day. We talked about everything from fruit growing to politics. We agreed on most topics (but there was a little talk under the breath once in a while). Bill was a leader in giving. If he had a grape plant you needed he would either have a scion or plant for you the next year. I learned a lot from Bill just listening to him talk about his past. Whether he was teaching, growing fruit or serving in the military, Bill was an all around great guy. He will be missed by everyone whose life he has touched.



Joseph Postman jpostman@ars-grin.gov

As fruit explorers, we are all familiar with Thomas Jefferson's 1800 quote: "The greatest service which can be rendered any country is to add an useful plant to it's culture." (*sic*) Bill Schultz lived out that saying by collecting useful plants and sharing them freely with all who were interested. Whether it was a noteworthy wild serviceberry that was conspicuously free of rust disease, or a yellow fruited raspberry selection discarded by a breeding program, or a red flesh apple tree lost in the forest on what was once an old homestead, or an early ripening grape selection from one of the many grape breeders that he corresponded with, Bill collected, grew and shared these plants with all. My **Airlie Red Flesh** apple, and nearly all my grape vines came from Bill. The **Glenora** grape was one of his favorites, and there are gardens from Seattle to San Francisco with **Glenora** grape vines that originated from cuttings taken from Bill's garden. Our dear friend is gone, but his handiwork remains.

**Garfield Shults:
86 Years Old and Still Growing Strong**

**Tim Woodward IdahoStatesman.com/Woodward
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*Permission obtained by Lon J. Rombough lonrom@bunchgrapes.com
Grapes, writing, consulting, my book, **The Grape Grower**, at
<http://www.bunchgrapes.com>*

Winner of the Garden Writers Association "Best Talent in Writing" award for 2003.

For even more grape lessons, go to <http://www.grapeschool.com>

For all other things grape, <http://www.vitisearch.com>

When outdoors writer Pete Zimowsky said he had a message for me from someone who claimed to have come up with a new kind of peach, there was no need to ask who it was.

It couldn't have been anyone but Garfield Shults.

Garfield is to fruit and nuts what J. R. Simplot is to potatoes. I wrote a story about him early in my career, did another one a decade or so later and then lost track of him. That was a shame because of the hundreds of interesting characters you encounter as a journalist, only a small percentage are truly unforgettable. Garfield is one of those.

Unlike Simplot, he didn't become rich by growing a better potato. His home near Homedale is modest. His kingdom is his orchard.

He's devoted his life to growing new, occasionally bizarre, varieties of fruits and nuts. (He's also a member in good standing of the North American Fruit Explorers and [Northern] Nut Growers, and how many people do you know who can say that?)

It had been so long since I'd heard from or about Garfield that, until he called looking for me and ended up talking to Pete, I wasn't sure he was even alive. The next day, I drove to Homedale to see him and check out the new peach. He looked about the same, right down to the coveralls and stocking cap. But his greeting made it clear that time had passed.

"You've aged," he said.

"Thanks, Garfield. How long's it been?"

"Twelve years. You wrote about me when I won a bunch of prizes at the

fair."

I looked it up, and he was right. He won five prizes at the Western Idaho Fair in 1995. It was the year his fruit cocktail tree—yellow plums, plum-cherries and two kinds of apricots growing from the same trunk—was a runaway crowd pleaser.

He's 86 now and a human testimonial to the Explorers' dedication to the "discovery, cultivation and appreciation of superior varieties of fruits and nuts."

The new peaches he called about are bigger and heavier than most peaches.

"Most are 12 to 14 ounces," he said. "I had one that was 18 ounces. An average peach is about seven ounces. ... The fruit ripens later in the summer, and it's sweeter than other peaches."

He calls it the **Garfield No. 4**. Like **Garfield Nos. 1, 2 and 3**, he developed it by nurturing a variety of peaches that bees would cross-pollinate, and relentlessly experimenting with the results.

"I don't know the parentage of these peaches because I have several varieties it crossed with. ... I save seeds out of the best fruits when I harvest and use them to plant seedlings," he said. "Sometimes, you get the same peaches, but if you keep at it, you can end up with a whole new generation of fruit."

A commercial grower who has purchased rights to his new trees in the past is testing the peaches now.

Garfield figures he's come up with about 25 new varieties of fruits during the 44 years he's lived in the Homedale area, where he says things grow better than they do in much of the Treasure Valley because of milder temperatures and a slightly longer growing season.

Deer thrive on it, too.

"I saw 10 of them here one day," he said. "If I hadn't been here to start the firecrackers, they'd have eaten me out of house and home."

We walked the slopes of his 35 acres while we talked, and it was hard not to be impressed by the profusion of things growing there—including some that shouldn't. He grows peaches, apples, cherries, plum-cherries, pecans, walnuts, hicans (hickory pecans), almonds, persimmons, papaws ...

"Here," he said, holding out three bright green nuts that looked like miniature limes. "Show these to anybody who doesn't think pecans grow this far north."

His passion for growing things began when he was a kid growing up in wintry eastern Idaho.

"I was 6 when I grew my first garden in Teton County," he said. "The bug bit me then and never let go."

No, it didn't. He's still growing things 80 years later and appears to be

enjoying it as much as ever.

There was something about that that I found strangely comforting. After so many years without hearing from him, it was good just to know that he's still out there, mother-henning his fruit and nut trees. In a time and place where so much is changing, it's nice to have some constants.

Cautions!

W. L. Rohrer 3840 S. Coffman Casper, WY 82604

Based on limited experience, there are some things we should not do in our zone 4 arid environment.

Years ago, I was told that trees should be well watered in the fall but none could tell me how much water was needed for a tree to be "well-watered." Consequently, some trees received too much water. What happened was that the tree retained too much water in the vascular system during subzero temperatures. The tree froze, large patches of bark broke free of the wood and the tree split open. That was my first lesson in "winter kill." Don't overwater in the fall. Let drying conditions prevail.

To avoid rodent damage to trees use ¼" mesh hardware cloth as a barrier around the tree. The diameter of the hardware cloth should be a few inches larger than the tree. Do not use plastic tree wrap. Plastic wrap does not breathe and can cause fungus/mold to develop. On warm winter days it can get relatively hot under the plastic. Subzero temperatures a few hours later puts a lot of stress on the tree.

The best way to avoid sunscald is to paint the tree trunk with water-based white latex paint. It can stay on for several years. Forty-plus degree temperature swings in a twenty-four hour period are the norm in this zone 4.

NAFEX's Future

Robert Hamilton lostman_amiga@yahoo.com
2282 Cloverdale Dr. Atlanta, GA 30316

Hello fellow members,

I have been with NAFEX for a short six years, and growing fruit only a few years more. During that time, I have learned a great deal from my readings in *Pomona* and the connections I have made at (or on the way to) the annual meetings. As some of you may know, last year I was asked to join the NAFEX

board. Though honored, I feel a little out of place with people who have been orcharding and NAFEXing for many years. Many of you reading this may have been members of this fine group for most (if not all) of its 40 years. You all are the knowledge bank that keeps this organization vibrant and relevant.

As with most organizations, we have periodic discussions on how we can expand our base and let people know that we are here to serve them. No doubt there are many people located near you who are hobbyists, orchardists or professionals just like you, and would benefit from this group. I am told we were once a group of about 3000+ members; now we are about half that and slowly declining. There are multiple reasons for the decline, ranging from the ease of Internet information to lack of time/interest in social/educational organizations. These problems plague groups like ours across the spectrum. The fact still remains that this organization is not known nationally and internationally the way it could and should be.

This is a real shame. I would not know even half as much without NAFEX's help. I may have even gotten discouraged early and dropped the idea of an edible landscape. Furthermore, it continues to disturb me that younger people are not high in number at our annual meetings. I can only hope that maybe these people are members without the time to participate. I urge everyone to go to an occasional meeting. The experience is well worth the trip! The reason I like to see new members and new young people is the reassurance that this knowledge bank is being utilized and passed on.

A poignant example at the forefront of my mind was that on a recent trip to the Southern Fruit Fellowship, I packed a tape recorder to do an interview with Sherwood Akins: being so close to Mississippi, he would no doubt show up. I met him briefly at the Tallahassee, FL, meeting and I wanted to pick his brain and get his life story. I also wanted to include T. O. Warren in this interview if possible. I was saddened to hear that Mr. Akin had died a week or two before. I feel for his family and community. If I may speak selfishly for a moment, I feel for our community as well. I had to wonder how many people he had touched, and whether the depth of his knowledge and passion had been passed on? What happens to his plant collection? Will someone continue his work? As for Mr. Warren, I was told he was not feeling well and could not attend. I hope he makes a speedy recovery and that I can interview him at the next meeting.

So how do we get more interested members? One of the main problems is promotion. We have relied too often on word of mouth or an occasional magazine article or someone who very luckily happens upon our webpage. Though limited in scope, this works fairly well.

But each of us needs to expand our range. Tell your family and friends. Mention NAFEX whenever you speak to someone about what you grow. If you have a NAFEX shirt or hat, remember to wear it when you think you're likely to meet interested people. This is a simple conversation starter!

We, the Board, must also do more. We will be examining and redesigning the web page to attract more interest to our organization. This may include online registration, products with our logo bought online, more information about current and past meetings, interest group information and other things. Our webpage should be rich resource for members and non-members. In a past *Pomona*, member Eddie Rhoades suggested producing a stock electronic slideshow from photos contributed by members that our membership could use in presentations and could be posted on the webpage. Maybe a brochure could be made in electronic form and posted on our web pages as well. This could easily be downloaded and printed out for members to hand out to people. We already have an active and growing electronic forum that has been invaluable in my fruit education and the basis for many of my contacts over the years in which many have turned to face-to-face meetings. I hope that more members can take advantage of this wonderful resource. As you may have read in *Pomona's* periodic "Round-Robin" section, a number of expert people are contributing their knowledge to a range of topics. Imagine receiving this level of knowledge on a daily basis! This being said, *Pomona* is still our foundation for communication. I don't see that changing anytime soon. We must also state that we do acknowledge that not everyone reading this is Internet accessible. We will not forget about you and the Internet is only one way to put our name more into the public sphere.

It was decided at the last board meeting that David Osborn, Oriana Kruszewski, Felix Cooper and I serve as a promotions committee to look into ways of helping NAFEX build its membership. I hope in the long term we can begin to build our membership back up. I will readily admit my background is not marketing, so I am again in unfamiliar waters. Through my discussions with various people in and out of our organization, I have some ideas to which I would like to dedicate the rest of this article.

Being a relatively narrowly-focused organization with modest resources, we must be able find way of getting our message out to just the people who would be interested in what we have to offer. I see three communities that NAFEX could better explore:

- 1) Cooperative Extension Agents
- 2) Organic gardeners/Permaculture/Slowfood communities
- 3) 1st and 2nd generation emigrants

The Cooperative Extension Agents are a loose network of people who work for universities and assist professional farmers, master gardeners and home gardeners alike. Some are researchers and teachers for the university; others work solely with the community. These people are often the first contact when the public has a gardening or agricultural question. Because of this, these are the people we need to reach. I feel it is essential that Extension Agents know about us and have our name in the backs of their minds when a question arises about resources outside of their expertise. If you have come to any of our annual meetings, you already know that we do work with a number of extension agents; they often serve a big part in the planning and hosting of meetings and lining up speakers. The agents who are members of our group or with whom we have a relationship are few, and we need to have a better sense of who is out there and what they are doing. We also need to have closer relationship to the agents we do know. How can we better help them and they better help us?

How will this be done? Through continual conversation with these agents, I have spoken to many of them and will continue to do so. In many areas their resources and personnel are shrinking, they increasingly have to address question that are outside their expertise....maybe we can help.

On a related note, I should point out that there are some funding issues with gene bank repository as well. I recently went to the California Rare Fruit Growers (CRFG) annual meeting where a person from the gene bank repository was speaking. In his talk he made some comments that seem to imply some resource. After the presentation, I spoke to the gentleman about this issue and did confirm that funds are short and if they do need to show real community support and feedback to prove their viability to people who may wish to restrict their program; a proactive relationship to the public without competing with the nursery trade maybe needed. No one is trying to shut down the program, but the repository is expanding its collection with the same amount of resources. An example of this is the many samples of apples and pomegranate accessions recently obtained from central Asia. This germplasm becomes valuable breeding material for new varieties. Resources and personnel are needed to accommodate this increase. He also stated that, being part of this governmental program, he cannot directly lobby for support, but he wishes that some of us could carry the torch. As many of us are true explorers and/or breeders of fruit, this may be of great concern to us. If this is a program that you use and value, please make to opinions known to you governmental official. Often these individuals have contributed to *Pomona*, our annual meeting and even our Board. Maybe we

should also expand our relationships more with these individuals. I hope to produce a more detailed article about this later.

I hope to have a good database of extension agents from around the country to start. A good contact from every state is the goal, and then we can expand from there.

If you are an extension agent and I have not spoken to you directly, please contact me at some point. I would like to know those of you who are part of the group and also I wish to know your thoughts on how we can better assist each other.

You non-agents can also help. If you know an agent who has a specialty or just an interest in fruit in your area, introduce us to him/her.

Another community is the Organic Farming, Permaculture, and Slow Foods community. Sorry for lumping everyone in a big pile like this. I know each has its own character and concerns, and I am sure there are other similar communities I could add to this category. Please feel free suggest some that I may be overlooking. These are food-focused communities that are questioning the "mainstream food culture" and that care where and how their food is raised and prepared. Some of you may already be involved in these communities. These are the communities that I feel would be interested in fruit of specific varieties, be they antique apples, minor fruits, or more traditional foods and preparations. Where better to find such information than with us? We can learn from each other.

Part of the answer is what I just mentioned. We have a number of members in these communities. If you haven't already, please spread the word among your friends and your other electronic forums. Some of you are writers and publish articles frequently in specific magazines or newspapers. Please make sure you mention us whenever possible. That also mean mentioning us if you are interviewed for an article as I was in a recent local paper. Someone will just casually look at that and go to our web page, find it of interest, and there we have another member! I also hope to post more NAFEX meeting information on community websites and try to generate a list of contacts for various groups in each state.

Lastly, are the 1st and 2nd generation emigrants. I speak to those who are US and Canadian members here. We must not forget that we do have a small number of members in other countries as well. When is the last time you heard someone say, "I remember eating *Aronia* jam from my relative's house. He brought that in from the old country..." or "... that dish doesn't taste like the one my mom used to make from her Italian figs," or "...my father used to pick some

fruit from his yard that I never find in the store here in the States. He made some wonderful wine, jam or some esoteric dish."

We have always heard some reference to food from another country with a sweet longing on the faces of young or old emigrants. I live in the city with my computer programming friends and I still hear it from time to time. The fact is that other countries still practice the art of home orcharding as mainstream and do a better job in preserving regional culinary traditions. For whatever reason, we do not, though California maybe an exception to this rule.

The BBC gardening programs I hear on the Internet from the UK regularly speak on growing fruit in the yard; our gardening programs rarely do. According to Chris of the Miami Dade Fruit and Spice Park, he notices families coming to the park to show the children a certain fruit that came from their country. He sees a direct connection for them with memory and tradition. Are they surprised that we don't grow fruit in our yards? Are they looking for resources through which they can reconnect with that tradition?

I was recently working outside while some people were resurfacing my street. A smallish Asian man came up to me and asked in broken English about my trees. I went down the list as he pointed to the selections in my yard that he seemed familiar with, but he did not know the names I called them till I stopped at the Jujube. His eye widened and told me that he used to eat them years ago in Laos. He misses the fruit of that tree. He had been looking for one to grow and wondered if it bought it here. Though I barely understood him, he had a gentle smile of longing on his face. I went to the back and picked out one I had in pot and gave it to him. He was excited and pulled out a wad of money from his pocket to give to me and I refused it. He thanked me, bowed lightly and ran back to his truck. Of course I felt rather good inside after that.

I don't think this was an isolated incident. I am sure other new people buy homes and want to do other things besides plant grass. Though they may not be the ones he actually had in Laos, jujubes are offered in the local Asian markets. I am sure he could get them there if he really wanted them. Obviously, his desire was to grow them himself. I wondered briefly if I should have run inside to get some NAFEX info, but I could barely understand him, so trying to explain our group might have been a daunting task.

So how do we reach these enthusiastic new residents? I wish I had an answer for this one. I would even know where to begin. This is another place where I hope you—the members—can help me. If you have suggestions on this, please let me know.

I may come across in this article with certain sense of urgency. Let me reassure you that NAFEX is not going away anytime soon, but it does bother me

that we are losing members and we are not as well known or as diverse as I think we can be. I hope we just require a little change here and there to get back on track and start increasing in numbers.

These are just my thoughts on the subject; the reason I am writing this article is to get feedback from the membership. Whether you agree or disagree on anything I mentioned here, I would appreciate hearing from you.

The Dependable, the Delectable, and the Different

Dave Strayer, P.O. Box 851 Millbrook, NY 12545
dlstrayer3@aol.com

It seems to me that we fruit gardeners often choose the varieties we do because they are:

1. Dependable—they produce good crops every year without much fuss;
2. Delectable—they offer wonderful flavors that are worth some extra trouble; or
3. Different—varieties or species of fruit that are unavailable in the market.

Of course, a few rare types offer two or even three of these qualities. I want to focus for a moment on the dependables—varieties that are healthy, winter-hardy, and produce good crops with a minimum of special care, regardless of whether the weather is a little dry or a little wet. They form the core of my fruit garden, and are the ones I recommend to friends who are starting their own fruit gardens.

I haven't grown many apples because we live in the middle of a great apple-growing region, but I've been impressed with **William's Pride**. My little espaliered tree has been very easy to train, and likes to make apples. I get very decent apples with just a single spraying of insecticide, and the fruit is full-flavored and crisp, and ripens in mid-August, when few good apples are in the market. As a bonus, the flowers are large and showy.

The only one of the eight pears that I've tried that has been dependable for me is **Seckel**, which seems to be self-fertile and produces a good crop nearly every year. They're delicious, too.

Among the seedless grapes, **Canadice** is at the head of my dependable list. It has been fully winter-hardy, starts bearing early, and bears a heavy crop nearly every year. It has been less susceptible to mildew, black rot, and splitting than the four other seedless grapes I've grown. The quality is very good, although not

as good as the best grapes I've grown. **Buffalo** and **Edelweiss** (which I've just started growing) seem very dependable among the seeded grapes.

Many kinds of the small fruits I have grown have been very dependable—generally much less finicky than the tree fruits and grapes, but I'd mention the following as especially dependable: **Earliglow** strawberry (also delicious!), **Canby** red raspberry, **Bristol** black raspberry, **Autumn Britten** (or **Autumn Bliss**) fall raspberry, and **Northblue** and **Patriot** blueberries. These all produce good crops essentially every year with little care.

These observations are from about twenty years experience in our Zone 5 garden in the Hudson Valley—I would be curious to hear what varieties all of you think of as the stalwarts of your gardens.

Pome & Stone Fruits

Montrose Apricot Update

Bob Purvis PO Box 387, Homedale ID 83628 purvisrc@msn.com

I had a phone conversation with David Schlabach in July, and he gave me some info on the performance of the **Montrose** apricot at his location (Medina) in Wayne County, western NY State. His information specifically concerns the **Hoyt** seedling of **Montrose**, which is what Schlabach's Nursery sells. In 2007, most of his apricots—which include **Alfred**, **Goldcot**, and most of the Harrow series—had only a partial crop, but the **Hoyt Montrose** had a full crop, with his tree yielding 1½ bushels. The flesh was a bit on the dry side, which suggests that it may be good for drying, but very tasty. Although it is a relatively early bloomer, it is self-fertile and is very consistent in its yields; and relative to other apricots, it ripens late. As you may know from Lloyd Rosenvold's booklet, the original **Montrose** came from a high-elevation site in CO and had survived -31° F there.

David's **Alfred** had its first crop in 2007, and he reported that the fruits were tasty although small. From past comments and articles in *Pomona*, AIG correspondence, and in the NY State Fruit Testing Assoc. catalogs, it appears that **Alfred** is considered among the most reliable, consistent, and adaptable of all apricot varieties. **Alfred** was introduced by the Geneva breeding program circa 1965. It is self-fertile and very productive, but the fruits must be thinned to produce decent sized fruits. Although I have read that **Alfred** is vigorous in its growth habit, I very much suspect that it would be a good "beginners' apricot" or

an "insurance apricot" because of its self-fertility and winter hardiness (to -30° F, it survives and fruits in south central WI). I do not know if my two-year-old tree of **Alfred** in Yakima, WA, is still alive or not after the transplant shock it endured last April moving from MN to WA.

David made another comment that amazed me, namely that he had had an exceptionally high "take" rate in summer budding of **Afghanistan** apricot in 2006, and also with summer budding of **Veteran**, a Canadian peach variety that is resistant to peach-leaf curl and has proven the hardiest of all peaches in testing in MN, where it is next to impossible to grow peaches. That amazed me—**Afghanistan** requires more heat to callus in spring bench grafts than do **Westcot**, **Debbie's Gold**, **M.604**, or **Jerseycot**, and that need for heat may also apply to summer budding. Southmeadow Fruit Gardens fruit connoisseurs' catalog called **Afghanistan** "the best" of all apricots, but I have never heard of anyone growing it side by side against **Blenheim**, which in CA is considered "the best" of all apricots, although it is unable to handle the intense heat of the Central Valley in CA. NAFEX member Philip Rainville in central Massachusetts considers **Afghanistan** the best of his apricots, **Henderson**, the second best, in fruit quality.

As you might guess, one of my plans once we are in Idaho is to use part of our three acres as an apricot germplasm repository for NAFEX members and the public at large, and to use this spot to make side-by-side comparison of varieties.

Given that it is Zone 7 with plenty of chilling hours but moderate summertime temperatures, it might be perfect for this purpose. The only problem is that the site, owing to its 2200' elevation and dry climate, is sometimes subject to late frosts. Apricots bloom there about March 15-20, or about two weeks earlier than in Selah, WA, and 4-5 weeks earlier than Cottage Grove, MN. Maybe the way to handle this situation would be to have a block with frost protection and the same cultivars grown nearby without it and to see how yields compare. I am eager to see how the NJ apricot introductions—**Jerseycot**, **Sugar Pearls**, and the four advanced selections from the Rutgers program—fare under those conditions.

My Apricot Interest Group friend John Fuerst had his first crop on the **Zard** apricot this summer and said the fruit was exceptionally sweet. Although **Zard** comes from Iran, the tree has endured -27° F without winter-injury in southwest Minnesota, a windy area. **Zard** is Farsi for 'yellow,' and knowing about John's lack of honeybees, I suspect it is self-fertile. It is exceptionally late blooming and passes on this and other good traits consistently to its offspring, so **Zard** has been much used by Dr. Joe Goffreda in his apricot breeding program there at Cream Ridge, NJ. I'm getting a tree of **Zard** this fall and hope to propagate other trees of it in the years to come, if the Lord tarries (and that is a very big IF).

How to Germinate Genetic Dwarf Peach Seeds

This article appeared in the Fall 2007 Pomona, but its final paragraph was displaced. My apologies to all of you, and especially to George Messner, the patient author, as well as David Lavergne, whose excellent article on mulberries in the south suddenly had a cryptic closing paragraph.

George Messner 290 W. US Hwy 160 Lockwood, MO 65682-9100

I have grown genetic dwarf peaches for a number of years, and visitors are always impressed with the beauty and bounty of the trees. Benefits begin with the gorgeous display of blossoms in the spring, continuing with the cascade of long green leaves all summer and culminate in the bountiful supply of freestone fruit in the fall. All this is possible with just one spraying after petal fall. The trees are very disease and insect-resistant.

The trees and fruit come quite true to seed and I have raised many seedlings. I have given away many seeds, but few people have been successful in germinating them, while I have well over 90% success. Therefore, I would like to write up the method I use, hoping it will be helpful to others. I welcome any improvements to the method.

After cleaning and air-drying the seeds for ten days, place in a sealed plastic bag and store in the refrigerator at 35° to 40°. About February 1st, crack the seed very carefully so you do not damage the embryo. Soak the embryos overnight in water and then place them between layers of wet paper towels in a sealed plastic bag to refrigerate: saturate the towels and squeeze out excess water.

About March 1st, remove from refrigerator and place bags in a dark environment at room temperature, such as a bread box. Check every day and plant, sprouts down, when sprouts are ¼" long. Plant in 8" pots, cover 1" deep, and place outside. Before planting, sterilize the pots by soaking overnight in a solution of one pint bleach to one gallon water. Use a good sterile plant mix and spray the plants weekly with a fungicide to prevent damping-off. Water as needed. You can use a mild water-soluble plant food sparingly.

Transplant the seedlings to a permanent spot about September 1st, keeping the rootball intact.

Pome and Stone Fruits in Minnesota

Bob Purvis P.O. Box 387

Homedale, ID 83628 (651)-323-0147 purvisrc@msn.com

When I planted my backyard orchard in the suburbs of St. Paul, Minnesota from 1999 through 2002, my intent was to provide a great diversity of tree fruits and berries for home use and to see how various varieties performed here in our USDA Zone 4 location. Having just moved from Minnesota to Idaho, I thought it good to share with others in NAFEX what I have learned here over the past seven years.

Among the apples, **Arlet (Swiss Gourmet)** is certainly winter-hardy enough for our location. My tree, on M.26, grew very well this year but has only a few apples on it. **Enigma** (from Canada) on Bud.9 produced some large apples this year and averaged about a foot of terminal growth. They began ripening mid-July after a hot June and appear to have some resistance to scab. **Enigma** is normally the first apple to ripen in late July in a more "normal" year. Some of the apples were over three inches across. In spite of the heat, they had about sixty percent medium red color with subtle striping. The flesh is aromatic and white. The texture was crisp and flavorful this year although texture was a bit on the soft side in past years. **Carroll** on Bud.9 produced about a bushel of fruit this year, making it was more productive than ever before. They began ripening July 10, while they normally don't ripen until the middle of August. **Carroll** and **Enigma** were rather similar in size, color, and aroma and both were good for eating and made fantastic applesauce. **Cameo**, a one-year-old potted tree grafted to Bud.9 is grown commercially in central Washington and survived -30°F here. The tree has been consistently productive and averaged over one foot of terminal growth while carrying a moderate crop load. The tree has been scab-free under a low-spray regimen for fungicides. **Cameo** has a mild, sweet flavor that can become more complex if left to ripen fully, and is notable for its keeping ability.

Honeycrisp on M.26 has been productive although it has a slight biennial bearing tendency. Scab has not been a problem but there was some pre-harvest drop in 2007, perhaps because of the heat and a large crop. A few fruits were ripening by September 1, and many more by September 19. **Ginger Gold** on Bud.9 has done very well, producing good crops of large, yellow apples year after year. They keep well, especially if picked when they are slightly immature. Their peak harvest time this year was August 23. **Zestar** on Bud.9 is the best-quality late summer apple we grow in terms of flavor. The tree has been productive with moderate vigor, and was harvested on August 29. **Zestar** does

have a few drawbacks, according to local commercial apple growers. The skin readily shows limb rubs and wind damage, and at windy locations it sometimes has problems with pre-harvest drop. Rain-induced splitting was only a minor problem.

Regarding my other apples, with the record-breaking rainy conditions in the first half of August, we were surprised and disappointed to find that perhaps twenty to thirty percent of our **Northern Spy** apples developed splits after the rain. This was an even more serious problem on our **Norkent** and **Norda** trees that are both grafted to Bud.118 and ripen in mid-August. **RubINETte**, grafted to M.26, had a good crop this year but is, as of September 19, just coming ripe, and the same could be said of **Scarlett O'Hara** (Co-op 25). **Scarlett O'Hara** as grown here is rarely damaged by insect pests, attains large size, and colors well; furthermore, it stores well even in garage temperatures that would diminish the life of **Fujis** and **Cameos**. **September Ruby** showed a slight tendency to split and needs to be thinned hard to develop good size. The **Yataka Fuji** on Bud.9 came back with another good crop following a good crop last year. It has had good terminal growth and better fruit size than ever before and some were ripe enough to be good eating by September 15, versus a more normal ripening date of October 6. The early-fall apple from northern Alberta, **922 End**, has been cited for its scab resistance in central Wisconsin. It is exceptional in pies. The fruits are large, up to 3½", greenish yellow to pale yellow with an orange-red check, and somewhat flattened. As grown on Antonovka rootstock, the tree has good crotch angles but has not been very productive, and its bearing habit is on the terminals rather than along the second year and older wood.

Plums, American hybrid and Japanese.

Alderman is unquestionably the best American hybrid plum we can grow here. Our tree has a spreading growth habit and only moderate vigor. The past three years, after thinning, it produced 90 lb. of plums each year, with the harvest usually beginning about September 5. This year the harvest was earlier, starting about August 20. The flesh is meaty, sweet, juicy, but clingstone, and the skin is slightly tart. The August rains caused about twenty percent of our **Aldermans** to split as they came ripe. The **Alderman** has **Toka** and **Waneta** planted very close to it for cross-pollination. **Gracious**, grafted like the other three to *prunus americana* seedlings, was extremely productive this year and also very vigorous, with an upright to spreading growth habit. The flesh is sweet and very juicy although the skin is a bit thick. I was surprised to find how much my colleagues at work liked the **Gracious**. Many of the fruits were 2" across, perfectly round,

and a deep purple-black color with a bit of red mixed in. **Superior**, grafted to Mariana 2624, has been extremely vigorous and not very fruitful for me. Both here and in Rushmore (SW Minnesota), the fruit tends to split if there is rain at harvest. **Toka** is upright and vigorous, producing only light crops with **Alderman** and **Waneta** as pollinators, even with near-perfect spring weather and a very strong beehive close by in 2007. The flavor and size of **Toka** was outstanding this year. Usually bright red, the **Toka** plums were a deep purple-red color when they became ripe this year.

Concerning disease problems, I have had rare incidences of black knot on both the European and American hybrid plums. I've noticed that the **Alderman** and **Gracious** are slightly susceptible, and the **Superior** more susceptible to brown rot, but **Toka** and **Waneta** have never once suffered brown rot on even one fruit during seven harvest seasons. Problems of rain-induced cracking have been minimal on these two plums.

Plums, European.

Mount Royal is the most popular European plum grown in Minnesota. My tree had a huge crop this year, ripening in early September, but about five to ten percent were lost to brown rot. The main issue with **Mount Royal** is thinning the fruits so they will size better. I did not do enough thinning this year with everything to do in preparation for moving. **Todd**, which Bill MacKentley of St. Lawrence Nurseries has cited as doing well in upstate New York, has been consistently productive here and very winter-hardy. The fruit quality is mediocre as grown under my conditions and slightly susceptible to brown rot. In a very cold river-bottom location in west central Wisconsin, another fruit grower found **Todd** severely injured at -40°F. **Todd** here goes from being unripe to overripe very quickly, and when dried the resultant product is tart, not sweet. **Opal** is productive, self-fertile, winter-hardy, and immune to brown rot here, as it has been in other locations, for example, Everett, WA. We had a good crop this year, and as always the flavor was very good, but the tree is slowly dying because of severe winter injury to its Mariana 2624 root system. It appears that Mariana 2624 is unsuitable for areas such as ours where we cannot depend on early, consistent snow cover. **Opal** has proven to be an excellent choice for home orchards here, just as it has in other states, due to its quality, immunity to brown rot, and winter hardiness. I would consider it a good complement to **Mount Royal** because of its ripening several weeks earlier. Normally, **Opal** is ripe here at the end of July and **Mount Royal** around August 25-30, but this year **Mount Royal** ripened a week late because of bearing an enormous crop.

The **Silver Prune** produces yellow plums that come ripe here in early September, and the tree has never suffered any winter-injury although it is slightly susceptible to brown rot. When allowed to ripen fully to bright yellow blushed slightly with orange, it has a unique, intense, pleasing flavor. **Seneca**, an outstanding performer in central Washington on Pixie, has suffered here from winter damage to its Marianna 2624 root system. I've noted both this year and last year that in our climate, the fruit will split when it is nearly ripe, especially in rainy conditions. Given its fruit quality and large size, and the hardiness of the tree, this would rank among my top four choices for European plums here, in spite of its upright growth habit and being slower to come into production than **Opal**. I did not thin my **Senecas** enough this year to produce good flavor consistently although size was good.

My European plums suffered somewhat from afternoon shade from our neighbor's box-elder trees and from each other, and from being planted too closely (9' x 12') for the fertile soils we have. Another problem was pre-harvest drop due to stress from consistently hot, dry conditions. **Autumn Sweet**, outstanding in Washington State, has suffered here from pre-harvest drop; furthermore, it turns bluish-purple before it is fully ripe and is somewhat susceptible here to brown rot. This year, it had a full crop with a few plums fully ripe by September 18. The growth habit of the tree here is upright to spreading and the limbs rather stiff. If you want to grow **Yakima** (my tree is on Myrobalan seedling) you will need European plums that are strong pollinators close by along with a good beehive. Fruit flavor is outstanding, with the plums often 2 inches long, with mottled pink and violet skin over amber flesh. Like **Seneca**, the tree has an upright but much denser growth habit as grown on Myrobalan seedling and would benefit from spreaders between the limbs and central leader. It would be good to grow it as grafted branches on other plum trees due to its quality and size, but because of its pollination issues it might be hard to grow commercially on a large scale.

Imperial Epineuse on Myrobalan has been winter-hardy, low to moderate vigor, upright to spreading but not precocious. Planted in 2000, this is the first year that it has much of a crop; and having eaten some of the fruit I now understand why **Imperial Epineuse** is the standard against which other prune-plums are evaluated. The tree is being shaded somewhat by the **Mount Royal** next to it. Many of its fruits were ripe and a few slightly overripe at harvest date on September 1, 2007. The color was not at all impressive—greenish with some irregular pink blotches and red dots, so more appropriate for a farmers' market than for Wal-Mart or regular supermarkets but in a sunnier location it might be better.

Cherries, sweet.

Blackgold, grafted to the semi-vigorous Gisela 7, has been an outstanding performer here. After a bit of bird and brown-rot damage the net harvest was 67 lb. of fruit in 2006 and 78 lb. of fruit in 2007. A few foliar magnesium sprays made a major difference in the tree health. In past years, many of the spur leaves would turn yellow and fall off at harvest; but even as of September 18, 2007 the trees had lost hardly any spur leaves at all! Harvest this year was from June 15 to 20, five days early. Grown in sod, the tree had about 10"-12" of terminal growth in 2007. Although the flavor is not as intense as **Bing**, it has attracted universal praise from my Minnesota customers. Both **Kristen** and **Bear Creek Early**, five-year-old potted trees on VSL-2, produced several pounds of good quality cherries in 2006; as of April 2007 the two trees were temporarily growing on the Naches Heights above Yakima, Washington, awaiting final transplanting to our future home in Idaho.

Cherries, tart.

The harvest on my seven-year-old **Meteor** this year was 18 lb., and 15 lb. on my **Bali**. The fruit size and flavor was better than it has ever been, possibly because of fall and spring zinc sprays, but more likely some pre-harvest potassium dextrose-lactose (KDL) and also calcium-magnesium sprays. Even more noteworthy was the fact that about ten percent of last year's tart-cherry crop was lost due to brown rot, and this year the loss was zero. Sadly, the **Meteor** showed signs of having contracted Western X-disease at harvest. Several limbs had fruit that was smaller, elongated in shape rather than round, poorly colored, and not ripe for weeks after the main harvest. I cut down the **Meteor** in late August, so now the **Bali** will get much better sun exposure.

Our **Nanking** cherries came ripe in early July and once again produced a huge crop. Most of them went to waste, however, because we were too busy to process them. Although rabbits like the bark of most fruit trees, they go after **Nanking** cherry bark with a vengeance. The bushes did bounce back pretty well from the extensive damage they suffered in March.

Apricots.

Jerseycot was the first to ripen, as always, and were harvested June 29 through July 2. The blossoms were thinned somewhat on the lower half of the tree due to the -23°F we had in February after a mild January, coupled with several 15°-16° degree overnights the first week of April. Nonetheless, we

harvested 216 fruits with a total weight of 22 lb. Five weeks after harvest, their flavor and juiciness was still good in our frost-free fruit refrigerator.

Carefully studying the **Jerseycot** at harvest corrected a wrong idea I had—namely, that if apricots bear on one-year-old wood, there will never be fruit again wherever the apricots grew! But, what I found on the first-year wood of the **Jerseycot** was fruit spurs growing off the sides of the stems of the fruit, preparing to bear blossoms in 2008. By contrast, some of the fruit spurs initiated in 2004-2006 were only spines that bore an apricot or two, but no terminal leaves. A more general statement might be this: apricots in moderate to good vigor, bearing a moderate crop load, are quite able to initiate fruit spurs on one-year-old wood that will be fruitful for perhaps two to three years afterward. By contrast, an apricot tree in low vigor may flower profusely on one-year-old wood but will not initiate spurs for the following year. Such was the case with mine at our former home in Selah, Washington three years after I left my orchard behind. This is also true with tart cherries that have less than seven inches of terminal growth; after flowering and fruiting on one-year-old wood, that portion of the shoot becomes devoid of leaves and fruits in following years.

Debbie's Gold was the first of the hardy apricots to ripen, beginning about July 5. Some fruits were up to 1¾" across with a rich, full apricot flavor. Harvest stretched out over a 10-12 day period and totaled 35 lb. with perhaps another pound or two lost to brown rot. **Morden 604** began ripening about July 8, again with a 10-12 day harvest totaling 25 lb. The **Mordens** were a bit larger and better flavored, but the differences were subtle. **Westcot** began coming ripe about July 13, and the harvest lasted a week but was only 1-2 lb. **Brookcot** harvest began about July 18, lasted a week, but again totaled only 1-2 lb. The **Brookcots** in some cases were up to 1½" across and had a flavor that was just about as good as the other three hardy apricots, unlike in past years.

The climax of the harvest was the apricots from the **Hargrand**. Total harvest was 15 lb or 77 fruits, some of them 2½" across, dull orange-yellow, with an incredible flavor and quite juicy. In nearby Hastings, our former pastor's two **Hargrands** and **Harlayne** produced heavy crops in 2007 for the first time. Because there are no other bearing apricots in Hastings, this suggests that not only **Harogem**, but also **Hargrand** is a satisfactory pollinator for **Harlayne**. A healthy, six-year-old tree of **Harlayne** planted a half-mile away set only a dozen fruits in 2007 because there is no pollinator close by.

A fungal disease called water spot attacks some apricot cultivars here when the weather is wet or humid, just as the fruit is coming ripe. There will be numerous superficial grayish brown spots on one side of the apricot that will toughen the skin, and the fungus can suck the moisture out of the fruit in severe

cases. This is a significant problem on **Debbie's Gold**, **Morden 604**, and **Westcot**, and a minor problem on **Hargrand** and **Brookcot**, but **Jerseycot** and **Harlayne** are nearly immune to it. I did not have time to experiment with fungicidal sprays this year to control it, and the problem is different than brown rot or bacterial spot. The zinc sprays were beneficial to the apricot trees in that the leaves this year were much larger than in past years, leading to more photosynthesis and better-flavored fruits.

As a final comment, I am testing three advanced apricot selections, **J-1-139**, **H80-77**, and **NJA-105**, from Rutgers University. I grafted them in April 2005, and they survived -23°F and had a lot of flower buds on them when they were shipped to Yakima, Washington and planted for the time being in a friend's nursery row. The trees were well branched and were in good vigor in 2005 and 2006. Unfortunately, the **H80-77** and one apiece of the two **J-1-139s** and **NJA-105s** died as they were attempting to strike root and leaf out, since they were already breaking dormancy as of April 2 when they were packed and shipped to WA.

At the home of Apricot Interest Group member John Fuerst, in southwestern Minnesota, no apricot variety has suffered noticeable winter-injury to the leaf buds at -27°F. This is true not only for **Canadian Prairie** varieties and the **Harrow** series, but also **Apache**, **Suphany**, **Henderson**, **Zard**, and even **Afghanistan**. **Afghanistan** is a "white" apricot and bore a small crop in 2007. It bloomed later than any of the other apricots, which suggests that this old Iranian cultivar is at least partially and maybe fully self-fertile.

Pears.

Concorde has proven fully winter-hardy at -30°F on OH x F.97 rootstock. The tree has been fairly productive and as pears go, precocious. **Concorde's** quality and keeping ability make it a good choice for here, and the tree is easy to manage. It was ripe enough to pick by September 17 this year although usually harvest is closer to September 20-25. In central Washington, it came ripe October 1. The tree suffered from a bit of pre-harvest drop both in 2006 and 2007. There is also an unidentified insect pest (possibly tarnished plant bug or lygus?) that bites the fruits early to mid-season, causing deep, unattractive dimpling and distortion of the fruit. The fruit is much more attractive to squirrels than **Douglas**.

Douglas seems well adapted to our location and to Rushmore, in SW Minnesota. The size is medium to large, and the flesh moderately sweet, but the skin is tart. **Ubileen** grafted to **Pyrodwarf** with a **D'Anjou** interstem has been

very vigorous here and not terribly productive, possibly because of shading problems. The pears produced in 2007 were huge, but even when they were harvested ripe and green in color, in many cases they were already beginning to rot at the core, just like a **Clapp's Favorite**. With hot, dry conditions both **Ubileen** and **Beurré Giffard** came ripe at the same time, on July 25, and with both we regretted that we did not harvest them a day earlier. **Ubileen**, while very sweet, kept only for a few weeks in the refrigerator.

My three grafts of **Beurré Giffard** on the **Concorde** have done well and been productive. **Harrow 604** bore eight pears as a young, three-year-old tree in 2004, but perhaps because of increasing shade problems has not borne any blossoms or pears since that first early crop. At Summerland, BC, in 1995 the fruit size and quality was outstanding. **Best Ever** pear has blossomed here, but not borne any fruit. Across the street in my neighbor's yard, a 20+ year old tree of **Honeysweet** has been productive and winter-hardy to at least -30°F, and in nearby Hastings, **Seckel** has survived and been productive at a full-sun, hilltop location about a tenth of a mile west of the Mississippi River.

Interspecific hybrids.

Grafted to **Citation**, **Bill's Peach Cot** has survived 23°F here without winter injury and so too has **Flavor King** pluot on **Citation**. However, **Citation** has not proven reliably winter-hardy on more exposed sites in central Minnesota.

Berries.

We had a good harvest of **Tribute** and **Tristar** strawberries in mid-June, but these two well-known, day-neutral strawberries bore no blossoms in July, August, or September of 2007, and sadly that was true also in 2006 thanks to a hot, dry July. There was extensive damage to our raspberries in March from rabbits, so the summer crop of raspberries was reduced. However, **Autumn Bliss** and **Prelude** have been bearing good crops of fall raspberries, although as autumn begins, the size of the berries is beginning to drop off. The foliar nutrient sprays I applied contributed to better leaf health and resistance to extreme heat on our **Hinnomaki Yellow** and **Lepared** gooseberries, and we again enjoyed a good harvest from our **Jewel** black raspberries and **Royalty** purple raspberries. Under heavy rabbit pressure, the black raspberry canes suffered much less damage than the red or purple raspberry canes.

Rootstocks.

Consistent snow cover has been the case for only a few of the eight winters we have lived here, so deep freezing of the ground has been a major issue. We have never had root injury to any apple rootstock here (Bud.9, M.26, Bud.118, Antonovka), nor to any pear rootstock (OH x F.333 or 513 or 87), **Manchurian** apricots seedling, **Mazzard**, **Mahaleb**, Gisela 7, or VSL-2 cherry rootstocks. **Myrobalan** and American native plum have not been injured, and **St. Julian A** has performed well as a rootstock here under both European plums and apricot (**Jersecot**). Both my **Opal** and **Seneca** plums, grafted to **Marianna 2624**, have experienced root injury serious enough to affect the above-ground part of the tree. In the **Seneca**, the tree did not leaf out in April, May, or June 2003 although the bark was green underneath. Only in July did the tree begin to leaf out and grow. **Marianna 2624** has proven to make a very vigorous tree of **Superior** and only slightly dwarfing on **Opal** and **Seneca** plum; this rootstock has had no effect on widening **Seneca's** narrow crotch angles or improving precocity. The lesson here seems to be that 2624 is a poor choice of rootstock for areas where deep freezing of the soil occurs, primarily because it is shallow rooted.

Lessons learned.

Although the 6½' x 13' spacing of my apple trees on Bud. 9 has been okay, if I were to replant here next year I would space my trees 7' x 13' or even 8' x 12', given our strong, heavy soils. A spacing of 9' x 14' is too close for our apricots and European plums; 12' x 15' or 16' would have been better, and our pears likewise would be easier to pick if spaced at 12' instead of 9' within the row. My purpose with this orchard, however, was not to have a perfect spacing, but given limited land and shading problems, to preserve, test, and evaluate as many fruit varieties as I could under the conditions of a Zone 4 climate in east-central Minnesota.

Given my enjoyment of grafting and desire to try different fruit cultivars, I grafted and grew in pots a lot more trees than the yard could accommodate, with the idea of keeping these until we moved to a more favorable site with more land. I dug a large hole in the garden and put my potted trees in it to over winter, mulching around the pots with leaves and surrounding the area with a 2' high fence to keep out rabbits. Heavy snows in both March of 2006 and 2007 resulted in hungry rabbits getting inside and doing extensive damage to many of my one-to-three-year-old potted trees. As the snows melted, the hole filled with water, so for the better part of four to six days the pots were sitting in water in late

March. Dormant apple, pear, and plum root systems can sometimes tolerate this kind of abuse, but apricot is much less tolerant. A better idea would be to leave the pots above ground, fence them in with a 4' chicken-wire fence, and then to pile leaves liberally around them. In fact, that is what some of the local garden centers do with their unsold and over wintered fruit trees.

Two friends who are expert hunters put out traps in April 2007 and cleaned out the squirrel population. As one Extension agent told me, ultimately the squirrels will come back, but even by September there was only minor damage to windfall apples and pears, and no evidence whatsoever that the few squirrels I occasionally saw were ripping numbers of half-ripe fruits off the trees as they did in past years. The dry weather in June and July delayed apple maggot fly emergence, and although I only applied one spray of Guthion to my apple trees, apple maggot and codling moth damage was negligible in 2007. Other orchardists around the Twin Cities likewise commented on the lack of damage due to apple maggot. I applied one spray of Imidan for plum curculio within a day of the first signs of fruit damage. Thanks to consistently warm temperatures, the period for curculio egg laying passed before the Imidan spray lost its effectiveness, and we had only a little damage to our plums, apricots, and cherries from that pest.

My last comment has to do with micronutrient management. Although a soil test showed 5 ppm of zinc in the soil (with 1-10 ppm considered adequate levels), my dwarf and semi-dwarf apple trees were troubled by a lot of "blind" wood and fruit borne on terminals through 2006, in the style of **Rome Beauty** apple trees. Furthermore, the leaves were sometimes rather small. Additionally, the phosphate levels in our soil are high because our land was a hog farm before 1973.

I applied Vigor Zinc Phos (or VZP for short, manufactured by Agro-K Corporation in Minneapolis) to all my fruit trees in late October 2006 and again in late March 2007. The leaves on all my fruit trees, but especially the apple trees, were obviously larger and healthier than in past years and the fruits, much firmer, larger, and better flavored than in past years. This was especially true on the summer apples but also quite noticeable on my later ripening fruits. Foliar zinc applications are not a panacea, but when phosphate-induced zinc deficiency is an issue, applying zinc in a form that the trees can easily absorb can really make a difference.

The final comment is that 2007 was our best year ever for tree fruits here in Cottage Grove, and for that I thank God heartily.

A Gentler Way to Topwork Apple and Pear Trees

Alan Haigh Home Orchard Company Haighal@aol.com

Topworking is the practice of grafting an established fruit tree over to a different variety. The traditional way of doing this is pretty brutal, with branches of up to about four inches in diameter being cut to stubs and the new variety being attached by way of cleft grafts at the end of these stubs. Reducing a tree to a skeleton in this way directs all the energy to the grafts leading to a rapid transformation.

There are two problems with this method. One is that the disfigured tree is an eyesore for two to three years until it establishes its new canopy and the other is that such a tree remains barren of any fruit during that time. For me, these two problems are crucial. I make the lion's share of my living managing very large, old apple trees, mostly on the carefully manicured estates of very wealthy clients. These trees are often over one-hundred years old and obviously not selected by the current owner of the property. The owner naturally loves the trees but not always the types of apples they produce or, even if they like the apples, one tree can produce as much as a half-ton of fruit. It's pretty hard to put so much fruit of one variety to use.

The obvious solution is to partially or completely topwork the tree to another or several other varieties. However, if I resorted to the traditional method I would probably be run off the property for disfiguring a specimen tree. I decided that it would be a good idea to try to change varieties in a less disruptive way and came up with a method that works very well for me.

On a tree that I want to change over or add new varieties to, I leave some strategically located water sprouts during winter pruning for grafting new varieties to at bud-break in spring. These sprouts should be vigorous and located on the trunk where a scaffold can be built or close to the trunk at the beginning of an already existing scaffold. On very large scaffolds it may be best to leave sprouts about half way out where most of the best fruit is harvested to reduce the amount of wood that has to be cut later. Younger, smaller trees can be changed over by grafting a scion to a single upright water-sprout connected to the trunk

low on the south side of the tree. As that graft grows you gradually replace the old tree with the new by cutting away the old wood to make room for the new.

A lot of articles have been written about grafting techniques in Pomona but grafting onto one-year wood doesn't require a whole lot of technique, at least with apples and pears. Both scions (grafting wood) and water-sprouts are new, meaning wood that grew entirely the previous year, so they tend to heal very quickly due to their high vigor and because they are smooth and straight.

I don't bother with a grafting knife—that would take too much skill for me. I just use a sharp pruning shear and cut both pieces to a sharp one-sided point making the cut as long as the shear allows. I cut the scions to two buds and use a scion about the same diameter as the water sprout. Then it is easy to match the pieces up and tie them tightly with vinyl electric tape. I coat the tips with pruning wax after taping. The whole process takes about ten minutes per graft and if the cambium tissue is lined up properly, almost all the grafts usually take.

With experience you learn how to make the cuts fit together so cambiums of both pieces often align almost perfectly, especially if you pull the tape tight as you wind it around the graft. Once the graft is successfully established I cut the tape with a single slice horizontal to the grafted shoot, usually about two months after grafting and always before growth begins the following spring. This is best done with a razor knife. An alternative method is to use electric tape instead of vinyl and forget about having to cut it later. This tape will stretch as the graft grows but doesn't allow you to pull it as tightly when you make the grafts. I have often read about the importance of sharp tools and clean cuts while grafting, but a little frayed cambium and bark doesn't seem to deter the success of my grafts a whole lot.

The most important thing seems to be that the scion wood doesn't dry out during storage and that insects don't destroy the new shoots as they begin to grow. Of course the cambium tissue of both parts needs to match on at least one side.

The less time the scions are in storage, the easier they are to keep vital, so I wait until very late winter or early spring to collect mine—just a couple of weeks before the buds begin to sprout. I then store them in the fridge with the scions in an open plastic bag surrounded by a closed plastic bag containing a moist rag. By the time the grafts begin to grow the rest of the growth on the tree has hardened off. In my region these new shoots are attractive to sucking insects like leafhoppers that can suck the life out of a fledgling graft. Three or four bi-weekly applications of Sevin or more frequent application rotenone-pyrethrum should help. You need only spray the growing tips, so only a tiny amount of pesticide is necessary.

Over the next three years or so the grafts will be trained into new scaffolds and interfering wood of the original tree will be removed as needed to make room and allow sun to reach the wood of the new grafts. By the second or third year these new developing scaffolds will need to be tied down to a slightly above horizontal position—branch spreaders can also be used. The longer you wait to do this the faster your new branch will grow so wait until just before it becomes stiff to bend. You'll be surprised how quickly a vigorous healthy tree can be transformed using this method. Just be sure that the new varieties get plenty of light and that you are diligent in cutting away the old tree as your new wood takes its place.

If you have a great big old apple tree that produces a ton of fruit that you don't especially like, don't despair. Consider your tree an opportunity to have an entire orchard on just one tree!

Pears in a Cold Climate: A Follow-Up

Claude Jolicœur 197 Aberdeen Québec, Québec, Canada, G1R 2C9
(418) 524-6833 cjoli@gmc.ulaval.ca

In the summer 2002 *Pomona*, I wrote a first paper about the pears I grow in my small orchard in Petite-Rivière-St-François, near Québec City, in climate zone 4 (this is Canadian zone 4, which is similar to USDA zone 4).

There is no fireblight in this area, so my observations might not be very useful for those who grow pears in areas where this is a problem.

Since my 2002 article, I have had rather small productions in 2002, 2003 and 2004. In particular, the winters of 2002-03 and 2003-04 have been colder than normal, which resulted in slight damage to some of the varieties and in general failure of flower buds. Then, the summer of 2005 in Québec was the nicest we had seen for many years. After a very rainy June, the sun started to shine by June 20 and stayed there until October, giving us very nice temperatures and perfect conditions for fruit ripening. The winter of 2004-05 was also relatively mild. I have had many pear varieties that produced fruit for the first time in 2005, while older varieties produced fruit in unprecedented quality and quantity. Then, in 2006, things were more normal, but I still had fairly good production.

For readers with internet access, I have posted pictures of all the varieties discussed here. These pictures are in an album with Google's Picasa web, and are available at: <http://picasaweb.google.com/cjoliprsf/PearsForPomona2007>

In the 2002 paper, I discussed the performance of **Golden Spice**, **Patten**, **Ure**, **Harrow Delight** and **Sainte-Sophie** in my orchard. I will only update the information on these varieties:

Patten remains my #1 pear in all aspects—productivity, hardiness, quality, size. It is one of the few that produce even during bad years. I am really impressed by it, and I would recommend it to anyone who wished to grow pears in a cold climate. In my orchard, the optimum harvest date appears to be around September 20.

Golden Spice is very irregular in productivity. I harvested one bushel in 2001, then nearly nothing the three following years, then two bushels in 2005 and almost nothing in 2006. It remains my favorite for juice, however. In 2005, in order to assess its best picking date, I harvested parts of the crop on August 28, September 10, 18 and 30. Sizes of nice specimens were 40 mm on August 28, 48 mm on September 10 and 55 mm for the two later dates, indicating that by the third week of September, the pears had grown to their full size and were ready to harvest.

Ure produced its only crop worth mentioning in 2005: 1/2 Bu. All other years, it has only produced a few pears (less than a pound). The 2005 crop was picked on August 25, September 10 and 18. The first date was too early and the pears never developed a good flavor. By September 18, they were well ripened and had started falling on the ground. They were excellent to eat right off the tree, but did not keep much more than a week. They also increased in size between the 10th and the 18th, reaching 60 mm by the later date. I made a juice test and was quite pleased by the result: specific density of 1.060, a good acid content and a nice flavor.

Harrow Delight is only marginally hardy in my orchard, and when we get normally cold weather in winter, it produces very little growth and no fruit. In 2005, it produced some growth for the first time since 2000, but very few fruits, and it had a crop in 2006. When it crops, the quality is great, but unfortunately, it doesn't happen often.

Sainte-Sophie was grafted on a hawthorn root, and produced its last crop in 2001—the graft was rejected and died during the 2002 summer. I have another

tree of the variety grafted on a *P. ussuriensis* root, but it still hasn't produced fruit.

I will now discuss about the varieties that still had not produced any fruit when I wrote my 2002 paper. These are **Flemish Beauty**, **Beurré d'Amanlis**, **Beurré Giffard**, **Luscious**, **Olia**, **Savignac**, **Seckel**, **Southworth** and a group of similar early pears.

The **Flemish Beauty** is an old *P. communis* variety from Belgium, introduced by Van Mons around 1810. It has the reputation of being one of the hardiest of the high quality European pears, and was already cultivated in Québec and Ontario by 1890. Through the ages and places of cultivation, it has been known under many different names, some of the better known being **Fondante des bois** (the original name) and **Beauté Flamande** (used in Québec). My **Flemish Beauty** tree was planted in 1992. It is on *P. communis* seedling root. The tree produced its first fruits in 2005 and a few pears in 2006. Obviously this is not a precocious bearer. The best picking date appears to be around September 15, and the pears start falling a few days later. They are ready for eating a month later. The quality is excellent, the pears are quite big and very juicy. Cold hardiness is good and the tree is a good grower. It seems to be an excellent choice for cold areas where there is no problem with fireblight.

Beurré d'Amanlis is also an old *P. communis* cultivar, that originated in France by 1850. It is not as well known in North America as **Flemish Beauty**, but Santerre mentions it as being cultivated in Québec in 1903. I made two grafts of this variety in 1999, one in the **Golden Spice** tree and one in the **Patten** tree. Both grafts fruited in 2005 for the first time. Interestingly, the pears in the **Patten** tree were much nicer than those in the **Golden Spice** tree. The pears were picked on September 18 and were ripe by October 1. The quality was very good, tender and melting. The variety seems quite hardy in my climate, the fruit sizes and matures well.

Beurré Giffard is again an old *P. communis* cultivar, that was found as a chance seedling in France in 1825. It was first described in 1840, and introduced in America by 1850. It is known as being very hardy and happy with a short, cool summer. Reports from other NAFEX members indicate that it is cultivated in Alaska and in Minnesota. I grafted it in my **Patten** tree in 2002 and it produced one pear in 2005 and two in 2006. The quality was better in 2005, the pear being

one of the best I have ever eaten. Optimal picking date appears to be September 1, and eating date about one week later.

Luscious is an American pear, bred in South Dakota in 1954 and introduced in 1973. It is a cross of the SD selection E31 x **Ewart**. From the information I have, **Luscious** would be pure *P. communis*, and resistant to fireblight. It is generally considered hardy to zone 4 and possibly to warmer parts of zone 3. I grafted it in 1995 to my **Patten** tree and it only produced its first fruits in 2005, which is very long for a graft to start production. The pears are small, size being between 45-50 mm across, but the quality is quite good. Picking date is between September 15 and 20, and they easily keep over a month for best eating quality. Hardiness and vigor are very good in my location.

Olia is a *P. ussuriensis* variety from Russia, which was introduced in Canada in 1940. I have one graft in my **Golden Spice** tree. It was grafted in 2000 and bore four pears in 2005, none in 2006. The pears were picked on September 18, and were already past 10 days later—I missed their prime, but they didn't appear very flavorful anyway. The variety is hardy and vigorous. The fruit is round, green and small.

Savignac. There are two different varieties that have been propagated under this name. One is a small, round pear and the other is medium-sized and pear-shaped. They come from a lot of four pear trees that had been bred at the Ottawa Experimental Farm and sent in 1947 to Brother Armand Savignac, in Joliette, Québec. From the information I was able to get, these were numbered selections from the program that released the Enie-Menie-Moe pears, but those particular selections were never officially named. Two of the trees died and during the 1980s, some nurserymen contacted Brother Savignac and propagated the two remaining trees that had proven hardy in this zone 4 location. The varieties used at Ottawa for the pear breeding program were **Flemish Beauty**, **Clapp**, **Kurskaya** and **Zuckerbirn**, the two latter being hardy *P. communis* cultivars from Russia. So, if my information is correct and the **Savignac** trees are selections from this program, they would have been bred from the same parents and would be pure *P. communis*. For a longer story on these pears, I wrote a note in the Winter 1997 *Pomona* (Vol 30 #1).

I grafted the small round **Savignac** in my **Ure** tree in 1999 and it produced its first fruits in 2005. I must say that those fruits looked identical to the **Ure** pears, so there is a possibility of a tagging error in this case. The other **Savignac** was grafted in 2000 in my **Patten** tree and I got small productions in 2005 and

2006. The pears are rather big, and very handsome, the nicest specimens approaching 65 mm across. Picking seems to be by second week of September and they keep for about two weeks, but more testing is required. Hardiness and vigor are very good.

Seckel is a well known American cultivar of *P. communis* that dates back to about 1800 and is generally considered hardy in zone 5 or 4, and resistant to fireblight. I grafted it in 2002 in my **Ure** tree and got one pear in 2005. I picked it on October 8 and ate it on November 1. The pear was small, 40 mm across, but with a fabulous taste. Up to now, the variety appears hardy in my location and the vigor is good.

Southworth is an American pear of unknown origin, which probably is pure or almost pure *P. communis*. Some testing made at the St-Jean-sur-Richelieu research station have shown it as one of the most promising varieties for commercial pear growing in Québec with **Flemish Beauty**. I grafted it in 1999 in my **Golden Spice** tree and got a few pears in 2005 and 2006. Quality was better in 2005; the pears were picked September 18 and eaten between October 1-15. I didn't find them as tasty as some others, but the quality was still quite acceptable. The variety seems quite hardy and the vigor is good.

I also have a group of early pears that are all very similar although they come from different locations and have different names.

North Brite is a variety that I collected from a young tree in a park in Québec City. There was an identification of that name on the tree. However, I have never seen a reference to this name in the literature. It was grafted in 2000 in my **Golden Spice** tree and fruited in 2005.

Highway 61 and **Westfort** are local names given to trees found in the area of Thunder Bay, Ontario. They were sent to me by NAFEX member Martin Hellsten and grafted, one in my **Golden Spice** and the other in my **Patten** tree in 1997. **Highway 61** fruited in 2001 and in 2005, while **Westfort** fruited in 2005 only.

These three varieties are also very similar to an unidentified tree growing in a public park in Quebec, which I call **Bois de Coulonges #2** (or **BC-2**). This is an adult standard tree which I guesstimate was planted by 1950. The origin of this tree could also be from the Ottawa experimental farm (as are the **Savignac** pears), or it could be a named variety.

All these pears are rather roundish, green turning yellow, often with a red blush. Size is small to medium and the flavor is quite good. Hardiness and vigor

are good. The ideal picking date is by 1st of September and they do not keep more than one week.

All of the abovementioned pears appear worthy of trial in a cold climate of similar to mine. Some of the varieties that I have tried were not as successful: **Clapp** and **Anjou** died before having time to bear a single fruit. Other less-successful varieties are **Bonne Louise** and **Shinko**:

Bonne Louise is an old *P. communis* cultivar, which originated in France by 1780. It is also known by the names **Louise Bonne de Jersey** and **Bonne Louise d'Avranches**. I have read a report by Leopold, 1914, that mentions it as being cultivated in Québec, probably in the Montréal area. I have one graft, in the **Golden Spice** tree, grafted in 1999 and gave its first four pears in 2002, then three more in 2005 and about ten in 2006. Unfortunately, this variety does not mature well in my climate. The pears remain very small (4 cm / 1.5" across) as if they wouldn't have enough time to grow to their normal size. Hedrick (Pears of New York, 1921) wrote that the fruit matures in October, and this seems to be too late for my short growing season. However, the taste was quite good, and it is somewhat interesting to have these tiny, good-looking pears. The wood did suffer during some of our colder winters.

Shinko is a *P. pyrifolia* variety from Japan that originated in 1932 from Nijisseiki (20th Century) open pollinated. I bought a tree on unknown root in 1991 to see if it could be possible to grow asiatic pears. However, this tree has winter killed almost every year, but it is really stubborn and every year, it grows back. One year, after an exceptionnally mild winter, I was able to pick some grafting wood from this tree, which I grafted in my **Golden Spice** tree to check if a hardy frame could increase the hardiness of the variety. The graft was done in 1998, and I did get 4 pears in 2002! The fruits were miniature, however, 35 mm across, and had not matured properly. During the winter of 2004, the graft was almost completely killed, but it rebudded. In any case, this variety surely isn't hardy in my location and I removed it during the summer of 2007.

Following are other pears that I am currently evaluating in my orchard but haven't produced fruit yet: **Clara Frijs**, **Dr. Jules Guyot**, **Lubenicarca**, **Menie**, **Miney**, **Nova**, **So Sweet** and **Summercrisp**. I also have a collection of six perry pears—**Blakeney Red**, **Gin**, **Hendre Huffcap**, **Thorn**, **Winnal's Longdon** and **Yellow Huffcap**—that appear hardy enough for my climate; these will be the subjects of another paper in the near (hopefully) future.

Update :

The production of this article was delayed quite a bit and the 2007 crop is now well on its way. I am writing this update on September 6 and the group of earlier pears was picked last weekend. **North Brite**, **Westfort** and **BC-2** are still very similar (see the last picture of the online album.) **Highway 61** and **Giffard** did not crop this year, while **Harrow Delight** gave a very poor crop. The other varieties haven't been harvested yet, but **Patten** is again coming up with a very nice crop while **Golden Spice** and **Ure** have poor crops. **Sainte-Sophie** is cropping again this year after a five-year interruption, and is looking good. **Menie** is setting its first crop and is looking good also.

Starting Fruit Trees in Milk Cartons

**Richard Fahey Catholic Homesteading Movement
Oxford, New York 13830-A**

The most exciting thing I'm doing lately is using milk cartons to raise seedlings. Why? The number one reason is because I can plant the trees out two months after I start them, just like gardeners do with tomatoes. I save a year in getting started, or maybe even two years, because I have a minimum of transplant shock compared with planting bare-root trees. There are a lot of other benefits, too, but before I get into them, I'll talk about the basics of starting seeds in milk cartons.

Using milk cartons to start seedlings is an old idea that seems new because it got forgotten with a flood of modern tree starting methods. Yet I believe it may still be the best method. A milk carton is just the right depth for most fruit and nut seedlings. Almost all seedlings have a long taproot that the milk carton's long shape accommodates. Both one-quart and two-quart milk cartons are the same depth. The two-quart carton is useful for starting two or three seedlings, or for one seedling that will be planted late, since it has twice as much room for roots to develop. The seedling won't get root bound as quickly. Always poke a few holes in the carton bottoms to drain excess water.

A potting soil that works well is a combination of ingredients that will be light and airy. Woodland humus, compost, and peat moss all work well. Up to half sand or topsoil can be added. Use what is available with the thought that at least part of the mixture should have plenty of plant food in it. A light and airy potting soil allows the seedling roots to penetrate and multiply throughout the soil in the milk carton. These roots will hold on to the soil so the fine root hairs will be undisturbed when the seedling is transplanted. Most fruit and nut trees

will not sprout readily unless they have gone through a two-month cold period either outside or in a refrigerator; this is known as a period of stratification.

The top growth of a tree indicates the equal growth of the unseen roots. When the seedling grows about a foot tall, and the leaves and branches are capable of filling an imaginary milk carton put on top of it, the roots have filled the soil in the real milk carton. This takes about two months. If you started the trees in mid-April, they might be able to be transplanted in mid-June at the earliest. Mid-June to mid-July might be the best time to transplant them, since after that the roots will fill all the carton space and grow into each other—a condition called being root-bound.

For years I only transplanted trees in the spring with bare root seedlings that I raised myself or purchased. These trees were a year to three years old, and the first year after planting they grew slowly. Spring planting of bare root trees has several disadvantages. These include a busy, rushed season, initial digging of the tree, digging a larger hole, weeding and watering and immediate insect and deer predation. (Most destructive insects hatch out in spring and eat foliage until July). Planting milk carton seedlings is easier and eliminates these disadvantages.

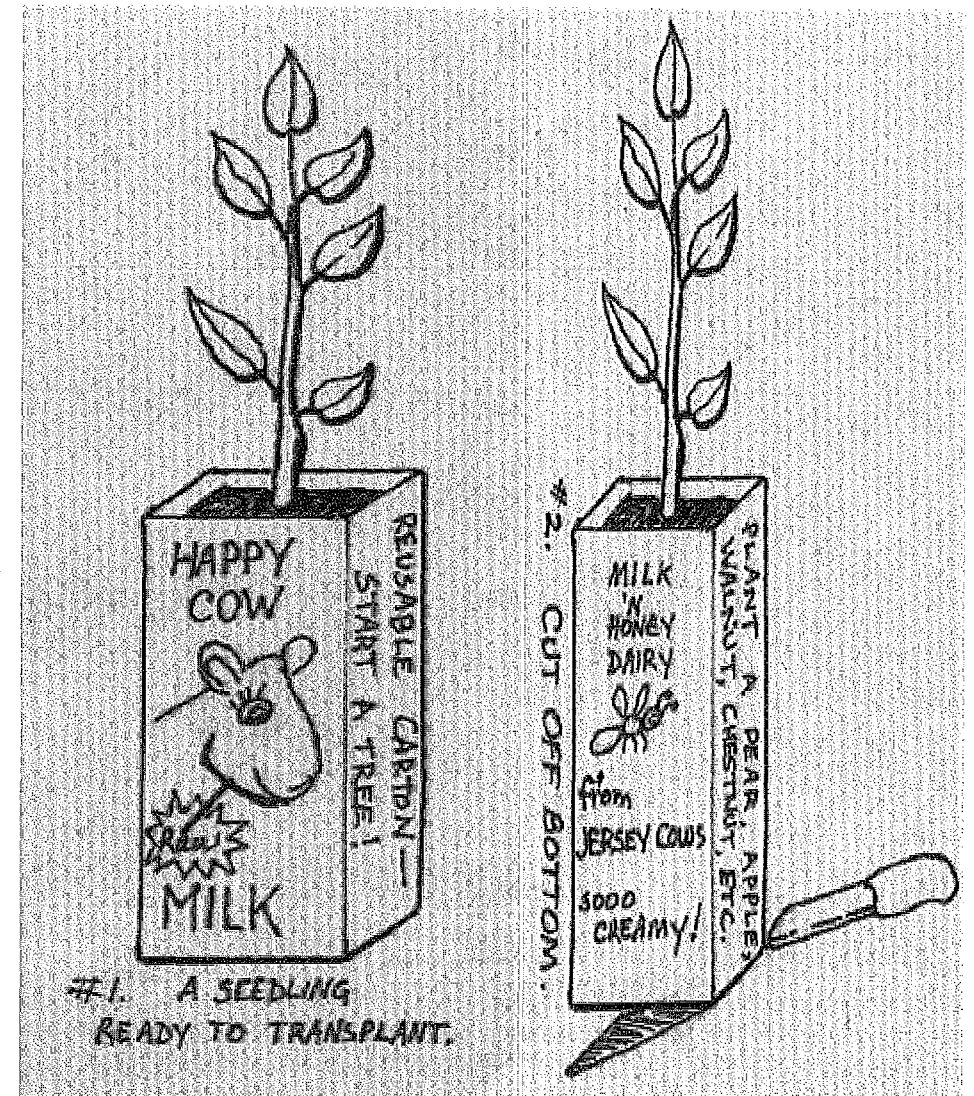
In early June I mulch a potential site with hay, cardboard, or whatever is handy. I do this after a good soaking rain as the mulch seals in the moisture. The grass dies in about three weeks and the seedlings are ready to plant. On the day of planting, the soil in the cartons should be on the dry side so it holds together easily as wet soil can slog off the roots. At the planting site, I pull the hay away and take a shovel or two of dirt out of the planting hole. Then I cut the bottom off the milk carton, *but leave the tree in the carton. The seedling is put into the soil with the bottomless milk carton still on it.* The soil that was removed from the hole is pulverized, the rocks and trash are removed, and then the soil is put back into the hole around the milk carton. Add extra sand, compost, or soil to replace rocks if necessary. Do not pack the soil; gravity will do that soon enough, and the soil needs to be loose for the next step.

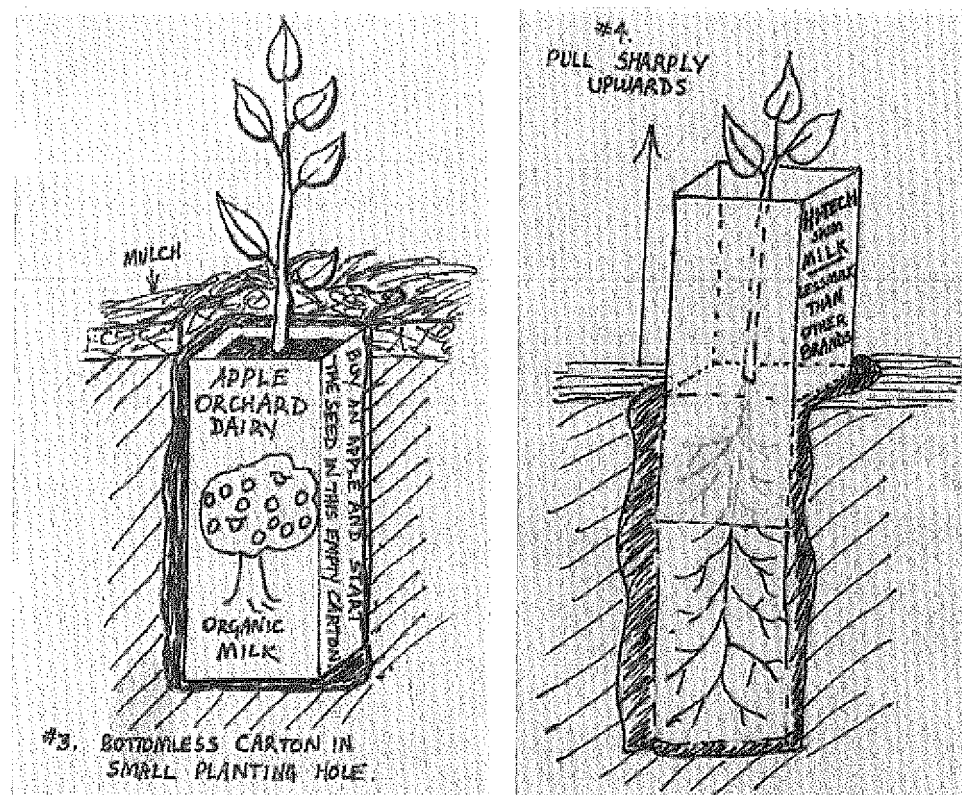
The next step is the most critical in the whole process. Once the hole is backfilled, covering all but the top of the milk carton, *I give an initial jerk upwards to the carton, freeing it. Then I slowly lift it out, leaving the seedling happily nestled in it's new home.* I give it a cup or two of water sometime that day unless it is raining or about to rain. The seedling has the rest of the summer to become well established.

Milk carton planting has so many advantages to bare-root planting. I can think of nine of them.

1. Seedlings do not suffer from transplant shock so their growth is not interrupted. That means that the first year growth of the seedling will equal that of a tree that is two or three years old.
2. Starting trees in cartons allows for easy initial care with light weeding and watering. There is no plowing, cultivating or weeding of wide spaces around the seedlings.
3. Trees can be initially raised almost anywhere, even on a rooftop, back porch, or windowsill.
4. Milk cartons eliminate the chore of digging up nursery seedlings.
5. The planting hole is the smallest it can be, making planting minimal work and saving time.
6. There is no rush in getting trees in the ground. They can be planted a few at a time over a long period of time throughout the summer.
7. With the mulch-in-June method, the grass is killed, almost eliminating first year weeding.
8. The intact root system of the milk carton seedling doesn't require nearly as much water as a damaged and pruned nursery seedling.
9. Most leaf-chewing insects are gone in July.

Besides more than doubling my efficiency in setting out trees, I also have trees to give to people over a longer period with the milk carton method. It's a great way to make people happy and encourage fruit growing.





Northern Pear Interest Group Report- Some Varieties Grown in 2007

David Sliwa 2682 Lannon Hill Road, Decorah IA 52101 Zone 4/5,
(563)382-3922 psliwa@gmail.com

This report focuses on the pear varieties which are being grown in the northern latitudes of North America. It is based on responses of NAFEX members with an interest in northern pears to an inquiry about which two pear varieties have been most productive in their locations, under their growing conditions and management. The purpose of this report is to identify three things about northern pears:

1. which varieties are being grown and are producing a satisfactory crop,
2. the growers evaluation of the fruit/trees of these varieties, and

3. when they are harvested.

Many varieties are being grown including a few local pears with local names and several Asian pear varieties. This report will discuss thirteen European pear varieties, chosen to include some input from each grower responding to the inquiry. The format of presentation includes a general description of the variety and grower comments. The pear varieties are discussed in alphabetical order. Other varieties will be covered in future reports. I invite readers who are growing pears in the north to share their experiences either by writing an article for *Pomona* or sending comments to me. I will summarize information received in future reports. Comments, questions, suggestions, and observations are welcome. All will help to increase the bank of experiential knowledge of northern grown pears and facilitate networking among members.

Information about the varieties other than personal experiences is from:

1. U.P. Hedrick, *The Pears of New York* 1921
2. Brooks and Olmo, *Register of Fruit and Nuts* 1997
3. Robert Nitschke, *Southmeadow Fruit Gardens* 1976
4. Seed Savers Exchange, *Fruit, Berry and Nut Inventory* 2002
5. Ron Gordon, *Fruit Growing in the Upper Midwest* 1991

Atlantic Queen Al Tripp, located at 6,000' elevation in the Wasatch Mountains of Central Utah near Spring City, zone 5, planted an **Atlantic Queen** pear tree about 15 years ago which he purchased from the seacoast nursery of Henry Leuthardt of Long Island, NY. A Leuthardt advertising flyer says it's an old French pear imported with other varieties during the 1950's, which they discovered growing in a garden close to the seashore; thriving in a difficult environment. The **Atlantic Queen** tree has done well in the old horse pasture orchard at Al Tripp's place where the growing season is normally about 100 frost free days and the temperatures can range 120° F. throughout the year. Al Tripp says it gets to be a very big pear. Indeed, it is advertised to tip the scales at one and a half pounds. Of the fruit Al Tripp says it is, "red blushed over yellow green; rich, buttery; tastes like a combination of licorice and fig, and when very ripe has a cinnamony taste." It sounds complex. Harvest at the Tripp location is late August to early September.

Bartlett Long the standard by which other pears are compared, this pear is worth growing where the climate is suitable and blight is not a problem. Hedrick states, "...the preeminently meritorious character of this one is its great adaptability to different climates, soils, and situations...The trees bear full crops year after year...The trees are vigorous, attain large size, bear young, live long, are easily managed in the orchard.... The pears are large, handsome, of good

quality, and keep and ship remarkably well." **Bartlett** was found as a wilding in Aldermaston, Berkshire, England and brought to Massachusetts in the late 1790's. It has become the most widely grown pear worldwide.

Larry Marsh of Solon Iowa zone 4/5 reports **Bartlett** thriving among several pears he tried, most of which failed. His first crop was harvested in 2006 on nine-year-old trees in his south facing hill top orchard. There was no crop in 2007 likely due to bud damage by late spring frosts.

Along the Lake Michigan shoreline in Sturgeon Bay, Wisconsin, Zone 4/5, Ray Kaminski experienced a wet cool spring 2007 and generally a small crop from his fourteen fruit trees. The **Bartlett**, however, did produce a crop, apparently like they usually do. He calls the **Bartlett** along with **Bosc** "old faithful ones." Tony Vavrik of Luckey, Ohio zone 5, reports his several **Bartlett** trees "produce fair crops on an annual basis." He harvests those crops early- to mid-August from pear trees located on a two-acre yard directly adjacent to a large woodlot.

However, both Al Tripp at 6,000' in the Wasatch Mountains of central Utah, zone 5, and Martin Hellsten of Thunder Bay, Ontario, Canada, zone 3, lost their **Bartlett** trees. As Hellsten said, "**Bartlett** won't make it through even a mild winter in this area."

Collette Discovered in 1941, Brooks and Olmo state this variety originated in Freeport, Illinois. Though of unknown parentage, **Collette** resembles **Bartlett** in appearance and the flowers bloom and the fruits mature over a long period of time. Indeed, the *Fruit, Berry and Nut Inventory* description states, "Everbearing; keeps blooming and setting fruit all summer."

Dave Omdorf, located just north of Columbus, Ohio, Zone 5, reports, "an early April cold spell...eliminated almost every variety of both apples and pears." Of the eight varieties of European pears and nine varieties of Asian pears he grows, "only **Collette** (European) and **Yoko Suchi** (Asian) set fruit...both have essentially a normal crop."

Giffard A high quality early summer pear. Robert Nitschke of South Meadow Fruit Gardens praises it highly, saying, "We believe this is the best of the summer pears. Medium in size, light green turning pale yellow with a pink blush, it has a delicious refreshing flavor and crisp tender and juicy flesh." It started as a chance seedling found in Foussieres, France, by Nicolas Giffard in 1825. In NE Iowa Zone 4/5, I have found the willowy trees of **Giffard** to be slow in bearing and have had only small crops. On OHxF333 roots, the first few

pears matured on six-year-old trees and after eleven years the trees are still shy bearers. However, the late July ripening pears are excellent. Martin Hellsten in Thunder Bay, Ontario, Canada, zone 3, reports, "**Giffard**...will survive an average winter or two but will be taken out in a test winter." Claude Jolicoeur, at his orchard in Petite-Rivière-St-François near Québec City Canada Zone 4, harvested one pear in 2005 from a 2002 **Giffard** graft onto a **Patten** tree. He describes the pear as "... one of the best I have ever eaten."

Golden Spice Selected in 1924 from unknown parentage at the University of Minnesota Fruit Breeding Farm and introduced in 1949, this small **Seckel**-sized spicy and tart pear is harvested around mid September. Art Schroder in eastern North Dakota zone 4, reports in 2007 his **Golden Spice** tree on *P. ussuriensis* roots "is loaded with fruit." Claude Jolicoeur near Québec City, Canada, zone 4, has had erratic production during the past five years from his **Golden Spice** tree, but it remains his favorite for juice. His crop is ready for harvest about the third week of September. In NE Iowa, I have noticed that the fruit on my fourteen-year-old **Golden Spice** tree has been especially scabby in recent years.

Gourmet Brooks and Olmo describe **Gourmet** as "a high quality, cold hardy dessert pear, resistant to fire blight." The turbinate green-yellow fruits have an Asian pear crispness with an intense European pear flavor. It was a Brookings, South Dakota, release in 1988. My eleven-year-old trees in NE Iowa have produced small to moderate crops the past two years; with the fruit maturing in early September. Bill Lax of Loretto, Minnesota, about 20 miles west of Minneapolis, Zone 4 grafted a **Gourmet** onto a **Summercrisp** pear tree in 2002. Of his first pear harvested in 2007 says, "It had a very smooth flesh and was intensely sweet."

Hardy Wisconsin Offered exclusively by the J.W. Jung Seed Company of Randall Wisconsin, this pear was found on one of the company farms by J. W. Jung in the early 1940's. It is the one pear tree grown by Lois Zibell of Seymour Wisconsin Zone 4/5. She says, "the tree was moved twice because it did not thrive in exposed sites and is now planted in a sheltered spot between multiple out buildings where it thrives and grows well. The fruit which is blunt turns from medium green to a bronzy green with undertones of gold somewhere about the third week of September to the second week of October. When the fruit yields to gentle pressure on the stem end, I pick it. It finishes ripening in the garage. It is heavy skinned, nice and sweet with a few grit cells. We either eat it fresh or make a delicious canned sauce from it."

Highland Robert Nitschke describes **Highland** as, "A large pyriform-shaped pear with smooth greenish-yellow skin covered with a thin russet. The flesh is melting, juicy, sweet and rich as might be expected from its parents (**Bartlett** and **Comice**). A fine new garden pear introduced by the New York State Experimental Station in 1974. Ripens late, keeps well in storage and ripens easily on the shelf." Brooks and Olmo say it ripens September 28 at Geneva, NY.

Glen Stephen of Cedarburg, Wisconsin, north of Milwaukee, zone 5, is presently grafting various varieties on OHxF533 which have not bloomed yet. Thirty-five years ago, however, **Highland** was one of his few favorites among a dozen varieties grafted on a single tree.

Lincoln Hedrick relates that this pear, grown as a seedling in 1835 by Mrs. Marcia Fleming of Corwin, Illinois, apparently does its best in the midwest because of its heat, cold and blight resistance. The medium size fruit is, "...coarse and granular...very juicy, sweet...pleasing but not richly flavored, quality good." In Northern Wisconsin, zone 5a in the Bayfield area, Tom Galazen says, "**Lincoln** is a nice pear, early; on a dwarfing rootstock only moderately productive."

Magness A **Seckel** seedling and **Comice** cross, this Beltsville, Maryland, USDA variety was released in 1968. Brooks and Olmo describe the fruit as relatively tough skinned and somewhat resistant to insect puncture and decay. It ripens at Beltsville in early September and keeps up to three months in cold storage. The tree is "very vigorous and spreading for a pear." In NE Iowa I have noticed this spreading characteristic on my three-year-old trees which are nicely feathered with branches at desirable angles. It is recommended for general trial because of a "high degree of apparent blight resistance and high quality of the fruit." Regarding the "apparent blight resistance" statement, it is interesting to note that W. L. Rohrer in a 60' x 70' backyard orchard of pears, apples and plums in Casper, Wyoming, zone 4, reports grafting **Magness**, **Aurora** and **Seckel** onto a **Nova** tree and only **Seckel** was unaffected by fireblight. Scott Peterson identifies **Magness** and **Aurora** as two pear varieties which "do well at [his] zone 7a windy, marine, salt air off ocean, sandy soil with lots of seaweed mulch" site. Robert Nitschke states, "This is one of my favorite late pears and should be in every fruit garden."

Patten Developed by C. G. Patten of Charles City, Iowa, it is an **Orel 15** and **Anjou** cross selected about 1915. Brooks and Olmo describe this dessert

quality pear as "among the hardiest of large fruited varieties, valuable only in the colder areas...where **Bartlett**, **Anjou** and other standard varieties cannot be grown." Claude Jolicoeur near Québec City, Canada, zone 4, says, "**Patten** remains my #1 pear in all aspects—productivity, hardiness, quality, size. It is one of the few that produces even during bad years. I am really impressed by it and I would recommend it to anyone who wishes to grow pears in a cold hardy climate. In my NE Iowa orchard the optimum harvest date appears to be around September 20th." However, here in NE Iowa the **Patten** crop was harvested earlier during the last week of August and the first week of September. The produce manager at the grocery where I market pears guessed **Patten** had **Anjou** in its parentage; saying she could taste the **Anjou**. Among the dozens of pear varieties I grow, **Patten** appears to be the most susceptible to mites, whether the pear blister mite or pear rust mite or both. Some years by mid summer the foliage can be almost totally blackened.

Seckel Hedrick describes **Seckel** as the premier home orchard pear, "...having no rival in any part of North America where European varieties are grown." "The fruits are small....clean and trim in contour...the flesh is melting, juicy, perfumed and most exquisitely and delicately flavored." Quality fruits can be ripened on the tree, but do not keep in storage. It is self-fertile, susceptible to scab, somewhat resistant to fireblight and slow to come into bearing. The original **Seckel** tree grew near the Delaware River south of Philadelphia and came into general cultivation during the early 1800s.

Seckel is a productive pear among several pears grown by Tony Vavrik of Luckey, in NW Ohio in zone 5 where it is harvested about mid to late July. W. L. Rohrer of Casper, Wyoming, zone 4, reports a ten year old **Seckel** on OH x F rootstock to be "loaded with fruit" in 2007. Rohrer further reports that in 2006 **Seckel** "began ripening the first week of September...There were still lots of **Seckel** pears September 22. Collected last **Seckel** pear October 5, 2006." Joan Rosenberg on Long Island New York zone 7, has a **Seckel** tree which has been bearing for six years with a good crop every other year. Claude Jolicoeur, in his orchard near Québec City Canada zone 4, grafted a **Seckel** pear onto a **Ure** pear tree in 2002. He harvested his first **Seckel** pear in 2005 and reports, "The pear was small...but with a fabulous taste...the variety appears hardy...and the vigor is good."

Here in NE Iowa, I recently purchased some **Seckel** pears at the grocery, which were grown in Washington State. They are indeed small, about 6 cm. long by 5 cm. wide. The flavor was exquisite.

The check out clerk commenting on my purchase said she bought some **Seckel** pears the day before for her two-year-old daughter who was delighted to discover these little kid-sized pears.

Summercrisp This Minnesota pear with good resistance to fire blight, originated as a seedling presented to the Fruit Breeding Farm in 1933 by John Gaspard of Caledonia Minnesota. It was introduced in 1987. Brooks and Olmo further describe the fruit as having crisp flesh, juicy and mild flavor, storing about six weeks under refrigeration. Ron Gordon states, "It must be picked at the proper time or grit cells will form and a strong aroma will become apparent." Gordon does not elaborate as to when is the "proper time" to pick this variety, however. Martin Hellsten in Thunder Bay, Ontario, Canada, zone 3, identifies **Summercrisp** as one of his most productive pears and further states that "most of my pears are ready to pick in early September." Hellsten uses seedlings of **Ure** and other pears he grows or Siberian pears as rootstock. In NE Iowa in 2007 I harvested a block of 25 **Summercrisp** trees on *P. ussuriensis* roots between July 25 and August 13. These trees started bearing very light crops in year six and although the harvest has increased slightly each year, they have yet to produce a heavy crop. I have found the fruit to have crisp flesh, not particularly juicy and definitely mild flavored. The tree is hardy and vigorous with clean foliage. I'd say it's an okay early season pear.

There's a full page picture in *The Pear* book, edited by van der Zwet and Childers, 1982; of a display of several hundred pear varieties in the Pear Exhibition Hall at the Second International Symposium of Pear Growing in Florence Italy in 1976. It shows tables loaded with plates of pears; each plate labeled and presumably a distinct variety. It's fascinating to see and to contemplate all those different pears. On the wall in the background above the tables are posters, not readable in the picture, but the type which shows the season of each variety with the horizontal bars progressing down the chart from early to late season. Looking at the picture reminded me of a rather ordinary pear I grow called **Mendel**. It's a large winter pear which grows on a vigorous and hardy tree. The fruit is rock hard when I pick it around early October. Its chief value to us is that we can enjoy eating it fresh for several weeks afterwards out of root cellar storage. Of the many pears that have fruited for us so far, it's one that fills the end of season niche. There likely is a better winter pear for our location and I hope to discover it. Meanwhile, growing some of the hundreds of pear varieties out there, looking for ones that fit our various needs, can make the heart sing!

Building a Better "Three in One" Apple Tree

Alan Haigh The Home Orchard Company
Haighal@AOL.com

Ever been tempted to buy one of those "three-in-one" apple or pear trees from a nursery catalogue? Well, if you gave in to temptation I bet you ended up regretting it. The three varieties are seldom of similar vigor so you can have a devil of a time keeping such a tree in balance. You're also stuck with the shape of the tree as it comes and you pretty much have to train the tree to an open-center with each variety functioning as a scaffold. Of course, limited varietal selection is also a problem.

I think I have a better way to build a free-standing, mixed-variety tree, of EMLA 26 to EMLA 111 size, especially if you prefer to train your trees to the more efficient central leader structure. A typical central leader apple tree reaches about fourteen feet in height at maturity and consists of three tiers. A tier consists of a group of three or four large branches—for most varieties I prefer three—evenly placed around the trunk to efficiently catch maximum sunlight—say, north, east, south and west in a four branch tier.

The scaffolds of successive tiers are separated by three to four feet of trunk from the scaffolds below and point in a similar direction. The scaffolds of each successive tier should be about half the spread of the tier below, creating a pyramid or Christmas tree shape. Scaffolds should never exceed half the diameter of the trunk at their point of attachment. For all but the most precocious varieties such as **Braeburn** and **Goldrush** it's worthwhile to remove all branches that are more than one-third the diameter of the trunk at their point of attachment. To build a three-tier central leader tree with three varieties, you start with the variety grafted to the rootstock. The second variety is grafted immediately above the first tier to become the trunk at that point. This is usually done a year after the tree is planted unless the one year tree has well positioned feathers to create the first tier. In this case you can graft the variety of the second tier the first year. Once the scaffolds have been selected for the second tier, another graft is made to continue the trunk and build the third tier. If you are growing trees in deer country you may want to begin your first tier four or five feet up the trunk. This would limit your trees to two tiers if you want to keep them reasonably compact.

In building a two- or three- variety central leader tree, it is helpful to use less vigorous varieties as you build up. In other words, if you start with a vigorous variety like **Baldwin** or **Jonagold**, you can graft less vigorous varieties

to build the tiers above it, say **Braeburn** or **Smokehouse**. This will help you manage one of the most vexing problems in with a central leader pyramid shaped apple tree—the excessive vigor of upper scaffolds. In a single variety tree the scaffolds tend to be increasingly vigorous the higher up the trunk you go due to their greater access to light. Typically you have to periodically replace the scaffolds of the upper tiers when their diameter approaches that of the scaffolds below. Otherwise the upper scaffolds will begin to excessively shade the lower ones. Trying to prevent shading by aggressively pruning back of the upper scaffolds is usually futile because such branches are likely to respond with even greater vigor as they grow leaves instead of fruit.

It amazes me that in all the years I've sifted through the fruit growing literature I've never encountered the seemingly obvious suggestion of balancing the vigor of tiers by placing less vigorous varieties on top. Such a strategy might even work in a commercial orchard if you put varieties on the trees that ripened about the same time to simplify picking. It could also be put to advantage when growing espaliers. I hope I've convinced you to leave those tempting "three-in-ones" out of your order list in favor of building a better and cheaper tree yourself.

Seckel Pear Note

**W. L. Rohrer 3840 S. Coffman
Casper, Wyoming 82604 (307) 265 7472**

W. C. Garthright (*Pomona*, Fall 2007) asked about the **Seckel** pear. Although **Seckel** is self-fertile and does not require cross-pollination, I find the pears tend to be somewhat larger when there is a graft or two of other varieties on the tree. This year the **Aurora**, **Magness**, and **Warren** grafts each produced a few pears. Whether there is any correlation, I don't know.

The **Seckel** here in Zone 4, began blooming on April 16, 2004, April 22, 2005, April 21, 2006, and April 22, 2007. I don't know what you consider early or late.

Mixed Fruits & Orchards

2007 Grape Report: Houston, Texas

Robert Hoffman 1011 Lower Van Road Coldspring, Texas 77331

Heavy rains came in June and July which produced an abundant crop of muscadine grapes. All the varieties such as **Early Fry**, **Sweet Jenny**, **Ison's**, **Cowart**, **Summit** and **Black Beauty** had a bumper crop of delicious fruit. Muscadine grapes thrive on lots of water and a hot, humid climate. They need very little care and they do not need any sprays or insecticides to control insects or disease. What is interesting about muscadine grapes is that the longer they stay on the vine after ripening, the sweeter they are! Two varieties this year are singled out for their production and performance.

Sunrise—this variety is a chance seedling from Florida and is sold only by "Just Fruits". It is a bronze male variety that ripens in August and has medium-sized berries. The skin is thin and the flesh is very tender. It produces large clusters of fruits that average between 30-40 lbs. per vine.

Black Beauty—a variety patented by Ison's Nursery. It may be the best-tasting variety of all the muscadine grapes. It produces large quantities of purple-black grapes in large clusters that ripen in August. The fruit is crisp, sweet, and of excellent quality. When it ripens and turns purple it is very sweet, but when it turns jet black, it becomes incredibly sweeter! I found this variety a little difficult to establish, but once it made it up to the wire, it became a healthy vine.

Persimmon Interest Group Report

Jerry Lehman, 7780 Persimmon St. Terre Haute, IN

I apologize and must admit I have not reported to this group annually as I should; even sadder to say I've not had much to report. This report covers several years.

Dissemination of scion wood:

2005- Thirty-eight requests resulting in one hundred ninety-five accessions shipped.

2006- Forty-nine requests received resulting in one hundred ninety-two accessions shipped.

2007- Fifteen requests were received resulting in forty-five accessions shipped.

Most of this material was from the Claypool breeding work. These are the best of his over 2,400 trees, the progeny of the best varieties being circulated 40 years ago. There were also many persimmon seedlings and hundreds of seeds distributed. Additionally, the above figures don't include wood supplied for the Indiana Nut Growers and various other associations for their scion wood swap meetings. Many accessions that were sent to growers consisted of five and more pieces of each variety.

Grower Reports

We are discovering persimmon characteristics can vary greatly between growing areas and even from year to year. It is important in future years that those who have received scion wood send reports as to fruit quality and performance in their area. Following are reports that I have received by state:

Bryant, Alabama

Bob Habenicht reported **Dollywood** is too soft and splatters when falling. Regrafted.

Jarreau, Alabama

David Lavergne reported that **Meador** retains some astringency even when soft ripe. He believes **Keener** is a hybrid bred by Burbank. It has large glossy green leaves and large flowers with large seed more like kaki. **Juhl** ripens first in this area and the ripening season is over. **I-94-A** produced some fruit for the first time, but size and quality are not notable. **Geneva Red** is still ripening and fruit size is good; taste and color are both very good. Of the locals here, **Geneva Red** and **Morris Burton** are rated highest as to taste. The various named selections of the **Early Golden** family also produce fruit that rates highly with the locals. **Morris Burton** will ripen soon with small but flavorful fruit.

Illinois, Chicago

Bob Kurl [source, Martha Davis] reports that **John Rick** was his most reliable. The Botanic Garden reports a **John Rick** on the shore of Lake Michigan that almost never ripens but **Meador** does ripen in that location.

Kentucky

John Brittain reported that the following are seedless in his area where 60 chromosome males are predominate: **Blue**, **Craggs**, **Delite**, **Evelyn**, **Juhl** (**Yates**), **Killen**, **Morris Burton** and **Miles**.

Michigan

Don Rice reported in 2000 that **Garretson** didn't ripen while **A-21**, **A-118** and **C-100** did. **Kalamazoo**, **A-118** and **Garretson** fully ripened in 2003, **A-21** not completely. Pruning helped increase the size of **A-118**.

Boloxi, Mississippi

Lee Sharp reported that **Rosseyanka** ripens before first frost and is good. **Rosseyanka** fruited the third year after grafting. It is great, approximately 2" in diameter, and the trees grow and produce well. **Oriental** persimmons in Mississippi are at their peak for most varieties around the last two weeks of October through the first half of November. The native persimmons of northern named varieties ripen there in August and early September.

Mississippi

Andy Thomas had the following established by fall 2004: **Elmo**, **C-100**, **A-33**, **F-25**, **Dollywood**, **F-100**, **H-118**, **H-128**, **Garretson**, **Juhl**, **Lena**, **Killen**, **Rossey**, **JR**, **EG**, **Wabash** and **Webber**.

Bassem Samma reports that his lone **Dollywood**, with no males in area, flowered but set no fruit.

Columbia, Missouri

Ken Hunt reported that he thinks he likes the taste of **Proc** slightly better than **Juhl**, and **Proc** is not quite so watery. **Proc** has a more astringent aftertaste if you consume the skin. He also liked the flavor and consistency of the pulp of **Proc** better than **Juhl**.

Nebraska

Ralph Puls reports that he has several American persimmon trees, including seedlings and some grafted trees such as **Meader** and **Yates**. A seedling he planted in 1993 produced seedless fruit this year in 2007. Perhaps 90% or more are seedless while a few have one or two seeds. By the way, **Meader** has very little astringency when compared to **Yates**. You can pick them from the tree when ripe and eat them without fear of astringency. There is a male persimmon nearby that has an occasional fruit. Ralph states that he was pretty excited at the thought of a seedless persimmon, especially since it tastes better than the **Yates** and is good sized. Twenty of them in a bag weighed thirty ounces. The fruit is not round and flat like **Yates**, but oblong, shaped somewhat like a bell pepper. [His **Yates** doesn't perform anything like mine; I received wood directly from Ed Yates. JL]

New Jersey

Ted Daniecki reported he has a non-astringent *virginiana*.

David Marsh reports that he has an **Ichu (kaki)** on the east side of his house that has survived -8°F.

Ponca City, Oklahoma

Wes Rice reported that **H-69A** was the only one of the six American persimmons that he noticed as being superior to my other producing named cultivars, which include **Early Golden**, **Juhl**, **Meader**, **Weber**, **Wabash**, **Garretson**, and **Szukis**. These fruit were large—about 1.5" -1.6", and early maturing—around the first of September. Orange flesh was quite tasty and non-astringent when soft even when plucked from the tree. **H-69A** has produced abundant fruit on a regular basis. He wrote, "If I could keep only one American persimmon, it would clearly be the **H-69A**. My soil type is Verdigris, the best in Oklahoma."

Cochran, Pennsylvania

Tom Blose reported a **Morris Burton** grafted on a *kaki* rootstock had six small fruits the first year to flower, and ever since is 100% male. [Did I accidentally send him **F-100** marked as Morris Burton? He reported back, no. JL] Tom also reported in 2004, one seedling [seed from me, JL] goes dormant earlier than others, the only one with full crop and pretty good flavor. It is larger than **Early Golden** and clean with no unpleasant aftertaste. **Early Golden** had a hint of astringency, used then after 22°F. The **Russian** hybrid had no flowers but is growing well. The **Early Golden** has a fruity flavor in the core. Tom also

reported that he has seedlings from Louisiana and the fruit remains astringent until mid November.

Wateka, Texas

Ethan Natelson reported that when his **Giombo** has good color and a few are soft, he picks the firm ones and soaks them in a large bucket of water, changing the water about 4-5 times over a few days. This dialyzes out the astringency. Then he puts them in a zip lock bag in the refrigerator for about 2-3 weeks and they are perfect in flavor, with no astringency and still are quite firm and have no streaks at the bottom.

Persimmons on the NAFEX chat net

~mIEKAL dtv@mwt.net

I've never had a persimmon make it through one winter here in zone 4, including the **Meader** and I don't think it even got down to -28° around here. After four or five passes at trying to get them going I've given up on them.

Tom Blose reported astringency in **Early Golden**. Here **Early Golden** is sweet and free of astringency when fallen from the tree.

Meader here is worthless; small, dry and fully loaded with seeds.

Terre Haute Indiana

Jerry Lehman reports that even with late April temperatures as low as 20°F, the persimmon trees were loaded, although there were no *prunus* fruit or pawpaw on any of his trees and only a few apples. They had slightly above average rainfall, and summer temperatures were above average. The killing frost came November 7, late for this area.

Doug Fell and Mark Hildebrand spent many hours evaluating and recording varieties grafted here. Jerry says that hopefully he will write a more detailed report on this later. To point out the differences in growing areas, David Lavergne reported that **Geneva Red** does very well in Jarreau, Louisiana. This is the first year it bore well here and it was a heavy crop. It is a nice red in color, oblong, and never lost all of its astringency. Even in pudding the slight astringency remained.

Nikita's Gift™ (Nikitaskaya Bordovaya) This Russian hybrid fruited after a killing winter in 05-06 that damaged the tree severely and killed a few newly grafted **Nikita's Gift™** trees. I believe this is an excellent variety for zone 4 and warmer. When ripe, the fruit can be tomato red, larger than any *virginiana* and very sweet. This variety can be ordered from One Green World (onegreenworld.com).

H-63A is large, very early and very sweet. The first fruits fell September 3 and all fruit fell by September 27.

J-59 is medium to large, and sweet with red pulp the first fruits fell September 7 and all fruit fell by September 27. **H-118** very early, September 3, but first fruits were unusable as many were cracked and infected by *Fusicladium levieri* (identified by Dr. Gail Ruhl, Purdue University); reported in the 2003 *Proceedings of the Indiana Academy of Science* 112(2):132-134.) The fruit of **H-118** seems more susceptible to this fungus than other varieties. The leaves of many varieties are infected with this fungus but typically not much fruit is infected. I know of no fungicides labeled for it.

Keener fruited this year. It has been reported to be a *virginiana-kaki* v hybrid. The tree and leaves look 100% *virginiana*. The fruit is larger than *virginiana* and very late. The seeds are more kaki-like but lacking cotyledon flesh, indicative of being a hybrid. The fruit here is a yellow/green with black streaks, rendering it ugly in my opinion. The taste is flat having little sweetness. It is reported to perform better in southern areas.

100-46 is a cross I made of Claypool's **B-56** x **G-26** and I have distributed some scion wood. It is mid season, large, nice red blush, excellent taste and makes good pulp.

Golden Gem is small, flavor described as "blah," but Fell & Hildebrand wrote, "It has a unique combination of flavors."

Please remember to send your persimmon growing reports to me or to *Pomona*.

2007 Yield

W. L. Rohrer 3840 S. Coffman Casper, WY 82604

This year was the most productive in several years mainly because the plum crop, which has frozen out each spring for the past five years, survived the spring freezes. The apple and pear trees were also loaded. Plum yields were:

- **Green Gage**—42#
- **Yakima**—8# (small yield, because house finches ate the ovules from most of the flowers)
- **Yellow Egg**—50#
- **South Dakota**—51#
- **Mt. Royal**—200#
- **Stanley**—220#

The apple yield was:

- **Wealthy**—400#
- **Golden Delicious**—100+#
- Others on dwarfing rootstocks totaled more than 100#.

A friend, upon visiting my backyard, inquired as to why my **Prairie Spy** were so much larger than his. My reply was that, in early July, I remove 70%-80% of the fruit from each tree. As an example, if the dwarf **Jonagold**, approximately 6' high x 6' wide, has 100 apples on it in early July, 80 of these go to someone's horses before mid-July.

Yes, it was another droughty summer and the trees' thirst was quenched by the city water system and my willingness to part with up to \$200 or more per month during the dry spell. Well, I'm only into raising fruit as a hobby, a way to stay out of mischief and explore unfamiliar cultivars. It is a retirement occupation.

Lately since Bear Creek Nursery went out of business, I've been somewhat frustrated trying to find a source for small quantities of **Ottawa 3** and **Mark** rootstock. Can you identify a source for me?

Orchard Progress in Amherst

Carl Schmeizle 190 Turner Creek Road
Amherst, VA 24521-4405

After this hot summer and no rain for a few months, I thought I would let the members know the progress of my trees. After my first writing to *Pomona*, a few members wrote to me and told me their opinion of Cedar Apple Rust (CAR), and I really appreciate the information I received from them. To date, I have had many other problems including deer, disease, squirrels, bugs and birds of all kinds. The worst of it is no rain of any significance for a few months. At the end of August there was still no sign of rain. One thing I did learn from this is that older trees can withstand a long drought, but a young tree newly planted needs to be watered until it has time to develop long, deep roots.

As I stated in my prior writing, I planted seven pear trees in the spring of 2005. In 2006, three of the trees had pears: the **Hosui**, the **Choyuro**, and the **Asian Giant**, but the deer got them all, so next time I'm going to net the trees. In spite of my troubles this year, not all the news is bad. After checking my records, I found the two peach trees I planted in the fall of 2003, called **Belle of Georgia**, had bees all over them this spring. After the peaches started to get some size, they started to drop again like they did last year. So, I cracked open every one that fell and found a worm eating every tender seed. Looks like I have

to use dormant oil spray this fall unless other members can advise what else might be going on.

I starting a spray program this last spring and sprayed all the fruit trees with a fungicide called "EXCEL-LG", made by Organic Laboratories, Inc. This is a systemic fungicide and the directions say to apply every ten to twelve days. So far, I've used this spray on the pear trees mostly, because three of my seven pears had fireblight this spring. Number one, **Shin-seiki**, is growing great and no disease of any kind; I should get some pears in 2008. Number two, **Hosui**, had fire blight this year before I started to spray with EXCEL-LG. I had to cut the leader branch off down below the blight (black bark area). Then a side branch developed the blight, so after calling the company and telling them what was happening, they said I might lose this tree, I'll know next year. Number three, **Chopjura** also had the blight, and I had to cut off the main branch. Luckily, there are three other side branches growing new buds and after spraying a few times, there is no sign of the blight.

Number four is the **Olympic Giant** that shows some cracked bark (I'm not sure what this is) but no loss of leaves and still looks healthy. Number five, the **Seckel**, is growing great with many branches and no sign of the blight. I still spray it with the others, although I read that it is supposed to be highly resistant to the blight. I also read not to prune much on the young trees as this opens areas to potential blight. Number six is the **Bartlett**. Early this spring one very nice long side branch developed the blight and I cut it close to the main branch. After I pruned off this branch and sprayed, many other branches started growing and no sign of the blight returning so far. Last but not least is number seven, the **Asian Giant** that is growing great with no signs of a disease. This tree is one of the three that had pears the first year (last year).

Next are the three remaining **Winesap** apples that had CAR pretty bad last year that I have been spraying since the first buds appeared this last spring. Another fungicide I've been using is a fruit tree spray, a broad-spectrum insecticide, fungicide, and miticide. On the label, ingredients are 0.25 percent of Pyrethrins, 2.5 percent of Perperonyl Butoxide, and technical clarified extract of Neem Oil. Boy, if I tried to remember all of that I'd be lost! So I called the company to explain my problem and they are always happy to help. This spray goes under the name "Greenlight" and, as of this August, the **Winesap** have no yellow spots on the leaves. But because of the drought we are having, some small leaves are turning yellow and dropping. When I talk to the local farmers about this dry spell, they say yeah, it's even turning the tree leaves yellow! Another apple in the group is **Red Delicious**, and last year CAR didn't affect it. It's growing great, but I still spray it along with the others.

Last are the next two apples, **Yellow Delicious** and **Goldrush**, which both had CAR last year and have it again this year, but not as bad. I have been spraying all these fruit trees whether they need it or not. I also keep a log what type spray I use, how often I spray, and the date. My garden is also included in my logbook. So I got brave this spring and planted two cherry trees, **Starkrimson** and **Sweet Cherry** from Stark Brothers. I have two semi-dwarf trees that grow to fifteen feet. I planted one on the front lawn and the other next to the rear deck where I can stand on the deck and pick cherries once they produce, that is if I can keep the birds from getting them first.

As this year the young trees received no rain and it has been very hot, I tried two mountain ash trees. One is called **Rabina Mountain Ash** from Russia, and the other is called **Shipova Mountain Ash** and both of these bear edible fruit. The **Rabina** has orange sweet-tart berries and the **Shipova** produces yellow-orange fruit that looks like **Asiare**. I purchased these trees from Jung from Wisconsin. When the trees arrived last spring, they were in fine shape, about five feet tall, and cost two for \$40.00.

I hope the members find my writing interesting and I welcome any comments and information.

Permaculture Q & A

Dan Hemenway Barking Frogs Permaculture Center
www.barkingfrogspermaculture.org

Q. Dan, I am a NAFEX member and a permy as well. I am visiting my brother for a week at his acre on the island of Boca Grande on the beach. I wanted to do a small permaculture planting there and have very little experience with that zone.

Do you have any small guild ideas that might be worth trying. Some natives mixed with some fruit. Banana circle or lime tree...? All that is there is cactus and sand burs and gila monsters. Could I call you? Where is Sparr, FL, anyway?

Bill Whipple

A. Hi Bill:

Sparr is in N. Central FL, a different world from Boca. So far as I know, being in permaculture full time since 1981, there is not such thing as a permaculture planting. Planting may be a component of implementing a permaculture design, but planting is to permaculture what carpentry is to architecture. I wouldn't begin to design for a place I've not walked.

If the question is one of what fruits will grow in Boca, that, too, depends in large part on the exact location. Coastal should be suitable for tropicals, e.g., mango, with salt spray and hurricane flooding with seawater a major limiting factor. Right on the water, coconut is a nice choice, and sea grape. Alas, I'm aware of no selections of sea grape for culinary purposes, but they can be processed into preserves, etc. Key lime will stand right on the sea wall. Inland would be more likely to involve only the hardier tropicals, and what are called subtropical (warm temperate) species. A good reference is Julia Morton's *Fruits of Warm Climates*, which I believe is now available online. A good source of adapted species and cultivars is ECHO, an outstanding organization that supports hunger workers in 'underdeveloped' countries, and which has a nursery for local sale. They are on the Gulf side, in N. Ft. Meyers. If you are driving, you can swing by there en route.

There is a small booklet on fruits for Florida. My wife Cynthia is looking for a copy now. It is a softcover with a temperature map of the state on the cover. (Low temperatures, which are the limiting factor of most species.) OK, the booklet is *Florida Fruits*, written and published by Lewis S. Maxwell, and is available in the local branches of chain bookstores, and quite possibly in small bookstores too. ECHO has a bookstore and may carry it. If you stop by ECHO, be sure to check out their bookstore. University of FL has developed a range of peach varieties of high quality which are adapted to chill hours as low as 50. The Maxwell booklet and a statement from the local extension service on chilling hours received will produce a match of adapted varieties. They are rated as of poor salt tolerance. Maxwell and Moreton are all you need, really.

The trick will be finding adapted varieties. For hedging or a dense specimen, be sure to get Surinam cherry, and the very best type is known as **Black**. This should produce most of the year once established. We have not had any heavy crops, but we are too far north. Our friends in St. Pete, about half way, climate-wise, between us and Boca, have them growing at their place on the bay, and they get flooded with seawater every few years. We are inland. And on and on.

The most productive species are site-appropriate selections of citrus, peach and mulberry. (I've seen mulberry bearing heavily as far south as Miami.) There are apples that will bear even in the Caribbean, but I think apples are overrated as a fruit and not comparable to many, many crops that can be grown here.

I think "permaculture guilds" is a bogus term. You can construct plant communities knowing the requirements and habits of different species. Most Florida soils are sandy, or just sand, and though the rainfall may seem high, they require planting distances more like arid lands.

The protocol for our Annual Permaculture Design Course Online is at

<http://www.barkingfrogspermaculture.org/Protocol4-23-06.pdf>

For a complete listing of Yankee Permaculture publications go to:

<http://www.barkingfrogspermaculture.org/YPCpublicationsbycategory.pdf>

True Lies in Horticulture Fruit Growers Should Know About

Alan Haigh alandhaigh@gmail.com The Home Orchard Co. Carmel, NY

Serious gardeners are usually interested in the latest findings in horticultural research, believing that science based information can be used to make us better plant caretakers.

Research-based science has absolutely proven its usefulness in agriculture and horticulture but you probably shouldn't blindly accept the conclusions of every research project no matter how competent the researcher. Horticultural research is particularly variable given the contrasts in climate, soil and species.

When I began a bearing age fruit tree nursery 16 years ago I was just out of hort-school and my brain was bursting with research-based information. I also searched libraries for any research that might help me manage fruit trees more affectively.

I remember a conversation I had back then with Ed Fackler in which he insisted that pear trees should be severely pruned back after transplanting to assure their survival. I'd recently read of Carl Whitcomb's research that "proved" that pruning trees back when transplanting didn't help them recover so I felt pretty proud of myself when I corrected Ed of his misinformation. Ed was something less than grateful for the elucidation.

At the time I assumed that Ed must be wrong, having the data to "prove" it. Maybe not—now I believe his opinion was based on actual experience even if it was "only" anecdotal observation.

Dr. Whitcomb's conclusion was also based on experience, but experience within scientifically controlled experiments performed while he was Professor Emeritus at Oklahoma University. Nevertheless, it was Ed's experience that led to the truth that I needed. Pear trees do seem to benefit from vigorous pruning after transplanting.

None of Whitcomb's experiments were done with fruiting pear trees (though he did use some Bradford ornamental pears). Fruit trees are much more sexually precocious than most forest trees and root pruning, which is an inevitable consequence of transplanting, tends to send them into fruiting mode. Also, because they tend to be bred for large fruit size and heavy yields, a disproportionate amount of energy is invested here.

Even if a tree doesn't flower it may be putting energy into producing flowers for the next year. Such a tree doesn't put much energy into new, vegetative wood and roots. A radical pruning could theoretically send a tree back into a more juvenile state of vegetative growth which would better serve root development.

I don't have the research to back up this theory with young pears and given the pear's relatively delayed fruiting habit I may be off the mark, but the important thing is to "know" that severely pruning back transplanted pear trees sometimes works in speeding their recovery from transplanting.

Most one- or two-year-old bare-root fruit trees quickly recover whether you prune heavily or not, so pruning decisions can be made purely for training purposes. These youngsters are sexually immature so the root damage that occurs during transplanting usually won't cause growth-stunting fruit and flower production. Pears may be the exception to this because of their non-fibrous root system and the fact that they tend to be severely injured during digging as the result of the exceptional depth of their roots.

This all is related to another research-based true lie, which says, "all pruning is dwarfing." This is something that I have read many times in academic pruning manuals. I have also encountered research that contradicts this rule. It has been proven that mature peach trees with a greater percentage of their wood removed can actually be larger at the end of the season than similarly sized trees pruned more conservatively. This is due to the dwarfing effect of fruiting and the fact that peaches can set fruit on any part of last year's wood.

This knowledge can be put to use when a pear or apple tree becomes "spur-bound"—when a tree is so spurred up that there is very little annual growth. Such trees become weak and susceptible to winter-kill and don't bare very good fruit because there aren't enough leaves to feed copious quantities of tiny fruit. A fairly drastic reduction of spur-wood often returns the tree to adequate vigor. In other words, pruning spur-wood is invigorating not dwarfing.

Bearing-age tree growth can generally be stimulated by reducing the energy spent on flowering and fruiting. On species that create spur-wood this can be done most affectively by reducing the spur-wood itself because this wood will always function as an energy sink. Even when flowers or fruit are promptly removed the tree will still deliver a lion's share of energy to these stubby little pieces of wood to grow flower buds for next spring.

I'm not going to wait for researchers to validate this point—when transplanting a bearing age tree I often reduce its spur wood to coax it to grow more roots and vegetative wood. I have also successfully established grafted Dunstan chestnut hybrids in a zone considered too cold for any but Dunstan seedlings when I've removed all flowers for the first few years. The grafted trees

seem to put too much energy into making nuts before they are tough enough to survive northern winters. Considering that chestnuts support their nuts right to the end of the growing season, this isn't surprising—hardening off for winter requires energy, too.

Another research-based true lie that's often discussed on the pages of NAFEX is that "adding amendments to the planting hole is never beneficial and often harmful." I have read contradicting research on this. Once again it was Whitcomb the iconoclast who performed the "conclusive" research that amendments are never beneficial when added to the planting hole. Thing is, the amendment that he used in his experiments were one of either peat moss, pine bark, sand or vermiculite.

The English researchers who got contradicting results used composted manure. I don't think the English experiment really proved that amendments help as much as it proved that some extra nitrogen can help—of course, that's just another untested hypothesis.

When amendments cause harm it is often a problem of texture. If an amendment is finer than the native soil, excess moisture can be the result because fine soil is like a sponge, pulling water from its coarser surroundings due to the capillary movement of water. If an amendment is coarser, the planting hole may be hard to keep moist as the surrounding soil pulls moisture away.

In my experience the question of whether amendments can help a tree get established is sometimes yes and sometimes no. If the soil is very poor or there isn't enough of it, a small tree can certainly be helped with amendments. Experts will often say flatly that trees can't be helped but this dogma is based on the response of large trees which would require a huge quantity of amendment to affect their growth and survival over the long term.

An apple tree on a size reducing rootstock or a peach tree can greatly benefit from large quantities of compost in some situations, such as when there's not much soil or when the soil is excessively coarse or fine. Compost probably won't work if it's shoveled into the planting hole, but if it's well worked into the top few inches of soil in a larger area of say 25 square feet it can be very helpful. I'm speaking of quantities of at least a quarter yard.

There are other horticultural beliefs frequently espoused by experts that I consider questionable. I don't know which of these are supported by research, however. One is that you should never dig a deeper hole when transplanting than the height of the root ball.

If a site's soil is extremely compacted it clearly seems useful to break up the soil at least a couple of feet below the root-ball to help a tree to anchor and function to a greater depth. In such cases soil must be loosened at least 3 or 4 feet in each direction from the tree's trunk. When planting, the soil must be

vigorously tamped down beneath the planting depth and the trees planted a little high to prevent them from settling too deeply.

Sometimes loosening up individual plots in compacted soil can create pooling and excessive wetness however. In these sites ridging would also be necessary to assure adequate drainage.

Another true lie is that it is important to fill all air pockets by tamping down the earth and watering heavily after transplanting trees. The belief seems to be that roots will not grow through air pockets but as a nurseryman I have often seen roots that have done this.

Soil settles adequately without being aggressively tamped down and roots won't be dried out growing through the spaces—it's too moist down there for that. Most soils can be improved with greater aeration, not compaction. As far as watering in bare-root trees is concerned, the soil that trees establish themselves best in is moist, not soaking wet.

Overconfidence in book knowledge has embarrassed me more than once. After telling a client that the soil under his blueberries must be quite acid because the plants were so healthy, I decided to demonstrate my acumen by testing the pH as he watched: my test revealed a pH well above six! I have since often found healthy blueberries in soil allegedly too sweet for their good health. The soil in these instances has always been very rich with high levels of organic matter.

I tried telling this to a professor and fruit researcher (including blueberries) during a NAFEX meeting in New Hampshire. He literally scoffed at me, suggesting—no, insisting that my testing must be inaccurate. He can scoff at me but I know some blueberries who would (very quietly) laugh at his educated hubris.

While claims that are backed up with research deserve extra consideration over the kind of anecdotal observations that I have been spouting here, I suggest that when your observations seem to contradict "established fact" you may have discovered something that research just hasn't sorted out yet.

20th Annual Advanced Landscape Plant IPM PHC Short Course January 11, 2008

Sue Turtle bambooconsultant@AOL.com

This Pomona may reach you members too late to attend, but we wanted to alert you anyway to things that are going on. If you are interested in attending a similar course in the future, contact Sue to express that interest.

If you are a commercial arborist, landscape manager, or advanced gardener and want to learn more about the principles and practices of integrated plant management and plant health care, this short course may be for you. Topics covered in the course include:

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*****NAFEXing*****

Library News

NAFEX Library, John Hillbrand, PO Box 296, Fayetteville, AR 72702
jhillbrand@hotmail.com 479-422-7322

You may obtain the following back issues of POMONA from the Library for \$3.00 for one issue and \$2.00 for each additional issue: 15-1, 21-4, 22-1, 22-2, 22-3, 22-4, 23-3, 23-4, 24-1, 25-1, 26-2, 26-3, 26-4, 28-1, 28-4, 29-2, 30-3, 30-4. As a package deal, I will send 30 back issues for \$40.00 (those just listed plus used copies to make up 30. Extending this offer, I will send 60 back issues for \$100.00. For a list of available used back issues (as well as surplus fruit books

for sale), send a stamped envelope or e-mail me. We also have POMONA IN REVIEW, volumes 1 and 2, available for \$3.00 each; these reviews contain the articles from the first two years of POMONA.

To borrow from the library, send proof of NAFEX or NNGA membership, such as a POMONA mailing label showing membership expiration date, along with your name and address, the loan fee, and a list of the items you wish to borrow. Tell me what to do if other members have borrowed your choices—do you have alternate choices, or shall I wait? If you don't tell me, I wait. Send \$3.50 to borrow three books, \$3.00 to borrow two, \$2.50 to borrow one, \$4.00 to borrow a videotape, and \$2.50 to borrow four back issues of POMONA. DVDs and CD-ROMs loan for the same fee as books. Canadian members should send \$20.00 U.S. funds; I will credit or refund money left over after shipping costs. Write if you have special library needs or have items to donate.

We have the following new items for loan:

Richard Ashton, with Barbara Baer and David Silverstein, *THE INCREDIBLE POMEGRANATE—PLANT AND FRUIT*, 2006, 154 pp.

Richard Ashton, *JUJUBE: THE CHINESE DATE*, 2007, 152 pp. How to grow.

California Rare Fruit Growers, *TECHNIQUES OF GRAFTING—SPICE GRAFT, BARK GRAFT, CLEFT GRAFT, AIR LAYER, CLONAL PROPAGATION*, 2007, 60 minute DVD.

Susan Freinkel, *AMERICAN CHESTNUT: THE LIFE, DEATH, AND REBIRTH OF A PERFECT TREE*, 2007, 294 pp.

Dr Gregory Moeseyevich Levin, *POMEGRANATE ROADS: A SOVIET BOTANIST'S EXILE FROM EDEN*, 2006, 183 pp. Memoirs of a life with pomegranates.

Chiranjit Parmar, *SOME WILD-GROWING FRUITS, NUTS, AND EDIBLE PLANTS OF THE WESTERN HIMALAYAS*, 2006, CD-ROM.

Presentation Videos Available

Jerry Lehman, 7780 Persimmon St. Terre Haute, IN 47802 (812) 298-8733

Videos are now available of the technical presentations from the 2006 and 2007 annual meetings. They are available for viewing on computers as MPG files on DVD disks. For DVD players they are available as a DVD. Be sure to specify which format you prefer, MPG or DVD. The first disk is \$15.00. Additional disks with the same order are \$12.00 each, which includes postage.

Speakers and subjects from annual meeting 2006.

Disk 2006-1 1:30

MPG.95 Joseph Postman: Exploring the Caucasus Mountains for Wild Fruits and Nuts

MPG.95 Kirk Pomper: Pawpaw, Currant and Gooseberry

MPG.95 Bob Purvis: Apricots, A Wider Geographical Possibility

Disk 2006-2 1:20

MPG.96 John Clark: Primocane Fruiting Blackberries: Origin and Potential

MPG.96 Charlotte Shelton: Novel Fruits for the Backyard & Retail Growers

MPG.96 Richard Moyer: Unusual Fruits for Backyard Orchards, Heirloom and New

Disk 2006-3 1:30

MPG.97 Richard Bell: Breeding Pears for Psylla and Fire Blight Resistance

MPG.97 Pete Tallman: Fall Bearing Black Raspberry Breeding Progress

MPG.97 Felix Cooper: Fruit Breeding for the Amateur

Disk 2006-4 1:20

MPG.98 Diane Miller: New Novel (Wild) Apples from Tien Shan, Central Asia

MPG.98 John Brittain: Propagating the Tough Stuff (Nuts, Pawpaws, and Persimmon)

MPG.98 Ray Armstrong: Sure-Fire Techniques for Budding Peach

Disk 2006-5 1:00 (Camera location such that the speaker's silhouette blocks part of the video screen)

MPG.99 Banquet Speaker Dr. John Clark: Pouring Cold Molasses on New Variety Introductions: Which Moves Quicker?

Speakers and subjects from annual meeting 2007

Disk 2007-1 0:30 **

MPG135 Dr. Mike Hood, Extension/Research Apiculturist in the Department of Entomology, Soils, and Plant Sciences, Clemson University: Bees for Fruit Pollination

Disk 2007-2 0:25 **

MPG136 Dr. Dan Horton, Professor of Entomology in the Department of Entomology, University of Georgia: Insect/mite Fruit and Tree Pest IPM

Disk 2007-3 0:25 **

MPG137 Dr. Guido Schnabel, Associate Professor of Plant Pathology in the Department of Entomology, Soils, and Plant Sciences at Clemson University: Economically Important Diseases of Peach and Strawberry

Disk 2007-4 0:25 **

MPG138 Ray Givan, Guyton, Georgia: Figs for the South

Disk 2007-5 0:25 **

MPG139 A.J. Bullard, Mount Olive, North Carolina: Mulberries and Che

Disk 2007-6 0:20 *Speaker had no visual illustrations.*

MPG140. David Lavergne, Jarreau, Louisiana: Citrus for Climate Zones 8A-8B

Disk 2007-7 0:25 *Speaker had no visual illustrations*

MPG141 William Preston, Jr., Glenn Dale, MD: Growing Oriental (kaki) Persimmons in Maryland

Disk 2007-8 0:25 **

MPG145 Dr. Desmond Layne, Clemson University: Peach Cultivars and Advanced Selections

Disk 2007-9 0:20 **

MPG147 Dr. Steve McCartney, Assistant Professor of Horticulture, North Carolina University; expertise is apple cultivars, production, and flower physiology: Southern Apple Cultivars

Disk 2007-10 0:30

MPG148 Dr. David Lockwood, Professor in the Plant Sciences Department of the University of Tennessee: Grapes for Southern Winemakers

Disk 2007-11 0:30

MPG150 & 151 Dr. Simon Scott, Professor of Plant Pathology in the Department of Entomology, Soils, and Plant Sciences at Clemson University: Tree and Small Fruit Viruses and Viroids.

Disk 2007-12 0:30

MPG152 Dr. Anton Callaway, BASF Plant Sciences, Apex, North Carolina: Precision Plant Improvement: An Aid to Hybridization

Presentations marked ** have a color hue variation cycling at about 1 second, caused by an interaction between the PowerPoint projector and video camera. This didn't occur when the camera was on the speaker and podium. Some viewers may find this objectionable, but the illustrations can be clearly seen.

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One exchange page notice of approximately fifty words will be accepted per member per quarter. These ads are accepted as a service to our members without charge and NAFEX accepts no responsibility for the authenticity of information given. Please assume the responsibility of answering all inquiries when a SASE is included, even if you are out of the material offered. Please try several sources for readily available material before submitting a "wanted" ad. When asking for seed of fruit trees, do not expect the seedling to be identical to its parent. Ads cannot be taken by telephone, but email is great. Do not ask for or offer scions of patented cultivars. A general fee of \$1 per stick of scion wood, postpaid, has been set, unless otherwise stated. Send your offering or request to the Editor-in-Chief, Jackie Kuehn, jakuehn@verizon.net or mail to Jackie Kuehn, PO Box 29, Lucernemines, PA 15754.

Please let me know how many times you want an ad to appear. I am happy to reprint ads in perpetuity, and have begun putting "[P]" next to those ads I believe should be permanent. If I am wrong, please tell me. Ads I believe are shorter-term will also be marked as such. Again, let me know if that was not your intention.

PAID ADS offering plant material, horticultural supplies, and publications that should be of interest to a large segment of the membership will be accepted. Paid ads are approximately one-half page (3 1/2" x 5") for \$50 or a full page (7" x 5") for \$85. Send your copy along with a check made out to NAFEX to the Editor-in-Chief.

WANTED

Dormant scionwood: Rareripe peach. In 1997, Pennsylvania NAFEXers suggested trying **Rareripe** peach as a superior alternative to **Reliance** peach, which it proved to be. I lost both of my trees last winter to borers. I would appreciate scionwood with which to start over. Glen Stephen, 290 High Forest Dr., Cedarburg, WI 53012. [W 08-Sp 08]

Scionwood of old Southeastern Indian seedling apples, including any that may still exist from the western territories. Dave Clark, 1378 Union Point Rd., Stephens, GA 30667. (706) 743-3738.

Dwarf super-hardy English walnut seedling trees, 2 yr. old, \$14 + S&H. Larger sizes inquire. Extra-nice 'Osage' and 'Muhlahay' pecan seed nuts, 20 seeds for \$3 + S&H. Larger sized 'Pawnee' seed nuts, 20 seeds for \$4 + S&H. Fresh sweet cherries or apricots in June, call for list May 15. Contact Garfield Shults, 1526 Hill Rd., Homedale ID 83628 (snail mail only), (208)-337-4121.

Scionwood of oriental persimmon varieties known as **Peiping, Atago, Honan Red** and **Tsuru**. Interested in other varieties that are late ripening/dropping that may have wildlife value. I will purchase bud sticks or I can trade. I have over 20 varieties of oriental persimmons which I can trade. Contact me at jeffthurmond@yahoo.com or 334-887-4510. [F 07-W 08]

Seeking book reviewers for Journal of Agricultural and Food Information (Haworth Press). <http://www.haworthpressinc.com/store/product.asp?sku=J108> Volunteer to review one or more titles -- you keep the book! For writer's guidelines and more information, contact Madeleine Charney mcharney@library.umass.edu

or (413) 577-0784.

Mulberries: I'm developing a list of currently-available mulberries. If you are a nursery owner (small or large) or an active fruit enthusiast with mulberries, please send me a list of your varieties. I'm particularly interested in northern varieties, i.e., those hardy in USDA Zone 7 and colder. Any information such as color, size, tartness, bearing period, species etc. would be appreciated. [F 07-W 08]

Lew Ward, Mulberry Consultant-Northern
246 Smith Rd.
Newfield, New York
14867-9610
607-564-7506
E-mail: lew_ward@yahoo.com

Cuttings for fall 2007-winter 2008 propagation: Gooseberries: **Glendale, St. Fiacre**, and other varieties. Also calamondins, **Chinotto** oranges, and **Yuzu Ichandren** lemon seed and cuttings for innovative propagation; and **Himalayan** peach cuttings. [F 07-W 08]

Please contact

Tony Vavrik
22424 Pemberville Rd.
Luckey, OH 43443
(419) 837-5531

Looking for grape wood of the following cultivars: **Chilcott, Desert Flame, Fiesta, Gagarin Blue, Muscat de Saumer, Noir Hatif de Marseille, Petite Jewel, Selma Pete, Schuyler, Super Beijing, and Tereshkova.** Will purchase or trade for some of my 150 table grape collection. Richard Jeske, PO Box 1015, Willits, CA 95490. easthill@saber.net

AVAILABLE:

Dwarf Super Hardy English walnut seednuts, 12ea. for \$10.00 (extra large). Extra strong semi-dwarf almonds (this tree survived -25 F.), 20 seeds \$4.00. **Pecans** grown on same tree, 20 seeds \$4.00, **Osage & Pawnee** ¾" x 1.5", **Gibson, Mullihay.** All orders postpaid in US. For more information, contact Garfield Shults, 1526 Hill Rd., Homedale, ID 83628 Phone 208-337-4121. [P]

Fruit Handbook: Hello, my name is John Lott (j_iott@hotmail.com), and I am a new member of NAFEX. I wanted to let the other members know of an excellent new and free publication just put out by the University of Washington Extension office, entitled *Fruit Handbook for Western Washington: Varieties and Culture*. It costs six dollars for a hard copy, but can be downloaded for free in PDF form. Folks can go to <http://ext.wsu.edu/> and search the title and download! It seems to be really well done and covers many different types of fruits. [F 07-W 08]

American persimmon: Will pay for scionwood of the older (possibly lost) American persimmon cultivars listed below. Contacts for individuals with information would also be welcome. [F 07-W 08]

Blagg: Introduced from Mt. Vernon, IL by Lee Dennis. 1961 winner of Mitchell Persimmon Festival. Ripens beginning in late August. Fruits have flattened shape, up to 2" in diameter with red blush.

Elder: Introduced from Lima, IL. Fruit is medium sized and early ripening.

Golden Gem: Introduced from Borden (Clark county), IN by Logan Martin in the 1860s. Fruit is medium to large, oblong in shape, dark orange to red. Ripens from late August to October.

Hicks (also called **Superior**): Introduced from Washington county, IN by E. Hicks Trueblood. Fruit is medium to large, roundish to oblate.

Josephine (also called **Honey**): Introduced from Bluffton, MO, by S. Miller. Fruit is up to 2" in diameter and starts ripening in September.

Waterloo: Discovered in Waterloo State Forest near Athens, OH. Reported to be large and early.

Please contact

John Raymond.
10390 Martin G. Ct.
Webberville, MI 48892
(517) 223-7714
jwraymon@yahoo.com

The book *Persimmons For Everyone* by Eugene & Mary Griffith, (Copyright NAFEX 1982) is now available as an Adobe book file. To order the CD send a check for \$14.00 to Jerry Lehman, 7780 Persimmon St., Terre Haute, IN 47802-4994. For each CD sold, NAFEX will receive \$5.00. The book is 160 pages, including 76 pages of recipes. [F 07-W 08]

Scionwood of cold-hardy apples, apricots, cherries, pears, and plums of varieties hardy in Zones 2-7. Also will graft whips for fall 2008 or spring 2009 delivery of apricot or other fruit cultivars per your request. Send SASE for list of available cultivars to Bob Purvis, P.O. Box 387; Homedale ID 83628. Phone: (208)-337-3782 (home, any time), e-mail still purvisrc@msn.com

Scionwood of 400 apples, also pears, plums, etc. Send a long SASE for a listing to The Catholic Homesteading Movement, Oxford, NY 13830A [P].

Historic and disease resistant, and cider apples for Canada, excluding B.C. Visit www.siloamorchards.com for listing and fruit tree grower information. Or contact Eric Hambly, Siloam Orchards, RR#1 Uxbridge Ontario Canada L9P-1R1. Email at mail@siloamorchards.com (905) 852-9418. [P]

The Northern Pomona: Apples for Cool Climates. This a recently-released UK book is available at www.northernpomona.co.uk It is a master work of primarily UK apples by Linden Hawthorne, with detailed descriptions and histories, magnificently illustrated by Bridget Gillespie, with many unique recipes and also grower info. Large format coffee table hardcover. Contact Eric Hambly, RR#1 Uxbridge Ontario Canada L9P-1R1. Email at mail@siloamorchards.com (905) 852-9418.

Apple bench grafts available at theapplebranch.com or email to applebranch@sbcglobal.net or send SASE to Apple Branch, P.O. Box 281, Portland, MI 48875 for a listing of available varieties. [P]

Pawpaw, jujube: pawpaw seed from seedling trees of named pawpaws 20/\$4.00. Jujube seed from seedling trees growing in zone 6b crossed with named trees 25/\$4.00. Seeds stratified and sent early spring. Contact Frank Henny, 229 Reaville Rd., Flemington, NJ 08822. [P]

Kitchen Letter:

As winter is settling in, we're reading our plant catalogues before the fire and eating in front of the fire many evenings. I'd love to have you join us for good times and good recipes in *Penn's Acres Kitchen*, one of my favorite places to be.

To subscribe, send a check for \$15 for a year's subscription (10 issues) or \$12 for an emailed subscription (print your own.) Make check payable to Penn's Acres Kitchen and mail to:

Penn's Acres Kitchen
c/o Jacquelyn A. Kuehn
PO Box 29
Lucernemines, PA 15754

Questions? Email me at pennsacreskitchenmail@verizon.net
Looking forward to cooking with you!

NAFEX Fruit & Nut Interest Groups

Lon Rombough PO Box 365 Aurora, OR 97002-0365.
(503) 678-1410 lonrom@hevanet.com

Grapes, writing, consulting, my book, *The Grape Grower*, at
<http://www.bunchgrapes.com>

Winner of the Garden Writers Association
"Best Talent in Writing" award for 2003.

For even more grape lessons, go to <http://www.grapeschool.com>
For growing supplies and more; <http://www.grapegrowersolutions.com>

Hi, Everyone:

This is the old coordinator of the NAFEX Interest groups with a couple of thoughts for all the groups. First, some of the lists have been rather quiet. In some cases, I suspect it's because many of you don't know who is on the list. It would be a good idea if each member of each list—at least those who are on the internet lists—would introduce himself/herself briefly and at least mention some of the varieties they are growing, along with any interesting items about the varieties and this (or any) growing year. If you know who is out there, you at least know who is reading your mail.

Secondly, you can help your group chairman out by sending something, by email or regular mail, to the list that he/she can put into a report for *Pomona*. In some cases, some of your groups haven't had a report in *Pomona* for a

LOOOOONG time, if ever. Have pity on the non-computer users and let them know what you are up to by sending the stuff to be collected and published.

Finally, if you think there should be another group, for something not covered in the online groups (Rubus, Ribes, Pears, Northern Plums, Juglans, Eleagnus, Apricots, Apples, and Amelanchier), contact me and we can get a new group set up. Thanks for all your participation.

The Fruit and Nut Interest Groups have been around since the start of NAFEX. In one sense, they were the way NAFEX started. Essentially they are groups of people within NAFEX who have especially strong interests in certain fruits. In the past the groups were called Test Groups because their main activity was to grow and test varieties of the specific fruit. Now the concept has been expanded to allow members to do pretty much anything that adds to the knowledge of that fruit—testing varieties, breeding new ones, locating antique ones, literature search, etc.

The old way was to send out round-robin letters, so that each person added something and sent the letter on to the next person in the group. When it got back to the chairman, it was usually edited and turned into a report for *Pomona*. The e-groups serve the same function, only faster, and the chairman can collect material from the group archives (hopefully) to report to *Pomona*.

To receive a regular mail reply, correspondence must include a self-addressed, stamped envelope. Interest groups allow members to participate directly in NAFEX through sharing experiences and interests with others of like mind. In turn, IGs share with NAFEX through *Pomona*. Share your experiences, reading and research. Groups work on variety exploration, cultural methods, collecting and testing varieties, breeding, variety history, or anything else connected with fruit and nut growing. You can make a single contribution to a group or be a long-term member. To ask a question, join a group, or just share something, contact the chairperson of a group. Join as many as you like.

People interested in chairing or starting new IGs should contact the Interest Groups Coordinator. It is an excellent way to learn about the fruit or nut involved, and it takes only enthusiasm and a bit of time.

Please send all additions or corrections to: Interest Groups Coordinator, Lon J. Rombough, PO Box 365, Aurora, OR 97002-0365. (503) 678-1410 lonrom@hevanet.com

APPLE: CHAIR—Richard Fahey, c/o The Catholic Homesteading Movement, 21 Delaware Square, Norwich, NY 13815-A. No phone. **NORTHERN PLAINS CHAIR**—Don Birkholz, Rt. 89, Broadus, MT 59317.

APRICOT: CHAIR—Bob Purvis, PO Box 387, Homedale ID 83628. Phone: (208) 337-3782 (home, any time), e-mail purvisrc@msn.com

CHERRY: CHAIR: Robert A. "Bob" Norton, PO Box 13554, Burton, WA 98013, mauryapples@juno.com

CHESTNUT: Tammy Biondi, 430 Otis Johnson Rd., Pittsboro NC 27312: teefisch@yahoo.com

CITRUS, HARDY: CHAIR—Dr. Alfred R. Loeblich III, Dept. of Biology, University of Houston, Houston, TX 77204-5513.

CONSULTANT—Donna Hudson, PO Box 1298, Cookeville, TN 38503. (931) 526-7344. Leave a message, we will call back; we are hard to catch. redherring@tnaccess.com

CRATAEGUS (Mayhaws, Hawthorns): **SOUTH:** John Harrington, 4794 Scales Lane, Orange, TX 77630. (409) 735-7355 jwhfaye@ih2000.net **NORTH:** OPEN

ELEAGNACEAE (Autumn Olive, Goumi, Sea Buckthorn): CHAIR—Hector Black, 170 Hidden Springs Lane, Cookeville, TN 38501. (931) 268-9889, 6 AM - 7 AM and after 6 PM central time. hblack1925@fastmail.fm

FIGS: CHAIR—Raymond U. Givan, 2412 Lowground Rd., Guyton, GA 31312. (912) 728-4028, 4-6 pm Monday - Thursday, and 1-4 pm Saturdays. No Sunday calls.

thegivans@planters.net Website URL: <http://web.infoave.net/~thegivans>
CONSULTANT—Dr. A. J. Bullard, 307 W. Henderson St., Mt. Olive, NC 28365-1999. (919) 658-4424.

GRAPES, MUSCADINE: CHAIR—Marvin Lewis III, Rt. 1, Box 1705, Converse, LA 71419. (318) 567-3240. atlantis0077@hotmail.com

HONEYLOCUST (*Gleditsia triacanthos*): CHAIR—Andy Wilson, Springtree Agroforestry Project, 268 Springtree Lane, Scottsville, VA 24590 (434) 286-3466 (evenings are best) awilson@pvcc.edu

JUJUBE: CHAIR—Roger Meyer, 16531 Mt. Shelly, Fountain Valley, CA 92708. (714) 839-0796, evenings. xotcfruit@yahoo.com

CONSULTANT—Paul Lyrene, Fruit Crops Department, 1143 HSPP, Gainesville, FL 32611. (904) 392-4711 pml@GNV.IFAS.UFL.EDU

KIWIFRUIT (*Actinidia* species): Bob Guthrie, 1810 Alameda Street, Roseville, MN 55113, bobguthrie@comcast.net (651) 488-7122 By telephone, 7 to 9 (central time) evenings are likely the best time to reach me, though with my schedule, e-mail is probably a more consistent means for communication.

PAWPAW: CHAIR—Dr. Kirk W. Pomper, Kentucky State University, 129 Atwood Research Facility, Frankfort, KY 40601. The best time for people to contact me with pawpaw questions is from 9-11 AM. Phone (502) 227-5942 Fax (502) 227-6381. kpomper@gwmail.kysu.edu

PEAR: SOUTHERN CHAIR—Travis J. Callahan, 11403 Wesley Road
Abbeville, LA 70510 teejcee@cox.net (337) 893-9134;

<http://www.geocities.com/ccduster/page3.htm>

NORTHERN CHAIR—David Sliwa, 2682 Lannon Hill Rd., Decorah, IA
52101. (563) 382-3922. ddslwiwa@gmail.com

PERSIMMON, AMERICAN: Jerry Lehman 7780 Persimmon St. Terre
Haute, IN 47802-4994. (812) 298-TREE JWLehman@aol.com

PERSIMMON, KAKI or ASIAN: CHAIR—James Beimel, PO Box 202,
Clinton, MS 39827-4754. JBeimel416@aol.com **REGIONAL CO-CHAIR**—
R. Lamon Ready, 526 Ready Lane, Cairo, GA 39827-4754;
lamonready@hotmail.com (229) 377-5111.

PLUM: **NORTHERN CHAIR**—John Bunker, 167 Turner Mill Pond Rd.,
Palermo, ME 04354. jbunker@gwi.net (207) 993-2837. Letters or email
preferred. **SOUTHERN CHAIR**—David Ulmer, 7157 Camellia Lane,
Sebastopol, CA 95472. Phone 707-824-1650; davidu9999@covad.net

POMEGRANATE: Chairman, Richard Ashton, 701 Home St., Brownwood,
TX 76801 (325) 646-6857 (best time to call 6:30-9:00 pm)
bwoodtx@verizon.net

RIBES (Currants and gooseberries): **CHAIR**—Ed Mashburn, 707 Front St.,
Northumberland, PA 17857. (570) 473-9910. Ribes60@aol.com Web:
www.currants.com

RUBUS (Raspberries and blackberries): **CHAIR**—Peter H. Tallman, 5690
Steeplechase Dr., Longmont, CO 80503. (303) 684-9404
pete_tallman@hotmail.com **SOUTHERN CHAIR**—Roy Mercer, 1434
Somervell CR314, Cleburne, TX 76031.

SPECIAL CONSULTANTS

ACORN (Sweet or edible): Ken Asmus, PO Box 19425, Kalamazoo, MI
49019-0425. (616) 624-6233, 7 PM - 9 PM. oak24@aol.com

AMELANCHIER: Wayne Fuhr, 12826 126 St., Edmonton, AB T5L 0Y1
Canada. (403) 452-8054. fuhrwe@telus.net

GRAPES: Lon J. Rombough, PO Box 365, Aurora, OR 97002-0365. (503)
678-1410. lonrom@hevanet.com

HONEYBEES: Ray Lackey, 1260 Walnut Ave., Bohemia NY 11716-2176.
(631) 567-1936 between 8 - 10:30 PM; lackeyray@tianca.com
<http://www.tianca.com/tianca2.html>

MULBERRY: **SOUTHERN**—A. J. Bullard, 307 W. Henderson St., Mt. Olive,
NC 28365. (919) 658-4424. **NORTHERN**—Lewis E. Ward, 246 Smith Rd.,

Newfield, NY 14867-9707. lew_ward@yahoo.com (607) 564-7506,
weekdays 9 AM - 8:30 PM eastern time.

PEACH AND NECTARINE: Don Birkholz, Rt. 89, Broadus, MT 59317.

SOUTHERN—Lloyd Williams, 8197 Hwy. 155, Montevallo, AL 35115.

QUINCE: Lester H. Davis, 1644 Lokey Dr., Columbus, GA 31904 (706) 323-
0857. Best after 9:30 PM eastern time. Lhdavis8@cs.com

STRAWBERRIES: Brian Smith, Dept. of Plant and Earth Sciences, UW-River
Falls, River Falls, WI 54022. Office: (715) 425-3851; home: (715) 425-
2131. brian.r.smith@uwrf.edu

WALNUT (Black Walnut, butternut, heartnut, English walnut, etc.): A. W.
Heiman, Jr., 717 Ernie-Lu Ave., Anderson, IN 46013. (765) 643-4582.
billheiman@skynet.net

BEES FOR POLLINATION: David Kuchta, RD 1, Tippetts Rd., Rt. 54,
Nesquehoning, PA 18240. (570) 645-3652; humblebe@intergrafix.net

CANADIAN SOURCES: Canadian Sources: Kim Maser, 9 Garnet Cr.,
Sherwood Park, AB, Canada T8A-2R7. (780) 416-7662 evenings between 6 -
9 pm MST prairiegrapes@yahoo.ca

GRAFTING AND BUDDING: Steve Burt, 19316 Brandt, Roseville, MI
48066. oldhoneymen@sbcglobal.net

POTTED CULTURE: Lee Reich, 387 Springtown Rd., New Paltz, NY
12561. (914) 255-0417, early morning eastern time best.
springtown@netstep.net

WINTER HARDINESS: William MacKentley, 325 State Hwy 345, Potsdam,
NY 13676. (315) 265-6739; trees@sln.potsdam.ny.us Phone calls preferred
to letters.

CENTRAL ASIAN CONSULTANT: Dr. Chiranjit Parmar, 186/3 Jail Road,
Mandi HP 175001 INDIA Phone: 01905-222810 Fax: 01905-221071,
parmarch_mnd@dataone.in www.lesserknownindianplants.com

PERMACULTURE: Dan Hemenway, Barking Frogs Permaculture Center, PO
Box 52, Sparr, FL 32192. BarkingFrogsPC@aol.com



Would you like to be the first one to read *Pomona*? Volunteer to serve
as Gathering Editor: all articles come to you first, either by email or snail
mail. You proofread, fix any errors you see, and send them on to me. The
job is interesting and includes a \$150 honorarium for your labors. You pick
which issue you'd like to work on. Interested? Contact Jackie Kuehn,
jakuehn@verizon.net (724) 479-0266, PO Box 29, Lucernemines, PA 15754.

Submitting Material To *Pomona*

Pomona is a member-written publication. Without you, we have nothing to say. Tell us what fruits and nuts you are growing, how they are doing in your USDA or Canadian hardiness zone, what special techniques you may have used to enhance your fruit's success. You are writing a letter to your fruit-growing friends when you submit to *Pomona*; you do not need to write a scholarly article, though we welcome those, too.

"Ideally, each [NAFEX] member would submit something for publication at least once every four years. ...subject matter can be anything that deals with fruits and nuts...: description and evaluation of an unusual variety; new variations of a propagating technique; a progress report on an experimental breeding or testing program; new methods of fruit culture, training, or pest control. Articles frequently respond to something printed in a previous issue. This feedback process is in keeping with NAFEX's Round Robin heritage... **Please check your facts.**" (*NAFEX Handbook*, p. 39.)

Your *Pomona* Submissions

From the beginning of NAFEX, when there was no *Pomona* and information was sent from one avid fruit grower to another as a series of round-robin letters, member submissions have been the lifeblood of the organization. That is just as true today as it was forty years ago.

In the interests of clarity, let us state that material submitted to *Pomona* remains your property insofar as future use is concerned, except for archiving back *Pomonas* with EBSCO Information Services, a provider of information access for research and educational purposes only (see www.ebsco.com) This is be a beneficial endeavor for NAFEX, and we wanted you to be aware of it.

**Send your *Pomona* articles to the appropriate
Gathering Editor listed inside front cover.**

Join the NAFEX Listserve

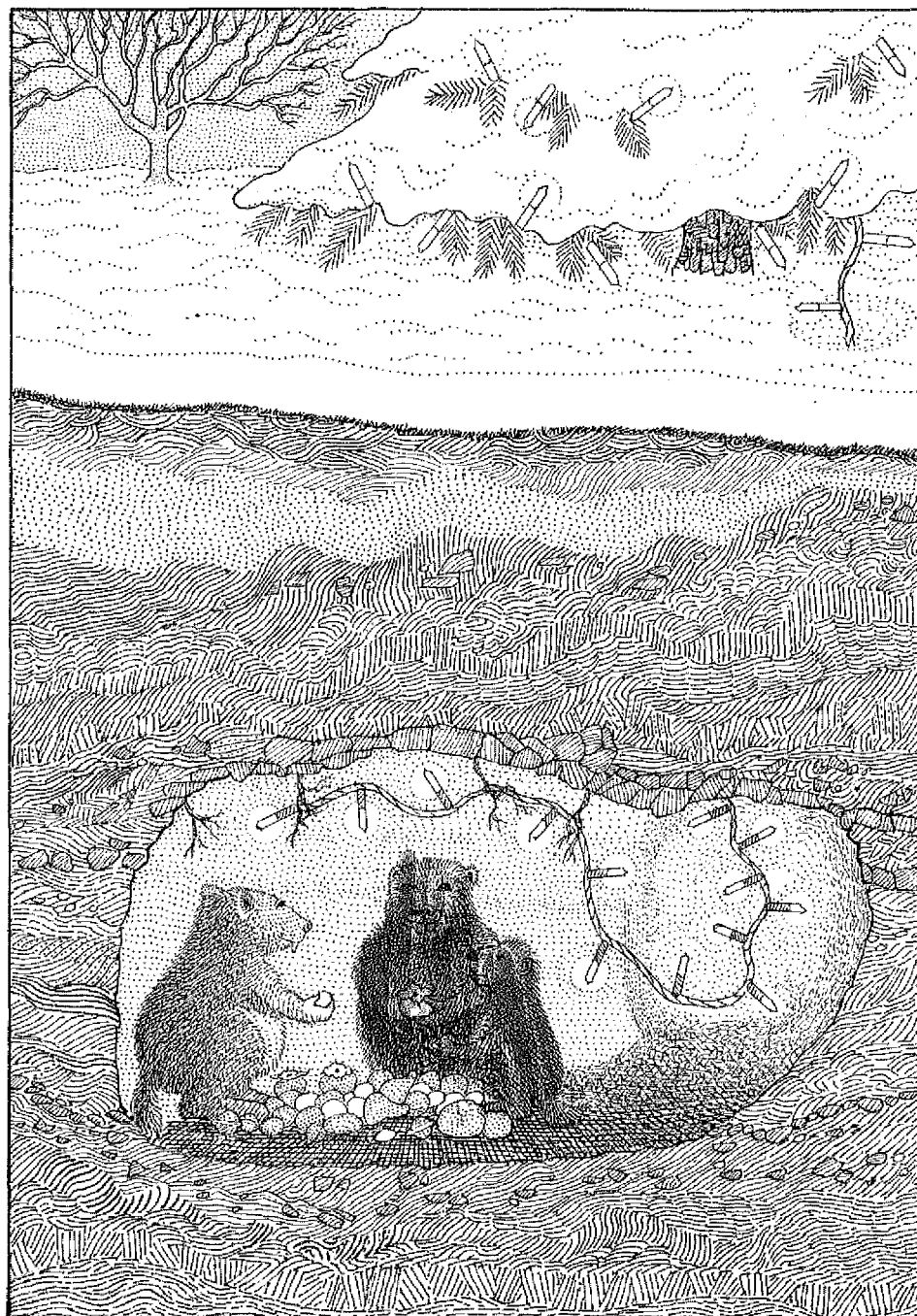
The NAFEX membership is eligible to join the chat line, where you can get answers to your questions from experienced fruit growers. Go to the following website and follow the instructions near the bottom of the page, then prepare to enjoy and benefit from the knowledge of many, and to contribute your own knowledge for the benefit of others.

<http://lists.ibiblio.org/mailman/listinfo/nafeX>



If you are familiar with only the taste of store-bought apples a great and pleasant experience awaits you. Many apples have been named after the special flavour they are thought to possess: **Pineapple Russett, Tinsley Quince, D'Arcy Spice, Moscow Pear, Winter Banana, Nutmeg Pippin**, and so on. There are more flavour, aroma and other taste nuances in the apple than in any other fruit. Many are difficult to describe. I quote an apple connoisseur's flavour description of the Zuccalmaglio: "Strong harmonious fruitiness. Exciting and titillating with tones of wild strawberry, quince, pineapple, ripe pear and a fine floral touch. Penetrating without pungency. Sugars and acid in perfect balance." It is easy to see that standard flavour epithets like nutty, spicy, subacid, musky, perfumed cannot do full justice, but which supermarket brands would even qualify for them?

**Fred Janson, NAFEX co-founder,
April 1985 North American *Pomona***



Finger Prince

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