

In Our First Issue of 2006

PAGE

- 2 Jeanette Yaklin and County Line Orchard
- 4 Maury Wills on Trellising vs. Staking
- 6 Great Lakes Fruit and Vegetable Expo Report
- 8 Michael Phillips Comes to the Midwest
- 9 Organic Farmers Action Network
- 10 Grafting and Pruning Opportunities
- 11 Research Updates
- 12 Network Web Page
- 14 Calendar

Just Picked

Newsletter of the
Upper Midwest Organic
Tree Fruit Growers Network

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Welcome to our first issue of 2006! Just Picked is the newsletter of the Upper Midwest Organic Tree Fruit Growers Network. We will have four issues this year, our second year, thanks to the Risk Management Agency of the USDA. Remaining issues will be in April, July and early October.

In this issue we highlight a major event of 2006: Michael Phillips' presentations in La Crosse, WI in February at the Organic University and the Upper Midwest Organic Farming Conference.

This issue features Jeanette Yaklin in eastern MI who is in her third year of transitioning her apple orchard. Each issue of Just Picked features an orchard that is transitioning to or is already certified or certifiable in its management practices. Learning from others who are making the journey is a top need of our Network members. Like our field days, growers are sharing not because they have all the answers, they are simply sharing what they are learning. This helps fulfill the major purpose of the Network- that we share with each other to help all boats rise, and to accept the differences we each face in the specific contexts of our journeys.

While not specific to organic, we have information or insights on topics members want: higher density training systems, and grafting and pruning demonstrations.

Our other purpose is to encourage research to improve the organic production and marketing of tree fruits. Toward that end, updates from those conducting research are included as well as my report on the Great Lakes Fruit and Vegetable Expo.

Also we need to get informed on policy matters affecting organic growers and advocate for what we want. An Organic Farmers Action Network is starting now, and you can join.

Contributions, comments, and ideas are always welcome. I look forward to hearing from you.

--Deirdre Birmingham, Network Coordinator



Jeanette Yaklin and County Line Orchard – Lapeer, Michigan

If you got the November issue of the *Fruit Growers News*, you may have read a bit about Jeanette Yaklin and her journey to certifying her orchard as organic. She is still on that journey as she enters her third year of transitioning her eight-acre orchard in eastern Michigan.

But Jeanette did not make a cold-turkey switch. And she did not do it alone. As an experienced crop scout, serving most of the orchards in eastern Michigan starting in 1993, she had learned a lot from the orchard growers, Michigan State University, and their efforts to reduce pesticide applications. She had gradually cut her conventional sprays to just two: her first spray of the season at petal-fall and her last spray of the season, which was for apple maggot. Her client and now mentor, Jim Koan, had been “nagging” her to make that final leap, since she was so close with only two sprays remaining. Jim is starting his last year of gradually transitioning his 100-acre orchard to organic, as described in our last issue. (See *Just Picked*, Vol. 1, Issue 5 on our website).

Jeanette started scouting for Jim Koan about ten years ago, before he started converting to organic. Jim got involved in a codling moth control experiment introduced by David Epstein of Michigan State University in the mid-1990s. Jim did not have a crop scout but needed one to participate in the experiment. Jeanette has worked with him ever since, watching Jim make the transition

Jeanette has maintained her position as a crop scout rather than a certified crop consultant. She would rather give growers information they use to make their decisions on spraying rather than tell them what to spray and when. She takes her job very seriously. For most of her clients, their fruit is their livelihood. They make decisions that affect their crops based on her information. “No one,” she says, “is spraying routinely anymore, such as every ten days because they’ve always done it this way.” Sometimes she’d arrive and “the grower has the water in the sprayer ready to go having heard news of an insect pest approaching.” She would scout and when she found

nothing to warrant spraying, if they seemed skeptical she would take the grower in her car to show them. With a note of satisfaction, she’d notice them dumping the water from the sprayer as she left.

Jeanette watched Jim struggle to control scab and knew there would be a steep learning curve to going organic. The materials allowed in organic systems tend to not have the residual effects that other materials do. Sulfur, for example, is not water-fast and



Jeanette Yankin and son Jeremy

must be reapplied when rain is significant. Two insects in particular, would be difficult to manage: plum curculio, which she termed “public enemy #1” and codling moth. Jim tried mating disruption for the first couple years to address codling moth. But when starting to use this technology, there is a time lag with more damage incurred before the impact of the mating disrupters is seen.

Jeanette figured if she could cut her two remaining conventional sprays, she would save time and money. But she learned that the opposite was true. She is spending more time on sprays since the organically approved materials have less residual effect.

I asked her to describe how she controls the other major insect pests. She responded honestly noting the issues involved. “For apple maggots I bait and trap the perimeter. For plum curculio, I use Surround [a kaolin clay based product] to cover the trees as well as bait and traps. I use mating disruption for codling moth as well as granulosis virus. My orchard presents problems because it is long and narrow. I have a difficult time with mating disruption because of the lack of density. I have large gaps in my trees, which makes it difficult to achieve the proper saturation of pheromone. I only do mating disruption in the middle of my block. Both ends of the block are treated differently.”

She emphasized that one “has to be prepared when transitioning to organic to see more damage before things get figured out.” “I just hope the transition

losses are worth it," she reflected. I think her fruit customers are already bearing that out, as we will see later.

One thing Jeanette observed while scouting diverse orchards is the difference between orchards that sprayed herbicides in the tree rows and those that did not. The latter had better predator insect populations due to the habitat created by "the weeds." "Poisoning the ground seemed to result in more broadleaf weeds, and thus more insect pests such as tarnished plant bug and sawfly," explained Jeanette. Since Jeanette finds that broad-leaf plants give more habitat to pest insects than to predator and parasitic insects, she maintains an orchard grass cover under her trees and never uses herbicides. The predators, such as predatory mites, live in the ground cover and leaf litter. She also keeps the ground covered to control erosion on her sloping orchard ground. Her orchard grass is weed-whipped in the spring and fall to avoid mice damage and to improve air circulation around the trees. "The aisles are not mowed until right after bloom, otherwise tarnished plant bugs will move out of the vegetation and into the trees. You are pretty busy with scab sprays anyway," she explained. She mows once a month after that until the grass growth slows as drier weather sets in. She resumes mowing at harvest time.

She is looking at adding trees, but is waiting for Jim Koan to share results from his experiments with varieties that include scab-resistant varieties. Getting scab sprays done, and, importantly, at the right time, competes with Jeanette's work as a crop scout, from which she is currently making more money than from her apples. Furthermore, her crop scouting business continues to increase as the other scout in the area gradually retires. The income gap could narrow, however, if Jeanette is able to get a premium for her apples once they are certified.

Her clients come from near and far. "They are so happy," said Jeanette, "to find someone growing apples organically." She explains to customers that her certification will come when she completes her transition phase. While she is 10 miles from Flint, Michigan, customers also drive from cities over an hour away because she grows her apples organically. They enjoy her tree-ripened fruit so much, that they ask her "Why can't we get apples like this in our grocery stores?" Since they can't, they keep coming back.

While her customers are willing to accept some

blemishes, Jeanette is concerned with quality control. While she allows a few customers to pick apples in the orchard, she wants to sort the fruit to be sure customers are not going home with any insects. She will demonstrate to her customers which blemishes are actually just scars, affecting only the skin, versus insect damage. She sells about 300 bushels of apples as fresh market apples, selling about 2700 bushels of fruit to farmers who press for juice. She keeps another 50 bushels for her family and animals. She must move all her fruit in the fall since she does not have cold storage. Once certified organic, she hopes to sell blemished fruit to Jim Koan who sells pasteurized, sweet cider. Jim also ferments some of his juice to real (hard) cider.



A large group enjoys visiting the orchard

Another aspect of her business is offering school tours. While word-of-mouth among teachers has spread the popularity of these tours, she is considering starting a little advertising. Primarily kindergarten, 1st and 2nd graders come to pick a few apples, ride the hay wagon, and see the farm animals. Jeanette has a couple horses, chickens, dogs, all of which eat apples daily. A friend brings sheep over to demonstrate shearing of their wool. Jeanette prefers older students because with them she can describe some of the science of raising her fruit organically, something she is passionate about.

I asked about her soil management practices, and found that this is an unresolved concern. She needs to do more research. Jeanette believes that the apples keep longer if the soil and trees have been properly fertilized. She has not used inorganic fertilizer since she started managing the orchard in 1996. She has done soil and leaf analyses from which Bio-Ag of Michigan recommended she apply particular trace minerals to the soil every year to fill nutrient

continued on page 13

High Density Plantings: Maury Wills on Trellising and Staking

There have been a number of discussions among Network members about higher density plantings of dwarf rootstocks and whether one stakes or trellises the trees. For this article I interviewed Maury Wills of Wills Family Orchard in Iowa, who is one of those who spent considerable time investigating the options for higher density. I also talked to Jim Koan of Al-Mar Orchard in Michigan, with whom Maury consulted on the topic. Maury discussed the pro's and con's of the options he considered from the perspective of someone inexperienced with high-density planting.

A high-density planting was something Maury has considered for a long time and as a complement to his other plantings. To him it seems like "an intensive care situation" relative to the M-7 rootstocks he has primarily used. He was interested in high-density, dwarf trees for several reasons. He wanted fruit sooner, less ladder work, less pruning of big wood, more emphasis on training rather than pruning to maximize production from a small amount of land. But how should he structure and train more densely planted trees?

Jim applauded Maury for making the move to higher density. Jim told me, "Most growers will spend less up-front for their support and rationalize it by saying they have more time than money to grow that orchard. In this case, time is money. Quicker production and less labor later gives a bottom-line profit. It took me 25 years to evolve to this system."

Maury considered three basic options. One would be to stake each tree. Another would be a two-wire system with a 10-ft. conduit secured to each tree. The top and bottom wires are widely spaced apart. Each tree is tied to a pole to add support. The third was the five-wire system recommended by Jim Koan with posts every 30 to 50 ft. After much consid-

eration Maury decided on the third option calculating that the costs would be lower to trellis. The costs of trellising 500 trees per acre using posts and wire would cost less than purchasing 500 metal stakes, either for staking individually or poles for each tree on a two-wire system. He had timber on his land from which he could make the posts. Also he had seen a two-wire system in Iowa that had some management issues. As the wires were tightened, the metal conduits moved away from each tree. Each of these conduits then had to be repositioned and reattached to each tree. He found quite helpful a book loaned to him by David Sliwa entitled *Intensive Orchardng (Managing Your High Production Apple Planting)* (1992. Bruce H. Barritt. Good Fruit Grower, Yakima, Washington.)

So what type of wood to use for the posts? The book covered this topic. He did not have the perfect wood, but he had wood, such as oak and hickory. While the book recommends treated wood, it is important to use untreated wood in an organically managed system. His white oak is not decay resistant, but it was plentiful. And Maury got some great exercise cutting trees, hauling logs with his tractor, peeling, and then cutting them to size. He used a post-hole digger to make the holes.

For the end posts he cut timbers of 14 ft. lengths of 5 to 6 inches in diameter. They were placed 3½ ft. deep into the soil. His middle posts are spaced every 50 ft. throughout the 250 ft. row. Jim, however, recommends every 36 ft., viewing 50 ft. as the maximum distance one should use. "I worry about breakage of posts as they start to decay in about ten years. The high-density orchard should only be useful under this system for ten years. You have made your money, new varieties and technology will motivate you to replant, and the decaying support structure will force you to do so. That is why I like this system!"



Maury made posts of 5 inches in diameter at 10 to 11 ft. lengths placed 1 to 2 ft. into the soil. He put anchor posts 5 ft. into the soil with only 2 to 3 ft. above the soil and pointing outward away from the trellis line. These posts anchor the whole system. [photo]

Jim also advised, "I would like to see either treated deadman anchor posts at the ends where the wires attach with metal anchors. They twist in and cost only about \$4 each. But they are a son-of-a-gun to put in if you have rocky soil. If you lose your deadman anchor, your system and the trees will be destroyed by a strong wind."

The costs for the timber were primarily Maury's labor, and a lot of labor that was! And he spent \$80 on high tensile wire, which he purchased from his local farm supply store. The book also described all the gadgetry and tools needed to tighten the wires. He uses rubber tubing to attach the tree to the trellis. "My next venture is learn more about training these trees," said Maury.

He planted Honeycrisp on Bud-9 rootstocks at 3.5 ft. apart. The trees can be planted one year and then tied to the trellis a year or two later. "But with the strong winds passing through my orchard, I wanted the trellis sooner rather than later so that I could tie trees to the first wire at planting." In other plantings Maury has staked his varieties on M-7 with 5 ft conduit due to the winds to avoid too much movement of the trees. Otherwise the tree puts more growth into thickening the trunk at the base rather than vertical growth.



Making posts

Jim advises Honeycrisp at a density of 3 ft. He varies his plantings from 32 to 38 inches depending on the variety and its growth habits. He is growing on a rich, clay loam soil.

The trees as they grow are woven through the five wires rather than having the trees all on one-side of the wires. Otherwise, when the wind blows from the side with the wires, the trees are pushed away from the wires and away from any support.

The major drawback to the five-wire trellis system is that you cannot move between the rows due to all the wires. You have to move to the end of the row to get to the next row. Maury realizes that he'll have to get used to this although 250 ft. rows are not excessively long.



Deer avoid electric fence in trellis

I heard from another orchardist that the deer seemed to avoid his trellised orchards. Possibly the deer may not like the restrictions the trellis wires place on their movements. Possibly they feel like they are entering a restrictive corridor, which many animals will avoid. Maury does have significant deer pressure. The photos best show how he piggy-backed electrified deer fencing onto his trellis structure.

Irrigation is recommended. He will irrigate from a well that is fed by a nearby pond. He will need to run another water line from one of the existing hydrants to bring water to the trellised block of trees. Maury will add trees and more trellis yearly for the next two or three years. ó

The Great Lakes Fruit and Vegetable Expo December 6-8, 2005, Grand Rapids, Michigan

On behalf of the Network, I attended the organic sessions at the Great Lakes Fruit and Vegetable Expo held Thursday, December 8. Here are a few highlights of my experience there.

A nice feature about this Expo is its cost. Early registration for all three days was \$45 and this included membership in the Michigan Horticultural Society and one-year subscriptions to the *The Grower*, *The Fruit Growers News*, and *American Fruit Grower*. Last year I signed up on site for Thursday-only, which was when organic fruit and hard cider sessions occurred. That cost only \$20. But registering on-site in 2004 took more time than I had planned for. It is best to pre-register regardless of whether you register for one day or the whole Expo.

Participants had a choice of two themes for the morning on organics. (Actually I had a third very tempting choice. Offered concurrently and in the very next room was the hard cider session complete with tastings!) One track discussed "Perceptions about Transition." The main presentation was titled "Going Organic: Perceptions, Reality and Opportunities for Michigan's Fruit and Vegetable Growers."

I attended the other track titled "Soil Management in Transition." John Biernbaum of the Horticulture Department at Michigan State University (MSU) organized and moderated the session. The main speaker was Michelle Wander of the University of Illinois at Urbana-Champaign who titled her one-hour talk "Organic Matter Transition and Soil Tests." She was followed by Sieglinde Snapp of MSU who spoke on "Managing the Macros: NPK for Transitioning to Organic." The final talk was my favorite, George Bird, also of MSU, spoke on "Cultivating Soil Microorganisms on Your Farm." He started out with the bigger picture and the theoretical and then moved right on to the practical in an accessible manner. He invited folks to stay after the session to hear his sound track of soils. Yes, soils make noise. Don't miss him when he gives two sessions at the Upper Midwest Organic Farming Conference (in La Crosse, WI, Feb. 24-25). One session is titled, "The Living Soil: Organic Agriculture's Foundation" and the other "Understanding Organic Pest Management for Horticultural Crops." He promises to bring his "sound of soils" to La Crosse.

The Expo includes a huge Trade Show, which I started touring during the 8 AM hour before the sessions started and then again during the two-hour lunch break and before the Trade Show closed at 1 PM. It takes that much time to get through it all. Given that there has been discussion on our list-serv about the use of high-tunnels in orcharding, I visited with a company about their high tunnel systems, which I have forwarded to the list-serv.

The afternoon options on organic were either Vegetable Production or Fruit Production. The Fruit session was organized and moderated by Mark Whalon of MSU, who really likes to get growers involved. The first grower was John Joyer from "Sakura Ridge" in the Hood Valley of Oregon. His talk was titled "Integrating Animals and Organizing Growers for Information and Profit in Pacific Northwest Organic Pears and Cherries." He showed beautiful slides of their location, which is a main draw for their Bed and Breakfast. They have 30 acres of organic sweet cherries and pears, six acres of pasture and seven acres of timber. He described their tinkering with introducing lamb and geese into their orchard. Since they are much smaller in scale compared to other orchards in the Hood River Valley, they strive to diversify their operations to increase their profitability. Introducing lamb and geese complimented their "leap into agri-tourism." Guests at their B&B enjoy having the animals in sight. They have clover and high quality grass in the orchard alleyways, which their animals devour. That ground cover is to produce lamb sold to local restaurants. He showed his attempts to grow asparagus and other crops within the orchard rows. But he has not landed on anything he will continue or recommend just yet.

John Joyer's "organizing" activities are with the Oregon Organic Coalition (OOC) that was only formed in 2005. Their purpose is "to direct and endorse activities that promote Oregon organics." Each sector of the OOC will have advisory committees to identify concerns and opportunities in each area represented on the OOC. The OOC's first projects will be to promote organic agriculture research at Oregon State University and to develop niche marketing programs for Oregon's organic industries. John can be reached at FarmerJohn@SakuraRidge.com and 541-490-5172.

Jim Koan of Al-Mar Orchard near Flushing, MI, took up Mark's challenge to analyze and present data from New Zealand on controlling scab. The first thing we learned is that down-under they call it black spot. Their aim was to keep black spot to less than one affected leaf per 1000 leaves. They compared rates of lime-sulfur ranged from 0.5% to 4%. Up to 4%, the russetting resulting from lime-sulfur is tolerable. The lime-sulfur was better at scab control although it is more expensive.

Jim compared sulfur at \$5 to \$8 per acre, which has been far more attractive to Jim than lime-sulfur's \$30 per acre cost. But Jim was sounding like he needs to give lime-sulfur a try. Lime-sulfur has back-action when the leaves are wet for 2000 degree-hours. It can be used as an eradicant, with the ideal application range being from 1.5 to 2.0%. If lime-sulfur is used at a 2% rate to the pink stage, then less sulfur needs to be used later. That could be followed by a combination of sulfur and copper (known as Kocide), but Kocide is not OMRI-approved. There are several approved formulations and each has different free ion rates. Therefore, active ppm considerations are necessary. Jim noted that one needs to pay attention to water hardness when using sulfur and copper due to ionic competition between minerals in the water and the sulfur and copper.

A downside that Jim has noted with sulfur is that it aggravates predator mites whereas copper does not. The sulfur "either drives away the predators, slows their reproduction, or stimulates pest mite reproduction, or a combination of these," offered Jim. "Anyway you look at it," he said, "the longer in the season you use sulfur, the more photosynthesis is lost and the

more mite pressure is gained." "When I switched to copper for black spot control and eliminated sulfur, my mite populations crashed. Where I used sulfur, I had mite problems and earlier fall leaf-drop. That means smaller apples and weaker trees entering next spring's growing season. The research suggests that we need to move towards less sulfur sprays and towards more copper and lime formulations."

When asking about his thinning regime, Jim mentioned that he uses salt at a rate of about six lb. NaCl, with a little lime-sulfur. However, I wasn't clear if the lime-sulfur was there for the thinning or for scab control.

Jim also noted that George Sundin at MSU is looking at copper and its potential for build up in the soil.

Jim's presentation was followed by a panel of growers including Jim and John Joyer, who were joined by Gene Garthe of Garthe Farms in Northport, MI near Lake Michigan. Gene grows apples, pears and cherries organically. The issue of livestock and manure in orchards came up. It was felt that as organic orchardists we need to proactively address the issues involved as well as the biodiversity enhancement that livestock might play in the orchard. It would be better that we define the role of livestock than others define it for us.

Mark Whalon asked that I speak on the Network. I brought copies of our newsletter, which went fast. I came back with new names for our list-serv and mailing list, as well as new acquaintances. I hope to make it back next year. Hope to see you there. ó

Calendar

February 2 & 3 – Upper Midwest Regional Fruit and Vegetable Growers Conference, St. Cloud Civic Center, MN. Organic sessions will include an organic overview and discussion on cover crops, compost, and weed biology. www.mfva.org or 763-434-0400 for information.

February 23 - Organic Apple Production by Michael Phillips. MOSES Organic University, La Crosse, WI. See page 8 for details.

February 24-25 – Michael Phillips gives two presentations, "The Organic Orchard in Context" and "Plant Medicines for Plants" at the Upper Midwest Organic Farming Conference. See page 8 for details.

February 24 – Meeting of the Upper Midwest Organic Tree Fruit Growers participating in the Upper Midwest Organic Farming Conference Friday at 12:45.

February 28-March 2 – First International Organic Apple and Pear Symposium, Wolfville, Nova Scotia, Canada. Primary topics: Management, production and pest control; Plant nutrition; Cultivar options; Post-harvest Storage. <http://www.oacc.info/AppleSymposium/home.html>

Grafting Seminars: March 5 in northern IL; April 15 in Hastings, MN. See inside for details.

more calendar page 13

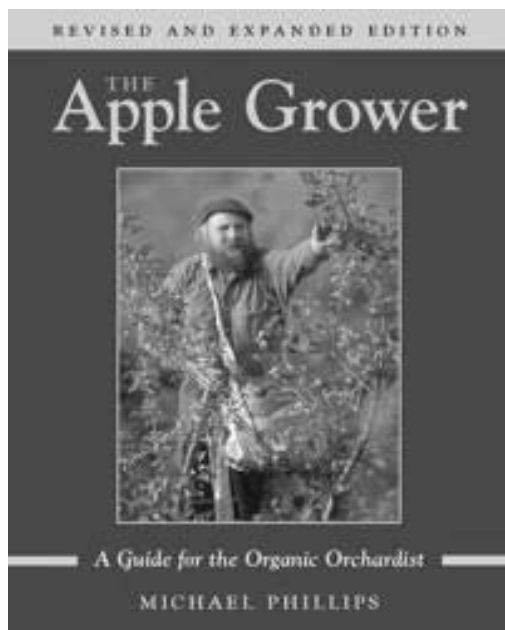
Michael Phillips to Speak on Apples and Herbs in La Crosse!

With MOSES' help we will bring Michael Phillips to the Organic University, February 23, to give his day-long organic apple production and marketing seminar. Michael will also present two 90 minute sessions, one on herbs and one on apples, at the Upper Midwest Organic Farming Conference on February 24 and 25. The course and conference sessions are described below as well as two books he has published and some background on the Phillips' family orchard and diversified farm.

In the Organic University course, Michael says he will lead participants in a walk through the orchard season. He will discuss how forest-edge ecology and soil health affect everything else we do to achieve a sustainable fruit harvest. He will emphasize the key role understory management plays in decreasing disease susceptibility in any apple variety. Nutrient density and medicinal synthesis in the fruit we sell to our respective communities follows from there. He will identify insect and disease dynamics from a holistic perspective to achieve maximum diversity, providing an overview of organic spray options in the process. Orchard architecture considerations enter in as well here when we make the 'right' varietal and rootstock choices. Orchards can very much be a profitable element of a diversified farm operation. Michael will delve into this financial reality and look at a range of options for successfully marketing an organic fruit crop. The day ends with a rambunctious wassail sure to kindle those hopes of offering the 'good fruit' within one's own community. It is guaranteed to be an informative day for both the commercial and backyard orchardist.

His Conference apple workshop is titled "The Organic Orchard in Context." Michael discusses how "an orchard can readily be a part of a diversified farm. We'll look at an overview of planting considerations, the labor involved, and an array of marketing tips." Michael gives a slide show tour of the Phillips' farm and orchard.

Michael's Conference herb workshop on "Plant Medicines for Plants" he describes as follows. "We enter the world of herbal medicine when we look at what role plant medicines have to play in the holistic garden. Going beyond using this spray for that bug means we will be leaving the many learned principles of toxicology behind. Plant medicines go hand in hand with fungal alliances that make for healthy fruit trees and perennial herbs alike. The parallels to human health are simply so astounding that this class may have a hard time getting this 'herbal apple grower' to ever stop! Come learn about stimulating plant immune systems to resist disease, higher medicinal content in the foods we eat, and things like calendula salves for chestnut blight. Sounds like a much different discussion already, doesn't it?"



Our timing is right to have Michael come this winter! The newly revised edition of his book, *The Apple Grower: A Guide for the Organic Orchardist* was released in November. Each participant of the Organic University (O.U.) will receive the book. Many are interested in reading it ahead of the class and having him autograph it at the O.U. As Faye Jones, Executive Director of MOSES, says, "No one minds getting a second copy of a really good book."

Personally, I am surprised that the book only costs \$5 more than the 1998 version. It has 70 more pages, charts and many color photos and plates. Buy it directly from Michael at www.HerbsAndApples.com or 603-636-2286 if you want it beforehand. His book will also be sold at the MOSES Bookstore at the Conference. Michael has also authored a book with his wife, Nancy, titled *The Herbalist's Way: The Art and Practice of Healing with Plant Medicines*, which will also be sold at the MOSES Bookstore. Michael will share 10% of each book's price with MOSES.

Both the Organic University and the Conference require registration. Advance registration for the O.U. is strongly suggested. Go to MOSES website, www.mosesorganic.org or call 715-772-3153 for registration and other information.

And now for a bit about Michael. Lost Nation Orchard is part of his family's Heartsong Farm. As a family of three they supply a community of shareholders with

both dessert and juice fruit, and do a brisk trade growing medicinal herbs and making herbal preparations. Their wide array of farm activities (including the classic family cow!) make possible a sustainable farm system that in turn guides holistic orchard connections from the ground up.

Michael has recently focused his orchard efforts back to their own land in the northern mountains of New Hampshire. Prior to this he was managing a certified organic orchard and water-powered cider mill just down the road from this home farm. That was until 1999 when the lease was taken back by new owners at the height of fresh cider liability fears.

The hillside orchard at Heartsong Farm is diverse. The trees currently bearing are Antanovka seedlings planted in the early 1990s along with experimental rows of M.9, Bud.9, and G.16. They planted 100 or so trees on MM.111 rootstock five years ago, which are just beginning to bear. They've started a new block of approximately 120 trees (primarily on Bud 118) in a field recently reclaimed from encroaching forest. A modest harvest of approximately 800 bushels -- that can be readily marketed in the local community -- is anticipated in the years ahead. Their varieties comprise Gravenstein, Sweet Sixteen, Honeycrisp, Spartan, Macoun, Cortland, Red Spy, Blue Pearmain; the disease-resistant varieties of Redfree, GoldRush and Florina; along with Pink Pearl, Zestar, Wealthy, Brock, Spencer, Ashmead's Kernel, and Calville Blanc (which holds far more vitamin C than any orange) among others.

Michael is a strong advocate for community-based orcharding. They sell yearly apple shares to local people for \$75 a share. Each shareholder receives a peck of select eating varieties three times a season as well as a bushel of juice fruit each time to collectively-squeeze into juice on their old-fashioned, hand-screw press. Getting the right infrastructure on a small-scale farm takes patience, and the years to come will see the reestablishment of a cider mill.

Michael and Nancy are cider vinegar aficionados. Cider vinegar results when juice ferments into "real" hard cider. Acetobacter (bacteria) in the presence of air converts the cider's alcohol to acetic acid. They say, "The best vinegars are aged for as long as four years in genuine wooden barrels." Time preserves the delicacy of flavor found in real cider vinegar that is lost in the 48-hour acetator process of industrial vinegar making. Equally important, the enzymes that give vinegar its reputation as a healing tonic only develop in contact with wood. Real cider vinegar -- made from organic apples and properly aged--acts as a therapeutic buffer of the human circulatory system. A High Calcium Tonic, made by tincturing high-calcium herbs in potassium-rich cider vinegar, is a popular item with their herbal customers. ó

Join the Organic Farming Research Foundation Organic Farmers Action Network!

Who speaks for organic growers? Well, shouldn't it be us? Join with organic producers from around the country to get informed and take action on issues that directly affect organic farming livelihoods. The future of federal support for organic agriculture depends on us.

What's at stake? While tens of billions of taxpayer dollars go to support conventional agriculture, just a tiny fraction of that is invested in organic farming. Current budget cuts threaten even the modest resources we have won for organic agriculture. Conventional agribusiness has the ear of Congress and the USDA. Now it's time for organic farmers to make their voices heard in Washington.

Conditions are ripe! With growing budget deficits and international pressure to cut commodity subsidies, conditions are ripe for real change in US agricultural policy. Working together, we can defend our gains and increase public support for organic agriculture. The 2007 budget process and upcoming Farm Bill are two critical opportunities.

You make the difference. Members of Congress tell OFRF that hearing directly from their constituents makes all the difference. You are on the front lines and your representatives need to hear from you. The OFRF Organic Farmers' Action Network can help you do that in a timely manner.

What you get. You will receive occasional policy updates to keep you informed and tools to make it easy to communicate with your representatives in Congress. With a simple phone call or letter at the right time, you can make a big difference in future farm policy.

To join the Organic Farmers Action Network, go to www.ofrf.org on the web or call 831-426-6606.

Want to Learn to Graft or to Prune Trees?

For those interested in grafting or pruning workshops, here are a few sources to consider. If you learn of more opportunities, please send them to me and I will announce them on our list-serv.

Robert Tomesh of UW-Extension frequently does grafting workshops throughout the state. His number is 608-265-4536 and his email is rjtomesh@facstaff.wisc.edu.

Dan Bussey of Albion Orchard in Edgerton, WI is offering a grafting workshop on March 5, Sunday, at 1:30 PM at Garfield Farm Museum in La Fox, Illinois, 5 miles west of Geneva in northern IL. Each participant makes three grafts to take home, cool store, and plant later in the spring. Call the Garfield at 630-584-8485 to make reservations. Cost is \$25/person. (I learned to do whip and tongue grafts from Dan and can vouch for the high quality of his instruction.)

Robert "Bob" Purvis is offering not only teaching grafting, but also tree pruning. His "Sixth Annual Minnesota Grafting Seminar" will be on Saturday, April 15, from 10 a.m. to 5 p.m. in the Apple Shack at the Carpenter Nature Center on the St. Croix Trail in Hastings, MN, in southeastern MN. The workshop includes instruction, demonstration, and hands-on grafting of apple, apricot, cherry, pear, and plum cuttings of Minnesota-hardy varieties onto semi-dwarf or standard rootstocks. Anyone age 12 and up wanting to learn this skill is welcome. Cost of \$69/person, includes lecture notes, lunch, scions, and 6 rootstocks. Registration limit is 30 and already 14 have expressed interest in registering.



Pruners-to-be: Jeanette Yaklin's Grandson and friend

Robert Purvis will demonstrate pruning on bearing-age apple trees at Fischer's Croix Farm Orchard, right next door to the Carpenter Nature Center near Hastings, MN, on Saturday, April 8 from 1 to 5 p.m. Cost is \$39/person and includes lecture notes, beverages, and anything else needed. Again, anyone 12 and over who wants to prune is welcome to register. Ten people have indicated an interest already in the pruning demo. Limit is 20.

If you want to attend both, Bob offers a "package rate" of \$105. Let Bob know ASAP if you are interested in either opportunity. He will send out registration forms in late February or early March. Those interested should contact: Robert Purvis, 7300 Iden Ave. S, Cottage Grove, MN 55016-1935; phone (651)-769-8473, or e-mail purvisrc@msn.com.

Please note: If interest is sufficient and his workshops fill, Bob Purvis would consider doing additional workshops in SE Minnesota and a bit closer to southern WI if we can find a location.

Sidenote: People who are looking for cold-hardy apple, apricot, cherry, pear, or plum scions may contact Bob for a list of what he has available.

I found Bob's bio so interesting, I decided to include it, as he is also on our listserve. Bob Purvis grew up in the suburbs of Philadelphia, PA, earned a B.A. in physics and an M.A. in astronomy, and went to Alaska with the U.S. Army in 1972. During his 17 years there as a test officer and then as a petroleum geophysicist, he founded the Alaska Pioneer Fruit Growers (1984) and led the group in propagating, testing, and evaluating many of the apple, pear, and stone-fruit varieties that are currently being grown in Alaska. He also wrote the 1990 Extension publication, "Growing Tree Fruits and Bush Fruits in Alaska." After earning an M.S. in horticulture with an emphasis on tree fruits from Washington State University in 1992, Bob worked as the horticulturist for Agrimanagement, Inc., an independent ag consulting company in Yakima, WA. From 1996-99 he served as the horticulturist for Columbia Reach Packers and Chiawana Orchards in Yakima. Moving to Minnesota in late

1999, Bob has spent 6 years working for the Minnesota field office of NASS, USDA as an agricultural statistician, but continues to do horticultural activities on the side. In AK, WA, and MN he planted a large backyard orchard to test and evaluate fruit varieties, especially those for cold climates. He has been an active member of the North American Fruit Explorers (NAFEX) since 1984 and regularly writes articles for POMONA, its quarterly. Bob has taught pruning and grafting classes regularly since 1985. 6

Land-Grant University Research Updates

Iowa State University – Kathleen Delate is on sabbatical leave in New Zealand for about six months from January to June 2006 to learn more about organic apple production there. We hope to hear from her while “down under.”

Michigan State University - This was the first year that the Clarksville Orchard has made a net profit. They hit a goal this year of getting 500 bu. yields on two varieties, including Gala. The Golden Delicious were only 350 bu. Gross yield was about \$20K. Less scab this year due to the dry weather. They sprayed 11 times this year for scab and fire blight compared to 19 times last year. Since such operating costs were done, that helped with their bottom line. “The ladderback moth is around,” according to Mark Whalon. They are digging into old literature to learn more about managing it. With the heat this summer and fall, they got a third generation of codling moth.

University of Wisconsin-Madison, Peninsular Agriculture Research Station – Matt Stasiak and Dick Weidmen are establishing an organically managed tart cherry and apple orchard. The apple block is spaced at 15 x 6 feet. The two outer rows on all four sides of the block will be Scarlet O’Hare/G16. Within the block there will be one to two rows of the following six varietal and rootstock combinations: one row of Murray/G16, two rows of Sansa/ELMA26, one row of Pixie Crunch/NIC29, one row of Florina/G16, two rows of Honeycrisp/B9, and one row of Nova Spy/G16. The Honeycrisp were planted in 2005 and ideally the remaining varieties will be planted in 2006 and 2007. Overlaid on to this are experiments with three types of mulching systems: organic mulch, plastic mulch, and a combination of these two. Matt Stasiak is working with plant pathologist, Patty McManus, to see if the biocontrol bacterium *Bacillus* (Serenade) would be inhibited by copper. They hope to have results to share soon. If copper doesn’t knock back Serenade, that would be a good thing for growers who wish to use both.

Eighty Montmorency cherries on Gisela-6 were planted in 2005 at a spacing of 18 feet aisleways and 16 feet within-row spacing. Rows are mulched with woven plastic except for one row mulched in organic materials. Hybrid populars will be planted for mulch material adjacent to the cherry orchard.

University of Wisconsin-Madison, Center for Integrated Agricultural Systems – Don Schuster will be working with the Eco-Apple Project to develop an apple budget spreadsheet in 2006. Stay tuned for more information.

Other Research


An application was submitted that would benefit the Network if funded by the North-Central Region SARE Farmer/Researcher Grant program. In this project we will track the expenses and yield quantity and quality of four diverse orchards in the Upper Midwest in 2006. Besides the information gained, the project would produce a tool that any orchardist could use to help track their expenses and yield data. While a one-year project does not yield enough data on which to construct cost/benefit analyses, it does provide at least some information where none exists. Furthermore, we hope this project will spin off into a longer term joint project between land-grant university researchers and growers to look at outcomes financially from different management strategies. Craig Chase of Iowa State University will work with the growers, if the project is funded by SARE, to help develop the form and consistent and thorough data collection by the four orchards involved. Watch the next issue of Just Picked for hopefully good news on funding. ó

Have You Checked Out the Network Webpage?


One Network feature is our webpage. The webpage is a tool to help the Network achieve its purposes of sharing information to improve the organic production and marketing of tree fruits in the Upper Midwest and to encourage research toward that end. Just like the Network is linking disparate people who have varied knowledge and experience in organic tree fruit management, the webpage brings together disparate pieces of information. Ultimately it could be one-stop shopping for such information and a place to start for someone interested in organically managing tree fruits. Thanks to MOSES employee Diana Witcher for doing such a great job of keeping the website up to date.

On our webpage we have sections such as our Newsletters, Events, References, and Research. More sections can be added as you see fit. The Network is only as strong as its members make it.

I encourage you to bring to my attention other materials that should be posted. For items available on the web, a link has been provided so that you can go directly to that item. For others that are not on the web, information on how to procure that item is provided. Here is a sample from our References section.



- [Newsletters](#)
- [Events](#)
- [References](#)
- [Research](#)
- [Contact Us](#)
- [Tree Fruit Home](#)
- [MOSES Home](#)



The UMOTFGN is a project of the Midwest Organic & Sustainable Education Service (MOSES.)

Webmaster

Upper Midwest Organic Tree Fruit Growers Network

REFERENCES

This page contains diverse informational materials for organic tree fruit production and marketing. If you would like to suggest additional materials to post on this webpage, please e-mail the Network Coordinator or call 608-967-2362.

- [Overview](#)
- [Soil Health](#)
- [Apples](#)
- [Pears](#)
- [Stone Fruits](#)
- [Other Resources and Books](#)

OVERVIEW

- **Tree Fruits: Organic Production Overview** - [ATTRA, 32 pages](#)
- **"Seasonal Checklist for the Home Orchardist"** by Michael Phillips, 3 pg. http://www.herbsandapples.com/orchard/seasonal_checklist.html
- **The Backyard Orchardist: A Complete Guide to Growing Fruit Trees in the Home Garden.** Stella Otto. Otto Graphics. 1993.
- **Bio-Intensive Integrated Pest Management,** [ATTRA](#)
- **Organic Orchard, Vineyard, and Berry Crop Documentation Forms** - [ATTRA, ~22 pages](#)
- **Fruit, Berry and Nut Inventory: An Inventory of Nursery Catalogs Listing All Fruit, Berry, and Nut Varieties.** Seed Savers Exchange. 3rd Ed. <http://www.chelseagreen.com/2001/items/415>
- **Fruit Crop Ecology and Management Book.** MSU Extension Bulletin Office. 517-353-6740. <http://www.emdc.msu.edu>. \$16 plus S&H.

County Line Orchard... continued from page 3

gaps. Since beginning the transition to organic two years ago, she has discontinued the trace minerals. Since these things take time to impact fully the tree and soil, she will do more soil and plant analyses this spring and expects to see some positive effects. She did a foliar feed of seaweed last year and felt like that contributed to the lack of a mite problem. Possibly the sticky substance smothered the mites. This may help balance the aggravation in mites caused by sulfur sprays. She is concerned with applying manure to the orchard due to the 120-day, pre-harvest application rule of the National Organic Standards.

While Jeanette, her husband, and three children began leasing the orchard in 1996, they have actually lived on the farm since 1982 when the first trees of M-111s were planted. In subsequent years M-26 and some M-106s were also planted. After leasing the farm for one year, they purchased its 28 acres in 1997. They removed about 10 acres of trees, and let a couple acres of pears remain, which she will soon remove as she is not doing anything with them. "I am maxed out," she claimed, "balancing my crop scouting and managing eight acres of apples." She has two women who help her throughout the year. One was her aunt who worked for the previous owner and on whom Jeanette could rely to get needed things done in a timely manner.

Jeanette and her "crew" are pruning now. Jeanette prunes the upper canopy keeping the trees to a 12' height. She uses an old three-wheel hydraulic pruning tower and a chainsaw on a pole. Her two workers prune the lower part of the tree so they don't have to drag around ladders. Jeanette explained her goals and strategies in pruning, something in which many of our readers are interested. "Pruning has many effects on fruit trees. First we need to get sunlight to the middle of our canopy to help with fruit set. Pruning

also helps with air circulation and spray penetration, which is important for disease control, fruit ripening and coloring. We need to try to control biennial bearing tendencies of fruit trees, which means they will fall into a cycle of vegetative growth one year and fruiting the next. So we try to even out the crop load to have consistent fruiting and bigger, higher quality fruit. When we prune in winter it is to spur growth, clean out junk wood, and control the size of the canopy. All big cuts are made when the tree is dormant. When we prune in summer it is to create sunlight and air circulation to the middle of our tree. My trees are semi-dwarf. I keep my canopy at 12' high by 12' across. They are in a modified central leader form. Most new trees now are dwarf trees, which are smaller and have to be trellised or staked. My trees don't need support."

She hand thins her apples in June. Every variety is different she explains, so even thinning with chemicals is not an exact science. But she is curious about Jim's use of salt as part of his thinning regime. She has thinned with salt, as has Jim. It depends on the weather and bee-flight as to what method she uses, as well as the variety involved. Varieties vary as to when they bloom. As the king bloom opens, her priority is to get the bees into the orchard. One has three days to a week, depending on the weather, before full bloom. If you can apply salt after the bees pollinate the king bloom and before the bees pollinate the other blooms, then you may succeed in drying up the other flowers and keeping them from getting pollinated. She has also heard of using a garlic solution after king bloom as that also seems to deter bees.

Jeanette is on the Network's list-serv if you care to get more detail on her "journey" and to discuss with others some of the management efforts described herein. ó

More Calendar

April 8 - Pruning Demonstration, Hasting, MN – See page 10 for details.

August 15-17 – 2006 SARE National Conference on Sustainable Agriculture, Oconomowoc, Wisconsin. www.sare.org/ncrsare or 402-472-7081.

September – Field Day at Prairie Fruits Farm, Champaign, IL. Read about them in Issue #3 and stay tuned for details.

Announcements

On February 23rd, 2006 the Network will host a full day classroom session on "Advanced Apple Production" with Michael Phillips. This will be a course offering with the popular MOSES Organic University. Michael will also offer two workshops during the Fri-Sat Upper Midwest Organic Farming Conference. Watch for details www.mosesorganic.org and in upcoming newsletters.

The Network's web page found at www.mosesorganic.org is a valuable resource. One section is titled "Resources." Under the Resources section is a comprehensive listing of many items that you can find from ATTRA, other web-based resources, or via mail order. Many of these items were included in the Resource Manual provided to participants of the Organic University course on Organic Apple Production.

We are pleased to announce that the Upper Midwest Organic Tree Fruit Network has again received funding from the USDA Risk Management Agency to continue into 2006. Thanks to MOSES for working with us to secure that support. Look for details on 2006 activities in upcoming newsletters.

Interested in hosting a field day? Please contact the Network Coordinator for more information. A modest honorarium is provided to the host orchard. Hosts are simply sharing what they are learning as no one has all the answers!

Don't forget you can join or un-join the Network's [list-serv](#) anytime. For information, please email the list-serv moderator at deirdreb@mindspring.com

The Upper Midwest Organic Tree Fruit Growers Network was started in 2004 for the purpose of sharing information and encouraging research to improve organic tree fruit production and marketing in the Upper Midwest. The Network is supported by the Midwest Organic and Sustainable Education Services (MOSES) and the Risk Management Agency of the USDA in addition to other event sponsors. This newsletter is produced by MOSES, layout by Jody Padgham. Network Coordinator is Deirdre Birmingham.

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