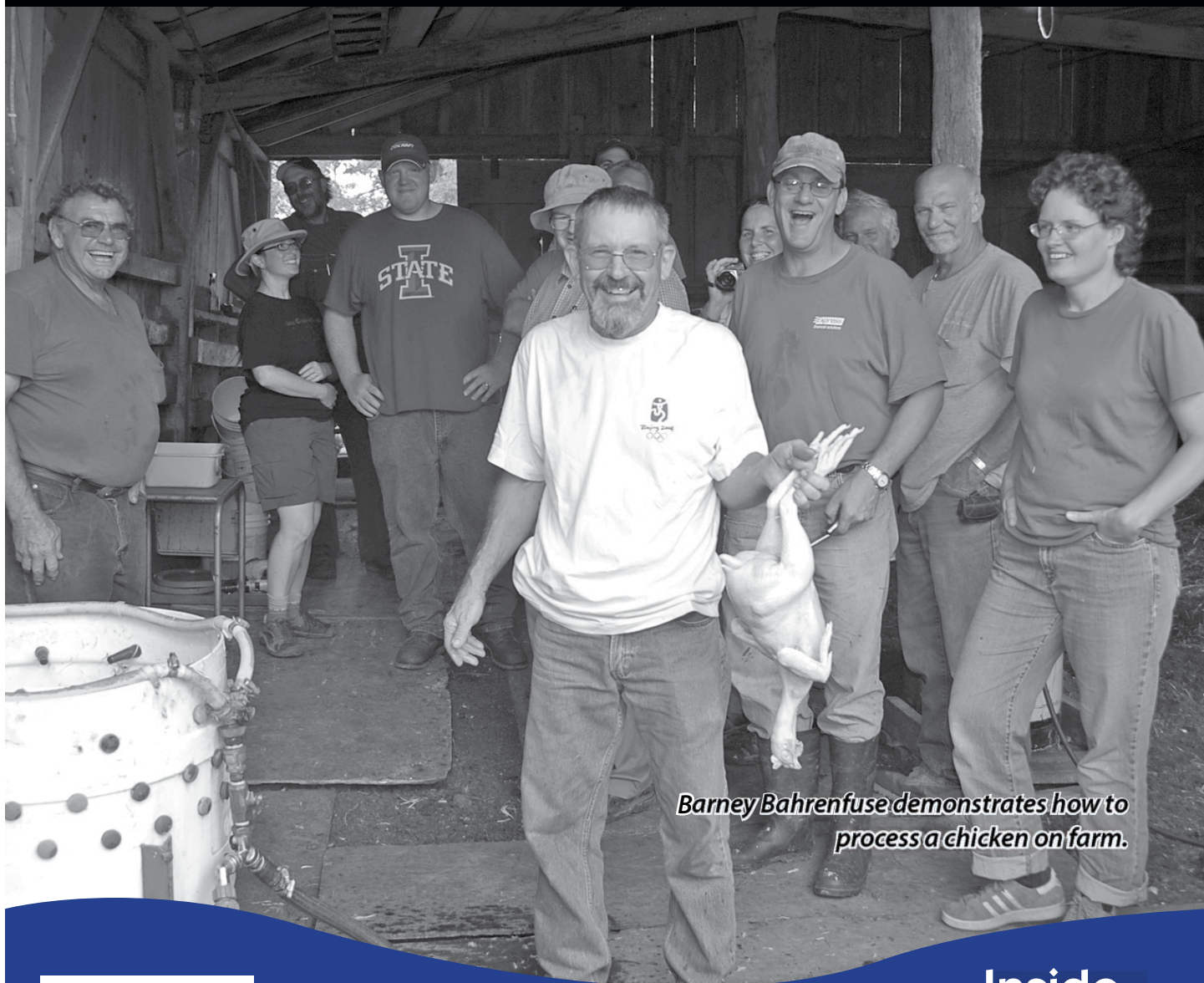


the Practical Farmer

A quarterly publication of Practical Farmers of Iowa

Vol. 25, No. 4 | Fall 2010



Barney Bahrenfuse demonstrates how to process a chicken on farm.



Inside

It's a 2011 PFI conference preview. Check it out!
Fun Field Days & Summer Camp photos you won't want to miss.
Is winter grazing right for you?
What we can learn from New Zealand farmers.
Much, much more!

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Contents

Letter from the Director	3
Next Generation	4-5
Grazing	6-7
Poultry	8-9
Farm Policy	10-11
Cooperators' Meeting	12
Small Grains	13
Field Days Photos	14-15
Annual Conference 2011	16-17
Scenario Planning	18-19
Calendar	19
Member Voices	20-21
Horticulture	22-23
Youth Camp 2010	24-25
Announcement	26
Young Farmer Spotlight	27
PFI News	28-29
PFI Merchandise	30
Join PFI	31

the Practical Farmer

the Practical Farmer keeps farmers and friends of farmers in touch with one another and provides informative articles about the latest on-farm research, demonstration and observation to help all types of farming operations to become profitable, while caring for the land that sustains them. Provided as a member benefit to PFI supporters, **the Practical Farmer** also serves to update members on PFI programming.

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(Back issues are available upon request.)



LEOPOLD CENTER



Looking ahead

by Teresa Opheim



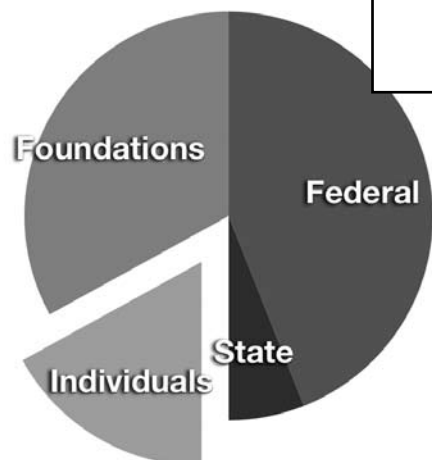
I get confused about what year it is. Before you ask me to see a doctor, keep in mind this: At the PFI staff level, we're always planning six months ahead! So, as you soon finish up the harvest, we are long past planning for the 2011 annual conference and well into planning the February Cooperators' Meeting and beyond. It doesn't help my confusion that PFI's fiscal year starts October 1 rather than January 1.

Good news on the PFI budget for our new fiscal year: Our projected revenue is \$1.1 million – a milestone to be in seven figures and a testament to the power of a widespread constituency of farmers and friends of farmers. This budget includes a lot of opportunities to conduct cover crop trials, more funding for PFI graziers and beefed-up (beeted-up?) programming for vegetable producers.

The largest budget increase comes in the beginning farmer area. We are very excited to announce *PFI's Next Generation Program* has received robust funding! PFI has received a federal grant that means we will have a mentoring program, numerous farminars/webinars, a retreat for beginning farmers and much more in the next

three years. As part of this grant, Grow Your Small Market Farm™ business planning course will be offered for the next three years, and Women Food and Ag Network will offer workshops for women landowners. We also will partner with the Iowa Valley RC&D (Resource Conservation and Development) on programming for Eastern Iowa beginning farmers.

The pie chart printed here shows how our budget breaks down as far as funding

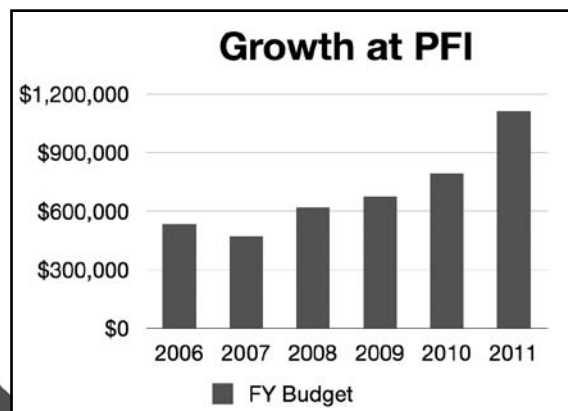


sources. We are eager to increase the unrestricted portion of the funding pie – that is your donations. Why is that pie piece so valuable? Because your donations allow us the flexibility to be completely focused on what you want from PFI.

In the Fiscal Year 2011 budget, we will pay \$71,000 to PFI farmers for your leadership on research and demonstration projects, field days and more. We will pay even more for food purchased from our farmers for events – PFI staff will never ask you to donate your food. You deserve to get paid for your hard work!

We are very proud of the annual conference lineup you will find on pages 16 - 17. The offerings are as varied

as our members are so please come and meet old friends and new. There is ample time for networking – we know you are hungry to talk with each other.



Thank you for being part of PFI.

Teresa Opheim
Executive Director



Farm pup Pete belongs to beginning farmer Caithlin Grieshop. Caithlin and Pete, an Australian Shepherd/Yellow Lab mix, live near Marshalltown.

Financing the beginning farm: Three interviews, countless lessons

by Luke Gran

Recently, I had the pleasure of talking with Mark Armstong and Barbara Grant, owners, Acoustic Farms. These new PFI members and beginning farmstead cheese producers share their experiences financing their operation. I also emailed or called about 45 other beginning farmers to discuss their experiences with financing. Many reported that they are building their farms with personal savings, off-farm jobs or help from family. Very few sought financial assistance from the bank. I've included excerpts from interviews with Nate Anderson, Sara Hanson and Shelley Squier of Squier Squash & Donnelley Farms.

Mark Armstrong & Barbara Grant
Acoustic Farms, District 5

What is your farm story?

BG: Mark and I met when I was close to 50 years old. He was 42. He had started and sold a couple businesses and invested those monies in an IRA. I had had a good job and invested mine similarly. When we married, we sold his third business, a farm, and my house. In 2006, we bought the family farm on contract with his mother.

MA: For the first two years, we had a CSA vegetable farm. The first year we provided fantastic produce to a dozen loyal customers. The second year was the flood of 2008 and was terrible. After that, we went to Italy at the urging of our CSA members. While in Turino, we decided to embark on a new enterprise and came home as cheese makers.

How did you finance your beginning enterprise?

BG: When we decided to go into the cheese business, we cashed in our IRAs and paid cash for everything. Cash is a rare way to enter into a business, but we are debt-free kind of people. Every year we try to have a Chinese New Year with no debt carried into the next year. We do have a small mortgage on the family farm sold (to us) on contract. The interest rate is low enough that we don't mind carrying it forward each year.

What were those first few years like?

BG: When we began, Mark was staying home to take care of his mom, who had Alzheimer's. Making cheese for our CSA customers was a way to pay for the farm while taking care of family. I had a town job.

MA: Barbara's off-farm work cushioned our business in the first years. When we switched to cheese we saw steady income and huge demand. When we started, we thought we would never have more than a dozen Jersey cows. Today we are milking 35 cows and making award-winning cheese marketed through a local orchard, New Pioneer Co-Op, and at farmers market. The demand for our time, and for our cheese, is so high we are growing much faster than our business plan suggested. It is hard to say "No" to people.

What business planning did you do?

MA: We spent a lot of time planning the cheese business. We did market research, talked to a lot of people at New Pioneer Co-Op and elsewhere. We considered selling to Hy-Vee, but New Pioneer could take all of the product we had to offer so we went with them. It just snowballed from there.



Barbara (L) and Mark (R) say believing is doing.

BG: We are now in several Hy-Vee stores in Marion and Cedar Rapids.

Looking back, what drove your decision to begin a farm business?

BG: We put it all on the line by cashing in our IRAs at this point in our lives, but we did so because of the firm belief in each other, our talents and the prospects of this farm. It has paid off largely because of those beliefs and values.

MA: We are one of a few businesses in the state that do farmstead cheese. We knew the possibility was there. Having a wonderful partner that believes in you and believing in them in return makes pretty much anything possible. Having a good partner is the key.

Being the age we are, it is not just a pie-in-the-sky dream, it is a dream we know we can achieve. It has helped tremendously to have 15 years experience running my own businesses before farming.

What previous business experience has helped you most?

MA: Being an experienced business owner, I knew how much hard work is involved, how many long hours it takes, how to set up a budget and financials, and how to plan for unexpected overhead costs. Just recently, we had a cow die unexpectedly and I was prepared to replace her. It was helpful to have a good relationship with a banker. We used the same banker from my previous business.

What banking services do you use?

MA: We do a short-term note for big farm purchases and pay it off as soon as we can. We don't like to pay interest. Our banker knows that we are good for it because we have a history of repayment. Keeping bankers abreast of what you are doing is key. If they know of trouble from the get-go, they will work with you. There are ups and downs. Not every business is a bed of roses every year.

Tips for beginners

from Barbara & Mark

- 1) *Don't under capitalize* as a beginning entrepreneur! Prepare for unplanned expenses.
- 2) *Don't pay interest* if you don't have to. If you have a mechanical mind, don't be afraid of using older equipment to get by at first.
- 3) *Study your market.* Know what is out there and who you are competing against.
- 4) *Believe!* Get up each day knowing you can do your chosen work.
- 5) *Don't forget to play.* The family that plays is happy and healthy.

How do you start building good banking relationships?

MA: Just get in there, sit down and talk with them about what is going on. Pay off any loans, pay down debt and be honest. There were times in my previous business that we had a bad year that we couldn't pay the principle, but we paid the interest.

Three other beginning farmers on financing.

Nate Anderson, District 1



Nate farms with his Dad near Cherokee, IA, where he raises corn, soybeans, hay and beef cattle.

What do beginners need to do if they are thinking about a loan?

Keep records! You need at least three years of financial and production records. Tie specific inputs to specific areas so you know what is giving you a better return. You need to be able to tell a banker precisely what makes you money.

What is your feeling about debt?

There is good debt and there is bad debt. It is important to know the difference. Bad debt is what can happen when you buy equipment – something that can dramatically lose value over time. Having debt isn't always a bad idea, but you have to know your costs and returns.

Sara Hanson, District 2

Sara moved home to north central Iowa to buy her great-grandparents' farm acreage and grow fresh fruits and vegetables.



How have you financed your emerging business needs?

I've funded my startup from off-farm employment. Working with federal cost share programs this year helped fund two acres of prairie CRP buffer strips and a hoop house for season extension. This winter I'm going to write a business plan and look at a small business loan for financing the conversion of a farm shed to a vegetable handling facility (for washing, packing and storage) as well as to purchase some additional hand tools and a hoop house irrigation system. I have my eye on a tractor too. Also, as I grow my farm business, I intend to add more mechanization to save on labor costs.

Shelley & Mike Squier



Squier Squash & Donnelley Farms, District 5

Shelley and her husband, Mike, have a diverse farm. It produces fresh fruits, vegetables, tree crops, goats, guineas, chickens and honey near North English.

How did you acquire your land?

For years, I worked 60 hours a week between two jobs to save a down payment. I financed my land purchase through a 20-year loan with US Bank.

How do you feel about how you financed your farm?

We have started a successful small farm business with a small down payment for financing the land purchase and two full-time, off-farm jobs. It has taken us 12 years to grow our farm. Hopefully, within five to 10 years, we will be full-time farmers. It has taken patience and lots of hard work, but what we have now is an invaluable lifestyle.

Winter grazing saves time, resources, money: Could it be right for you?

by Kevin Dietzel

How much does it cost you to put up hay, to clean out barns and lots, and to spread manure? Leaving forage in the fields and letting cows walk to it and harvest it themselves is more efficient and cheaper than harvesting it with machines and feeding it to them. Add to that the benefit of manure and urine distribution right out in the field, and it's a no-brainer, right? These touted benefits are true, but winter grazing takes planning. Could one of the following winter grazing strategies work for you?

Bale grazing

involves setting bales in the field or pasture in the fall and portioning them off with electric fence



over the winter months. This is arguably not actual grazing, and fuel and time are still spent cutting and baling hay. Without the use of a bale ring, this method can waste a lot of hay and create spots in the field that take a while to recover. However, this is a potentially good method to add fertility (through manure and hay) to a field that needs improvement. The easiest way to fence off the next row of bales is to stick fence posts into the bales, thus avoiding having to deal with frozen ground.

Swath grazing

involves cutting forage in the fall and leaving it in a swath in the field. The animals are given one swath at a time. The advantage to this method over stockpiling is that the forage is concentrated in a smaller area, so the animals do not have to dig through as much snow to get the same mass

of forage. This seems to be practiced more in lower rainfall areas because precipitation or snow melt will significantly decrease the quality of the cut forage.

Grazing crop residue

is a viable option. One acre of cornstalks can provide 1.5 to 2 animal unit months (AUM's) of



grazing. Bruce Carney, who farms near Maxwell, says that he grazes his spring-calving cows on his neighbor's cornfield until mid-March. For yearlings, protein supplementation may be necessary. A winter cover crop such as winter rye or winter wheat, if planted early enough in the fall to get significant growth, is a great, cheap protein supplement and helps prevent erosion and nitrogen leaching.

Grazing stockpiled forage

Strategic planning is the key to this excellent, yet challenging option.

Stockpiling planning needs to begin before grazing starts in the spring. Forages to be grazed in late fall or winter need to be stockpiled starting in mid-July to mid-August. You need to have other pasture on which to graze your animals during a time of possible pasture shortage. There are two ways to achieve this: leave "set-aside" acres of pasture that are not part of your rotation at that time and return to them after growth has ceased; or incorporate a long rest period (greater than 60 days) into your rotation so that your stockpile is always ahead of you in the rotation.

Take an inventory of your standing forage before the growing season is over. Once there is a killing frost and grass stops growing, you need

to know how much forage you have on hand and how long you want it to last. At this point, you will just be rationing out your existing resources. If you have to supplement with stored forages, it is better to know in the fall so you can destock or purchase hay while it is still relatively plentiful and inexpensive (in relation to late winter).

It is important to know the species makeup of your stockpiled forages.

Legumes should be grazed earlier, as they will lose quality quickly after a killing frost (leaves will drop off and snow can smash the plants down). Of the grasses, fescue holds quality the longest and should be left to graze last. Fescue leaves have a waxy cuticle that essentially seals in the nutrients.

Annual crops can also be great for early winter and fall. Winter cereal grains, such as winter rye and winter wheat, can be grazed in fall or winter or can be used for spring grazing. Grazing should not be initiated before the plants are at least six inches high and three inches of residue should be left in order to allow re-growth of the plant. Oats will grow faster in the fall but will winter kill, therefore, should be grazed in late fall or early winter.

Brassicas, such as turnips or rape, work well for late-fall to early-winter grazing. Several farmers mentioned that these will turn "mushy" soon after a freeze. Animals will graze both the tops and the tubers. Brassicas should be planted 70 days prior to harvest. If grazed early enough, they will re-grow.

Spotlight: PFI farmers who use winter grazing by Kevin Dietzel

Winter grazing presents challenges, but for the farmers featured in this story, the benefits outweigh the obstacles.

According to interviews with five PFI farmers, winter grazing challenges include watering stock during freezing weather, providing consistent forage quality and the physical hurdles that snow, ice, mud and frozen ground present.

Torrey and Erin Wilson Paullina, IA

The Wilsons graze beef cattle, dairy cattle and sheep into early winter. They don't have much fescue on the farm but have long rest periods (60+ days) so stockpile stays ahead of the feeding rotation. They rotate their animals daily to ensure quality. However, when confronted with snow cover, they will leave the animals in one paddock for about a week.

Torrey says that more than eight inches of snow becomes an impediment for the animals to dig through to reach forage; however, sheep dig through snow better than cows. Torrey's favorite annual forages for fall and winter grazing are turnips, rape and oats. He adds, "Sometimes weeds make the best winter forage, especially ragweed." Brassicas have not yielded well when late summer is excessively wet or dry.

When feeding hay, the Wilsons unroll round bales in the field to distribute the nutrients better. During muddy times, they feed the animals in a lot until the ground freezes or dries. Torrey feels that the animals are able to walk further for water in the winter than in the summer. They are working on installing tire tanks, which are heated by the earth below, in strategic locations on their farm to prevent water from freezing in winter.

Ryan Herman New Albin, IA



Ryan, who grazes beef cattle, says, "I would love to eliminate hay feeding in winter, but realistically in Northeast Iowa, I would be happy with feeding hay for just two months of the year." Forage quality is a concern, according to Ryan, and the best way to use annuals is to graze them during midsummer or fall to give more rest to the perennial pastures, which stockpile better. Ryan warns that sorghum, sudan and brassicas are great forages but lose quality quickly after freezing.

He adds that if the sward is dense enough, getting fence posts in the ground isn't a problem. Ryan uses a rubber mallet to pound 3/8-inch fiberglass rods into the ground. If the ground is frozen, he pounds a steel rod into it first to make a hole, then places the post. When possible, he plans his rotation beforehand, putting posts in the ground *before* it freezes.

Ryan waters cattle with frost-free waterers, a stream or an artesian well. He says cattle will dig through a foot of dry snow, but wet snow is more common. He warns that if cows have to dig through ice and wet snow, you need to ensure they are getting enough to eat by watching rumen fill, manure and body condition. He feeds hay on pastures unless the weather is too cold and windy or if pastures are too soft from thawing. Then he feeds in a sheltered, cement yard.

Bruce Carney Maxwell, IA

In addition to cornstalks, Bruce grazes stockpiled pastures, which he starts stockpiling in late July. He prefers fescue but doesn't have it in all pastures. He tries not to stockpile the same pastures each year. Last year he fed hay in September so he could grow more stockpiled pastures for winter grazing. The idea being that the pastures would be growing at a rate faster than the amount of hay he was feeding, resulting in a greater net amount of forage. A problem arose when it snowed in early December, and he couldn't graze stockpile until early March.

Bruce has grazed oats and turnips until December and has also grazed standing corn. For fencing, Bruce prefers to set out paddocks in the fall but has also used a drill with a masonry bit to make holes in the frozen ground for posts or stuck posts in snow drifts or in corn stalks.

Virgil Knobloch Bloomfield, IA



Virgil, who raises 100% grass-fed, organic beef, had to feed hay a mere 13

days during the past four winters. He stockpiles fescue, planning the stockpile areas to be around winter waterers. He starts stockpiling from July 15 through August 15. The fescue maintains quality until mid-March. He grazes closer in winter than in summer and says that the cows can graze with up to 12 inches of snow cover. When grazing turnips, he plants them in July along with oats and wheat for extra fiber, grazing September to November. When pastures are muddy, he says, "Keep 'em movin'!"

One PFI farming family's response To the Egg Recall

by Suzi Bernhard

This summer the nation was rocked by a widespread egg recall due to Salmonella contamination. Most of the media and consumer attention has been focused on one specific farm in Iowa, bringing the issue into the lap of the Iowa agriculture.

Curiosity got me thinking about how PFI members were being affected, which brought me to the kitchen table of Mark and Connie Tjelmeland. The Tjelmeland's farm, approximately 280 acres of organic, transitional and conventional crops, is located outside of McCallsburg. They raise corn, soybeans, oats and hay, and have a few acres of prairie and pasture. The Tjelmelands raise 750 laying hens and are able to market their eggs through six local grocery stores because they have an egg-handlers' license.

Over a cup of coffee on a beautiful Friday morning, the Tjelmelands and I had a great conversation about their operation, specifically how the egg recall has affected them.

Have you been affected by the recall?

Ultimately we make decisions about our farm based on our mission statement and goals. We want to make decisions that keep our family together and leave the natural resources we have depended upon in an improved condition. Farming for us is a long-term, lifetime career view. We aren't investing money to do something for five years and then go do something else that is profitable. The recall reminds us why this is important.

We've had a few calls from people wondering if our eggs were included in the recall, but other than that, we are continuing to produce as we always have.



6 Tips for safe egg handling

1. Keep eggs refrigerated at 45 degrees.
2. Hold cold egg dishes below 40 degrees.
3. Hold hot egg dishes above 140 degrees.
4. Never leave egg dishes at room temperature for more than one hour.
5. Cook eggs thoroughly, until no visible liquid remains.
6. Hard cooked eggs should reach an internal temperature of at least 160 degrees.

Has demand for your product changed?

Demand for our eggs is slightly up. It appears that the recall is making people re-think buying locally. Over the 17 years that we have been raising eggs, demand appears to be slowly but steadily growing for eggs that are produced in a more sustainable way. This slow, steady growth fits our temperament well and also fits into our long-term, lifetime vision for our farm.

What do you think the long-term effect of the recall will be?

I hope this will encourage people to practice safe food handling in the home. We do the best we can to produce as safe of a product as possible, and we hope that consumers try equally as hard to keep the product safe in their kitchens. (The Tjelmelands share their tips in the black box, left.)

We hope also that this causes people to ask for and get more regulation in the food industry. If we keep cutting government regulation, we will keep having problems like this. There should be more inspectors, and those inspectors should be supported. We appreciate the inspection and recordkeeping that is required for organic certification. Mark would be happy if they came out two or three times a year rather than just once. More inspection could lead to a few extra cents per dozen of eggs, but consumers should be willing to pay ever so slightly more for their food to cover the cost of competent inspectors and to know that their food is safe.

Are there any common public misperceptions about raising eggs?

People don't realize that chickens are very smart for their size. We put out in the barn things for them that are fun: a bucket, a bale of good hay for them to scratch through, things to keep them interested and active.



Chickens are trainable. We train ours to use the pasture, how to use a new building, how to go down a lane, etc.

People also wonder how we find all of the eggs out in the pasture. We explain that we are strict about getting the birds in at night and keeping the nests clean so the nests are desirable to our hens.

We make a point to invite the egg case managers and other to field days and to the farm. It is so important for producers and consumers to come together and have open conversations about what really goes on.

Does the recall say anything about people's differing visions for food?

There is a segment of the population that wants really cheap food without much regulation that is willing to overlook the repercussions of trying to make really cheap food. Some say that the way we raise chickens is "going back to the old fashioned way," but that isn't necessarily true. If you want the short-term, cheap solution for food, this egg recall is the type of thing you will continue to see.

Can you have too many chickens in one space?

What a great question for consumers to be asking! The organic standards say that you can't have more than a

certain number in a limited space, but as free-range producers: yes, we believe that there can be too many. We monitor health and production, and can usually tell if the numbers are becoming too concentrated. We also monitor pasture health when figuring out how many chickens to have on our farm.

Chickens should be able to express its natural behaviors of scratching, roosting, pecking, etc. If they are able to express these behaviors, they are more likely to be healthy. We do vaccinate our birds for two illnesses as day-old chicks and are rigorous about removing a bird from the flock if they are sick. We have taken a few manure samples testing for salmonella, and they have always come back negative. In the 17 years of producing eggs, we have never had an outbreak of anything.

Anything else you want to add that we didn't cover?

We would like our consumers to be asking the question, "What does it mean when we buy eggs from TJ farms?" We are working toward deliberately produced food, not just investing a little money in the short term to make a maximum return. There are lots of things that go into the decision to raise chickens, but again, it ultimately goes back to the mission and vision we have set out for our lives.



New Zealand's experiment without subsidies by Laura Sayre (Originally published on www.newfarm.rodaleinstitute.org, March 20, 2003. Reprinted here with permission.)



Laura Sayre

What would the world look like without agricultural subsidies? What would the United States look

like? If a crystal ball exists for those questions, its name is New Zealand, one of the first and still one of the few modern countries to have completely dismantled its system of agricultural price supports and other forms of economic protection for farmers.

Alone among developed countries of the world, New Zealand (NZ) has virtually the same percentage of its population employed in agriculture today as it did 30 years ago and the same number of people living in rural areas as it did in 1920. Although the transition to an unsubsidized farm economy wasn't easy, memories of the adjustment period are fading and today there are few critics to be found of the country's bold move.

... As late as 1964, NZ sent 61 percent of its total meat exports (lamb, mutton, beef and veal), 94 percent of its butter, and 87 percent of its cheese to the United Kingdom. Disruptions of this pattern during the First and Second World Wars, however, encouraged NZ to adopt increasingly protectionist policies, placing tariffs on imported industrial goods and establishing Producer Marketing Boards for the major commodity groups from the 1920s, designed to represent farmers' interests and to act as single sellers in the global marketplace.

Like the US, NZ suffered a major economic depression in the 1930s and enjoyed a boom period in the 1950s, as post-war consumption levels rose and war-time technologies found new agricultural applications like fertilizer and pesticide production and improvements in transport. (On NZ's rugged landscapes aerial topdressing of pasturelands was widely adopted, and helped boost productivity.)

Several factors threatened the comfortable prosperity of NZ agriculture in the 1970s. The independence of the Pacific Island of Nauru in 1968 spelled the end of NZ's supply of cheap phosphate rock, mined there and on other so-called 'phosphate islands' since the early part of the century. Four years later, in 1972, Britain's decision to join the European Economic Community (now the European Union) signaled a major realignment of global trading relationships, in which NZ's position as a Commonwealth country would no longer guarantee special consideration for its agricultural products. Finally, and again as in the US, rising oil prices triggered a period of inflation, making it increasingly difficult for farmers to secure good prices on the international market.

Governmental policy at this time exacerbated the situation by seeking to boost agricultural production based on the hope of greater returns—farmers were offered subsidies to purchase more fertilizers, and tax breaks for increasing herd sizes—further depressing commodity prices through oversupply. In part because of the recognized importance of agriculture within the national economy, farmers were also offered price supports, low-interest loans, disaster relief, weed-eradication subsidies and special training programs to get them through the hard times. As the laundry list of farm support programs grew, it became



an increasingly impossible burden for this small national economy to bear, threatening to further undermine the stability of the whole system.

Farm leaders advocate an end to subsidies

Interestingly, farming leaders were among the first to recognize the absurdity of the situation and to propose alterations, although they stopped short, at first, of advocating the total elimination of agricultural subsidies. In 1982, Federated Farmers of New Zealand (NZ's leading farmer organization) submitted to the government an economic position paper declaring that controlling inflation, rather than compensating farmers for the consequences of inflation, should be the national priority. They reasoned that a key cause of inflation was the budget deficits required to fund farm subsidies (among other programs), so that more subsidies only made the problem worse.

While most of the Federated Farmers' specific recommendations were rejected by then-Prime Minister Rob Muldoon, the cat was out of the bag. Economic analysts from across the political spectrum began to debate the effects of subsidies and other forms of market intervention, and when the Labour Party won a landslide election in 1984, (defeating Muldoon and the National Party), the country was ready for reform.

Because most NZ farmers were traditionally National Party members, the process of reform was to some extent bipartisan. Agricultural reform was also part of a larger package of economic restructuring that included the scaling back of import tariffs; deregulation (or partial deregulation) of public utilities and transport systems; implementation of NZ's first 'goods and services' tax (or GST—similar to the US sales tax); and floating of the NZ dollar on the global currency exchange. Further reforms were implemented after the National Party was voted back into power in 1990.

... This was not achieved without some controversy, and there were a few casualties, political and economic. It is estimated that around 800 farmers — or 1% of the total number of commercial farmers in operation — were forced to leave the land. Sheep farmers, who as a group were the most heavily subsidized, were hardest hit by the elimination of subsidies. Those farmers who were heavily in debt at the start of the reform were hit hard by rising interest rates, and a transition program was negotiated to ease their situation. Farm-related sectors like packing and processing, equipment and chemical supply, and off-farm transport also suffered, but this was regarded as evidence of their previous inefficiency. Overall the 'transition period' lasted about six years, with land values, commodity prices and farm profitability indices stabilizing or rising steadily by 1990.

Removing subsidies ... forces farmers and farm-related industries to become more efficient, to diversify, to follow and anticipate the market. It gives farmers more independence, and gains them more respect. It leaves more government money to pay for other types of social services, like education and health care.

... The NZ experience strongly suggests that most of the supposed objectives of agricultural subsidies and market protections—to maintain a traditional countryside, protect the environment,

ensure food security, combat food scarcity, support family farms and slow the corporate take-over of agriculture—are better achieved by their absence.

Sayre's thoughts in 2010

Re-reading my 2003 article on NZ farming and the dismantling of their agricultural subsidy system, I would make one key point: the global dairy boom of recent years is illustrating the fact that an exclusively profit-driven (as opposed to subsidy-driven) agricultural sector can also have its downsides, notably in terms of environmental impacts. According to Statistics, NZ dairy cattle numbers

Why New Zealanders don't like subsidies

1. Resentment among farmers, some who feel subsidies are applied unfairly.
2. Resentment among non-farmers, who pay for the system once in the form of taxes and a second time in the form of higher food prices.
3. The encouragement of overproduction, which drives down prices and requires more subsidization of farmers' incomes.
4. The related encouragement to farm marginal lands, with resulting environmental degradation.
5. Most subsidy money passes quickly from farmers to farm suppliers, processors and related sectors, again negating the intended effect of supporting farmers.
6. Market distortions, such as the inflation of land values based on production incentives or cheap loans.
7. Various bureaucratic insanities, such as paying farmers to install conservation measures like hedgerows and wetlands—after having paid them to rip them out a generation ago, while those farmers who have maintained such landscape and wildlife features all along get nothing.

have risen from 3.8 million in 1994 to 5.9 million in 2009, average herd sizes are climbing and even in grass-based systems all those nutrients (including from heavily fertilized pastures) have to go somewhere. There are serious concerns about nutrient overload in major NZ rivers as well as about water consumption in milk handling and for newly installed irrigation systems in the drier parts of NZ. As in the US, environmental impacts are mediated in part by the decisions of local authorities (who grant permits for new wells or new milking parlors), resulting in a patchwork of regulations that may miss the big picture. High dairy prices have also contributed to rural land speculation, making it harder for newcomers and young people to get established in farming.

The view from France

From my current perspective here in France, I would observe that French farmers are indeed overwhelmingly dependent on subsidies (and the debate about the next round of CAP reforms rages on), but at the same time, they are subject to an interlocking system of regulations and inspections that would make most American farmers' heads spin (obligatory cattle passports tracking all animal movements, for instance, are a fact of life!); and the idea that farmers receive subsidies not so much "to feed the world" as to "manage the rural landscape" is widely understood. On the other hand, over the past year the French government has begun a huge initiative to support conversions to organic farming, with the ambitious goal of getting 20% of French agricultural land in organic management by 2020 and halving overall pesticide use by 2018. And they are using government money to try to make these things happen.

Born and raised in Iowa City, Laura Sayre was formerly senior writer for The Rodale Institute's NewFarm.org. A PFI member, she is currently based in Dijon, France, where she is a post-doctoral researcher with the French National Institute for Agronomic Research (INRA).

Cooperators' Meeting

Got questions? PFI cooperators get answers

PFI members are following up on the questions posed at last year's Cooperators' Meeting by conducting 100 on-farm research and demonstration projects through PFI's Cooperators' Program.

A total of 72 individuals are involved in these projects. Hear results of these projects and design your own project at PFI's 2011 Cooperators' Meeting.

PFI has confirmed the 2011 Cooperators' Meeting date and location to be held Thursday, February 10 and Friday, February 11 at the Quality Inn and Suites Hotel (Starlite), 2601 E. 13th St., Ames, IA.

PFI's Cooperators' Program has helped farmers throughout Iowa and beyond conduct high-quality, on-farm research and demonstration projects to develop and promote profitable, ecologically sound and community-enhancing approaches to agriculture.

A glimpse of current projects

Tom and Irene Frantzen, and four other cooperators in the state, are comparing aphid-resistant soybeans to susceptible soybeans.

Dan Wilson is participating in the "farming pod" study where PFI staff are collecting water infiltration and soil quality data from neighboring farms on the same soil type.



Tom and Irene Frantzen discuss their research trial with Dan Wilson at this year's Cooperators' Meeting.



Jerry Sindt (left) is looking at a field of aerially seeded winter rye with Alan Bennett (center) and PFI staffer Kevin Dietzel (right). Jerry is measuring cover crop effect on crop yield on his farm. He is one of 11 participants around the state.



Nathan Anderson



Kelly Tobin

Nathan Anderson planted two types of winter wheat to test cover crops for grain quality. He is pictured here counting plant diversity in his hayfield.

Kelly Tobin is another cooperator measuring cover crop effect on crop yield. He is pictured here in a field comparison of winter rye versus no rye (control).

Ryan Marquardt is one of five farmers testing their chickens for nutritional composition in comparison to those purchased at the grocery store.



Ryan Marquardt

The Cooperators' Program (a core part of the PFI mission since its beginning in 1987) helps farmers become leaders in researching and answering questions about their farms and then sharing that knowledge with others. Learn more about becoming a PFI Cooperator at <http://practicalfarmers.org/programs/cooperators>.

To attend and learn more about conducting on-farm research and results of current PFI members' projects email or call Megan Dollen at megan@practicalfarmers.org or 515.232.5661.

Small grains, big flavor: Savoring Iowa grains

by Tomoko Ogawa

There seems to be a growing interest in locally grown small grains. Grain CSAs (community supported agriculture) are emerging in different parts of the country. These CSAs usually provide a share of small grains, flours and beans. University of Maine Extension received a USDA grant to investigate local organic bread wheat production.

While the argument for terroir (the combination of factors, including soil, climate and environment, that create distinctive character, of wine or cheese) is widely mentioned, terroir of bread does not seem to get the spotlight too often. Sure, the Iowa climate may not be suited to produce wheat that works best for mass production or for certain recipes that require specific protein levels, moisture content, ash content, etc. But Iowa-grown grains may create bread that can only be tasted in Iowa.

Many obstacles exist for Iowa-grown small grains, especially related to economic feasibility and infrastructure. The biggest constraint may be the lack of small-scale processors who clean, store and mill food-quality grains.

That being said, it is important to explore the possibilities for Iowa-grown cover crop small grains. Cover crops already have so many benefits for the environment, wouldn't it be great if they were tasty as well?

This fall, we are planting 17 small grain varieties at ISU Agronomy Farm in Boone, including four hard red winter wheat varieties, three soft red winter wheat varieties, four rye, four barley, one winter lentil and one triticale. In addition to evaluating their cover crop qualities, we are going to harvest the grains next summer to test their baking qualities.

As a baking enthusiast and Cover Crops Small Grains and Food Coordinator for Practical Farmers of Iowa, I have already been given a unique and exciting challenge to test Iowa-grown cover crop grains for their potential to be marketed as food.

After contacting our members for grain samples through PFI's email list service, we have collected several different types of soft and hard red winter wheat as well as buckwheat, rye and cornmeal. We have showcased some food featuring these grains at our events, including buckwheat-apple bars, buckwheat cookies, corn bread and whole wheat bread.

In addition to my baking, I brought wheat samples to local bakeries in Ames and Des Moines. Great Harvest Bakery in Des Moines baked a couple loaves of "all-Iowa, whole wheat honey loaf," using the same recipe that they use with their Montana wheat berries. The wheat they used was Expedition, from member Gary



Earl Hafner examines some Buckwheat.

Steenblock, which contained quite high protein. I brought all-Iowa and all-Montana whole wheat honey loaves from Great Harvest to the office for a blind tasting. Many of us preferred the flavor of all-Iowa bread. However, the texture of Montana bread seemed less crumbly and more consistent.

At a workshop and mill tour, held at Heartland Mill, a farmer cooperative, organic mill in western Kansas, I learned that milling requires science and technique, not just the right equipment. Passionate discussion by bakers from across the country underscored the notion that protein level is more complex than "higher is better."

Have grains on your farm? Are you a baker and/or food processor who is interested in locally grown grains? Please, contact PFI's Tomoko Ogawa!

WHEAT SAMPLES			
Wheat type	Variety	Protein <i>(At 12% moisture)</i>	Moisture
Hard red winter	Arapahoe	12.38	12.28
Soft red winter	Not stated	10.87	13.6
Hard red winter	Not stated	14.4	12.75
Hard red winter	Expedition	10.94	12.9
Soft red winter	Not stated	9.95	13.21

References: Byczynski, L. "Growing grains for local markets" *Growing for Market*. Vol 18. No.8. September 2009. Lawrence, KS: Fairplain Publications, Inc. Kiley Mack, S. "Dollars target organic bread wheat in Maine." *Bangor Daily News*. November 2, 2009. Lewis, J. "Bringing Wheat Back to Our Backyard." *Edible San Louis Obispo*. Winter 2009.

Field Days



Top: Barney Bahrefuse demonstrates how to process a chicken on farm.

Middle left: Kate Solko leads a tour at Iowa State University's student organic farm.

Middle right: Tom Cory takes a brix reading of grass.



Bottom: Dean Henry points out a field of mustard cover crop on a wagon tour of his fruit farm.



Field Days



Top left: Ethan Book discusses beginning farmer issues.

Top right: Attendees scour the field for weeds at Melissa and Andrew Dunham's Grinnell Heritage Farm.

Middle: Torrays Wilson assesses the litter layer in his pasture with Craig Wells.

Bottom left: Derek Carney demonstrates how to measure forage using a rising plate meter.

Bottom right: Amber Anderson Mba displays her backyard goat herd.



PFI conference "Redefining Fence Row to Fence Row" Just around the corner

Join us January 7 – 8, 2011 at Marshalltown Community College for the PFI 2011 Annual Conference titled, "Redefining Fence Row to Fence Row."

From fence row to fence row across Iowa and beyond, PFI farmers are linking together healthy soils, diverse farms and profitable farming operations. Attend the 2011 PFI Annual Conference and talk with these farmers and friends of farmers who are working toward a vision of Iowa agriculture where farmers can, "stay small and mid-sized," instead of "get big or get out," where across the fence you find farmers with diverse operations of both plants and animals. No matter what part of the field you're in (conventional or organic, field crops or vegetables, farming or not farming), there are plenty of ways to work with your PFI neighbors to build healthy food, diverse farms and vibrant communities. Come learn, share and visit with old friends and new.

Keynote Address

***Farming Without Subsidies:
New Zealand's Journey***

Mike and Sharon Barton, Lake Taupo Basin, New Zealand



The 2011 annual conference will feature farmers from halfway around the world: Mike and Sharon Barton, who finish beef cattle on their 350-acre farm in New Zealand's Lake Taupo Basin.

Farmers in New Zealand used to have a variety of federal agricultural subsidies, including agricultural price supports, low-interest loans and disaster relief. In the 1980s, New Zealand changed all that, in a move

16 the Practical Farmer

endorsed by the country's farming organizations. Now government assistance to agriculture is primarily funding for agricultural research.

For our Friday evening keynote address (note the new time this year), Mike and Sharon will talk about this sometimes painful shift to farming without subsidies and how the New Zealand experiment now works well for this nation where 90 percent of total farm output is exported and most of the food consumed is domestically produced.

Mike and Sharon will be introduced by Dr. Mary Wiedenhoef, Chair of the Graduate Program in Sustainable Agriculture and an Agronomy Professor at Iowa State University. She has visited the Barton farm and has worked with New Zealand's AgResearch investigating environmental issues surrounding nitrogen and phosphorus use in farming systems in the Lake Taupo Catchment.



Business Meeting

New time! Join us at Saturday lunch for the latest on PFI's programming, finances, staffing and more.

Seed Swap

Bring extra seeds and your wish list! Exchange seeds with other growers during this informal session. Plus, bring your supply list if you wish to find a partner for a bulk order. (No cash allowed.)

Coffee Shops

We have three coffee shops this year. Stop in and talk one-on-one with Jess

Jackson (on grazing) or Jean-Paul Courtens and Jody Bolluyt (fruits and vegetables) in the Exhibit Hall from 8:30-10:45 am Saturday.

Talk with Howard Vlieger (field crops) 1:45-4 pm in the Exhibit Hall Saturday.

WANTED: Posters

Member posters have a long history at the Annual Conference! Bring a poster about nearly anything of interest to other members – share your farm, your research and demonstration projects, your lessons learned! (No proprietary products, please.) Just check the box on the registration form, and we'll send you more information.

Meet & Eat

FREE Beginning Farmer Lunch, Friday 11:30 am-12:30 pm

EAT: Friday soup supper and Saturday lunch, featuring food grown by PFI farmers

MEET: Bring snacks and Iowa wine, beer, cider, Templeton Rye and other refreshments and mingle with other PFI members, Friday evening in the Hospitality Room.

Cluster Meetings

Talk with farmers who grow what you grow: Field Crops, Poultry, Livestock, and Fruits and Vegetables. Join a gathering of beginning farmers or attend a session for Friends of Farmers (nonfarmers).

U-Pick

Back by popular demand! From glyphosate resistance to selling your products to schools: YOU choose the topic for this session.

Friday Workshops

Cheese and Crackers: Done Locally

Lois Reichert, Donna Prizgintas, Earl Hafner, Tomoko Ogawa

Iowans are making some superb cheeses! Learn from cheese maker Lois Reichert about the basic chemistry of



Lois Reichert

cheese making and how different milks affect cheeses. To accompany the tasting of goat cheese, PFI staffer Tomoko Ogawa will serve crackers she made using Iowa-grown small grains. Chef Donna Prizgintas and farmer Earl Hafner will talk about how to access and eat Iowa-grown small grains.

Scaling Up Your Vegetable Operation

Jean-Paul Courtens and Jody Bolluyt

Roxbury Farm in Kinderhook, NY, has scaled up from 30 CSA



(community supported agriculture) members to more than 1,100 shares located throughout the Hudson Valley, including New York City. Jean-Paul and Jody will talk about how they did it, including appropriately scaled equipment, crew management, harvest systems, crop rotation, and farm organization. With their production systems, they manage the farm with 11 employees during peak season.

Ridge-till, Strip-till, No-till, Oh My!

Ron Rosmann, Jeff Longnecker, George Schaefer, Rob Stout



George Schaefer

Reducing tillage can help decrease soil loss and farmers' energy use. What tillage alternatives exist and which fit your

farm best? Learn from four farmers using conservation tillage in different ways: Ron Rosmann (ridge-tillage and organic crop and livestock production), Jeff Longnecker (strip-tillage, cover crops in corn and soybeans, and beef cattle), Rob Stout (no-tillage and hog manure in corn and soybeans), and George Schaefer (conventional and organic no-till and organic crops and beef cattle).

Farmville — for Real!

Andy Larson, Rick Hartmann, Susan Jutz, Sean Skeehan, Jill Beebout, Tim Daley, Jerry Peckumn, Ryan Herman, Dan Specht

This is a working session for those who want to farm or are in their first years of a new enterprise. Come work with Andy Larson to define your values, draw your vision, identify milestones, add to your resource inventory, (things you have, things you need, where you'll get them), and define your goals. Have your plan analyzed by an expert farmer in your enterprise, and if you choose, put your plans on display for other conference attendees. Expert farmers will provide one-on-one advice and support from 3-4:30 pm for beginners.

Pasture Fencing and Watering Basics

David Petty, Jess Jackson, Jason Schmidt

Discover everything you need to set up the necessary infrastructure for a rotational grazing system! What fence design options exist? Which fence materials work best for your situation? How do you design and set up a watering system for rotational grazing? We will hear from Jason Schmidt of Schmidt Fencing about fence design and materials options. David Petty will share his experiences — which fencing and watering systems he has used and



how they have worked. Jess Jackson of NRCS will fill us in on different grazing systems and how to fit fence designs and materials to your system, plus options for stock watering systems on pasture.

Saturday Workshops

- *Ruminating on Minerals*

- *Vegetable Equipment for Farms (10-50+ acres)*

- *Biological Farming: For the Soil's Sake, for Your Sake and for the Consumer's Sake!*

- *Scenarios of Your Future*

- *Pastured Poultry System Potluck*

- *Know Your Cuts of Meat*

- *Soil Fertility Practices on Roxbury Farm*



Tammy Faux presents the *Genuine Faux Farms poultry production system*, Saturday morning.

- *Making Milk Without Grain*

- *Turtle Farm Succession: A Work in Progress*

- *Don't Give Weeds a Chance*

- *Portion Patrol: Efficient CSA Distribution*

Check www.practicalfarmers.org and your mailbox for more details!



Kelly Biensen presents, *"Know Your Cuts of Meat," demonstrating various cuts of pork*, Saturday morning.

- *Busy All the Time, Never Overwhelmed*

- *Farming with Nitrogen Limits: A New Zealand Perspective*

- *Health Insurance and Rural Folks*

- *Toward Energy Self-Sufficiency On-Farm*

What if? Glimpses of the future, part III Jerry Peckumn reflects on “Nature’s Path”

At the 2010 PFI Annual Conference, a group of 50 PFI members came together to think about the future. Their discussion centered around three scenarios of farmers and their farms in the year 2035. We’ve continued that discussion in two previous articles in the Practical Farmer and now as we plan for the 2011 PFI Annual Conference, we hear from Jerry Peckumn on the third and final 2010 future-of-farming scenario, “Nature’s Path.”



Jerry Peckumn

Scenario 3: Nature’s Path

Sam heads out of the house and onto the field for a winter walk, New Year’s Day, 2035. “Hard to believe I’ve been farming 25 years now,” he thinks. It’s been raining the past few days, but his walk through the fields isn’t too muddy. Gone are the days when his soil was bare in the winter, and that makes him feel good. He has protected the soil from erosion, cut fossil fuel dependence, and shakes his head at the amount of fertilizer and herbicides he used to use.

“It’s a good thing,” he thinks, “something positive to counter the challenges of farming in such unpredictable weather.” Sam heads up the hill to the start of his 1,000 acres of the perennial-wheat relative, Kernza. “Grains you don’t have to plant each year,” he thinks. “Dad wouldn’t have believed it.” He first planted Kernza on a commercial scale in 2030, after 10 years of trials with PFI. He even uses Kernza flour, which he purchases at his local Walmart in his family’s baking.

For the first part of his career, Sam was strictly a corn and soybean farmer; today just 500 of his 4,000 acres rotate between corn and beans in a no-till system. “Relying on corn

and soybeans is now a risky business,” he thinks. In the wet years, mold ruins much of his corn. In the dry years, the soybeans don’t produce well. Glyphosate-resistant weeds are now too much for his corn. He’s thinking next year may be his last year for these crops.

Sam has 2,500 acres of the farm in perennial grasses, providing feedstock to a regional biomass facility. He’s a big fan of the facility because it has kept jobs in the community.

Sure, taxes are heavier than they were in 2010, but in general, he likes the direction federal programs have gone. He enjoys the check he gets every year for the clean water and high-quality habitat he’s providing. Since 2020, the U.S. has had a strong green payments program, the political will brought as a result of a decline in the power of agricultural states in the Congress and urban outcry after farmers’ bare fields exacerbated five rounds of serious flooding in Des Moines.

By now, he thought that he’d be selling carbon credits through the federal cap-and-trade program. He backed off in disgust, though, at the speculation

and “funny science” from the system dominated by Wall Street banks.

Sam makes the turn at the end of the field and heads back to the house. He walks past his cattle, which he added back to his system 10 years ago, once federal policy made it easier to make it with grass-based systems. It’s a system that has required him to get larger, but with the government payments, he doesn’t have to work off of the farm. Some neighbors who used to farm now work for him. He misses some other neighbors who sold him their farms and moved away. “Overall, I’ve been lucky,” he thinks. “I’ve held onto the farm, I’ve improved the environment and even grown food for others.”

Jerry Peckumn reflects on “Nature’s Path”

Soylent Green was a movie that really made me think many years ago. Once I had a chance to talk with Charlton Heston, the star of the movie – it was one of his favorites. While considering your questions about food policy, I was eating what were really fake strawberries – no sweetness without added sugar, little taste, but pretty – quite disgusting. In the movie, strawberry jam had become very rare and precious. People had to eat Soylent Green food, made from algae harvested from the ocean, until even that last food source starts to collapse.

We only have a few major food sources. Is Soylent Green similar to corn (Soylent Yellow?), wheat and rice? It has been a long time since I saw the movie and maybe my memory is faulty. That is why I would like to see it again; it would be fun to do so with friends who care.

I would feel more connected to this scenario if Sam had farmed 50 years, as it has taken me 25 years to build

enough capital to farm very much land, become consistently profitable and buy more land. Maybe he and his wife had really good off-the-farm jobs, spent very little on living expenses (free lunches, no kids, and such), were very savvy with the neighbors or had significant family resources. Also, I am uncomfortable with the idea that one farmer will need to farm so much land and hire neighbors who could not stay in farming, but maybe, there are both large and small profitable family farmers providing an efficient sustainable food and fuel system.

I really like the idea that farmers are paid for environmental results rather than for raising a particular crop ...

I really like the idea that farmers are paid for environmental results rather than for raising a particular crop, although, I am apprehensive about the idea that farmers would still be paid with tax funds, at all, 25 years from now. Good ag policy would result in family farmers making a good living providing healthy food and efficient bio-fuel and using sustainable farming methods. There seems to be too much money either given to politicians or used to re-elect them from people who really only want to make more money. Greed seems to be trumping good policy. There is too little money or understanding of the issues, or too few people who care to really make good ag policy. Everyone who knows

and understands our food system should work hard for secure and sustainable agriculture.

Is a green Walmart in the future? I prefer cooperatives.

The foremost question though is this: Does Sam pay Monsanto or a successor firm an annual "tech" fee for the

perennial grain? Is it transgenic? If not, then how did we build a political base for a significant increase in university and land Institute research paid for by the people? For this scenario of significant land base in perennials to have any possibility, it seems we must rally political support for Wes Jackson and bring in the land grant universities with substantial public funds.

NOV | DEC | JAN

NOVEMBER 21-22 | 10th Annual Iowa Organic Conference

Iowa State University, Scheman Building, Ames, IA. Topics include: How to Transition to Organic Farming; Marketing Innovations; Organic Grains, Fruit and Vegetables in the Local Food System; Organic Livestock and the New Pasture Rule; Marketing Skills & Incentives; Organic Crop Insurance: What's Changed & What's Not. For more information visit: www.ucs.iastate.edu/mnet/organic10/home.html.

NOVEMBER 23 | Iowa Forage and Grassland Council Annual Meeting

Des Moines. There will be both stored forage (baleage) and grazing educational tracks during the conference. Contact Margaret Smith, 515.294.0887, mrgsmith@iastate.edu for details.

DECEMBER 3-4 | High Tunnel Production, Business Development and Marketing Workshop

9 am to 4 pm, Henry County Extension Office, 127 N. Main, Mt. Pleasant. This workshop is for growers of fruit and vegetables interested in extending their season. Topics covered include high tunnel construction tips, irrigation and climate control, pest management, soil fertility, and development of marketing and business plans. Registration is required. Contact: Sue Woods, ISU Value-Added Ag Program, 515.294.9483, swoods@iastate.edu.

DECEMBER 6-7 | Western Corn Belt Conference for Organic Farmers

Best Western-Ramkota Hotel, 3200 W. Maple Street, Sioux Falls, SD. Fred Kirschenmann will be lecturing on Trends in Sustainable Agriculture, and the Importance of Resiliency. Register before Nov. 6 by contacting Peter Sexton, 605.688.6179, peter.sexton@sdstate.edu.

JANUARY 7 - 8 | PFI 2011 Annual Conference, "Redefining Fence Row to Fence Row"

Marshalltown Community College, Marshalltown, IA. Keynote address: Farming Without Subsidies: New Zealand's Journey. Speakers: Mike and Sharon Barton, Lake Taupo Basin, New Zealand. Plus a wide variety of other breakout sessions in which to share, learn and grow. Registrations due: Wednesday, December 29. More information: Contact Suzi Bernhard, 515.232.5661 or visit: www.practicalfarmers.org.

JANUARY 21-23 | Winter Solstice

Honey Creek Resort State Park, Moravia. The topic will be Sketching Iowa's Heritage: How to Draw Children Back into Nature. Registration packets will be available in November. Contact: Heather Niec, 319.848.7019.

Can sustainable farming Feed the world? *(Reprinted with permission.)*

by Francis Thicke

Proponents of industrial agriculture often proclaim that if sustainable or organic farming were widely adopted there would be mass starvation around the world. There are several flaws to that argument.

The first flaw is the assumption that converting to sustainable or organic farming means returning to the methods of 100 years ago. Clearly, that is not the case. While we can learn and apply many things from earlier traditional farming methods, advances in technology and increased understanding of biology and ecology have taken organic farming far beyond the farming methods of 100 years ago. Then, all farming was “conventional,” because the distinction between organic and conventional had not yet been made. Since then, conventional and organic farming methods have diverged and both have become much more productive.

Innovations in farm equipment over the years have benefited both organic and conventional farmers. For example, in the 1960s, when my brother and I would cut hay using a tractor hitched to a converted horse mower, it took the two of us about an hour to cut one or two acres. Today, on my organic farm, I can easily cut, condition and windrow 10 acres of hay per hour by myself. In the 1960s, it took our family crew of four a long hard day to bale 50 tons of hay; today I can bale 50 tons in two hours, by myself. Also, today’s organic farmers use mechanical weeders and guidance systems on cultivators to control weeds much more efficiently and precisely than possible in the 1960s.

But the greatest advancement for today’s organic farmers has been an increased understanding of biology and ecology, and how to design and manage organic farms to efficiently utilize the energy and organizing power of nature’s ecology.

For example, as discussed earlier, new scientific understandings of grassland ecology help grass-based farmers better manage grazing in order to increase biodiversity and productivity and reduce the need for fossil-fuel-based inputs.

“In the 1960s, it took our family crew of four a long hard day to bale 50 tons of hay; today I can bale 50 tons in two hours, by myself.”

Also, new scientific advancements in understanding the ecology of insects, weeds and plant diseases are helping organic farmers manage pests through the use of crop rotations, beneficial insects, pest mating disruptions and other cultural practices that circumvent the need for chemical pest controls.

Certainly, there is room for improvement in organic food production, just as there is in conventional production. However, it is remarkable that organic agriculture is as productive as it is today given the paucity of research funding for organic over the years. Long-term research comparing organic and conventional farming methods done by Iowa State University has found that corn and soybean yields of organic and conventional farming systems are similar.

The agriculture research budget of the United States Department of Agriculture is approximately \$2 billion annually.

Before the 2002 Farm Bill, when \$5 million was earmarked for organic research, there were virtually no USDA research funds specifically dedicated to research on organic agriculture. The 2008 Farm Bill raised funding for organic agriculture research to \$15 million, a good increase but still meager in comparison to research funding for conventional agriculture. One can only wonder where organic agriculture production would be today if its research budget had been on par with that of conventional agriculture over the past 50 years.

A research team from Michigan compared yields of organic versus conventional agriculture by analyzing 293 existing data sets from around the world. They found that in developed countries, the yields of organic and conventional agriculture were about equal. But in developing countries, the organic yields were higher, often substantially so. The study concluded that, “... organic methods could produce enough food on a global per capita basis to sustain the current human population, and potentially an even larger population, without increasing the agricultural land base.”

A 2008 United Nations analysis of 144 projects in 24 African countries found that yields more than doubled where organic practices that maximized the use of on-farm resources were used. In addition to yield increases, the study found that environmental benefits from organic farming in those studies included improved soil fertility, better retention of water and resistance to drought. The UN study concluded that, “... the evidence presented in this study supports the argument that organic agriculture can be more conducive to food security in Africa than most conventional production systems, and that is more likely to be sustainable in the long term.”

A key reason why researchers are looking to organic methods, particularly in developing nations around the world, is that organic methods optimize the use of locally available resources and biologically produced resources on site, rather than relying on expensive external inputs that are not readily available and are often too expensive for limited-resource farmers.

The Green Revolution of the latter 20th Century was a great triumph of increasing food production in food deficit countries using the methods of industrial agriculture. However, scientists are now recognizing that some of the unintended consequences of the Green Revolution include extensive soil erosion, loss of soil fertility, loss of agricultural land through salinization, depletion of water tables, increased pest resistance and social disruption.

In 2008, the United Nations, World Bank and Global Environment Facility sponsored an International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) by a team of more than 400 scientists and development experts from more than 800 countries. The IAASTD team looked at policy options for how agricultural knowledge, science and technology could reduce hunger and poverty, improve rural livelihoods and human health, and facilitate equitable and environmentally, socially, and economically sustainable development around the world. The team produced a comprehensive report in which they addressed the successes and shortcomings of past development efforts and made recommendations for future efforts. The report pointed out that past development efforts of the Green Revolution have produced large increases in food production, but those increases have come with significant environmental and social costs, and the challenge today “is to increase the productivity of agriculture in a sustainable manner.”

The IAASTD team pointed out that “for many years, agricultural science focused on delivering component technologies to increase farm-level productivity,” and argued that to increase food

production in a sustainable manner requires recognition that agriculture is multifunctional. As the report framed it, “The concept of multifunctionality recognizes agriculture as a multi-output activity producing not only commodities (food, feed, fibers, agrofuels, medicinal products and ornamentals) but also non-commodity outputs such as environmental services, landscape amenities and cultural heritages.”



*Francis Thicke
PFI Field Day
2008*

The IAASTD report made recommendations for how agricultural knowledge, science and technology could be applied in international development in ways that would, “... recognize and give increased importance to the multifunctionality of agriculture, accounting for the complexity of agricultural systems within diverse social and ecological contexts.” The recommendations focused on eight areas in which the multifunctionality of agriculture should be considered: bioenergy, biotechnology, climate change, human health, natural resource management, trade and markets, traditional and local knowledge, and community-based innovations and women in agriculture.

Applying the concept of the multifunctionality of agriculture would no doubt serve us well in the United States also. Often policies for agricultural production in this country run counter to environmental and social concerns. For example, US crop subsidy programs in general provide the highest incentives for farmers to grow annual crops that can have the greatest potential harmful environmental effects, such as soil erosion and nitrate leaching to water resources. Another example is the existence of state-level laws that give higher priority to the economic returns of CAFO owners than to the health, quality of life and property values of their neighbors.

Some of the multifunctional aspects of agriculture that we in the US should consider in our deliberations on agricultural policy include the viability of rural communities, the competitiveness of family farms, the health of farmers and rural residents, the resilience of farming systems to extreme weather events, the aesthetic and recreational value of the landscape, the nutritional value of the food we produce, the welfare of farm animals, the effects of farming practices on air and water quality, the compatibility of agriculture with wildlife habitat, and the long-term sustainability of our farming systems.

Designing agricultural policies that take into account the inescapable interconnectedness of agriculture’s many roles will take more comprehensive thinking, but will provide ample payback in enhanced benefits for society and reduced externalized costs from agriculture. Such policies will move us beyond industrial agriculture to a multifunctional agriculture designed around nature’s ecology, with long-term benefits for farmers and all of society.

Duffy, Mike, Matt Liebman, Ken Pecinovsky. *Organic vs. Conventional Farming Systems*. ISRF02-13. Iowa State University Northeast Research and Demonstration Farm. <http://www.ag.iastate.edu/farms/02reports/ne.OrganicConvSystems.pdf>.

Catherine Bagledya, Jeremy Moghtador, Eileen Quintero, Emily Zakem, M. Jahi Chappell, Katia Aviles-Vasquez, Andrea Samulonand Wette Perfecto. *Organic agriculture and the world food supply. Renewable Agriculture and Food Systems* (2007), 22: 86-108 Cambridge University Press.

Hine, Rachael and Jules Pretty. *Organic Agriculture and Food Security in Africa*. UNCTAD/DITC/TED/2007/15 2008. United Nations Conference on Trade and Development, United Nations Environment Programme.

Agriculture at a Crossroads. International Assessment of Agricultural Knowledge, Science and Technology for Development. April, 2008. <http://www.assessment.org>.

Maury Wills vs. apple pests

by Sally Worley

Wills Family Orchard is situated outside of Adel in picturesque rolling hills that overlook the Raccoon River Valley. Maury and Mary Wills planted their first apple tree in 1992. Maury is a city kid from the south side of Des Moines. His dad grew up on a fruit farm near Cambridge and that resonated with Maury. Mary grew up on a small dairy farm near Ames and envisioned a farm upbringing for her children as well.

Maury was rooted in the organic lifestyle before the orchard was born: “I was buying organic food. I lived in Columbia, MO, for a time and used to go to the food coop and had read all the books of the time pertaining to whole foods. I thought, if I’m going to raise apples, I’m going to learn how to grow them organically because it’s going to be a learning curve for me anyway.”

Maury plunged himself into researching apple growing techniques used prior to World War II and the advent of many modern farm chemicals, including organophosphates. “I wanted to find out how the old timers did it, so I looked at as many old resources as I could find,” he mused. Maury was a big fan of *Mother Earth News* and searched every page of stacks of the publications for stories of orchardists.

“This was 1991. I came across an article from 1980 about A.P. Thomson, an apple grower in Shenandoah Valley. A.P. grew up in the orchard, went to World War II, returned and decided to revamp his orchard into an organic operation. This really sparked my interest for raising apples organically – I found a face and name of someone doing it.”

Maury found inspiration from A.P. Thomson, but realized his farm in Iowa presented a different playing field: “We’re in the Midwest. We have different humidity, different insects,



Maury Wills points out his apple sprayer.

and different temperatures from other parts of the country.”

Wills Family Orchard has been certified organic since 2000. Maury doesn’t let the fact that his apples are certified organic justify a lesser quality product. “We market a good graded apple. Having an awful apple and saying they’re organic is no excuse as far as I’m concerned. If you do something organic and there’s no quality about it, what’s the use?”

There are four acres of apples in the orchard, and Maury wants to increase to 10 acres over time. He started with scab immune varieties and continues to experiment with new varieties that will work well in an organic orchard: “I put in 80 Honeycrisp, but am pulling them out. They are all dead.” He is seeing good results with other varieties that aren’t immune to scab, such as Spartan, Chieftan and Macoun.

Wills Family Orchard raises pumpkins, winter squash and gourds but not organically. “This year we’ve used three treatments, fewer than typically used in the conventional world. Right now that’s the only way we could have a crop. We don’t use any herbicides, just

insecticides for cucumber beetle and squash bug.”

“Every year we make an improvement on the farm. We used to do everything out of the house but built our store building three years ago,” Maury said. The store houses a custom-built apple washer, retail area and apple storage. Maury and Mary have a certified kitchen in the basement of their home but plan to move the kitchen to the store building as well as build a fully plumbed bathroom in the store.

The store sells value-added products they make, including organic apple butter, applesauce and pies. They also host tours from school groups. Business on the weekends during the fall has really picked up. Maury says, “When we started selling from the farm, we were excited if we had two or three or four customers. One weekend we had eight people drive in and that was exciting. Yesterday we had hundreds, and it was awesome.”

Maury applies organic controls to the orchard with a 50-gallon, John Bean air blast PTO orchard sprayer. He can combine many of the treatments in the tank, reducing application labor. “The sprayer has nozzles and a huge fan on the back. Water comes out in narrow streams, hits the air blast area and makes fine particulate spray. It provides good coverage and is a great sprayer for us.”

Before they owned the air blast sprayer, Maury applied his products with a barrel and 1/2-horse, on-demand pump with hose and spray wand. “It was a really cheap, good way to get started. As you grow, at some point, you have to get the right trade off for time with a bigger sprayer.”

Wills' family orchard Organic apple-pest control methods

by Sally Worley

Growing an organic apple is not easy, especially in Iowa. Over the years Maury has improved his pest control regime. "I was really green when I started. Plus, drastic improvements have been made in organic products available for apple producers." Maury's spray regime continuously evolves.

Quince Rust

Very early in the season, Maury starts his pest control with an application of biofungicide, Serenade, bacillus subtilis. This controls quince rust. "If infected by quince rust, the blossom end of the apple stays real narrow and shrivels, and the rest of the apple grows. If you cut into the apple, you see dark circles, and they taste awful," Maury says. Serenade is sprayed into the flower cup before the arrival of quince rust spores and occupies the sights that quince rust would occupy. "It really does work," he adds.



Green Fruitworm

"The first insect that really is a pest for us is green fruitworm. In early spring, when the apples are set on the tree and are pea-sized, they'll start to eat the side of the apple away. The apple's history if that happens." Green fruitworms arrive dependably every spring, and the Wills' family begins scouting for the worms once the fruit are set. When they find green fruitworm, they spray bacillus thuringiensis, or Bt. Often kelp or fish emulsion will be added to the first Bt spray for fertility. After the initial application, Maury applies Bt in every cover spray after that without scouting. Spray interval is about every week from petal fall through about late June.



reprinted with permission from the Mid-Atlantic Orchard Monitoring Guide

Codling Moth

"Five or six years ago codling moths were really tearing me apart," says Maury. Codling moth larva tunnels through the core of the apple, leaving frass in its path. While Maury was struggling with codling moth, Dow developed a product called spinosad, formulated for organic apple growers. Maury tried a sample and his codling moth damage went from 70% to 5% the next year.



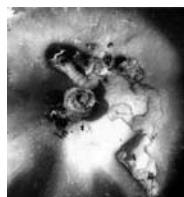
DLR Rheinland

"With codling moth, it's about timing and knowing the pest's life cycle," says Maury. "In Iowa, there are sometimes two generations we watch for." Maury sets codling moth pheromone traps in the orchard. Once he has trapped four or five male codling moths (this winged arrival of codling moth is termed biofix), he counts degree days—250 degree days base 50. At 250 degree days, Maury sprays.

Maury sprays three times, seven to 10 days apart. Maury had used Entrust (spinosad) for each application but altered his codling moth spray regime after a granulosis virus (Cyd-x), which is specific to the codling moth, came on the market. "Now my first spray is Entrust, second spray Cyd-x and third spray an Entrust/Cyd-x combination," he explains.

Leafroller

While Maury uses Cyd-X exclusively to control codling moth, he does apply one round of Entrust before a single codling moth has landed. "There are a bunch of leafrollers early. When they arrive, before the presence of codling moth, I spray Entrust to clean up leafroller, then do the Cyd-x for each generation of codling moth once they arrive. Every orchardist has to figure out what works best for them. There's merit in using Entrust, then Cyd-x, then a combination."



Apple Fly Maggot (photo by Andrew Forbes)

The apple fly maggot emerges early June in Maury's orchard and lays eggs in the pulp of apple fruit. When the maggot emerges, they eat through the flesh of the apple in a railroad pattern. "Purdue researchers figured out that the apple fly is attracted to a round red sphere," Maury said. Maury's family paints whiffle balls red, puts the balls in a baggie, applies Tangle-Trap, a clear sticky substance, and hangs the balls in the orchard. "In early June, you don't have any red apples, so the flies are attracted to the red round spheres and get stuck. Some organic growers will apply a little apple essence too. I don't want to attract any more than are already here. I load the trees heavily with red balls. We don't have an apple fly maggot problem. It's pretty much 100% trap-out, the only insect you can totally trap out organically."



Plum Curculio

"Plum curculio is really the Achilles heel of organic growers," said Maury. The female bites into the side of the apples, makes a crescent shape, then turns around and deposits an egg. One female is capable of depositing 400-500 eggs. Wills family's first attempt at controlling the plum curculio mimicked a pre-World War II method. "It sounds like a joke but it's true," Maury laughed. "Imagine an inverted umbrella on a wheelbarrow with handles and a slot in the center. You set it under each tree, and tap each branch firmly with a padded stick. The plum curculio gets jarred from the branch, into the umbrella, and funneled into water or oil. We did



(Continued on pg. 27)

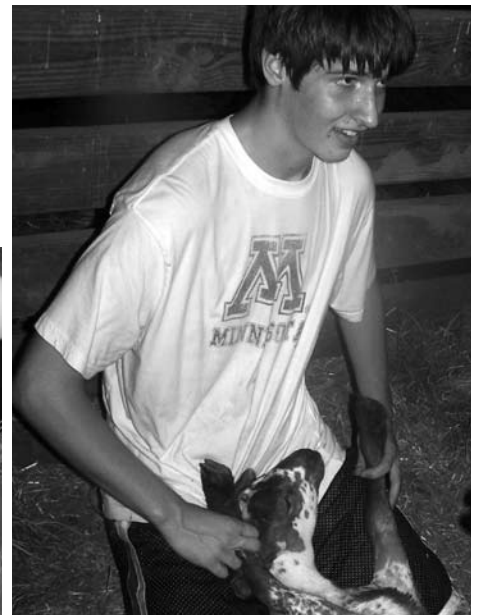
Youth Camp 2010



Top: Silly faces, everyone! It's time for Summer Camp coolness.

Middle: Pollywogs, slimy frogs and slippery logs. Youth enjoy spending time at the pond.

Bottom: Making ice cream, collecting eggs and clipping sheep hooves are all part of the summertime activities.



Youth Camp 2010



*Top: Picking veggies and fruit
Middle: Sun-bathing piggies don't need a blanket. Campers learn to move a cow.
Bottom: Bale-hopping beats video games any day. Kids experience "sheep" thrills moving the herd to a new pasture.*



Announcement

Practical Farmers of Iowa launches endowment In honor of 25th anniversary

by Teresa Opheim

To celebrate Practical Farmers of Iowa's 25th anniversary, the PFI Board of Directors has taken a very fitting action: officially launching an endowment.

The Board took the endowment action at its meeting August 31, 2010. We have now transferred \$100,000 of our reserves into endowment accounts created through the Community Foundation of Greater Des Moines.

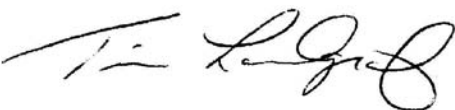


PFI Board President
Tim Landgraf

The PFI endowments will be invested to generate income for Practical Farmers of Iowa. One endowment is called the "Practical Farmers of Iowa Endow Iowa Fund." Donors to this fund receive a significant tax advantage – a 25-percent Endow Iowa tax credit in addition to their normal federal income tax deductions.

The other fund is called the "Practical Farmers of Iowa Endowment." This fund is more flexible on return of the principal, but it does not offer the same tax advantage to donors as the Endow Iowa fund. With this fund, the PFI Board has committed and invested for the future; however, the Board may vote to remove money from this fund for a compelling purpose.

As your representatives on the PFI Board, we are so pleased to make this decision, which will benefit PFI for many years to come!



Tim Landgraf

Q&A PFI Endowment Funds

Q. What is PFI's vision that the endowment will help us realize?

A. Food that is celebrated for its freshness and flavor ... Farms that are prized for their diversity, their wildlife and healthy soils ... Communities alive with diverse connections between farmers and nonfarmers ... Places where the working landscape, the fresh air and the clean water remind us of all that is good about Iowa.

Q. Why is an endowment needed to achieve this vision?

The PFI endowments will create an ongoing source of income to help with operating expenses. They also may provide us a measure of independence from economic, governmental and political forces so we can act quickly on the problems and opportunities that arise.

Q. What problems /opportunities will we face?

A. If only we knew! Some trends that will require a strong PFI: A tremendous farmland turnover – a quarter of Iowa farmland is owned by people over 75 years old – will make it challenging to get new and sustainable farms started. We face a future of escalating energy costs that will severely challenge many farmers. And experts say we will continue to have "weird weather," like the intense rains and high winds many of you experienced this summer.

PFI is absolutely necessary to help lead Iowa agriculture toward a positive future. We have the seasoned farmers with years of experience building resilient farming systems. We have motivated beginning farmers eager to take over the reigns. We have an increasingly committed group of "eaters" searching for connections with farmer. And we have a broad-based membership and talented staff ready to help!

Q. If PFI is effective, why will there be a need for the organization in the future?

A. Farmers will always want to do on-farm research and demonstration – there are always new ideas to try and fellow farmers and farmer friends to meet with and learn

from. The need for the PFI community will continue! We anticipate work for years to come to reach, refine, then reach our vision again.

Q. Why did the Board choose the Community Foundation system for its endowment?

A. The community foundations in Iowa exist to improve Iowans' lives through philanthropy and to keep wealth that is generated in Iowa here to benefit our state and its nonprofit organizations. For more information about the community foundation system, see www.desmoinesfoundation.org.

By working with the community foundation system, PFI has aligned itself with a great deal of expertise in community investment, finance, auditing and legal services.

In addition, a very attractive tax credit is given to donors who give through the community foundation system: a 25 percent tax credit for the donation (in addition to the federal tax credit).

How the tax credit works:

Cash gift amount	\$1,000
Net federal tax savings (Assumes maximum tax bracket)	-\$350
Endow Iowa Tax Credit	-\$250
Net COST of contribution:	\$400

For gifts of appreciated assets, the net cost could be even lower if capital gains taxes and/or alternative minimum taxes are avoided. We encourage you to consult with your tax advisor first to review your individual circumstances. Then contact Teresa Opheim if you'd like to take advantage of this opportunity.

Q. How do I contribute?

A. To contribute to PFI's permanent endowment, simply send a check to PFI made out to "Practical Farmers of Iowa Endow Iowa Fund." PFI will forward your contribution to the Community Foundation of Greater Des Moines, which will send you acknowledgement and paperwork for capturing the 25 percent tax credit (in addition to the federal tax credit).

Runquist reflects on World Food Prize Borlaug-Ruan intership in India



Claire Runquist traveled to Hyderabad, India this past summer as part of her World Food Prize Borlaug-Ruan internship, where she conducted research to help solve India's widespread nutrient deficiencies.

Stepping off the final plane after the 30-hour journey to Hyderabad, India this summer was one of the most surreal experiences of my life. By the time the plane landed, I was sleep deprived and barely remembered why I had traveled to the other side of the world alone in the first place.

As I shuffled dazed toward the exit, I couldn't yet fathom the experiences that awaited me. My summer was full of research and friendship as I explored a foreign city and learned the customs of another culture.

I was part of the research being conducted at AVRDC-RCSA, (The World Vegetable Regional Center for South Asia). The first part of my research was learning about India's malnutrition problem. In India, a significant number of the population suffer from Vitamin A, Iron and Iodine deficiencies.

A big part of my research was working with the home garden projects. This is not a new concept, but AVRDC-RCSA's design has helped to specifically address the malnutrition issues, combats poverty and can work in any environment.

AVRDC-RCSA measures yields from a hectare of land with eight model home gardens for three different areas of India (Hyderabad, Punjab, Jharkand). While I was there, I got to design and plant my own model. By the end of the two months, I was able to harvest amaranth and palak (spinach) from my garden!

The next step was to prepare recipes with all of the vegetables. We basically made traditional Indian recipes modified to be more nutritious and then calculated the nutrition and tested the recipes for taste.

I also surveyed vegetable sellers at Lingampally vegetable market. The vegetable market was similar to our farmers' markets but much more disorganized, dirty and crazy. There were no tables, and most of the sellers did not actually farm. Those who did farm were relegated to the far end of the market, given a smaller amount of space and not treated as well.

As I boarded my return flight, it was hard to say good bye to my newly acquired Indian family. This summer experience was one of the most meaningful of my life, and it will always be a part of me.

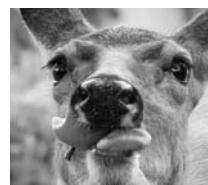
(Continued from pg. 23)

something very similar with long bamboo poles and a bedsheet and looked like a bunch of chickens picking them up."

Kaolin clay, or Surround, has helped solve Maury's plum curculio woes. Surround creates a powdery barrier between the fruit and pest. "The female doesn't like to go through the Surround, it gets all over her." Maury sprays Surround as soon as he gets fruit set, and sprays each week for six to eight weeks. "You can see the Surround on the fruit in the orchard, but they clean up nicely when washed."

Cedar Apple Rust

"This year has been the worst for cedar apple rust," said Maury. The spores from cedar galls affect the leaves. They created a crop failure for variety GoldRush this year in Maury's orchard. Maury did not treat cedar apple rust but heard from other growers who spray sulfur for scab that there was some cedar apple rust control with those applications. "We need to do a research project to explore good control options."



Deer

Wills Orchard's biggest pests are deer. "The deer get up on their hind legs and stand in the tree," said Maury. They have destroyed entire fruit regions. Maury has had some success putting a narrow electric fence on both sides of the tree row. "Deer have poor depth perception. If they try to jump, they are going to jump to the other side."

He has also had success using the 3-D electric fence model, where the middle row is situated outside the top and bottom rows. "The electric fences only work well when the battery's hot and require constant maintenance," said Maury.

Maury purchased an auger and is installing an eight-foot deer fence. He has situated a u-pick area inside the fence. He says, "People can pick easier where the deer haven't removed the bottom branches."

Gary Huber finishes 19 years with PFI

My last day as a PFI employee will be in November. I started working with PFI in October 1991, so I'll have just over 19 years with the organization. It has been a remarkable journey. At the start it was just Rick Exner and me working out of Elwynn Taylor's corner lab in the ISU Agronomy Extension office. Ron Rosmann had written a grant to the Educational Foundation of America for a project aimed at youth in 4-H and high school ag education programs. Rick ran the on-farm research program and I worked on the youth education program, and began to share duties for things like the newsletter and annual conference.



Gary Huber

In 1993, the Kellogg Foundation funded a grant I wrote for the Shared Visions project. It allowed PFI to continue its on-farm research program while adding a set of 15 community-based groups across the state. It was a challenging project that spanned four years, but it helped PFI broaden its influence and bring new people to our group.

Another highlight during my time with PFI was the Field-to-Family project, which was funded by a 1997 USDA Community Food Project grant. When this grant came in, I moved off campus and began working with Robert Karp, who later became PFI's first Executive Director. It was a fun project that included my brokering foods for all-Iowa meals at the ISU Scheman Center. These meals also helped increase awareness of the local foods, which in turn helped set the stage for much of what has happened since.

During the last several years, my work moved into helping niche pork farmers and businesses through the Pork Niche Market Working Group, plus helping develop and launch the Iowa Food Cooperative. Both of these foci have been rewarding and will likely continue to be part of my work. I will also be working on new initiatives to create a vital and durable food and farming system in the Des Moines area. Looking forward, I believe it is imperative that we put in place the people and systems needed to be able to feed ourselves. This is the work I intend to do next.

I want to thank some people. These include Dick and Sharon Thompson for helping start PFI and inspiring us all to do the right thing. Others include Ron Rosmann, Tom Frantzen and Vic Madsen for guiding me and PFI while serving as board presidents during my first years on staff. Robert Karp for his gentle and insightful leadership as a colleague and as PFI's first Executive Director. Rick Exner, who helped PFI establish credibility by being a stickler for good on-farm research trials. Rich Pirog of the Leopold Center for his friendship and help. And Dave Stender, Iowa State University Extension, with whom I've worked closely in recent years on various niche pork topics. These people and others have touched and enriched me.

The future of PFI is bright. Teresa is a capable Executive Director, and the organization is full of good people. If you should want to contact me, use my Iowa Food Cooperative email address (gary@iowafood.org) or call me at 515.450.6812.



Welcome, Ann!

PFI has a new communications director! Ann Seufferer (pronounced CI-pher) started with us October 12 and is busy learning the ropes from Sally. (Sally is now the Director of Next Generation and Horticulture.)

Ann has 23 years experience in designing, editing and writing. She comes to us from Children & Families of Iowa, has owned her own freelance writing and design business, and also has worked for Kragie-Newell Advertising and the Area Education Agency 6. A native of Marshalltown, Ann, her husband and daughter, are gardeners and make first-rate salsa (the PFI staff can attest).

Love is in the air!

Congratulations to the following PFI couples on their recent marriages.

Luke Gran & Sally Hertz

Pete Lammers & Jennifer Filipiak

Chris Corbin & Kim Smith

Daniel Rosmann & Ellen Walsh (Photo)



PFI launches a new website!

Our goal in launching this new website is to make our research, demonstration and activities easily accessible. Please take a look at www.practicalfarmers.org and let Ann (ann@practicalfarmers.org) know what you think.

MCC opens new ag Incubator building

Marshalltown Community College opened the doors for its new ag incubator building. Inside is an office, place for vegetable washing, storage and coolers. This is just the first part of a vision put forth by PFI member and MCC professor Linda Barnes seven years ago to help small entrepreneurial farmers learn, produce and market foods. Next? An incubator kitchen so producers can legally process foods and test recipes before going to a larger food processing facility.



Representative Tom Latham and Sue Martin cut the ribbon.

Grow Your Small Market Farm™ Business Planning Program to be Offered in 2011

A program designed for new or existing market farm businesses will be offered in central Iowa beginning January 2011. Penny Brown Huber, Executive Director, says the program helps agricultural entrepreneurs with business tasks, including writing a business plan, developing financial planning skills and learning about specialty food marketing.

The Grow Your Small Market Farm™ program has three phases and costs \$595 per farm business plan. The first phase is taught weekly on Saturdays, January-April, 9 am to noon. Scholarships will be offered to three people in the amount of \$250 each.



The second phase involves Penny Brown Huber making one-on-one site visits to each farm, between May and October, to help build on the farm planning. And finally, phase three has the participants returning to meet in early December to share their experiences and their future business plans, and to participate in a Grow Your Small Market Farm™ Network Lunch-N-Learn program. The network represents farm businesses with over 325 graduate members.

Participants also will learn to use the QuickBooks Pro small business accounting program, learn to develop targeted business marketing materials and receive individual assistance in creating their business plans.

For more information, visit growmarketfarm.com, or contact Penny Brown Huber at 515.232.1344, penny@growmarketfarm.com.

Join Practical Farmers of Iowa's Fall and winter webinars

Farmers have asked for more learning opportunities in the off-season, and farminars (online seminars, or webinars) are a good vessel for sharing knowledge. You are able to communicate with and hear from others any place there is a computer connected to the Internet. Farminars open up the ability for people worldwide to participate in the meeting, not just those in the vicinity of the speaker. The farminar technology allows audience interaction so bring your questions!

Fall farminars began October 19 and will continue through December 14. The series offers participants a "Fish Bowl" view of a beginning farmer learning from an experienced farmer. Farminars are held Tuesdays from 7 pm-8:30 pm (CST).

Last year 730 people participated in PFI's farminars, and 4000 watched the archived sessions. Did you miss a farminar? All archived farminars

are available online at www.practicalfarmers.org/farminar.

Remaining fall farminars:

- 16-Nov Growing Greens Better
- 30-Nov Setting Marketing Goals
- 14-Dec Financing Niche Pork

Winter farminars commence December 28. Topics include: growing berries better; choosing a legal farm structure; customer relations; and finishing animals on grass. View details for the fall and winter series at www.practicalfarmers.org/farminar.

Farminars are supported by the Beginning Farmer and Rancher Development Program of the National Institute of Food and Agriculture, USDA, Grant # 2010-49400-21843.

Practical Farmers of Iowa presents A CSA Mini School

December 2-3, 2010
Des Moines Y Camp
1192 166th Dr. | Boone, IA

Speakers: Chris Blanchard, Rock Spring Farm, Decorah, IA. Elizabeth Henderson, Peacework Organic Farm, Newark, NY. Rebecca Graff, Fair Share Farm, Kearney, MO

Day 1 is geared toward beginners although all are welcome. Day 2 includes programming relevant to both beginners and seasoned CSA farmers. *(More experienced farmers who do not wish to participate in day one are welcome for dinner and lodging the evening of day one.)*

Housing: Bunk style cabins (lower bunks only) with rest room facilities. Meals provided.

Cost: FREE for members and \$35 for non-members. Register by November 22. Contact Sally Worley, sally@practicalfarmers.org, 515.419.9551.

Details: Available at www.practicalfarmers.org.

Be a proud PFI member!

Casual Cap—\$12 (Item: C-1)

Khaki, Velcro closure, “Healthy Food, Diverse Farms, Vibrant Communities” tagline printed on back

Qty: ____ x \$12 = \$



Colored PFI T-shirt (S-XL) —\$15 (Item: T-2)

Available in gray, orange, and safety green,

Scenic landscape with Practical Farmers of Iowa caption on front of shirt

Qty: ____ x \$15 = \$



Farmer Cap—\$8 (Item: C-2)

Summer style farmer cap with light denim cotton front and mesh back

Qty: ____ x \$8 = \$



King Corn DVD—\$10 (Item: DVD-1)

Learn about the fate of corn—and our food system

Qty: ____ x \$10 = \$



White PFI T-shirt, (S-XL) —\$15 (Item: T-1)

PFI logo on front with tagline on back

Qty: ____ x \$15 = \$



To order your merchandise and show support for Practical Farmers of Iowa, complete this form and mail to: Practical Farmers of Iowa, 137 Lynn Ave., Suite 200, Ames, IA 50014 or fax your order to: 515.232.5649 or call Suzi at: 515.232.5661, x. 301

First Name:

Last Name:

Street Address:

City:

State:

ZIP:

Phone:

Email:

Item No. & Description

Qty. x Price Subtotal

x =
x =
x =
x =

Total:

Plus shipping*:

Grand Total:

*(\$3 for the first item, \$1 for each additional item)

Payment

Select your payment method.

Check payable to: Practical Farmers of Iowa

Credit card

Mastercard

Visa

Card number: _____

Expiration date: _____

Signature: _____

Grow your farm with PFI. Join today!

This annual membership is a:

- new membership
- renewal

My interest in joining PFI is primarily as a:

- farmer/grower
- non-farmer (You will have the opportunity to expand upon this when you receive your membership information form.)

I am joining at the level of:

- Student—\$15
- Individual—\$35
- Farm or Household—\$45
- Organization (including businesses, agencies, not-for-profit groups)—\$75

..... Each membership includes one vote and one subscription to *the Practical Farmer*.

Sustain PFI

For the long-term health and vitality of PFI, we ask you to consider making a donation above and beyond your membership fee.

I would like to make a tax-deductible donation to PFI in the amount of:

- \$1,000
- \$500
- \$250
- \$100
- \$50
- \$_____

JOIN OUR GIFT OF THE MONTH CLUB

The Gift of the Month Club is an easy way to support Practical Farmers of Iowa! Send in your pledge with your credit card information, and we will automatically deduct your donation the first of each month.

YES! I would like to give _____ per month to PFI, to be automatically charged to my credit card the first of the month. (\$10 per month minimum)

Practical Farmers of Iowa is a 501(c) 3 organization. Your gift is tax deductible to the extent allowed by law.

Thank you!

Individual, Farm or Organization Name: _____

Mailing Address: _____

Street: _____

City, State, ZIP: _____

Primary Phone (with area code): _____

Alternate Phone (with area code): _____

Email: _____

* For Farm/Household membership, please list names of persons included.

* For Organization membership, please list one or two contact persons.

Payment:

Total: \$_____ = \$_____ membership + \$_____ donation + \$_____ merchandise (from opposite page)

Check or money order enclosed. (Please make payable to "Practical Farmers of Iowa.")

Credit Card Visa MasterCard

Card Number: _____

Expiration Date: _____ Signature: _____

Healthy Food | Diverse Farms | Vibrant Communities



Practical Farmers of Iowa
137 Lynn Avenue, Suite 200
Ames, IA. 50014

Non-Profit
Organization
U.S. Postage
PAID
Waterloo, IA
Permit No. 901

Our Vision for Iowa



Food that is celebrated
for its freshness
and flavor
and connection
to local farmers
to seasons
to hard work
and good stewardship



Farms that are prized
for their diversity
of crops and livestock
their wildlife and healthy soils
their innovations, beauty and productivity
their connection to a rich past
and a fulfilling present
where individuals and families
are earning a good living



Communities that are alive
with diverse connections
between farmers and non-farmers;
places where commerce, cooperation, creativity
and spirituality are thriving;
places where the working landscape, the fresh air
and the clear water remind us of all that is good about Iowa

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