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## Just Picked

Newsletter of the  
Midwest Organic  
Tree Fruit Growers Network  
Volume 4, Issue 2, Spring 2008

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Welcome to the Spring 2008 issue of Just Picked, our Network's newsletter.

### In this issue read about:

- Conference calls with grower and author, Michael Phillips, every Thursday at 8:00 AM.
- Mark your calendars for three field days, starting with a day and a half event at Hoch Orchards and Gardens in Minnesota on June 27-28.
- Patricia Bliska will host a tour of her orchard and berry patch on August 2, also in Minnesota.
- Eric Mader gives us Part 2 of his series on Keeping Native Pollinators.
- Earth First Farms of Berrien Center, Michigan, where Tom Rosenfeld, of the Network's Advisory Council, is transitioning an orchard for organic certification
- The Michigan Organic Tree Fruit Research Meeting held in March.
- An update on Jim Koan and MSU's efforts to integrate organic pork and apple production.
- A brief report of our first Advanced Growers Retreat.
- Exchange of information and needs among growers in NetEx.
- Michael Phillips list of orchard tasks for the season underway and unfolding.

We'll get Part 3 on the soil biology research of Jennifer Moore-Kucera in our 2008 Summer issue, when her graduate student will be finishing her work on soil nematodes. Amidst the busyness of the season, do find time to read Just Picked. I always value your feedback.

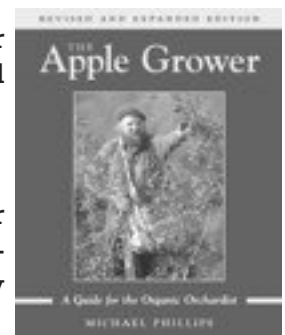
*Deirdre Birmingham, Network Coordinator*

## The Organic Apple Grower Hour

Starting on Thursday, April 24th at 8:00AM, Wisconsin's Eco-Apple Project will offer 18 free weekly conference calls with organic apple orchardist and author, Michael Phillips, and other apple growing pros.

### ***What is the purpose of the Organic Apple Grower Hour?***

The purpose is to address the needs of those managing their orchards organically. For the bulk of the growing season, the calls provide an affordable way to get input from experts on key apple management concerns. The only cost for the calls is your normally incurred long-distance charges.



*continued on page two*

Apple Grower Hour...from page one

**Who is the Organic Apple Grower Hour for?**

The calls are geared for commercial apple growers in the Midwest with intermediate to advanced orchard management skills. Open-minded growers who are interested in a holistic approach to orchard management will get the most out of these calls. Whether you consider your growing practice to be certified-organic or ecological-organic or biologically-based IPM – or just plain ornery! – we hope you join us for this nuanced discussion.

People who don't quite fit the description above (such as beginning orchardists or growers from other regions) are more than welcome to listen in on the calls, but the focus will be on the questions of open-minded, commercial growers in the Midwest.

**When will the calls happen?**

Calls are scheduled every Thursday at 8:00AM from April 24th through August 28th. There will be no call on July 3. This schedule could change due to the weather or other scheduling conflicts.

**Who are the experts?**

Michael Phillips will be the primary consultant for the Organic Apple Grower Hour. His book, *The Apple Grower: A Guide for the Organic Orchardist*, is widely regarded as setting the standard for eastern organic apple production. He is a consultant for orchardists across the nation, and compiles holistic apple research on his website, [GrowOrganicApples.com](http://GrowOrganicApples.com). Michael manages a two-acre organic orchard in Groveton, New Hampshire (Zone 4), facing many of the same challenges as growers in the upper Midwest.

John Aue will consult on half of the calls to provide insights on pest biology and behavior specific to the upper Midwest. John has provided IPM consulting services to conventional and organic apple growers in Wisconsin, Minnesota, and Illinois for 20 years. He manages his own potato farm organically in Richland Center, Wisconsin.

Depending on growers' needs and events taking place in the orchard in a given week entomologists, plant pathologists, horticulturalists, soil scientists, and experienced growers from other regions may also be invited to contribute to the Organic Apple Grower Hour.

**How will the calls work?**

Each week, send your apple orchard management questions to Michael by 8pm Central Time on the Wednesday evening before the call. Please e-mail questions to [michael@herbsandapples.com](mailto:michael@herbsandapples.com). If you do not have e-mail access, you can leave a message with your questions on Michael Phillips' answering machine at 603-636-2286. Along with your questions, submit any degree-day tracking information that you have recorded and provide any pertinent observations you have made in the field.

Michael will review the questions before the call. During the call he will prioritize the discussion according to the questions most relevant to the majority of call participants.

This is how a typical Organic Apple Grower Hour will run:

8:00-8:05 Roll call: Please announce your name and location as you enter the call-- this will help us know who is participating.

8:05-8:15 Michael's report: Michael will discuss emerging issues in the field. Pest and disease challenges will likely hold our attention until the fruit crop sets. We'll broach ecosystem and soil health issues in more detail throughout the summer weeks as orchards sail toward harvest.

8:15-8:50 Answers: Michael and others invited to participate will address the questions submitted by growers.

8:50-9:00 New questions: If time allows, Michael will address any other questions that arose during the call.

**How do I call in?**

Call 712-432-1680, then enter this access code: 868736. The calls are hosted by [www.freeconferencecall.com](http://www.freeconferencecall.com). Other helpful numbers:

press 3 to exit a call

press 4 to get a menu of touchtone commands

press 6 to mute your line. press 6 again to un-mute your line

FreeConferenceCall.com's customer help line is 877-482-5838.

**What if I can't make the call at 8am on Thursday?**

If you can't make the calls, you can listen to a recording of it. Call (712) 432-1284, then enter this access code: 868736. Each week's recording will be available until it is erased by the following week's call.

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## Earth First Farms

Each issue or so of *Just Picked* we feature an organic or transitioning orchard. In this issue we feature Network Advisory Council member, Tom Rosenfeld and his family's Earth First Farms (EFF).

**What is Earth First Farms?** Tom writes in one of his direct-to-consumer marketing pieces that "Earth First Farms is a new effort to create change in the food industry through active intervention. We are a Rogers Park family who purchased the farm with the sole intent on transitioning the 45-acre orchard from a conventional farm to organic. After years of supporting organic growers and being concerned about impact on the earth that conventional farming brings, we figured the next logical step was to enter the food production system and BE the change. We welcome you to join our revolution."

The Rosenfeld family bought 45 acres in 2005 in Berrien Center, Michigan, located 100 miles from Chicago where they live. Their 45 acres includes a 25-acre orchard with 2500 mature trees of varying ages, but all at full-production. In 2007 they began leasing another 20 acres from an adjacent orchard with about 2000 apple trees. On both the owned farm and leased orchard, most trees are 15 or more years old. There are about 30 acres of semi-dwarf and about 15 acres of dwarf. They were planted with 20' X 20' or 25' spacing, or 100 trees per acre.

Since purchasing the farm, they have managed it organically. Approximately 50% of their apple production will be certified organic in 2008 with the balance eligible for certification in 2009.

**Apple Production.** Tom is also an accountant and by nature keeps good records of his production. The following table shows each variety grown at the owned orchards (listed roughly in order of ripening) and their 2006 approximate yields expressed in bushels, using a 42-lb bushel.

| Earth First Farms 2006 yield |            |                   |
|------------------------------|------------|-------------------|
| Variety                      | # of Trees | Approx yield (bu) |
| Paula Red                    | 360        | 950               |
| Empire                       | 410        | 1,200             |
| New Red Jonathon             | 290        | 1,000             |
| Red Chief                    | 230        | 850               |
| Starkrimson (RD)             | 700        | 2,000             |
| Golden Delicious             | 210        | 750               |
| Jonagold                     | 15         | 50                |
| Cortland                     | 15         | 50                |
| Ida Red                      | 40         | 100               |
| Law Rome                     | 260        | 1,100             |
| TOTAL                        | 2,530      | 8,050             |

The newly leased land adds McIntosh and Winesap to the varieties they sell. The remaining varieties on the leased land are similar to those on the owned farm, but their proportions are different. Nearly half the trees are Golden Delicious (GD) with an additional 25% being primarily processing varieties. The remaining 25% are Red Delicious (RD). As these leased trees are larger, yielding more per tree than those on the owned property, Tom anticipates that the overall apple harvest will double, although Tom uses 12,000 bushels as a conservative yield estimate. In the longer term, ten acres of open ground may be converted to orchard for more fresh market varieties and/or other tree fruits that Tom loves, such as peaches and cherries



An orchard tour at EFF's Harvest Party

**Packing and Storage.** While you might be wondering about labor to produce all this fruit and how it is marketed, which we will get to, Tom's biggest obstacle to date is packing and storage. For his certified organic apples to maintain their certification status, packing and storage providers must also be certi-

fied organic. Since there are none near his farm, he is exploring different options. He is considering getting his own packing line as one option. He has been taking fruit to a storage place. But now that more of his fruit is certified organic, he cannot expect this storage place to separate his organic apples from other apples. Rather than store near the farm in Michigan, he would like to find storage near his markets in the Chicago-area.

**Marketing.** If you attended the Apple Marketing Seminar held in Madison, Wisconsin, on April 3, you heard Don Schuster emphasize repeatedly the need to plan and budget for marketing. So we are addressing that head-on in this article. And Tom is a good example of planning and budgeting for marketing.

Tom has developed a business plan that details how he will market his fruit. And he has a budget to make it happen.

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## Keeping Wild Bees: A System for Small Farms and Orchards: Part 2

By Eric Mader, Midori Horticultural Services 608-445-3572, Info@MidoriHorticultural.com

This article continues the management system for keeping cavity nesting wild bees introduced in the previous issue of *Just Picked*. The foundation of this system is the use of variously sized bamboo tubes (cut from sections of garden stakes), housed in plastic buckets, and mounted vertically on the side of a barn, or shed adjacent to your orchard. Wild cavity nesting bees like leafcutter and mason bees are often attracted to large, man-made, wooden structures, and this placement of the nest buckets takes advantage of that trait.

As mentioned in the last article (Winter issue), under this management system your nest buckets should be in place by late winter, prior to the emergence of wild bees. They should not be removed until late fall, after plants like asters and goldenrods have finished flowering. This practice allows you to attract bees of many species that will be active throughout the growing season. This is particularly useful for diversified farmers who may grow summer-blooming fruits and vegetables as well as spring-blooming tree fruits. In addition, prematurely moving, or jostling the nest buckets once they are in place can dislodge developing bee larva from their food provision, causing death by starvation.

By late fall the larvae will either be preparing for winter dormancy, or will have already matured into dormant adults. At this time you can safely remove the bamboo tubes from their nest buckets, for sorting and winter storage.

### So What Did You Catch?

As you examine the individual bamboo nest tubes you will notice that the formerly open entrances of some of the tubes are now closed with various materials. These materials can vary from plant resins, to mud and leaf pieces, to bits of grass. Knowing what type of bee uses which material to secure the entrance can give you an idea of which bees inhabit your orchard. The following table describes the common nest closure materials used by various types of bees.

| Table: Identifying Cavity Nesting Bees (And Wasps) By Nest Construction Materials |  |
|---|--|
| End Closure   | Type of Occupant   |
| Cellophane  | Masked Bees (Family: Colletidae, Genus: <i>Hyleus</i> )          |
| Felt/Hair/Fibers  | Carder Bees (Family: Megachilidae, Genus: <i>Anthidium</i> )     |
| Leaf Pieces   | Leafcutter Bees (Family: Megachilidae, Genus: <i>Megachile</i> ) |
| Rough Mud/Chewed Leaf   | Mason Bees (Family: Megachilidae, Genus: <i>Osmia</i> )          |
| Plant Resins  | Resin Bees (Family: Megachilidae, Genus: <i>Megachile</i> )      |
| Smooth Mud Surface  | Various Wasps (Families: Vespidae, and Sphecidae)                |
| Grass/Twigs   | Various Wasps (Families: Vespidae, and Sphecidae)                |

Also, in addition to nests provisioned by cavity nesting bees, some of these tubes will contain the developing larvae of various beneficial wasp species. Rather than provisioning the nest with pollen and nectar, these solitary wasps entomb pest insects such as aphids, grubs, caterpillars, or grasshoppers. These prey insects are often paralyzed by a sting from the mother wasp, who then drags it into the nest tube where it will serve as a food source for her developing offspring. Because of their beneficial nature, these wasps should be encouraged. They will also coexist happily with your various bee species, so there is no need for concern.

As you remove the nest tubes from the buckets, place the ones whose entrances are obviously closed upright inside of another container (ideally another plastic bucket). It is important that the entrance remain facing upward because any actively developing larvae still inside the tubes will use gravity to orient themselves while they mature. During this process they will spin a silk cocoon and transform themselves into fully formed adults. If the tubes are stored upside down, these larvae may spin their cocoons in the wrong direction, and be unable to escape the following year.



A large leafcutter bee closes off the end of her nest tube with circular pieces of leaf. This tight enclosure will prevent parasites from entering the nest tube and attacking her eggs.

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Earth First Farms... from page 3

With the varieties he currently has, the observed premium seen in the organic market, and their proximity to the huge Chicago market, Tom developed the following marketing strategies:

- ó Develop stable relationships with organic apple processors and wholesalers for both culls and a portion of the harvest.
- ó Increase the fresh market pack-out of their most marketable varieties (GD, RD, McIntosh, Jonathon)
- ó Develop relationships with retail outlets, primarily in Chicago, to whom EFF sells directly.
- ó Participate in Chicago farmers' markets
- ó Continually increase direct consumer sales
- ó Develop value-added products (sweet cider, apple pies, cider donuts, apple sauce)
- ó In the long-term, add varieties targeted for the fresh market.

To achieve the above strategies, Tom is undertaking the following steps outlined below and then described in further detail.

- ó Expand wholesale and processing relationships
- ó Continue to utilize the resources of the Michigan Agricultural Cooperative Marketing Association (the apple division of MACMA is a collective of Michigan apple growers and processors) to gain access to the MACMA pricing structure and its apple processing members.
- ó Participate in the Chicago-area pilot organic school lunch program
- ó Identify one or two processors who are active in the organic market
- ó Expand sales to retail
- ó Actively develop relationships with Chicago-area grocers, particularly those that specialize in organic produce
- ó Expand sales to consumers
- ó Increase participation in farmers' markets from two to four.
- ó Expand direct sales through internet campaigns
- ó Continue to sell to CSAs and natural food co-ops
- ó Logistics
- ó Identify solutions for cold storage and packing
- ó Continue to develop Earth First Farms' identity and label
- ó Expand product offerings
- ó Increase sweet cider sales
- ó Further develop apple sauce and apple butter
- ó Continue to work with a business seeking to launch an organic hard cider



Pies are popular!

Now for detail on the above strategies and actions.

**Direct to consumer sales.** Starting in 2008 the Rosenfelds will work three markets in Chicago – Edgewater and Logan Square on Saturday and Sunday, and the Green City Market on Wednesdays, to which they just received notice that their market application was accepted. Congratulations, Tom!

They started a “Rent A Tree” program in 2006 to provide a CSA opportunity for locals in Michigan and those in the Chicago-area to rent a tree whose progress they follow through the season and whose bounty they receive. Priced at \$50 per tree, this grows a little each year. They hope to rent about 40 trees this year. The localharvest.org website has been a big help for consumers to find their Rent A Tree program.

They are also launching a U-Pick this year “with no entertainment or diversion planned – just apples and apple products”, explained Tom. “This will be a weekend-only operation and we will see how it goes.”

They provide in-season, organic apples to four or five CSA's. Tom likes that “they are great customers as they truly appreciate a good apple and are less concerned about fruit appearance than a grocer.”

**Harvest Party.** Earth First Farms hosts an annual harvest party toward the end of September with live music, beer, food, and, of course, lots of apples. Tree renters, friends, other customers, and more are invited, including their picking, thinning, and pruning crew. They hosted about 100 people each of their first two years and expect that number to increase this year due to wider consumer exposure. While the Party is a good sales opportunity, it is really about giving thanks for the year.

**Retail.** Tom continues to expand direct sales to primarily small, independent grocers in Chicago. His sweet cider plays a major role to get in to these stores.

**Wholesale.** Tom worked with conventional wholesalers in the past, but now that more and more of their apples are certified organic, his is developing relationships with one or two large-scale wholesalers.

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Bees... from page 5

The most difficult part of this management system is deciding what to do with the remaining tubes—the ones with no obvious closed entrance. In some cases bees may only lay a single, or a few eggs within a tube before they die, or move on to another nest. In such cases larvae may be present inside a nest tube, but since the entrance is not covered, and because you cannot see inside, you have no way of knowing if something is in there, or not.

Over time you will be able to determine which of these tubes holds something just by the slight amount of extra weight. Until you reach that point you will have to hand sort them. I do this by probing each individual tube with a long, and very slender stick—a single stiff grass stem is ideal. Do not use anything sharp which may puncture any inner chambers holding your developing bees. Simply drop the probing stick into the tubes, noting how far down it drops, then withdraw the stick and compare it against the outside length of the nest tube. Those that hold something should go into storage with your other nest tubes that contain bees, and the empty nest tubes can be set aside for reuse next year.

This hand sorting is a time consuming, but not unpleasant process. I wait for a warm late fall afternoon then tackle the project in the backyard with a beer and the radio on.

### Over-Wintering

Do not leave your bees outside in the original nest buckets over the winter. One of the central practices of this management system is to prevent the bees from re-nesting in previously occupied tubes. If you simply keep filled nest tubes in the field all winter, bees will begin emerging in the spring, only to lay their eggs inside the tubes from which they themselves emerged a week earlier. This results in a rapid build-up of diseases and parasites.



These nest tubes are prepared for winter storage by covering them with a layer of vermiculite to prevent movement of parasites between nest tubes. Notice that the tubes are stored with the entrances facing up, insuring that any still developing larvae spin their cocoons in the proper direction.

In addition, the bamboo tubes are not as well insulated against extreme cold weather as some of the nest cavities these bees normally use in the wild (such as old borer holes in thick tree trunks). While you probably wouldn't lose many of your bees to cold weather if the tubes were left outside all winter, there is no point in taking any chances.

Finally, filled nest tubes left outside all winter will often fall victim to woodpeckers. Damage can be extremely high. Do not take chances. Bring your bees somewhere secure for the winter.

You have several storage options for these nest tubes. One is to simply keep them in a refrigerator maintained at 36-41° F.

The other option is to store the tubes in an unheated garage, shed, or barn. In such cases, the tubes should not be stored near windows, where they could be warmed by direct sunlight. Also, nest tubes should be secured against mice, and parasites that may emerge on warm days, only to parasitize other dormant bees. The simplest way to protect these tubes is to cover them with a layer of vermiculite or sawdust. This prevents any emerging parasites from moving between nest tubes. Perlite should not be used because it has a slight static-electric charge that will cause any remaining particles on it to stick to the bodies of emerging bees later on.

### Releasing Your Bees

As stated earlier, one of the critical practices associated with this management method is the prevention of bees from nesting in previously used tubes. This is actually fairly easy to accomplish.



Nest buckets in the orchard. This shelter provides extra protection from the weather where the roof eaves of the barn alone are inadequate. The bucket in the upper left hand corner contains occupied nest tubes from the previous season. Bees will emerge through the exit hole, where they will find new, clean nest tubes awaiting them in adjacent buckets. Note the chicken wire that protects the nests from woodpeckers. This also discourages bees and should only be used as a last resort.

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## June 27-28, 2008 -- Hoch Orchard and Gardens Field Day

**H**arry and Jackie Hoch are again opening their orchard and now their apple packing and processing business for a 1.5-day event at their Hoch Orchard and Gardens in La Crescent, Minnesota. This event builds on the discussions of the Advanced Grower Retreat that 25 growers participated in February 20-21 at Trempealeau, Wisconsin. The first half-day will be on value-added, markets and pricing. Saturday will focus on the orchard and organic apple production. A number of guest speakers are invited.

On Friday, June 27 starting at 1:30 PM Harry will give a tour of their packing facility, apple pressing and UV treatment setup, and their certified kitchen. They are applying for organic certification for their processing area. They have a small-scale packing line with bin dump, inspection rollers, washer, spin-sizer, grading tables, and baggers. The cider facility is set up with a bin dump, washer, and a JWI 18" continuous belt juice extractor. The juice is UV-treated and bottled on-site. The bottling room doubles as a commercial kitchen where they make sauces and jellies on a small scale.

The second part of the afternoon will look at issues in marketing and pricing of organic apples. Tom Rosenfeld, of Earth First Farms, Berrien Center, Michigan, will discuss an outcome of the Advanced Grower Retreat, which is the start of a grower-based, wholesale price-sharing mechanism. Heather Hillerin of Greenleaf Market will detail two new mechanisms for growers to use: GreenLeaf Market to sell to institutions and other businesses, and Local Dirt where consumers pre-order from growers and pick up their order at a farmers' market.

Harry and Tom will be joined by other Advisory Council members who will present as follows: Maury Wills on apple sauce production and on-farm retailing; Jim Koan on sweet cider, wine, cider, vinegar, and all levels of marketing; and David Sliwa on farmers' markets and renewable energy in fruit processing.

On Saturday, June 28, here is a glimpse of what you will see and discuss at Hoch Orchard and Gardens.

Foremost is a variety of approaches to enhance the orchard ecosystem. Multi-species ground cover are

fostered that are alternately mowed, birdhouses, windbreaks, and natural habitat areas.

For weed control, a Weed Badger in-row cultivator is used.

Insect and disease control are Harry's forté. He traps and reports several insects for the Minnesota Department of Agriculture to monitor population levels. In addition they trap for Codling Moth (CM) and Apple Maggot throughout the farm. CM is controlled using pheromone trapping and degree-day accumulations.

While you will see two blocks of disease resistant varieties many other varieties are disease susceptible. Harry's uses data loggers to monitor leaf wetness. He sprays on a post infection schedule with lime sulfur.

Three styles of deer fencing are established: energized six foot vertical, energized slant fence, and woven wire.

There are several training systems and rootstock combinations in the apple blocks. You will see everything from 50yr old-plus standards, to semi-dwarfs, to high-density trellis, and several staking systems. In addition, there will be a new planting of 1000 dwarf trees on organic ground supported by a short trellis system.

You will see Harry's nursery with bench-grafted trees and t-budded rootstock. He top-grafted the last two years a block of 10yr old semi-dwarfs. He plans to graft a couple hundred more this year. Mouse damaged trees are being bridge grafted.

Strawberries and raspberries are inter-planted in a three year old planting of standard apple trees as a mini permaculture experiment.

Other tree fruits being grown are plums, apricots, tart cherries, and peaches. They also have a couple acres of grapes and a couple acres of berries including blackberry, raspberry (purple, red, yellow, and black), blueberry, and strawberry.

By tour time, Hoch Orchards will be hosting five international interns, which they do annually. ó

Earth First Farms....from page 5

### **So What is Earth First Farms Selling?**

Besides all the varieties of apples previously listed, they sell an increasing number of value-added products. The first one they developed is a premium, sweet cider, milled locally in Michigan. They've already sold their first thousand gallons.

Tom found a baker to make apple pies, similar to a milling arrangement, where he takes the product in and gets a finished product back. "Finding the best baker was fun research", admits Tom. Sunday evenings in the fall Tom can be found in their kitchen with a bushel of apples, his hand-crank apple peeler, and a paring knife to prep the apples. Tom brings the prepped apples to the baker, the baker makes pies according to Tom's spec, (he is very particular about the crust), and the Rosenfelds sell their pies at farmers' markets, their Harvest party, and direct to consumer. Last year they sold about 100 pies in about six weeks. This worked well as the baker's price was right as long as Tom gives a 2-3 day window for the baker to schedule the pie-making during down time. They will continue this for a year or two and see if volume picks up to make it worth the effort.

Tom just purchased a donut maker to make cider donuts. "We are looking for suggested recipes," noted Tom, hoping readers will be forthcoming.

They are also working on an applesauce product.

In addition to apples, EFF is growing produce organically to complement their apples at the farmers' markets. They produce garlic (about 12 varieties), melons, summer and winter squashes, sweet corn, and they will start strawberries this year. This production is already certified organic.

**Labor.** So now you've read about Tom's marketing strategy, let's look at labor. First off, there is the Rosenfeld family, of Tom and Denise, and their children Ryan (22), Sydney (18), and Spencer (16) who all play a role. Tom's primary roles are grower, marketer, and business functions. Spencer helps out on the farm during the summer as well as playing a major role in the farmers' markets effort. Sydney has played various roles, including being the main 'party' organizer, and really shines when selling at farmers' markets. Denise also helps with farmers' markets and, maybe more importantly, provides valuable guidance and support for Tom as he works through unending business decisions.

Since the Rosenfelds live in Chicago it is crucial that he has someone on-farm for day-to-day management. "I have been very lucky to find Gonsalo" said Tom. "He finds the crews and oversees them on the farm. He has the key skill that I lack for farming – mechanics. He can fix anything, which is good because I seem to break anything!" Gonsalo is interested in organics, but "admittedly is new to the approach," noted Tom. Gonsalo also does the necessary spraying. Tom ensures that Gonsalo has a vested interest in the farm's profitability.

Here is another evidence of Tom's creative approach to the orchard business. Gonsalo and Tom created a farm labor company called "People First." Through People First, EFF gets its labor needs met and provides a service to other farmers who need short-term help and are unable or do not desire to go through the document checks and carry the necessary employer insurance. While People First is a for-profit enterprise, the name signifies the company's emphasis, which is to ensure that its people are first. The focus is on providing employment opportunities for farm laborers at a higher than minimum wage in an environment that respects the worker.

**Other Support Services.** Tom finds that "Dennis Mackey, a grower in Manistee, Michigan, and Doug Murray, organic consultant out of Paw Paw, Michigan, have been incredibly valuable assets to our entry into organic apple growing." Doug and his daughter, Danika, provide scouting services and Doug consults on orchard health. In addition, Tom finds the Network newsletter, list-serv, and other opportunities to share ideas with fellow growers an invaluable resource in his learning. "I am always surprised by just how generous those in the Network are with advice," he says.

Tom's next-door neighbor, Steve, is a 73-year old apple farmer who was born on the farm he continues to live on today while leasing the orchard to Tom. "While he thinks organic 'isn't worth it'", stated Tom, "his knowledge of growing apples, weather, and life in general is unbelievable and he has been very sharing with his expertise. He is thrilled to see someone getting into the business instead of getting out."

"My other comment on support would be the utter lack of it locally from other farmers," said Tom. "It is official now, words spoken by my neighbor and friend just two weeks ago – 'no one around here thinks you will make it. It's just not possible to grow organic

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*Earth First Farms....from page 8*

apples in southwestern Michigan.” This phrase is repeated almost everywhere Tom goes. “After two brutal seasons, I still hope they’re wrong as I don’t like giving up.” declared Tom. Tom and family are hopeful that finally getting organic certification will provide the financial support needed to keep going.

**Pest Management Issues** At Earth First Farms the approach is to build tree and soil health. While the tree rows were once sprayed with herbicide, they’ve let those rows fill in. Fortunately, what grew was a nice diversity of flowering plants and grasses, and even some vetch. They are not plagued with any particular weed, such as quack grass, and are pleased to see a nice growth of vetch coming into the mix. They note good beneficial insect and pollinator diversity. They minimize mowing to when it’s a problem for equipment to get through and for fall harvest.

Their soil has a good pH. They have not been adding soil amendments, but instead Doug Murray advises to apply a weekly foliar application of fish emulsion with other additives (K, CA) as the season requires for nutrients. They routinely take soil and plant tissue samples for analysis. In the fall the trees a compost tea is sprayed, which is helpful for leaf decomposition and nourishes the developing soil microbiology. A tractor with a cab is important, according to Tom, in part due to the odor of the fish emulsion. When the tractor cab’s air conditioning broke one hot summer day, his youngest son was not to be deterred and thought with the cab windows wide open, he would just spray anyway. Tom said that boy stunk for days afterwards!

As part of their pest monitoring they use about 15 to 20 traps for Codling Moth, Oriental Fruit Moth, and Oblique Banded Leaf Roller.

They are using pheromone disruption this year for Oriental Fruit Moth.

Tom uses granulosis virus and Entrust™ for Codling Moth (CM). He is cooperating with Michigan State University to be a several-acre test site for Iso-mate™ to control CM. Since they are close to a woodlot with tall trees, Tom feels their orchard is not a good candidate for mating disruption technologies.

Fortunately Plum Curculio has not yet been problem. So they don’t use any Surround.

Japanese Beetle is eating at the edges of their orchard, which is the only pest Tom actually hates. “They even defoliate my grape vine at home,” he claimed.

As far as diseases, their major ones are scab and the sooty blotch-fly speck complex. This year they got a spray on before budbreak, which happened mid-April. They used a Bordeaux mixture of lime and copper and will switch to sulfur as the leaves establish.

They’ve had some fire blight, for which they used a hydrogen peroxide spray, two years ago, but did not apply anything specifically for fire blight last year.

There are no other natural problems. There are lots of birds in the orchard, which are welcome visitors. They do not inflict any damage yet add to the biological diversity. Fortunately deer, rabbits and other rodents are not much problem (yet) either.

To learn more about Earth First Farms, visit their website at [www.earthfirstfarms.com](http://www.earthfirstfarms.com) , but with patience as it is being reconstructed. And to share a cider donut recipe contact Tom at [Tom@earthfirstfarms.com](mailto:Tom@earthfirstfarms.com) . ó

*Apple Grower Hour....from page 2*

If you want to download recordings of the Organic Apple Grower Hour, contact Lisa DiPietro at [ldipietro@wisc.edu](mailto:ldipietro@wisc.edu) .

**How do I sign up?**

If you are interested in participating on the calls, please pre-register. Send your name, phone number, e-mail address, and your orchard profile to Lisa DiPietro at [ldipietro@wisc.edu](mailto:ldipietro@wisc.edu) . The registration and orchard profile are all one document that can be found at [www.mosesorganic.org/treefruit/intro.htm](http://www.mosesorganic.org/treefruit/intro.htm) or by contacting Lisa. If you prefer, you can mail your name, contact info, and orchard profile to Lisa at 1535 Observatory Drive, Madison, WI 53703.

It is not required that you register before you participate on the calls, but doing so will help us better tailor the calls to your needs, and to keep track of who uses the calls.

Any Questions? Contact Lisa DiPietro at [ldipietro@wisc.edu](mailto:ldipietro@wisc.edu), or 608-265-3637. These calls are made possible by grant from the Organic Farming Research Foundation. Thanks OFRF! ó

## Integrating Organic Pork and Apple Production

**A**s you have probably noticed, every grower magazine in the country, various tree fruit list-servs, the Associated Press, and NPR, among others, have picked up on Jim Koan's project with his cast of researchers lead by David Epstein at Michigan State University. David reports calls from across the US and other countries. Interest is huge.

But as fate would have it, the project did not receive the continued funding it requested from the USDA Integrate Organic Project, which funded the one-year pilot project. (See the last four issues as we have been tracking developments.) David and team are considering reapplying.

But! David Epstein was successful in receiving funds from the USDA North-Central Region IPM Center to keep the project going in 2008. Plans include a 2nd season of evaluating effects of hog grazing on plum curculio populations and subsequent PC injury to fruit. They will also continue following hog growth and health. They will closely follow fecal contamination with E-coli and other microbes. This year they will also start collecting data on the effects of grazing on incidence of scab and codling moth (overwintering and 1st generation cocooned larvae on orchard floor). If funds allow, they may also do soil and leaf analyses to monitor nutritional benefits from manure and shallow rooting.

Animal scientist, Dale Rozeboom, will continue to work on the project with David and Jim. They will be joined by Matt Grieshop, the new organic pest management faculty at MSU, and George Sundin, MSU plant pathologist.

Also collaborating will be the Berkshire pigs: Bacon, Sausage, Hammy, Chops, Loin, and Butch. Brutus as the lead boar, and his harem of Kathy and Karen, makes the project possible. ó

### Bloom Checklist

by Michael Phillips, from *The Apple Grower: A Guide for the Organic Orchardist*

ó Cut down wild apple trees spotted in bloom within 100 yards of the orchard to prevent pest migration to your trees. The exceptions here are those trap trees managed (that is, pruned at this time) as an "alternative home" for insects put off by repellent strategies.

ó Move in honeybees hives and give three cheers for the wild pollinators.

ó Hang pheromone wing traps for Lepidoptera monitoring. (Pheromones are species specific.)

ó Train young trees with limb spreaders: make heading cuts to the central leaders of apically dominant leaders.

ó Cultivate the edges of dwarf tree rows in preparation for a summer cover crop.

*The checklist for "Pink" was in the Spring 2007 newsletter, which can be found online at [www.mosesorganic.org/treefruit/intro.htm](http://www.mosesorganic.org/treefruit/intro.htm)*

*Bees....from page 6*

In early spring, as the snow begins to melt and early flowering plants like pussy willow and crocuses begin to bloom, simply put the occupied nest tubes back in one of the empty nest buckets mounted on the side of your barn. These buckets, which contain the occupied nest tubes, should then be covered with their original lids. By drilling a 3/4 inch hole in the lid, bees will emerge from the bucket and not return. Make sure there are additional nest buckets located near by with clean, new, nest tubes. These will attract your bees, and your management cycle will repeat itself.

### Keep It Going!

In late fall discard the old nest tubes from which you released this season's bees. I usually throw mine in a late fall bonfire. Whatever you do, never reuse them. Various mites and fungal diseases can remain inside for long periods of time. Consider them contaminated and treat them accordingly.

Also, after several seasons you will notice your bee population steadily increasing. As this happens you will eventually need to add more nest buckets with more tubes. At some point your population will stabilize as you reach the carrying capacity for your orchard—you only have enough flowers to feed so many bees.

You may also find that you soon have more filled tubes each season than you can comfortably sort. Give some of your excess to nearby friends and neighbors, but do not ship them long distances around the country. While some "bee ranchers" make a business from this practice, it generally isn't an ecologically sound activity. Your bees are best adapted to your local environment, so keep them there. Sending them on a cross-country road trip might cause problems (including the accidental introduction of parasites and diseases) for bees in other areas.

Good luck! ó

## Advanced Grower Retreat a Success!

The Network hosted its first grower retreat on February 20-21 at the Historic Trempealeau Hotel in Trempealeau, Wisconsin. Maybe the chef welcoming us with warm cookies chock full of organic apples from the hotel owner's orchard, set the pace and tone for the event. Twenty-five growers gathered from Minnesota, Iowa, Wisconsin, Illinois and Michigan, many who met for the first time. All who participated were so glad they did and want another retreat next year.

Growers brought their value-added products, which lead to a wonderful, tasty show-and-tell break and launch to our discussion on value-added products. The group listed topics they were most interested in discussing, which for value-added centered on juice pressing, pasteurization, vinegar, and fermented cider production. Those discussing this topic benefited from the knowledge shared by Jim Koan of Al-Mar Orchard in Michigan, and Harry Hoch of Hoch Orchard in Minnesota. Dan Kelly lead another group discussion on cider vinegar making, one of his primary products.

The markets and pricing discussion discussed strategies to mitigate against price erosion from buyers and to help growers negotiate prices with more information in hand. Tom Rosenfeld of Earth First Farms in Michigan offered to initiate a system whereby growers could share price information and their experiences with various buyers. A template will be made available for this fall's harvest. Growers would be anonymous. Eventually this system could be based on a secure website. Growers providing information would be the ones to benefit from the collated price results. Other discussions were about on-farm store pricing and farmers' market pricing.

The Network also discussed its future. The 25 growers present voted for the Network to become a membership-based organization at the start of 2009 and for the existing Advisory Council members to become the organization's board of directors. Those participating each put down their first \$10 toward membership and, moreover, as a sign of commitment to continuing the Network's services and fellowship. ó

### Bud-Break Checklist

– by Michael Phillips, from *The Apple Grower: A Guide for the Organic Orchardist*

- ó Chip all prunings in the orchard for the benefit of soil fungi. Remove any cankered wood to prevent rot spores from establishing.
- ó Finish any compost spreading not completed in late fall. Spread deciduous wood chip mulch and rotting hay bales in haphazard fashion.
- ó Boron needs are met with a sprinkle of borax every three years. Similarly, apply gypsum if soil testing has indicated calcium levels are moderate to low.
- ó Remove any spiral trunk guards used on young trees.
- ó Spray copper for "transition scab" and fire blight (if necessary) before ¼-in green.
- ó Alternative spray could include compost tea and other bioantagonists.
- ó Spray 2% oil emulsion on young trees for aphid control (if necessary) at tight cluster on a warm day.
- ó Plant new trees as early as possible.

## The NetEx

The Network Exchange, or NetEx, is for Network growers to use similar to a Classifieds section, but at no charge. In addition to our list-serv, NetEx allows growers to exchange information on services or things to share, buy, or sell. It is not for product or input advertising. However, for now, knowledge-based services provided by Network participants are fine. Other examples: equipment needed or for sale; exchange or share scion wood; find others to make bulk purchases; orchard consulting or pest scouting services; host a work day, offer a seminar (such as grafting or pruning), and any other way to help us improve our organic production and marketing of tree fruits, except for product advertising.

**Equipment needed for 10-acre orchard** in process of being revitalized after several years of neglect. Wanted: 30-40 HP tractor with PTO and 3 pt, 100-gal sprayer, orchard ladders, field crates, row mulcher, washer. What else do you have that you don't need? Must be inexpensive! Ken Mandley 715-986-2757; kmandley@centurytel.net

**Looking for Natural Fruit** Natural Direct, LLC distributes produce directly from farmers in northern Illinois to homes in the Chicagoland area. Organic certification preferred, but not required. Farm pickup is available. Contact Scott at 630-551-7878 or scott@naturaldirect.com.

# Calendar

ó **Organic Apple Grower Hour** - Every Thursday 8AM – starting April 24 running through August 28. See inside for more information.

ó **Hoch Orchard and Gardens Field Day** – June 27-28, La Crescent MN (See announcement inside and [www.mosesorganic.org/treefruit/events](http://www.mosesorganic.org/treefruit/events) .)

ó **Elm Tree Farm Field Day** – August 2nd. Host Patricia Bliska, of Afton, Minnesota, will host fruit growers to her organically managed apple orchard and berry farm. Advance registration required. The Summer issue of Just Picked will have registration details as well as the Network's website.

ó **Organic Apple Research Field Day**, August 8, 2008 - Dixons Spring Research Station, University of Illinois at Urbana-Champaign. Registration is \$20 and includes lunch. Go to [http://web.extension.uiuc.edu/smallfarm/ag\\_tours.cfm](http://web.extension.uiuc.edu/smallfarm/ag_tours.cfm) for more information, including registration.

ó **Fruit Research Grant Proposal deadline**: July 15. Organic Farming Research Foundation. [www.ofrf.org](http://www.ofrf.org) 831-426-6606.

ó **Future issues of Just Picked**: Submissions due June 30 for the Summer issue; September 15 for the Fall issue

**Just Picked** is a publication of the Upper Midwest Organic Tree Fruit Growers Network.

Our Mission is:

*To share information and encourage research to improve the organic production and marketing of tree fruits in the Midwest, and to represent the interests of growers engaged in such.*

The 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 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.

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