the Practical Farmer

Practical Farmers of Iowa Newsletter

Vol. 13, #4
Winter 1999

Spring Jump-starts with Strong Winter Workshops

A positive twitch spreads across Iowa as PFI district meetings get underway this season and everyone gets psyched for spring. One source is the Winter Workshops and Annual Meeting held at the Gateway Holiday Inn in Ames on January 8 and 9, 1999. Subzero temperatures and blowing snow did not deter over 250 people from attending. You'll find many pages of this newsletter dedicated to summaries of the speakers and workshops. It's nothing like the real thing, but it's our best shot at transmitting the positive experiences to those who couldn't make it. We'll hit the highlights for you here.

Friday night was a blast! Toe tapping music from the Pretty Good Band drew a crowd of all ages to the dance floor. Others sat back and indulged in ice cream sundaes and catching up with old friends. Friday was also an opportunity to take care of meeting registration business without standing in line.

Dick Thompson presents the Sustainable Ag Achievement Award to Ann Wallace Fleming, accepting for her cousin Jean Wallace Douglas.

Saturday's meeting began with a welcome from PFI President Dave Lubben, followed by the presentation of the Sustainable Agriculture Achievement Award. The award went to Jean Wallace Douglas. (Check your fall edition of this newsletter, page 4, for a tribute to Jean.) Ann Wallace Fleming accepted the award on behalf of her cousin, Jean.

IN THIS ISSUE

Loren Kruse, editor in chief of **Successful Farming** magazine, delivered the first keynote address, "Growing More Joy in the Farming Business". Loren said "As farmers you are confronted everyday with changes and choices. Doing something different to lift yourself up and your farm or community to a new level requires a lot of courage. There will be thousands of people – especially your neighbors – who will give you a thousand reasons why a new idea won't work. As you consider risk and doing something different for the betterment of your farms and communities, I like the simple advice from the motto of the Special Olympics for the Handicapped. It goes like this " Lord, let me win; but if I cannot win, let me be brave in the attempt." (If you'd like the full text of Loren Kruse's speech, contact Nan in the PFI office. She'll mail you a copy.)

"Spirit of Place, the Meaning and Practice of Regional Reliance" was the theme of Odessa Piper's speech. Odessa, chef at L'Etoile Restaurant, was there to remind us that we are raising not just commodities, but food. (See p. 3.) As conference planners anticipated, Odessa was both dynamic and down to earth, passionate but practical. Odessa framed her remarks around an imaginary menu. She certainly whet listeners' appetites for the very real buffet that followed her keynote.

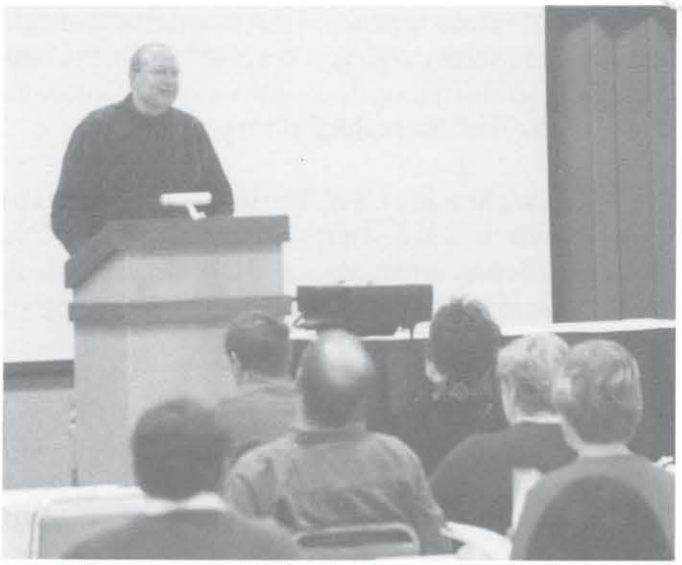
By the culinary skill of the Holiday Inn kitchen and the grace of the hotel staff, two hundred and fifty diners enjoyed the lunch. The menu featured meat and produce from four PFI enterprises: pork from Vic and Cindy Madsen, Audubon; poultry from Deanna and Dean Hansen, Audubon; squash from Jan Libbey and Tim Landgraff, Kanawha; and carrots from Gary and Nancy Guthrie, Nevada. The meal got rave reviews. Special thanks go to the Leopold Center for grant money that covered the expenses for Odessa Piper, and helped subsidize the added costs that went into assembling the meal using local sources. Also thanks to PFI staff members Gary Huber and Robert Karp who delivered the leftovers to the local food shelter. We know that Odessa would smile on that.

At the PFI business meeting, Executive Vice President and Treasurer Dick Thompson updated members on PFI's financial picture. This included the initiation of a fund raising campaign to support an endowment to protect PFI's future. (See endowment p. 8.)

Members then adjourned to district meetings to plan additional gatherings and elect new board members. Here are the results: In District 1, Northwest, Ken Wise replaces Paul Mugge; in District 2, North Central, Ron Brunk replaces Doug Alert; in District 3, Northeast, Walt Ebert replaces Dan Specht; in District 4, Southwest, Steve Williams replaces Barney Bahrenfuse. (You can look forward to finding out more about these new board members in future newsletters.)

Meanwhile and at all points in between, the conversations were nonstop in the hallways, around the corners, in front of the posters and displays. The only thing competing with participants' attention was the workshops themselves – sixteen of them! Summaries written by PFI members follow, starting on page 16.

We hope that the positive energy you produced and tapped into at the Winter Workshops and Annual Meeting will add a little zest to your spring. Mark your calendar now for another opportunity – we'll do it again in January, 2000!



Loren Kruse promotes joy in the farming business. Copies of his remarks are available from the PFI office.

Summaries of all the workshops begin on page16. For video tapes, see page 6.

Spirit of Place: the Meaning and Practice of Regional Reliance
Odessa Piper's Keynote Talk

by Gary Huber

Odessa Piper is chef and owner of L'Etoile, a restaurant in Madison, Wisconsin. She started L'Etoile in 1976 and from the beginning sought to purchase foods from local farmers. Her talk at PFI's annual meeting was instructive. It was also an impassioned case for local foods as a means to care for the land and support healthy communities.

L'Etoile is a 50-seat fine-dining restaurant in the upstairs of a building on the square of the capitol in Madison, Wisconsin. The menu is seasonal, changing monthly based on the availability of foods. During the summer they have access to the finest fresh vegetables available anywhere, with the Dane County Farmers Market right across the street. "We forged an interdependence," said Odessa.

In the winter, the challenges are greater, leading to things like using summer vegetables "put up in the peak of the growing season so we would have them on hand to serve in the winter." Seventy percent of the fruits and vegetables are still sourced locally in the winter.

Odessa described her early experiences by saying, "Back then trying to source locally was a little bit like trying to build a boat while learning to sail it while actually still getting some of the beams in place to support it while bailing constantly to keep from drowning. It led to the creativity of necessity, and the key was the interdependence with the farmers. I needed these farmers for their crops and they needed us for an income."

Her experiences with meats is instructive. She decided in 1980 to find a source for meat that was an alternative to factory beef and hogs. She found there were farmers who had whole animals, and so she bought one from an Amish family. She went on to describe what happened next. "When I picked up the animal at the locker, it was so much meat, it was huge. So I got hold of my colleagues in Madison and suggested we do something collaboratively. We figured out what each could use of these animals, and then we started to figure out how to use the whole animal."

Asked to put a boundary on regional reliance, chef Odessa Piper responded, "As far as the heart can reach."

Learning to use the whole animal may sound familiar to farmers who are trying to create markets for their beef and pork. On this need, there is agreement from Odessa, who noted, "it's really the next step to get this to be sustainable - using the whole animal."

L'Etoile now uses naturally-raised, local meats thirty percent of the time, and "when we do, we put their names on the menu." She also went on to say, "We are a gourmet restaurant, and what people are experiencing is special. We don't clobber them with the local food."

There is clearly a need at restaurants such as L'Etoile for meats that are of consistently high quality and that are raised in sustainable ways. As well, these meats need to get to these restaurants at costs that will allow them to stay in business. As Odessa noted, "This is the practical part - I've got to stay in business."

This relates to a key need identified by Odessa, "Infrastructure, infrastructure, infrastructure - the middlemen, distributors, processors. We need to create the infrastructure to bring about this revolution." She also noted that this infrastructure must be paid for as it is developed, which adds additional costs. She provided an example by noting that in 1993 she could afford to hire a forager who looked for what they needed.

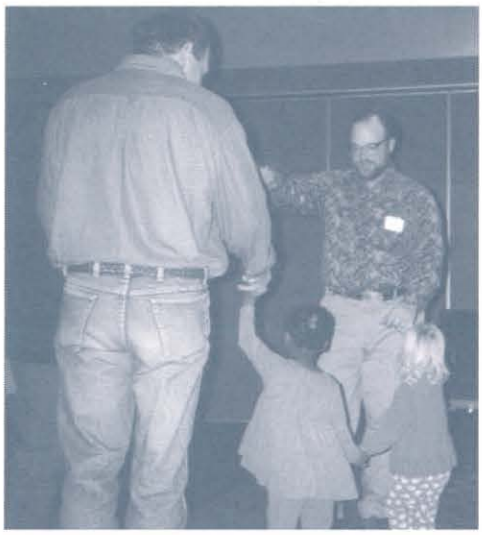
The dilemma on prices being faced by L'Etoile is similar to one being faced by CSAs, which is that the costs of the foods are often beyond what many people

(Odessa Piper continued on page 6.)

Virginia Wadsley, Colin Wilson, and Pernell Plath – open for business.

The Pretty Good Band outshined its name.

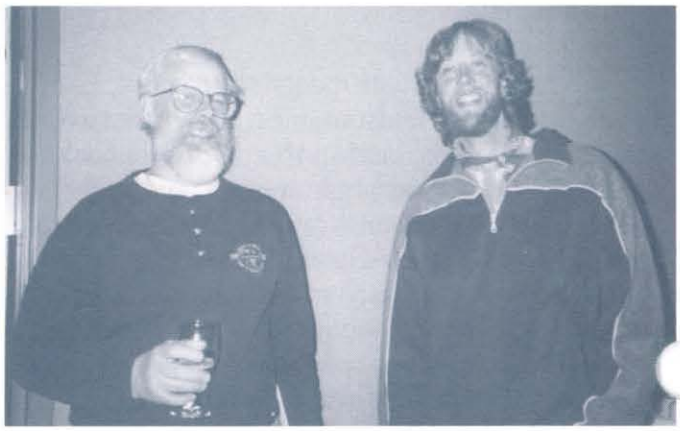
Friday Night Festivities



Some girls just go for older guys.

The dance floor was the place to be Friday night.

Deb Cooper, PFI volunteer of the year, welcomes district two member, Don Adams.



Veterinarian, Dr. Randy Kidd, with district 3 board member, Mike Natvig.

Saturday Snaps

Gary Guthrie and Sue Jarnagin enjoy the poster break.

Mardi Mellon, Union of Concerned Scientists, and Don Duvick, formerly of Pioneer, ponder seeds of the future.

Happy campers return from a day at Hantesa.

Dean and Deanna Hansen, Larry Cleverley (back), and others at Southwest district meeting.

Deb Tidwell, Jeff Klinge, and Michael Nash at Northeast district meeting.

"...our voluntary commitment to seasonality and locality provides the agricultural solution that is intrinsic to our culture and our agriculture."

(Odessa Piper continued from page 3.)

can afford. This leads to a tension between costs and access to food. Odessa said they were dealing with this tension by planning to add a restaurant area at the street-level area of the building with the current restaurant.

Odessa described some "centrally key plateaus" in her work. One involved how she came to understand the importance of "the incredible wisdom of the land, its incredible power to grow and provide." She told of a trip where prayer was combined with meals of local foods, which led to a revelation about her work. This revelation was the connection between a spiritual dimension of a relationship to the land with the realization that all the great cuisines of the world are regional. The result is that, "When we buy we are so intentional - we are celebrating that place."

Odessa noted another centrally key plateau in her description of a relationship with one of her main growers, Harmony Valley Farm. She noted that they have high quality and diversity in their products, and they were good business people as well. But she said it went deeper, and her relationship with Harmony Valley Farms has led her to redefine food as something other than a commodity. Rather, food forms the center of a symbiotic relationship between the farm and the restaurant that leads a new conception of profit as abundance.

"Our reliance on friendship means profits are about long term relationships. This has led me to redefine profits as abundance. At the time my restaurant was fifteen years old, and most restaurants don't last that long. Our friendship, and knowing that profit is not about short term bottom line but about long term relationships, is sustaining us."

Odessa's talk showed the importance and significance of local sourcing and regional reliance, especially in terms of the health of our farms and communities. She also connected regional food systems with global concerns, including her statement that "The

U.S. has enormous responsibility in food quality assurance for our food in the future. We can do the right thing or we can do the wrong thing."

In summary, Odessa said, "Our region's mission is to demonstrate to others that we can be regionally reliant, and that regional reliance is fundamental to sustainable food choices, and our voluntary commitment to seasonality and locality provides the agricultural solution that is intrinsic to our culture and our agriculture."

Postscript: On a recent trip to Wisconsin, I had the pleasure of eating at L'Etoile. The food was superb, and I saw how Odessa was "walking the talk." There was a bulletin board in the kitchen with photographs from the farms they had visited to source their foods. There was a map on the wall that should the locations of their sources, each labeled with the name of the farm. The menu and the descriptions provided of the food by the waiter also made mention of the sources.

Can I get a Winter Meeting video ?

Thanks to volunteer talents and hours from PFI members Jeff Olson and Sue Jarnagin, the answer is yes. These home video quality tapes are available for $13 each which includes postage. The six hour tape covers: Loren Kruse, Odessa Piper, ag award, and selections from workshops on soil quality & weeds, GMOs, seeds of the future, and local food systems for regional reliance. Call Sue Jarnagin 515- 292-6802 to place an order.

COOPERATORS MEET AND PLAN RESEARCH

Rick Exner, Farming Systems Coordinator

As February weather goes, it was tolerable, but the talk inside the Starlite Best Western was of spring just around the corner. Thirty-one cooperators met for a day-and-a-half for workshops, socializing, and planning the 1999 on-farm research and field days. The total number of cooperators this year will approach 40, a new high. Where are these new faces coming from? Several new projects are bringing them in; a couple of new PFI board members also found themselves in the research game this year.

Farm Bureau Funds Expansion

The Iowa Farm Bureau recently funded a $20,000 proposal from PFI to expand the number of collaborating farms in the research network. At least eight cooperators identified through the IFB will take part in research and field days. This includes four new cooperators and four IFB collaborating farms from 1998.

Fertility Project Gets Under Way

The SARE (Sustainable Agriculture Research and Education) program of the USDA has funded a $59,000 proposal from PFI for a two-year study of soil fertility philosophies. What philosophies – how do you study a philosophy? The two major philosophies or "paradigms" in sustainable agriculture are based on "sufficiency" and "ratio." The sufficiency approach asks "Is there *enough*?" of whatever crop nutrient that crop growth will not be limited. The ratio approach asks whether the nutrients in the soil are present in the appropriate proportions, or ratios. The sufficiency paradigm is held by most schools of agriculture, including all state agricultural institutions in the U.S. The ratio approach is taken by many private consultants and used by many organic and sustainable farmers.

This project aims to begin a process of communication among adherents of these different schools of thought. Project collaborators are: Kathleen Delate, ISU Organic Specialist; Doug Karlen, a soil scientist with the National Soil Tilth Lab; Keith Cuvelier, a private crop consultant; and PFI/ISU Extension Farming Systems Coordinator Rick Exner. Side-by-side comparisons will take place on six farms and two ISU research farms, beginning in 1999.

Marion Moser shows a planter adapted for vegetable seeds.

Oats on the Horizon

Fortified by a Fund for Rural America grant, the Wisconsin-based Michael Fields Agricultural Institute and consultant Ron Doetch are expanding their efforts to bring small grains back into the mainstream of Midwest agriculture. PFI board member Walt Ebert (319-276-4444) is coordinating farmers in the northeast quadrant of Iowa who want to market oats together through Doetch. Look for some "oats cooperators" this summer.

Veggie Production Evolving

Jan Libbey and Tim Landgraf, Kanawha, join the PFI cooperators involved in market gardening. Jan will be the lead tester for an analysis model for vegetable producers growing for CSAs (community-supported agriculture projects). The veggie growers are interested to see if this approach can help them better match their efforts to the needs of their CSA subscribers. Also look for more ergonomic-type info from Marcia Miquelon. She spoke at the INCA Winter Meeting on efficient designs for veggie production and handling. Marcia hopes to make an appearance at a field day this summer as well.

Hoopin' with Swine

Throughout 1998, a number of PFI cooperators with hoophouse swine systems tracked labor and productivity, working with ISU Extension Economist

Michael Duffy. This effort continues, but a picture is now emerging. PFI field days in 1999 will showcase a variety of deep-bedded swine systems and discuss what the research is revealing.

Deep-bedded systems also produce quantities of mixed bedding and manure that can be either an asset or a liability to crop production. Working with ISU agronomists Tom Richard, Matt Liebman, and Cindy Cambardella, PFI cooperators will study the best ways to handle the bedding/manure to optimize nutrient availability and minimize labor involved in composting.

Details Coming

In June, newsletter recipients will get the 1999 field day guide, listing locations and describing the farms and trials planned. PFI field days are consistently rated highly by farmers attending. In surveys, the majority say the field days they attend are useful to them in making changes in farming practices. Don't miss the opportunity to see some of the most creative farming in the state. And spread the word; take along a neighbor to a PFI field day this summer!

Board Establishes Endowment to Assure PFI's Future

by Gary Huber

Editor's note: This item first appeared in the program for the 1998 Winter Workshops and Annual Meeting available at the Ames event in January, 1999.

Practical Farmers of Iowa has been fortunate. We began in 1985 without outside support, and two years later a gift from Jean Wallace Douglas helped start our on-farm research network. Since then we've worked for profitable and ecologically-sound farming systems with grants totaling over $2 million from such notable sources as the W.K. Kellogg Foundation. This work has been good work, leading PFI to be recognized nationally as "the premier farmer driven research organization in sustainable agriculture."

Even though PFI has prospered, operating with grants is a feast or famine existence. Realizing this, the Board of Directors has started work to secure a stable financial future for PFI. This is important work, so the Board wants members to know our plans.

Even though PFI has prospered, operating with grants is a feast or famine existence.

PFI's annual budget has been just over $200,000 for the last four years. About half of that supports the on-farm research network. A substantial portion has gone to the community-based work of Shared Visions and its successor, the Field to Family Project. Core organization functions, like the newsletter and meeting expenses, make up the remainder.

These core functions are what the Board wants to support without having to rely on grants. The reason is simple: grants for basic organizational operations are hard to get. Funders typically support programs, not the infrastructure that makes an organization possible. Other funding sources are needed.

A reasonable total needed year in and year out for basic PFI operations is about $75,000. This much money would support supplies, accounting expenses, the newsletter, member mailings and directory, phone bills, annual and district meeting expenses, and part-time staff.

The long range plan for covering these needs involves creating an endowment, which we've already begun work on with the help of the ISU Achievement Foundation. The endowment fund will earn interest. The interest will pay these operational bills. The key to success is securing gifts to this growth fund. A generous major first gift has come from Jean Wallace Douglas. PFI board members have each pledged to this fund. And other PFI members have made donations above their memberships.

From this beginning, we will start working in a more concerted way for additional donations. This effort will likely include continued help from the ISU Foundation. Their staff can guide us in new approaches, such as charitable estate planning. We will also ask you for help and donations as the effort proceeds. If you have skills, ideas, time, or money to help in this important effort to assure a future for PFI, please call Dick Thompson at 515-432-1560 or Gary Huber at 515-232-7162. You can expect to hear more about this work as we proceed.

The Editor Muses

Two months ago the PFI staff rolled out of the Gateway Holiday Inn and back onto campus loaded with boxes galore, audiovisual equipment, checks, receipts, evaluations, even toys from the childcare suite, and various bits of jetsam from the Annual Meeting. Phew! That was Monday, January 11. The same day we proceeded to pack up still more boxes. We had no time to recover and three days to move to our new office in 2303 Agronomy Hall. Don't worry, our mailing address and phone numbers haven't changed. But if you come to visit, you'll find us on higher ground with about half as much elbow room.

It's a room with a view. From my work space I can keep tabs on trees, students, and squirrels in a corner of Agronomy Hall courtyard, all of which are displaying intermittent signs of spring. Looks like this winter newsletter is going to bump right into another equinox.

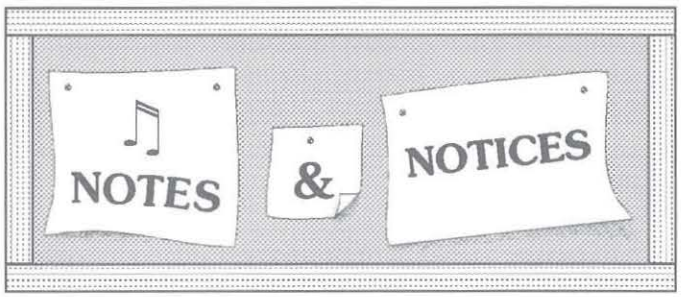
We know that our readers haven't been gathering moss either, and it's on to bigger and better things. For PFI that includes cooperators' meetings, district meetings, holistic management training, women's winter gathering, swine conferences, and field day planning. This just seems to be the time of year for farmers going to meetings.

I want to thank all the members whose energy and enthusiasm made the Annual Meeting such a worthwhile venture. As you go forward, watch out for folks who you think would make a good contribution to next year's annual meeting. It's not too early to be thinking about the program and speakers for January 2000. After all, deadlines amuse me.

Cheers!
Nan Bonfils
P.S. Next newsletter deadline is May 14, 1999.

Spring Cleaning Begins This could be your last newsletter.

We've already started spring cleaning on the PFI membership roster. As we go to press, we have over 600 folks on our list, but over 150 of you are behind in renewing memberships. Written reminders went out last September. Your district board members sent you another letter recently. Perhaps you've received a phone call for one last gentle reminder. If you're still not sure who you are, check the mailing label on this newsletter. A "LAST CHANCE" indicates that you are in danger of being removed from the list, which means that this is your last newsletter. Lost all the paperwork? Call Nan at the PFI office 515-294-8512 and she'll set you up for renewal. If your check is already in the mail, we apologize.



Swine Options Conference Draws Crowd

More than three hundred people attended the February 17 *Swine Systems Options Conference* to hear the latest from farmers and scientists working with deep-bedded hog production. The meeting, organized with leadership from the Leopold Center for Sustainable Agriculture, featured a lunch menu containing Iowa-grown products, including hoophouse pork from Audubon Family Farms. Practical Farmers of Iowa was a co-sponsor, and a number of PFI members appeared on the program. Highlights of the conference will be sent to attendees and will be available through the sponsoring organizations. Frequently requested, proceedings of the previous conference on the topic are still available.

Photographer Michael Ableman to speak at UNI Campus

The University of Northern Iowa Museum has received a grant from the Leopold Center for Sustainable Agriculture to bring acclaimed author and photographer Michael Ableman to Cedar Falls, Iowa on March 30, 1999. Ableman will discuss issues related to sustainable agriculture and local food production. The slide presentation will take place at Sabin Hall Room 102 on the UNI Campus at 7:00 P.M. There is no admission charge.

Ableman is the founder of the Center for Urban Agriculture at Fairview Gardens, one of the oldest and most diverse organic farms in southern California. Fairview Gardens produces some 100 varieties of fruits and vegetables, as well as fresh eggs and cheese, on its fertile 12 acres that have been surrounded by urban development. Through education and community outreach, Ableman believes people can become more involved in their own food sources, through programs like community supported agriculture (CSA's) and local food buying. Ableman stresses that people need to know about "the connection between the field and the plate."

Ableman's work, a photographic display of over 60 images taken around the world, documents the diversity in agriculture and attitudes of many cultures. The exhibit *From the Good Earth* is currently on display at the University Museum now through June 20, 1999. For more information, call 319-273-2188.

Pesticide Decision Tool

When you choose herbicides or insecticides, are cost and effectiveness your only criteria? Or do you also consider the materials' environmental behavior? There is a new tool available to help you factor in the toxicity, mobility and persistence of pesticides in your fields. It is the Pesticide Decision Tool (PDT), promoted by the Institute for Agriculture and Trade Policy. John Vickery of the IATP is looking for PFI farmers to test-drive the PDT.

The PDT is a set of documents including: a user guide; reference tables for pesticide selection and management; tables of soil types and their ratings; a soil-pesticide interaction worksheet; and forms for listing data for each field on the farm. If you have access to the Internet, the PDT will show you how to download a computerized version produced by the USDA. For more information on the PDT, contact Extension/PFI coordinator Rick Exner (515-294-5486) or John Vickery (612-870-3430, jvickery@iatp.org).

Loading Hay, Sicily, 1988 by Michael Ableman on exhibit now at the University of Northern Iowa Museum

SARE Producer Research and Education Grants

The North Central Region of the USDA SARE program (Sustainable Agriculture Research and Education) has allocated $225,000 for grants to farmers and ranchers in 1999 and another $25,000 specifically for producer agroforestry projects. Grants are available to producers on a competitive basis – up to $5,000 for individuals and up to $15,000 for groups of three or more separate operations.

A number of PFI farmers have obtained SARE grants to answer questions from grazing to weeds to hazelnuts. To quote the SARE bulletin: *Producers are invited to submit proposals that test, evaluate, and adapt sustainable agriculture practices for their operations; conduct learning circles, educational events, field days or demonstrations to further disseminate information to producers; develop new marketing strategies; develop new technologies; or create or modify equipment. Applicants must identify specific problems and potential solutions to those problems.*

Grant applications must be received by the SARE office in Lincoln, Nebraska by April 30. If you are thinking of submit-

ting a proposal, the SARE folks ask that you call them at 402-472-7081.

New SARE Publication on the Benefits of Diversified Crops

Diversify Crops to Boost Profits and Stewardship provides a brief overview of different ways to diversify agricultural crops, from mixing new crops into a rotation to working trees and cover crops into the farming system. This 12-page publication is available at no cost from the ISU Extension Sustainable Agriculture Program, or it can be viewed on-line at www.sare.org/san/htdocs/pubs/

PFI Summer Camp 1999

Plans are brewing for another excellent summer camp experience for PFI kids and families. Once again Shelly Gradwell is taking on leadership with help from past PFI campers Frances, George, and Reuben Zacharakis-Jutz. They have fresh ideas for themes and programs. The NEW location is YMCA Camp north of Boone, Iowa. Mark these dates on your calendar: Friday, June 4th to Sunday June 6th. (Teen counselor and assistant staff leadership camp will be held June 3-4.) Please call right away and let Shelly know if you have a school conflict with any of these dates. Direct any questions or comments to Shelly Gradwell at 515-294-0887 or shellyg@agron.iastate.edu.

Expo 99 Creating a Thriving Iowa Agriculture

Vision 2020 has organized a day for producers, suppliers, and just about anyone with a stake in Iowa's agricultural future to attend an expo at Scheman Conference Center in Ames on Thursday, June 17. For more information call 515-294-2092 or email kklind@iastate.edu.

Creative Volunteer Needed for PFI Website

PFI Website? You mean there is a PFI website? Actually, yes. But we don't talk about it too much because it's in sad shape. In fact, parts of it are so inaccurate that we're contemplating pulling the plug. Yes, we know it's an important, modern communication tool, a wonderful resource. What a great way to let thousands of people know what we're up to. It could make a world of difference in attracting new members or endowment gifts. And it would actually be fun to work on, if only we had the time. Can someone help us out?

We'll supply you with all the photos and text you need, give you a few guidelines for layout and then get out of your way. Presently the only way to do this is for someone to come in and work in the PFI office in Ames. You'd be doing the organization a tremendous service. Call Rick Exner at 515-294-5486 for additional conversation.

Composting Workshop in October

All-day on-farm composting workshop on October 27, 1999 in Cedar Rapids. The workshop will help you get from fresh manure, animal mortalities, and crop residues to the finished product and show you how to use it effectively on vegetables and crops. $15 registration fee includes materials. Co-sponsored by the Leopold Center For Sustainable Agriculture, the Iowa Recycling Association, BioCycle, and Iowa State University. For more information contact Garth Frable of the Iowa Recycling Association at (515) 265-1596, Frable3r@aol.com.

Women's Winter Gathering

By Linda Nash, Postville

On February 13 and 14, eighteen women gathered in Boone, Iowa, for the fourth annual PFI Women's Winter Retreat. We came from all over the state, from the towns of Ames, Audubon, Cedar Rapids, Decorah, Des Moines, Earlham, Garrison, Grinnell, Iowa City, Madrid, Mingo, and Postville. Women from twenty-something to sixty-something and every age in between came together to share their ideas and dreams and sorrows and failures, in a quiet, relaxed, and most importantly, supportive atmosphere among other women who care about the many issues facing agriculture in today's world. There was a mix of growers and non-growers, of food professionals and food consumers, of experienced farmers and those just starting out, and everyone got a chance to get to know each other and talk about anything and everything.

"...despite overwhelming odds, the cows lived, (as did children and husband)... I must do it again." Cyndy Hyde, winter retreat participant

The conference took place at the Scenic Valley Conference Center outside Boone, a place we all appreciated for its beautiful fireplace and wonderful meals (thanks for the vegetarian option!). Nan Bonfils directed an opening writing exercise to help us get acquainted, and then Virginia Wadsley led a discussion about the recent PFI Women's Survey. There were many responses to the request for information, from all over the state. Virginia presented a map showing where in the state the responses came from, and discussed some of the issues raised by women who sent back the survey. Further discussion followed on how to use the information gathered and how to further extend outreach to the women who sent in a survey. Suggestions included some possible new columns for the newsletter and possible new formats for the directory, to help us all better reach out to each other and share information.

We had time before dinner for a "book talk," during which the participants each discussed a book they had recently read and especially enjoyed. The books were then left out for review on an information table, which also had brochures and other information women brought to share with each other.

Kate Hogg leaves the winter gathering with a goodie bag from the massage therapist. Kate volunteered to organize next year's retreat. You are welcome to call her with your ideas and suggestions. 319-896-4396. Thanks, Kate!

Licensed massage therapist, Kathy Jones, works a few kinks out of Diane Mayerfeld. Donna Bauer, Linda Nash, and Deanna Hansen look on at the women's retreat. Yes, that is a rolling pin!

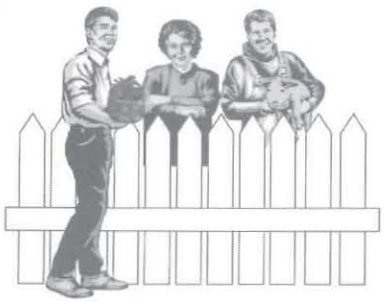
The high point of the retreat for many of us was the evening program of "Circles of Stories." During this circle, each of us took time to talk about our lives, sharing issues that we were involved in and what had happened with us recently. Many questions followed each "story," as we sat around the fireplace and drank our tea and hot chocolate, and we pondered the many common threads that ran through our stories – our desires for better lives for our families and a better environment for us all to live in. Many of the stories were about farms and farming practices, and all were about our lives as women in today's often rough and tumble world. We talked well into the night and fell asleep with many ideas running through our minds.

We enjoyed home-canned pears and cherries for a light breakfast Sunday morning, and then went straight into a business meeting, during which ideas and plans for the coming year were discussed. The next Women's Retreat was tentatively planned for February 2000 at the Prairie Woods Retreat Center in Cedar Rapids. Since Kate Hogg is from there and familiar with the facility, she will check on possible dates and on possible programs that Prairie Woods might be able to present for us, including a nature walk on their trails. The retreat will again be planned as a time to get together to both relax and learn – not necessarily in that order! Also discussed was a possible invitation to new Secretary of Agriculture Patty Judge to the PFI Annual Meeting and the next Women's Retreat. The women felt that she needs to hear our ideas and concerns, and that she might be more receptive in a more casual environment for discussion.

After a yummy Sunday brunch, we were fortunate to conclude our meeting with a presentation by licensed massage therapist Kathy Jones, from Atlantic, Iowa. She gave us ideas for stress reduction (not that any of us needed that!) and pressure points to use to help relieve headaches and other physical symptoms of stress. She was a wonderful speaker and shared a wealth of information before sending us on our way with a goody bag of massage oil, massage cream, and chamomile flowers. She graciously stayed after her talk to give short massages to those who could stay – many of us took advantage of her generous offer and enjoyed a relaxing moment before driving home to our families.

The whole retreat program was relaxed and yet informative and thought provoking all the way through. Thank you to Nan Bonfils for coordinating the site and the program – this event is highly recommended as a very special time for women to get away and get together.

Editor's note: The time and talents of the licensed massage therapist were made by possible by an anonymous gift. Many thanks to our unnamed benefactor who can rest assured that the gift was deeply appreciated.



Over the Back Fence

by Nan Bonfils

So many good things are happening among the women of PFI these days. There's been a strong, expressive response to the survey sent out last fall – so expressive that it's a challenge to collate results. (But volunteers **are** working on it. Want to help?) Gender balance at the annual meeting appears to be evening out. Turnout at the women's winter gathering (see Linda Nash's article p. 11) has about doubled from a year ago. As one woman wrote, there's "such a positive, constructive, can do attitude...PFI women are demonstrating inclusiveness and mutual support".

Like good neighbors, how ever far apart they may live, PFI women are ready to tackle the problems they bring to each other's attention. To that end, they have directed me to establish a feature in this newsletter that will be like a helping hand extended. (I'm delighted to make it happen.) This idea came out of discussions at the women's winter gathering as well as the larger annual meeting. In keeping with the group's intentions, this new feature, named tentatively "Over the Back Fence", appears here in the body of the newsletter; it is NOT designed specifically for women's voices. Rather it is a place to solve problems– just what you'd expect of a practical farmer, regardless of gender.

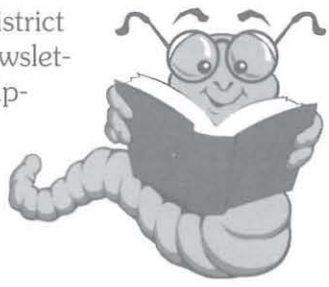
Like good neighbors, how ever far apart they may live, PFI women are ready to tackle the problems they bring to each other's attention.

So here's the first problem. How can we arrange overnight accommodations so that more PFI families can attend the annual meeting without facing a hefty hotel tab? Several women in the Ames area offered their homes as places to stay.

(Back Fence continued on page 16.)

PFI LIBRARY UPDATE

The next two pages present a sampling of resources from the PFI district lending libraries. This newsletter covers the topics: equipment, grazing & pastures, pest control, grains, and miscellaneous. Contacts for the district libraries are:



Northwest	Paul Mugge	712-446-2414
North-Central	Doug Alert	515-456-4328
Northeast	Mike Natvig	319-569-8358
Southwest	Barney Bahrenfuse	515-236-4566
Southeast	Jeff Olson	319-257-6967
Stonecypher	Ray Stonecypher	515-398-2417

PFI Library Holdings: Equipment, Grazing & Pasture, and Pest Control			
Topic	**Title**	**Author/Publisher**	**Library**
Equipment	Agricultural Equipment Operator Safety Series (video)	ISU	Southeast
Equipment	Behavioral Methods for Accident Prevention (video)	Behavioral Science Technology, Inc	Southeast
Equipment	Encyclopedia of Tractors	Wendel, C.H.	Northeast
Equipment	Farm and Ranch Electrical Safety (video)	WA State Univ Ext	Southeast
Equipment	Farm Inventions in the Making of America	Johnson, Paul C.	Northeast
Equipment	Farm Power in the Making of America	Johnson, Paul C.	Northeast
Equipment	Power Fencing (video)	Galagher	Northeast
Grazing & Pasture	Dollars and Sense: Handbook for Seasonal Grass Dairying	Tranel	Stonecypher
Grazing & Pasture	Forage Management in the North	Smith	Southwest
Grazing & Pasture	Forages	Heath, Metcalfe, and Barnes	Northeast
Grazing & Pasture	Grass Productivity	Voisin	Northeast
Grazing & Pasture	Grass Productivity	Voisin	Stonecypher
Grazing & Pasture	Greener Pastures	Murphy	Northeast
Grazing & Pasture	Intensive Grazing Management	Smith	Northeast
Grazing & Pasture	Intensive Grazing Management	Smith	Stonecypher
Grazing & Pasture	Intro to Rotational Grazing (video)	DATCP Sustainable Agriculture Program	Northeast
Grazing & Pasture	Native Grasses, Legumes, and Forbs	Phillips Petroleum	Northeast
Grazing & Pasture	Pasture Poultry (video and book)	Salatin, Joel	Northeast
Grazing & Pasture	Pasture Primer (video)	Pratt and Ingram	Northeast
Grazing & Pasture	Pasture Profits with Stocker Cattle	Nation, Allan	Northeast
Grazing & Pasture	Pastured Poultry Manual	Salatin, Joel	Northeast
Grazing & Pasture	Pastures for Profit: A Guide to Rotational Grazing	Univ. of Wisconsin	Northeast
Grazing & Pasture	Quality Pasture	Nation, Allan	Northeast
Grazing & Pasture	Voisin Video #1	Murphy	Northeast
Pest Conrol	Avoiding the Storage of Unwanted and Unusable Pesticides (video)	ISU	Southeast
Pest Control	Breaking the Pesticide Habit, Alternatives to 12 Hazardous Pesticides	Gips	Southeast
Pest Control	Entomology and Pest Management	Pedigo	Southeast
Pest Control	Moving Toward Sustainability (video) Pest Management	ISU Extension	Southeast
Pest Control	The End of Corn Rootworm	New Farm	Northwest

PFI Library Holdings: Grains and Miscellaneous Topics

Topic	Title	Author/Publisher	Library
Grains	A Guide to Quality Oat Production	MN Ext.	North Central
Grains	The Miracle of Corn (video)	ISU MRC	Southeast
Misc	20 Questions About the Amish	Good, M	Northeast
Misc	50 Farming Techniques from the Americas	White, Richard	Northwest
Misc	Amish Horsefarming Across America	Zielinski	Northeast
Misc	Amish Houses and Barns	Scott	Northeast
Misc	Cradled by the Hand of God (video)	Nat Catholic Rural Life Conference	Northeast
Misc	Everyone a Teacher. Everyone a Learner	SARE	Northwest
Misc	IFM Demonstration Program, 1991	ISU	Northwest
Misc	Leopold Center Progress Report - 89, 92, 93, 94, 95, 96, 97, 98	Leopold Center for Sustainable Ag.	Northwest
Misc	Native American Testimony	Nabokov	Northeast
Misc	Organic Farming	Nicholas Lampkin	Northwest
Misc	Organic Field Crop Handbook	Canadian Organic Growers	Northwest
Misc	PFI Annual membership Meeting - 89, 90, 91, 92, 93, 94, 95, 96, 97, 98	Practical Farmers of Iowa	Northwest
Misc	Plant Relations	Coulter	Northeast
Misc	Plants: What They Are and What They Do	Seward, A.C.	Northeast
Misc	Prairies, Forests, and Wetlands	Thompson, Janette	Northeast
Misc	Report and Recommendations on Organic Farming	USDA	North Central
Misc	Science in Agriculture	Anderson, Arden	Northeast
Misc	Science in Agriculture	Anderson, Arden	Northwest
Misc	Textbook of Botany	Transeau, Sampson, & Tiffany	Northeast
Misc	The 7 Habits of Highly Effective People	Covey	Northeast
Misc	The Albrecht Papers	Albrecht, W.	Northwest
Misc	The Albrecht Papers, Vols I and II	Albrecht, W.	Lubben
Misc	The Farmer's Guide to the Internet	James, Henry	Northwest
Misc	The Land Remembers	Logan, B.	Northeast
Misc	The Never-Never Land of N	New Farm	Northwest
Misc	The River of the Mother of God	Leopold, Aldo	Northeast
Misc	Thompson on-farm Research Reports - 84, 90, 91, 93, 94, 95	Rodale, Thompson	Northwest

(Back Fence continued from page 13.)

"Nothing fancy," they universally declared. "It's okay, as long as I get a little warning." So, we're already off and running on alternatives to hotel stays in the Ames area. You can put Diane Mayerfeld and Mike Bell (515-292-7856) on your list, along with Deb Cooper and Paul Hudson (515-292-5125), and as well as Cyndy Hyde and Tom Peterson (515-233-1679). Anybody else want to volunteer?

And why limit ourselves? Patti McKee was quick to offer her hospitality with her husband Jon M. Krieg in Des Moines. You can contact them at 515-255-7316. How about PFI members who are traveling to rural parts of the state? I am going to start by collecting names and numbers of potential hosts. You can reach me by phone at the PFI office 515- 294-8512. For email it's nanb@iastate.edu. We'll see where we go from here, and how many fences we reach across.

WINTER WORKSHOP SUMMARIES

Editor's Note: The summaries presented here and continuing to page 24 were recorded by PFI members who attended the Annual Meeting in Ames on January 9, 1999. Thanks to all these fine recorders! Sorry, we had to edit some content for space. Workshops are listed in alphabetical order by title. Special thanks to PFI member Lonna Nachtigal for custom designing our snow man.

Cost Cutting Ideas

Reported by Diane Mayerfeld

Dave Lubben facilitated a workshop on cost cutting ideas. Participants had a variety of suggestions, ranging from very general advice, such as "don't try to maintain a reputation as a big spender" to specific tips for reducing your electric bill.

When the flow of ideas slowed, Dave shared a list of fifty-six cost cutting ideas he has collected in such workshops over several years.

Where will the next generation of farmers come from? The number of Iowa farmers nearing retirement age range from 30% to 45%.

At the end of the workshop, **Dwight Ault** described a project where he adapted an old barn to be used as a winter farrowing house, roughly based on the Swedish model.

Farming Without Inheriting

Reported By Brian Depew

Q: What do the words; easy credit, bullet, motorcycle, whirlwind romance, farmer, sky diver, and promiscuous sex have in common?

A: "They are all dangerous," someone in the audience said.

PFI member **Duane Sand**, led a discussion on "Where will the next generation of farmers come from?" Sand started the session by sharing some statistics on farmers. The number of Iowa farmers nearing retirement age range from 30% to 45%.

Only 32% of farmers said that, given the chance, they would encourage their children to enter farming. "There's an easier way to make a living," was thought to be the attitude held by many older farmers.

"We are doomed for industrial food processors if these statistics are accurate," commented Sand on about ten statistics he had shared. Concerns from PFI members present were that the majority of today's youth have no interest in the family farm. This would mean that we are losing a generation of potential farmers.

Sand suggested two other groups from which the next generation of farmers may come. They were farm workers and immigrants. Both groups often come from agricultural backgrounds and may have a desire to own their own farm.

The problem that arises for these groups is the large amount of capital needed to get into farming when land is not inherited.

Three niche markets that may help people get into farming were discussed. They were: direct marketing, conventional commodities, and premium priced crops.

Organic crops, community supported agriculture (CSA), and farmers working together in co-ops were all suggestions.

A representative from Ag Connect was present at the meeting. Ag Connect works to connect older farmers with younger people interested in getting into the farming. The older farmer in a sense adopts the younger farmer. Two other groups that do similar things are Farm On and Land Link.

Flaming for Weed Management

Reported by Jerry Depew

Flaming may not boost yields, but it surely kills weeds. **Joe Fitzgerald** of New Melleray Albbey near Dubuque reported that "a blind person can see the difference in weed control" between flamed and unflamed organic corn, even though both plots had also been rotary hoed and cultivated. Joe's field trial did in fact produce 9 more bushels per acre in the flamed plots, but the test itself was too small to allow him to claim statistically reliable evidence. Joe is convinced, however. He said that after four years of learning to flame, he now flames all corn except when doing the research plots.

Wisconsin vegetable grower **Richard DeWilde** likes flame weed control for slow germinating crops like parsnips. He plants, places a window pane on part of the bed, and waits for parsnips to emerge there first. When they do, he flames the entire crop, thus killing all emerged weeds just a day or two before parsnips emerge into a freshly weeded bed.

Richard has a different strategy for spinach or other fast-emerging plants. He prepares his seed bed two weeks before planting to give the weeds a head start. Then he literally burns them down and plants without further tillage.

Dennis Lutteke of Wells, Minnesota, is a dairyman and manufacturer of flamers that will fit onto old cultivators. He discussed technical points of flamer design and configuration, and told of his experiments flaming both corn and soybeans.

GMOs: Updates, Assumptions, and Concerns

Reported by Diane Mayerfeld

Margaret Mellon of the Union of Concerned Scientists presented an overview of some of the issues surrounding the use of genetically modified crops in agriculture.

Genetic engineering is only the newest of several techniques of bio-engineering. Older techniques such as selective breeding and tissue culture are very powerful and have made immense changes in agriculture. One of the main ways genetic engineering differs from older bioengineering is that genes can be moved across major taxonomic boundaries. Sadly, all the focus on genetic engineering has meant that the work and resources for crop breeding and other established forms of bioengineering have been drastically reduced.

About 30 genetically engineered organisms are currently approved for commercial use in the US, including corn, canola, cotton, soybeans, tomatoes, and papayas. Genetic engineering of crops has focused on two traits: herbicide resistance and incorporation of Bt. There is reason to fear that these traits will lead to widespread pest resistance and loss of the effectiveness of both Bt and powerful herbicides such as Roundup™.

The Union of Concerned Scientists does not have a position for or against genetic engineering, but they are cautious about its use because it is such a powerful tool. Risks from the use of GMOs for crops include:

- Pesticide resistance across many species
- Spread of allergens (of particular concern is the introduction of genes from non-food species into food crops, with unknown allergy effects)
- Gene transfer to wild or weedy relatives (in a recent experiment, GMOs had a much higher rate of outcrossing than selectively bred plants with the same gene)

Increased weediness in both agricultural and natural habitats (it is more difficult to control volunteer herbicide resistant crops and there is a chance the resistant genes could transfer to wild relatives)

Poisoning wildlife (for example, Bt can be toxic to some beneficials and possibly other wildlife, as well as the target pests)

Antibiotic resistance

Turning on new plant toxins

New viruses

Unknown risks

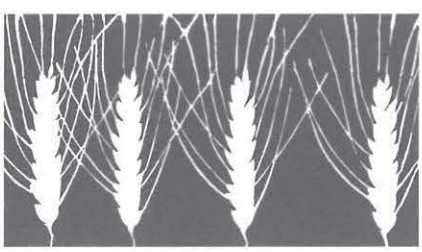
Genetic engineering has not resulted in "mutant, man-eating cockroaches" but it has also not resulted in much social benefit to date. In agricultural crops, the GE successes have made money for the producers of GE seed and herbicides, but have not had any other social benefit. In many ways, the problems of genetic engineering are not so much intrinsic to the technology as a result of the fact it has been used for foolish ends.

The questions/discussion at the end resulted in the following points:

The promoters of genetic engineering are not evil, but their outlook is limited to solving narrow puzzles without regard to the broader consequences. Or they counter concerns with their faith in the virtues of progress and the free market.

Unfortunately, when government, industry, and university establishments all stand to profit from this technology, their combined power and momentum is hard to stop.

The "terminator gene" would build several functions into the plant so that the seed would not grow. This technology is still being developed. Since most crop seed production is concentrated in a few large companies, if the "terminator" technology works, farmers won't have a choice. All the large seed producers will put the terminator into their seed.



Hoop House Composting And Manure Management

Reported by Steve We

Tom Richard, of ISU, started the meeting by looking at data they have compiled from research at the ISU Rhodes farm. Essentially, hoop houses contain a large volume of manure with variable nitrogen, temperature and moisture contents. This is dependent largely upon where in the hoop the manure is taken from, whether it was a bedding area or a dunging area. By composting the manure, volume, weight and odor are reduced, while the nutrients are stabilized and homogenized. Pathogens and weed seeds are also reduced.

At the Rhodes farm they looked at different methods of composting the manure. One trial looked at building windrows with a manure spreader and then either turning the pile with a loader or leaving it set with no turning. This was compared to building a windrow with a loader and then either turning or not turning the pile. The conclusion was that the more you processed the manure, the more you speeded up the composting and also the nitrogen loss. Since a large portion of the nitrogen loss occurred when the manure is removed from the hoop, more research is needed to discover the best way to compost the manure. Tom stated that the best way to build a pile was to put dry material on the bottom to soak up any liquids and then do your best to mix the material from different areas of the hoop as you build your pile up to a height of 6 to 7 feet high.

He hopes to receive a grant to look at mineralization and availability of raw versus composted hoop manure. Having a static pile versus turning also needs to be looked at further.

The panel members, **Dan Wilson, Doug Alert**, and **Dennis Abbas**, then gave a short overview of their experiences composting manure on their farm. Their observations included how fast the material heats up, the decreased volume and added consistency

The conclusion was that the more you processed the manure, the more you speeded up the composting and also the nitrogen loss.

and uniformity composting accomplishes. They also spoke about their experiences with composting dead animals.

I Love my Family, BUT...Multi-generational Families on the Farm

Reported by Lorna Wilson

This informative and encouraging workshop was about how we should communicate on the farm between generations. Our reasons for being there ranged from how to incorporate decision making multi-generationally to preserving the family farm and understanding others.

Beth Fleming, the presenter, helped us to see the general tools we could use. The most important tool was understanding the generational perceptions that have developed through history, recognizing their world views and who their heroes were.

These generations were divided into: WWII (1914-29); Silent generation (1930-45); Vietnam generation (1946-55); Me generation (1956-65); Generation X (1966-80) and Generation Y. Beth promoted quick insight into why generations may develop communication gaps, why certain generations react the way they do, and therefore we could try to develop an appreciation for different view points.

Beth also led us into exploring the fears associated with generational interaction using examples from the group. The fears pertained to: productivity, relationships, loss of control, bad choices, economics mismanagement and financial failure. She mentioned three things to listen for: facts, feelings, and perceptions.

Advice given from the group included: have a sense of humor; it's all right to hurt for it produces growth; it's okay to take risks; let others know you care – say it; give the respect needed; watch put-downs; and keep talking!

We all thoroughly enjoyed the interaction and were encouraged that there are similar situations in each of our farming relationships.

The CSA is a means and not an end. It is a piece of a larger vision of sustainable living.

Lessons of Life from a CSA

Reported by Jennifer Gay

Three presenters shared their personal stories of why they were involved in community supported agriculture, challenges they faced, and life lessons they drew from their involvement in CSAs. Every CSA is different; there's no set model or certification. Community supported agriculture farms are farms that sell shares of the produce for a growing season to interested community members. Share holders receive weekly portions of produce during the growing season.

Gary Guthrie and his wife returned from working in Latin America to Iowa two years ago to begin farming on his mom and dad's farm. Last year was their first full year of production. They started off small by subscribing 20 members asking for a $50 deposit and the members paid for the produce per pound. Gary has one acre in production and 30 different vegetables as well as strawberries, raspberries and apples. Gary delivers directly to his members and says it's worth it to offer that conveniences for his members. He does charge a $1.50 delivery fee.

Gary figured he made about minimum wage and, as it was his first season, he is satisfied and encouraged with that. Most of his members are in fact concerned that he is not making enough. He says his members are hooked on veggies and have developed a connection and concern for his work and his land. The lessons Gary shared with us were how farming and starting a CSA has been a wonderful opportunity for him to be at home with his son and teach his son the value of hard work. Gary says the most important part of all of this is the relationships that are fostered and nurtured. In fact his favorite part of the CSA is doing deliveries. His greatest challenge is learning to balance the facets of family life with the CSA. One of the main reasons Gary and his family moved to the farm was to spend more time with Gary's parents.

Jan Libbey with One Step at a Time Gardens has a background in natural resources and environmental education while her partner **Tim Landgraf** has a

background in engineering. They began by asking each other how the land they were living on could sustain them and how they could sustain it. They began slowly, gardening and doing farmers markets in Mason City and Belmond. Marketing got their feet on the ground, but there were still missing parts for Jan. She wanted education to be a part of her work so they made the intentional decision to start a CSA. Now the CSA is their main market and farmers markets are for overflow. They also sell the excess from the farmers markets to a local grocery store.

It is important to them to build relationships with the communities they live and do business in. They started at 7 shares, grew to 12 the following year, 20 the next and hope to reach 30 shares for the '99 season. Jan emphasized the importance of knowing members' expectations and remaining realistic in requests for their involvement and support.

Their delivery is evolving from door-to-door to pick-up sites at farmers markets. They offer their members 35 varieties of vegetables for 20 weeks and average 14 pounds of produce per share per week. Transportation creates expenses and in 1999 they will adjust their membership fee to accommodate transportation costs. They give their members a survey in the fall which is very helpful for planning next season. They also link their members to other local producers by including local eggs, honey and bread in their share.

Their biggest issue thus far has been finances. Because they need to ensure the CSA is paying for itself they are increasing their membership fee $150 more than last season to $500 for the next season because they aren't being paid for their work yet.

The lessons Jan identified fall into three categories: personal, professional and human. Personally Jan said her experiences have affirmed a sense of context to the CSA. The CSA is a means and not an end. It is a piece of a larger vision of sustainable living. Professionally, Jan developed confidence in running her own private business and sees a window for new farmers like herself that can break through the initial reservations and fears of farming to higher learning. On a human level, Jan's lesson has been in the way she views food and mealtime. They are higher priorities now and preparing and cooking food has grown more important and rewarding.

Gary Huber represented the Magic Beanstalk which is different from the previous CSAs in that it was not organized and started by a producer. In 1994 a group of ISU students and community members wanted to start a farm so they found a producer and started the Magic Beanstalk. The name Magic Beanstalk has symbolic meaning: Jack was the group that began the CSA, and the giant was the system of agriculture they didn't like. The Magic Beanstalk has grown tremendously since its first year. It began with 26 members and last season expanded and maxed out at 122 shares or 168 families. One of their struggles has been matching the share size to what people want. They find people often split shares, which makes things a bit more complicated.

They offer 26 veggies for 22 weeks at $250 a share. All members pick up their produce at a church in downtown Ames. They help other producers market their produce by issuing a brochure to their members listing several producers and their products. They received 20 scholarships from a local charity to subsidize 20 low-income shares. They have educational activities, field days, fall harvest festivals, community events, cooking classes and meals. They also have a substantial post season survey which helps them shape the upcoming CSA season.

The Magic Beanstalk has expanded to include 5 producers which has good and bad points. They have lost the ability to have personal relationships with all their members and producers. Gary says everything is up in the air next year and it may be time to divide and encourage more CSAs to take form in Ames. Several questions were raised throughout the presentation. Most concerns were about the economic viability of CSAs which all panelists acknowledged as a major concern.

Local Food Systems for Regional Reliance

Reported by Susan Zacharakis-Jutz

Kamyar Enshayan, UNI project coordinator, spoke about the progress they have made in working with three institutional food buyers who have made a commitment to buy a greater portion of their food purchases from local farms and processors of locally-grown agricultural products. The project began in 1997 with funding from the Leopold Center. Kamyar believes there is great potential for success in the area of institutional buying of local foods.

From June through December 1998, Allen Memorial Hospital (Waterloo, IA) spent 22% of their fresh produce budget of $21,762 locally. They have hired a "forager" to find food for the hospital. All Iowan grown foods served in the cafeteria line are labeled as "Iowa Grown" as well as identifying the farm they came from.

The other two institutional buyers, University of Northern Iowa's Dining Services and Rudy's Tacos (Waterloo, IA), have also increased their purchases of locally grown food.

Although there is still skepticism among these institutional buyers about the value of purchasing food locally, Kamyar believes that with continued education they will see even more progress in the marketing of locally-grown food.

Carol Hunt, the coordinator for Johnson County local foods pilot project funded by ISU Extension money, talked about the progress of her project. Carol reported that producers and institutional buyers have a lot of work to do to change attitudes and gain a better understanding of each other's needs and concerns. She will be using round table discussion groups to bring producers and buyers together to work on these issues. Carol believes that the interest is high and she's hopeful the buyers will carry through and make a commitment to buying locally grown food.

David Tousain, Audubon County Family Farmers, talked about their Leopold Center funded project, to develop local marketing relationships. The focus of their project has been on marketing products through the Des Moines Farmer's Market. Individual farms also utilize other marketing systems such as roadside market stands and local wholesale markets. David said customers are interested in issues beyond just price and he believes relationship marketing has a lot of potential and they are in it for the long haul.

Robert Karp, coordinator for Field to Family, a USDA funded project, identified five areas of focus. 1) Community building by organizing community meals and festivals. 2) Connecting children and youth to the farm and garden by integrating kids into food production and nature. 3) Nutrition education through hands-on cooking classes where they make and share a meal together. 4) Hunger issues — they believe there should be equitable access to healthy food. 5) Create local markets — they have started a downtown Farmer's Market and have been exploring institutional buying opportunities.

Outlook on Organics

Reported by Pernell Plath

Dr. Kathleen Delate, Iowa State University Organic Crop Specialist, started out the session with an overview of the increasing popularity of organic foods and farming. She then updated the audience on the new proposed Federal rules and indicated that growers should still go with local certifiers. Prescribed practices for certification generally include 3 years with no synthetic chemical use, extensive farm records, a 5 year rotational scheme, and a 25 to 30 foot border between organic and non-organic plots. Dr. Delate finished with a discussion of her 1998 organic agriculture research. She generally found there to be good yields and profits from the organic acreage.

Jim Boes, farmer and president of the Heartland Organic Marketing Coop, spoke next on marketing organic grains. He stressed that there will be many contracting opportunities for the 1999 crop and producers must closely scrutinize contracts before signing. There are strict criteria involved with every contract. Additionally, the farmer must provide on-site storage, have the capability to sell when the buyer demands, have a loading site that can be accessed by semi-trucks, and protect the crop until the buyer takes delivery. Mr. Boes emphasized that harvest and handling are the places where most producers lose the value of their crop.

Ron Rosmann, farmer and former PFI president, also discussed marketing of organic grains. He pointed out that the trend toward contract farming with grain and oil seed production is increasing. He believes that farmers lose out with contracting their crops. He considers organic production as one of the only options left for smaller farmers. He recommends marketing through coops. The greatest hurdle for most organic production, as he sees it, are buffer zones that cannot be hayed or grazed by animals.

Larry Cleverley, an organic vegetable farmer from Mingo concluded the session. He grows garlic as well as heirloom tomatoes, greens, basil, beans, and specialty potatoes. He sells these to restaurants and through the Des Moines Farmers' Market. Mr. Cleverley is not certified organic. He says that right now his customers are not demanding that he be certified. He grows organically because he takes pride in providing healthful, chemical-free foods for the people he feeds.

Pigs, Profits, and Marketing Networks

Reported by Larry Kallem

This panel session was chaired by **Dr. Kendall Thu,** adjunct professor at the University of Iowa. He opened the session with his opinion of meat retailers in the current income crisis being experienced by farmers engaged in hog production.

First speaker was **Paul Willis**, a northeast Iowa farmer who has built a marketing arrangement for his "free-range" hogs through a San Francisco, California restaurant company. Both Paul and the company believe that his traditional production methods based on pasture farrowing, together with consistently high standards, result in a product with superior eating qualities. Meat from hogs raised in this fashion is now unique in the market. He began with a shipment of meat from 35 head of hogs and has seen the volume increase to 250 head per week, the current volume coming from a combination of his own hogs and additional supplies from a total of 25 farmers. "People are willing to pay extra for hogs raised in a particular way," he said.

Their business arrangement provides the farmer with price stability and the restaurant with a supply of high quality meat it can market to the social values of its customers. Quality is maintained by adhering to a set of common production methods, to a meat inspection procedure, and to an information system that ties the identity of the product back to the originating farm

A new Iowa company, related to the San Francisco outlet but owned by hog producers, will soon be launched with support from the Iowa Department of Economic Development. Its purpose is to properly manage the growth of this market and to provide additional opportunity to the new company's farmer-owners.

Dan Specht, another northeast Iowa farmer, told of marketing his organically-raised cattle through a well-established Wisconsin-based cooperative, called CROPP, which markets a wide variety of food products to retail outlets under the brand, "Organic Valley." Dan sold 45 head of cattle last year to the co-op. He said that, at long last, this beef can now be labeled in the retail meat case as being "organic."

Ken Rosmann, of Heartland Organic Cooperative in Harlan, described the development of this producer-owned company which began in 1993 with 12 farmers marketing mostly organically-raised soybeans for the export market. It now has 120 members and is in the process of launching a meat division. The new division is necessary to accomplish the goal of marketing members' production in each of the phases and rotations required to have a working system of organic farming. At this point, the livestock component is beef. Consumer reception, says Ken, has so far been very encouraging.

Realities of Holistic Vet Practices

Reported by Steve Weis

This workshop featured Holistic veterinarian, **Dr. Randy Kidd** of McLouth, Kansas. Dr. Kidd started the session with a little background on him and his practice. He graduated from ISU with a basic veterinary degree. He then went back to school and added three basic holistic areas. These were in acupuncture, chiropractice and herbal medicines. He currently runs a practice with no antibiotics administered.

To illustrate his model of holistic veterinary, he used a stacking ring toy, where there is a base with a stem in it upon which you stack rings that are big on

Dr. Kidd's "base" for a holistic practice is nature and involves body, mind, and spirit.

the bottom and progressively get smaller as you build up. His "base" for a holistic practice is Nature and involves body, mind and spirit. The "centerpiece or stem" is Spirituality or your core values. The "first ring" and the most important is human interaction with the animal. The next most important is the lifestyle of the animal and should be as close to natural as possible. Next is nutrition, followed by use of herbs. Following herb use is the "hands on and eyes on", that is the touching and observing the animal. This is followed by the three medicines, Chiropractic, Homeopathy and Acupuncture. This is the top of the pyramid and the last practices you should try.

He then stated that modern Western veterinary practice has this pyramid inverted. The first item used is antibiotics and medicines, and the "stem" of core values is also removed. He feels that antibiotics will be outlawed in 20-30 years and that this will definitely be a problem if we continue to practice medicine as we re now.

The panel members, **Susan Zacharakis-Jutz** of Solon, **Francis Thicke** of Fairfield, and **Steve Weis** of Osage each gave a short overview of their farm operation and explained some of the practices they use and also of the problems they have encountered. Some practices used were natural and balanced nutrition from grazing, homeopathy, herbs, chiropractice and energy balancing. Management skills were also emphasized such as clean, dry environment, rotating pastures, decreasing stress levels, minimal vaccinations, culling sick animals, fresh air, and natural products such as probiotics, kelp and yeast.

Problems they have encountered were such things as coccidiosis, problems treating large numbers of animals, transitioning to no drug use, and parasites.

Questions were then taken from the audience. It was generally agreed that the first five generations while transitioning were the hardest and that once you ot past that your genetics were a big asset rather than a hindrance. Essentially you need to cull out sick animals and breed for healthy animals, all the while keeping a holistic view on your practices.

Seeds for the Future

Reported by Laura Krouse

This workshop turned out to be a widely ranging discussion on crop breeding concepts, multinational corporations, patent laws, and several other issues relating to crop genetic resources. The presenters, **Ricardo Salvador, Don Duvick, and Margaret Mellon**, answered questions from workshop participants and discussed their own concerns about the effects of modern biotechnology on the types of genetics and seed availability in the future. All three agreed that the seed business, and therefore the genetics available to farmers, is now almost completely controlled by huge chemical companies like Monsanto.

They also agreed that the rapid evolution of resistance by weeds and insects to the genetics of today's seeds is guaranteed. All three were concerned about the declining role of public institutions like ISU in developing new varieties. The presenters and several participants commented on the complexity of crop/natural ecosystem interactions, and how valuable genes like Bt are literally being wasted because they have been commercially released before the potential consequences of their release have been fully studied.

Soil Quality and Weed Management; What's the Connection?

Reported by Jeff Olson

Dr. Matt Liebman reported on how farmers are learning to manage the soil to manage the weeds. Nutrient release is often different for organic nutrient source systems and synthetic source systems. The decay of organic matter and release of nutrient can come later in the growing season. A synthetic source has perfect timing for the early growth of small seeded weeds so we need to think about the effect of this timing. Large seeded crops tolerate low levels of available nutrients early in the season so we can use this. The decomposition of cover crop material such as alfalfa or clover by microbes produces compounds that have alleleopathic or phytotoxic effects on small seeded plants, but not on large seeded crops like corn, wheat, and soybeans.

The research shown was for a two year rotation of sweet corn and spring wheat underseeded with clover. The underseeded clover did not affect wheat yield. It was incorporated as the N replacement in the research. Good science was practiced as fixed densities of crop and weeds were achieved by hand thinning. The treatments were + and – wild mustard as weed pressure, and N as compost plus clover versus N from synthetic fertilizer (ammonium nitrate). The clover green manure crop was plowed in mid May for sweet corn planting late May. The ground would otherwise lie fallow in a synthetic nutrient system.

In the years shown 1997 was pretty even data, but in 1998 the organic system was significantly better in yields in the weed plots. The compost plus clover system reduced the weed's dry matter production but not the crop's. The delayed pattern of N release was important to the growth of the mustard, and the clover decomposition subjected the weed to chemical stress. Application of synthetic fertilizer dramatically increased the early season growth of mustard.

Matt showed research about clover extracts affecting germination and growth of small seeded weeds and related it to the green manure. Also there are some organisms in the soil that respond to additions of organic matter that give desirable negative effects to weeds and do not hinder the crop. There was a study shown of microbe activity in organic material with increased amount of pythium disease in the small seeded weeds.

On to potato production in northern Maine where production costs approach $1600 per acre. Inputs (transgenic Bt potatoes are becoming more common), include many fungicide applications, 3 to 4 insecticide treatments, 12 to 15 herbicide sprays, all of which make the soil highly stressed and lead to degradation of the resource. Soil assays were taken to count the seed bank and track the management system for 8 or 9 years.

What is obvious is that weed seed amounts grow in weedy crop rotations. Conservation tillage is good as long as good weed control is maintained, otherwise weeds can get out of hand fast. A conservation tillage system can work if a crop rotation that is highly competitive with weeds is used.

Composting kills a lot of seeds. Weeds germinate more in a manure system. Composting can be done in a relatively short amount of time. A spring tine cultivator worked best in the amended with compost system. In Iowa, at Agricultural and Biosystems Engineering, compost research work is being done by Tom Richard. He and Matt will be working with the Iowa weed problems of waterhemp, foxtails, and velvetleaf.

Value Added from Beans to Tofu and Beyond

Reported by Merlin Pfannkuch

This workshop dealt with adding value to soybeans in varying ways from growing identity preserved beans, to on-farm processing into full fat soy flour, to on-farm processing into a final consumer product, tofu.

Lesley Lloyd from Optimum Quality Grains (a DuPont-Pioneer joint venture) described his company's program with identity-preserved soybeans and sunflowers. Lloyd said while originally envisioned as a grain company, the company is actually a marketing company whose most important function is to create customer demand for potential food products. Once a demand is created, then plant genetics research, seed production and supply chain systems are directed to meeting this customer demand.

Lloyd said the varieties of soybeans farmers grow on contract for his company include high sucrose, high protein, high oleic and low saturated fat. He said his company pays a premium to farmers growing the beans, so even though many of the varieties yield less the returns per acre should be higher.

Paul Lang from Grinnell described his family operation that removes the hull from beans and produces full fat soy flour. No one else was doing this when they started three years ago. He said they had decided at the outset not to become involved in marketing the product to consumers, but rather to produce a processed product sold to other food processors.

Lang said their biggest product today is a raw full fat soy flour that can be used in hamburger buns to replace 1/2 of 1 percent of wheat flour. A second

(Workshop summaries continued on page 31.)

PFI 1998 ON-FARM TRIAL RESULTS – I

(Editors' note: Results of PFI 1998 on-farm research will appear in *The Practical Farmer* over the course of this year. We hope this will give readers a chance to absorb these cooperator reports. Soil amendments are on the minds of many farmers as spring approaches. Here are nitrogen and manure management trials that set the stage for research projects in 1999. In addition, Matt and Diana Stewart offer a tip for graziers who want to fully utilize their grass.

Nitrogen Trials

It wouldn't be PFI on-farm research without a few nitrogen trials. After 70-some on-farm experiments using the late spring soil nitrate test, you would think it would be cut-and-dried. It isn't. Both PFI researchers and ISU scientists continue to explore the factors that play into nitrogen management – factors like weather, manure, and the prices of corn and N.

In 1989, four farmers took part in PFI on-farm research through the Iowa Farm Bureau, and each one of them demonstrated nitrogen management (Table 1). For both Les and Lisa Schnekloth, Eldridge, and Bryan and Lisa Sievers, New Liberty, the wet June weather prevented sidedressing, making their trials "one-treatment experiments." Even with only a low-nitrogen treatment in place, indications were that crop performance was within specifications. Les Schnekloth measured late-spring soil nitrate nitrogen of 23 parts-per-million, only a shade less than the 25 ppm that is usually considered sufficient. At the end of the season, Schnekloth had stalk nitrate of 493 ppm – on the low side but acceptable – and an average yield of just over 215 bushels. Down the road Bryan Sievers measured 37 ppm soil nitrate-N, well over the sufficiency level. His stalk nitrate-N averaged 2,553 ppm, slightly on the high side but consistent with the spring soil nitrate.

Reading Numbers, Knowing Terms

When you see the outcome of a PFI trial, you also see a statistical indication of the strength of the difference observed. The following information should help you to understand the reports of the trials contained in this report. The symbol "*" shows that there was a "statistically significant" difference between treatments; that is, one that likely did not occur just by chance. We require ourselves to be 95% sure before we declare a significant difference. If instead of a "*" there is a "N.S.," you know the difference was "not significant" at the 95 percent confidence level.

Comparing Two Practices Many on-farm trials are of a straightforward "A versus B" type. These trials, which are easy to design and analyze, correspond to the typical experimental question "Is alternative 'B' better than, worse than, or the same as my customary practice 'A'?" This approach can be used to evaluate individual practices or whole systems of practices.

There is a handy "yardstick" called the "LSD," or "least significant difference," that can be used in a trial with only two practices or treatments. If the difference between the two treatments is greater than the LSD, then the difference is significant. You will see in the tables that when the difference between two practices is, for example, 5 bushels (or minus 5 bushels, depending on the arithmetic), and the LSD is only, say, 3 bushels, then there is a "*" indicating a significant difference.

Multiple Treatment Trials The LSD doesn't work well in trials with more than two treatments. In those cases, letters are added to show whether treatments are statistically different from each other. (We usually use a statistical test called a Duncan multiple range grouping.) The highest yield or weed count in a trial will have a letter "*a*" beside it. A number with a "*b*" next to it is significantly different from one with an "*a*," but neither is statistically different from a result bearing an "*ab*." A third treatment might produce a number with a "*c*" (or it might not), and so on.

Economics Average 1998 statewide prices for inputs were assumed in calculating the economics of these trials. Average fixed and variable costs and time requirements were also used. These can vary greatly from farm to farm, of course. The calculations use 1998 prices of $2.00 per bushel for corn, $5.20 for soybeans, and $1.10 for oats. Labor was charged at $9.00 per hour.

Table 1. Two-Treatment Nitrogen Rate Trials in Corn

	LOW RATE TRT			HIGH RATE TRT				
COOPERATOR	YIELD (bu)	N RATE (lbs N)	STALK NO_3-N	YIELD (bu)	N RATE (lbs)	STALK NO_3-N	RATE DIFF.	LSNT (ppm)
(AFTER SOYBEAN)								
MCLAUGHLIN	178.1	140	48	186.1	140	35	0	27/37
	SPLIT			PRE-PLANT				
SCHNEKLOTH	215.3	45	493	RAIN PREVENTED SIDEDRESSING				23
STRUTHERS	130.4	30	1,800	150.1	130	2,200	100	32
WILCOX	163.7	98	2,488	165.4	123	2,283	25	24
(AFTER CORN)								
SIEVERS	160.2	164	2,553	RAIN PREVENTED SIDEDRESSING				37

At the other end of the state, Gary and Venita Wilcox, Correctionville, started with a late spring soil nitrate-N level of 24 ppm, then sidedressed an additional 25 lbs N on half the plots (Table 1). There was no statistical evidence of a difference in yields between the two rates, and end-of-season cornstalk analysis indicated adequate nitrogen in both treatments.

The fourth trial with a Farm Bureau cooperator was carried out by Dave and Becky Struthers, Collins. What's this – a 20-bushel yield loss at the low rate of N? Dave started with a late spring soil nitrate-N of 32 ppm, well past the sufficiency level. He used a Patriot sprayer to sidedress an additional 100 lbs N on half the plots and ended the growing season with what would be considered good stalk nitrate (Table 1). Stalks of corn not sidedressed averaged 1,800 ppm, well within the 700-2,000 target range. So why did the low N rate yield so much less? Suggestions, anyone?

Another "head scratcher" was provided by Dennis and Kate McLaughlin, Cumming. For the second year Dennis attempted to compare a preplant application of anhydrous N to a split application of the same material and total rate. For the second year the all-preplant application produced more corn. As Table 1 shows, he started the season with plenty of soil nitrate, ended with very low stalk nitrate, and experienced a

Table 2. A Trial Using Manure

	MANURE TREATMENT					PURCHASED INPUT TREATMENT	
COOPERATOR	FORM / METHOD	N CONT. / AVAIL.	TISSUE N (ppm NO_3)	YIELD (bu)	$ COST	N RATE	TISSUE N (ppm NO_3)
WILSON	COMPOST (170+289+225)	266/130	42 LSNT	165.1	$23.87	96	22 LSNT
		INCL 96 LB 28% N	200 STALK				90 STALK

Two-Treatment Nitrogen Rate Trials in Corn

STALK N SIG.	YIELD DIFF.	YLD SIG.	YLD LSD	LOW RATE $ BENEFIT	GAL. DIESEL EQUIV.	COMMENT
NS	-8.0	*	2.5	–$21.97	0.0	HIGH LSNT, LOW STALK NITRATE, GOOD YIELDS!
						FIELD WAS HOG PASTURE IN 1994
NS	-19.7	*	10.3	–$41.47	23.8	STALK NITRATE IS ADEQUATE IN BOTH TRTS, BUT YIELD LESS IN LOW N TREATMENT
NS	-1.7	NS	3.0	$5.20	6.0	
						CUSTOMARY 180-200 LBS N APPEARS UNNECESSARY

yield difference of 8 bushels. As in the Struthers trial, the pieces of information here don't add up. How ould Dennis go from excess nitrogen to an N deficiency? Was the initial soil sample unreliable? Sampling becomes more of a challenge when high rates of anhydrous have been applied. Was Dennis able to apply the rates he intended? He does not have access to a high-tech regulator. Did the sidedressing itself damage the crop? The equipment was not driven through the non-sidedressed plots. Did the soil seal over the sidedress anhydrous band? In 1999 Dennis will reexamine those questions.

Manure Trials

Back in northwest Iowa, Dan and Lorna Wilson and Colin and Carla Wilson want to know how to use the manure and bedding that come out of their swine hoophouse and Swedish-style nursery facility. The nutrients in this mixture are wonderfully stable – good from an environmental standpoint but not necessarily for crop production. To "cook out" some of the extra carbon from the material, the Wilsons let it age on a cement pad before application to the land. They then spread strips of this passively-composted manure on land that had already received 130 lbs of N as UAN solution. As in Dennis McLaughln's trial, the late spring soil nitrate test indicated adequate nitrogen –

A Trial Using Manure

PURCHASED INPUT TREATMENT						
YIELD (bu)	$ COST	YIELD DIFF. (bu)	YLD SIG.	YLD LSD	MANURE $ BENEFIT	COMMENTS
165.2	$19.87	-0.2	NS	21.2	–$4.00	N SHOULD HAVE BEEN SUFFICIENT. N AVAILABILITY FROM COMPOST CALCULATED AT 20%

Table 3. Mugge Manure and Nitrogen Trial.

YIELD - TRTS AND N RATES

N RATES	C		L		W	D
24	135.7	c	171.2	a	146.1	139.9
64	157.9	b	177.9	a		
104	170.7	ab	180.2	a		
144	174.9	a	179.3	a		

YIELD - MANURE TRTS AT ZERO N

C	135.7	c	C=CONTROL (NO MANURE)
L	171.2	a	L=LIQUID MANURE
W	146.1	b	W=WET HOOPHOUSE MANURE
D	139.9	bc	D=DRY HOOPHOUSE MANURE

LEAF N - TREATMENTS

N RATES	C		L		W	D
24	2.74	c	3.47	a	3.21	3.00
64	3.32	b	3.63	a		
104	3.74	a				

STALK NITRATE - TREATMENTS

N RATES	C		L		W	D
24	59	b	89	b	37	55
64	65	b	415	b		
104	79	b	585	b		
144	620	a	2428	a		

especially where the compost was applied – but stalk tests at the end of the year suggested the crop may have been short of nitrogen (Table 2). ISU Ag Engineer Tom Richard suggests that only 10-15 percent of the nitrogen in compost may be available the first year. If the Wilson's bedding/manure was incompletely composted, that would account for the higher-than-expected spring soil nitrate, and it could mean that carbon in the bedding tied up soil nitrogen later in the season. There was no statistical difference in yield between corn that received the extra nutrients and corn that did not.

We are in the early stages of learning how to use the manure/bedding that comes from hoophouses, and as more hoops go up around the Midwest, this becomes an important issue. Paul and Karen Mugge, Sutherland, put up a hoophouse recently, and this year Paul added hoophouse manure to a trial he began in 1997. That trial examined the crop growth and nitrogen availability for corn receiving liquid swine manure or no manure – at four levels of nitrogen sidedressing. In 1998, Paul added two grades of hoophouse manure/bedding, spreading the wetter material separately from the drier stuff. Neither c

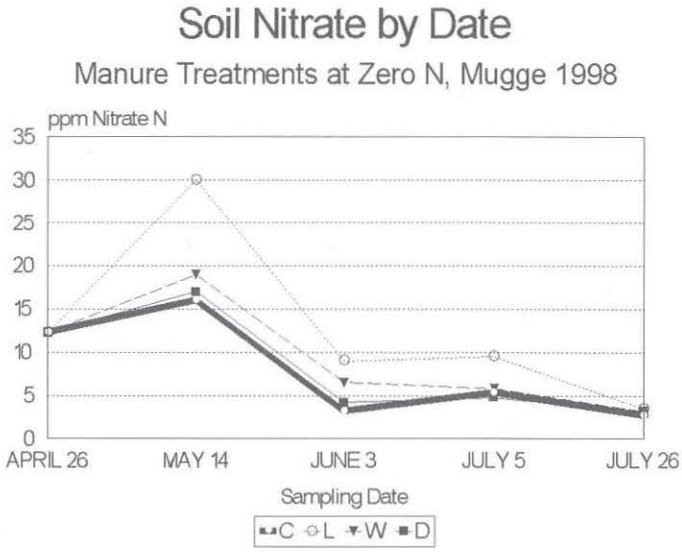
Table 4. Multiple-Treatment Manure/Nitrogen Trials

				TREATMENT "A"				
COOPERATOR	CROP	PREVIOUS CROP	YIELD SIGNIFICANCE	DESCRIPTION	YIELD (bu. or T)	STAT.	TRT COSTS	$ BENEFIT
BRUNK	CORN	SOYBEANS	**	3,300 GAL LIQUID MANURE + 30 LBS N AT PLANTING, NO OTHER N	136.9	b	$10.46	$0.00
MUGGE	CORN	SOYBEANS	**	L=LIQUID MANURE	171.15	a	$2.39	$68.61
			**	NO MANURE, 24 LBS FALL N	135.65	c	$17.60	$0.00
MUGGE – SAME TRIAL AS ABOVE								

At zero additional N . . . the liquid manure far outperformed the other treatments.

the hoophouse treatments received additional N sidedressing. Tables 3 and 4 show yields, leaf nitrogen, and stalk nitrate-N for the trial. Figure 2 traces soil nitrate in one-foot core samples over the course of the spring.

The four sidedressing levels were 0, 40, 80, and 120 lbs per acre. The whole field received 24 lbs of N as diammonium phosphate the previous fall. Where 3,000 gallons of liquid manure was applied, the crop did not respond to sidedressed N. In the no-manure control treatment, there was a strong response to additional N. Table 4 focuses on the response to sidedressing where no manure was applied and on the response to the different kinds of manure where no additional N was applied. At zero additional N (other than the fall-applied 24 lbs), the liquid manure far outperformed the other treatments. Was nitrogen limiting? The only "adequate" soil nitrate reading was 30 ppm in the liquid manure treatment on May 14. Leaf N levels of 2.75 percent and higher would normally be considered adequate, but the treatment



Manures applied late April. June 3 samples to ISU Soil Testing Lab, others to Midwest Laboratories, Omaha.

Figure 2. Soil nitrate availability over the spring and summer in the Mugge manure trial. (Treatment descriptions in Table 3.)

yields did follow the same order as the treatment leaf N readings. Stalk nitrate-N was very low in *all* manure treatments where no N was sidedressed.

How much manure nitrogen was getting to the crop? Soil nitrate numbers suggest that the

Multiple-Treatment Manure/Nitrogen Trials

TREATMENT "B"					TREATMENT "C"					
DESCRIPTION	YIELD (bu. or T)	STAT.	TRT COSTS	$ BENEFIT	DESCRIPTION	YIELD (bu. or T)	STAT.	TRT COSTS	$ BENEFIT	OVERALL COMMENTS
LIQUID MANURE + 30 LBS N AT PLANTING + 45 LBS 28% N	170.6	a	$11.15	$63.88	LIQUID MANURE + 30 LBS N AT PLANTING + 90 LBS 28% N	167.7	a	$11.15	$63.88	YIELDS AT 45 LB AND 90 LB N RATES NOT STATISTICALLY DIFFERENT
C=CONTROL (NO MANURE)	135.7	c	$0.00	$0.00	W=WET HOOPHOUSE MANURE	146.1	b	$3.05	$17.81	N CONTENT: LIQUID=115 LBS/ACRE, WET=198 LBS/ACRE, DRY=105 LBS/ACRE
					D=DRY HOOPHOUSE MANURE	139.9	bc	$3.05	–$3.05	
NO MANURE, 24 LBS FALL N, 40 SPRING	157.9	b	$25.91	$36.13	NO MANURE, 24 LBS FALL N, 80 SPRING	170.7	ab	$34.23	$53.43	QUESTIONABLE PROFIT INCREASE FROM HIGHEST N RATE
					NO MANURE, 24 LBS FALL N, 120 SPRING	174.9	a	$42.54	$53.62	

WHY HOLSTEIN HEIFERS?

Matt and Diana Stewart, Oelwein

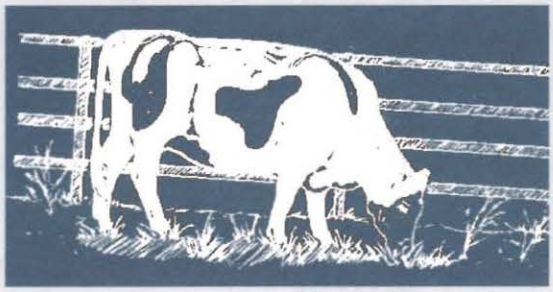
Why Holstein heifers? This actually relates to an advanced grazing topic. One of the challenges as you raise more grass is figuring how to "market" it. We are looking for ways to expand our operation, but we don't want to milk more cattle.

On April 24th, 1998, we purchased 21 Holstein heifers through the Manchester sale barn. All were calfhood vaccinated and had been checked to be breeders. Seventeen of these heifers weighed 800 lbs, and four weighed 500 lbs. The plan was to expose the 17 bigger heifers immediately and sell them as bred heifers in the fall. We hoped to grow the 500-lb heifers and sell them as breeding age heifers in the fall.

Pertinent questions and our answers –

1) Why Holstein heifers? Our expertise is with Holsteins. We know the market, we know how they perform in our pasture program, we owned a Holstein bull to breed them to, and we could keep any heifer that doesn't remain salable and use her in our dairy.

2) Why 500-lb and 800-lb heifers? We have not had good luck putting heifers less than 500 lbs on pasture. We have had marginal success with 500-lb heifers and very good growth with our bred and breeding age heifers. We decided to try a few smaller heifers for future reference, as it is not always easy to find a group of exactly the size one might want. We insisted on 800-lb heifers that we could breed immediately for two reasons. First, it takes an 800-lb heifer at breeding to make a springing heifer that is big enough to bring top dollar on the market, especially if demand is soft. Secondly, the best market for selling heifers is about 1½ to 2 months before they calve. These heifers do not yet have an udder (which can be injured in cross-country transportation). We wanted all our purchased heifers gone before January.



3) What expenses did we incur?

Transportation $7.00/hd.
Veterinary $5.00/hd.
Mineral $10.00/hd.

The bull and the grass were fixed costs – they would have been incurred whether we had these cattle or not. This is one of the catches to grass farming; once the land has been committed to a grass-clover pasture, mechanical harvest is not a very profitable alternative compared to grazing.

4) Death losses? We figured 5% (which is historical for our operation), and we lost one out of 21.

5) How did we obtain and sell our stock? We purchased these heifers ourselves through a reputable sale barn. This saved us 5–8 cents per pound. This is what Gordon Hazard calls "purchased profit." (Anyone interested in harvesting grass through feeder livestock needs to read *Pasture Profits with Stocker Cattle*, available through Stockman Grass Farmer.) Demand was very strong this fall, so we sold these cattle through a sale barn. If demand had been softer, we would probably have tried to sell through an order buyer.

We purchased 15,600 lbs total weight and sold 21,240 lbs on December 11th. We had budgeted both buying and selling at about $.90/lb. That would have netted us $5,076. We did a little better than that, as we bought in at $.89/lb and sold on a very strong market this fall. Two of the seventeen bigger heifers did not settle in the five months that they were exposed to the bull and brought the exact same dollar amount as we paid for them. Of course, the death loss is absorbed in the above weights. We figure that the actual average daily gain for these heifers was about 1.4 lbs/day. This is lower than what we normally would expect from our heifers and may be because they came off a corn silage ration and were carrying very good flesh when we bought them.

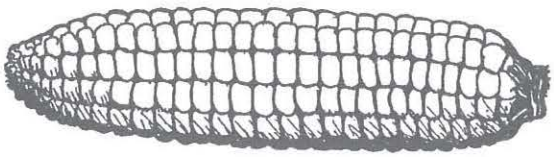
We'll try to double the number of head next year. Profit wasn't huge, but this was a low-risk way to increase profits by playing to our strengths.

Discussion in front of the compost pile at the Wilson field day.

uncomposted hoophouse manure/bedding was about the same as no manure at all (Figure 2). Yields indicate it was only a little better. Clearly this material needs to be managed in a way that makes it a source of nitrogen and not a nitrogen "sponge." PFI cooperators will work with ISU agricultural engineer Tom Richard to determine just how much handling is necessary to make hoophouse manure an asset to crop production and not a liability. Answers should start to emerge in 1999.

Soil nitrate numbers suggest that the uncomposted hoophouse manure/bedding was about the same as no manure at all.

Ron and LaDonna Brunk and Steve and Tara Beck-Brunk, Eldora, generate lots of liquid swine manure in producing breeding gilts. In 1998 they modified a 1997 trial in which they evaluated the benefit of 30 lbs purchased N after 3,200 gallons of liquid manure. In 1998, they evaluated 0, 45 and 90 lbs sidedressed after preplant applications of 3,300 gallons + 30 lbs N (Table 4). In 1997, they saw no benefit from an additional 30 lbs of N; in 1998, the 45 lbs of N sidedressing increased yield, but there was no greater yield from 90 lbs. Results are somewhat inconclusive because field equipment damaged four of the six replications of the trial.



(Workshop summaries continued from page 24.)

raw flour is sold for use in making tofu. The third main product is a roasted flour that can be used to replace up to 50 percent of dried egg powder in any recipe, with this product geared to the institutional market.

Tom Lacina of Grinnell described the whirlwind pace at which the extended Lacina family has developed a 3,800 sq. ft. tofu manufacturing plant on their farm. He said he the idea came to him at the 1998 PFI meeting, with Midwest Harvest tofu to be distributed by Blooming Prairie within a few weeks of this year's meeting. (A bulk order was sold to Grinnell College in December.) Expertise within the family helped them move to production so quickly.

Lacina said the firm tofu they are now making "looks like cottage cheese that's pressed." He said they hope to be producing a soft tofu by mid-1999.

An overall conclusion to be drawn from this workshop is that those considering value-added products need to recognize that to get a final processed product to the consumer involves going through a complicated food chain, with the necessary steps increasing the closer you become to producing the final product for the consumer. A more obvious conclusion is that you need to be able to be comfortable with risk to pursue on-farm processing.

Women Growing Together – a new way to connect

Reported by Virginia Wadsley

The vitality twenty-five women brought to two sessions of "Women Growing Together: A New Way to Connect" made unnecessary the exercise planned to start up the connecting process. In fact, the process was underway before the first session "officially" opened. And energy grew as women exchanged their stories, ideas, and information. Time ran out before suggestions for specific actions or projects could be fully developed but a number of ideas made it to magic-marker-printed-on-newsprint status.

What were our ideas and concerns? Innovations using what we have at hand to grow our crops and gardens. Displaying and selling our products at PFI meetings and giving a percentage of profits to

women's scholarships. Designing and distributing inexpensive promotional flyers for our businesses. Creating a PFI women's directory. And/or expanding the existing directory to include a broader, more inclusive range of agricultural-related activities and value-added women's businesses. Biodynamics. Use of EQIP funds. Rural-urban exchanges utilizing host families. Communicating through the PFI newsletter. For starters.

What took place in the workshops was truly part of a larger process of PFI women growing together as we have worked with PFI projects and activities, women's winter gatherings, "Bits of Sustenance," and sharing through the "Getting to Know You" questionnaire. The process will continue as we take next steps to communicate in the newsletter, identify and publicize our skills, promote our products, and always connect.

All PFI women are invited to tap into this growing energy. If you need some help plugging in, contact Nan Bonfils in the PFI office at 515 294-8512. Her email is nanb@iastate.edu. By post, it's 2104 Agronomy Hall, ISU Ames, IA. 50011. She'll try to get you connected.

FOOTPRINTS OF A GRASS FARMER

Holistic Resource Management

Tom Frantzen, Alta Vista

As we develop a sustainable agriculture, our thinking is influenced by contemporary writers. I was very impressed when I read Allan Savory' s Holistic Resource Management. Published in 1988, it introduced many people to the concept of holism being applied to land management. While I was deeply impressed with the concept, I must admit that I never read the book from cover to cover !

A Second Edition Holistic Management was published last fall. I bought one for Christmas. I soon discovered that the new version is not just a slightly altered version of the first book. From cover to cover it is completely rewritten. The book lists both Allan Savory and his wife, Jody Butterfield, as the authors.

...the new version is not just a slightly altered version of the first book.

While I regard Savory as a brilliant thinker, I found Jody Butterfield to be an equally gifted writer. I read this book cover to cover (560 pages) in a few weeks, enjoying each page.

Attempts to apply holistic management have frustrated many. Our farm management group (CHARM) shared this frustration. The new version of Holistic Management is a direct response to this reaction. The first 120 pages deal specifically with what holistic management is and how people singularly and in groups apply its principles. Confusion of understanding and failure of applications are often rooted in a lack of a clearly defined and owned holistic goal. The book repeatedly emphasizes how vital it is to develop a clear holistic goal and to claim it.

Most of the confusion about holistic management rose from the initial emphasis on the testing guidelines. These tests look at the ecological, economical, and social implications of management decisions. While the principles remain valid, the new emphasis is on the overall mission. When to use the guidelines and when not to are explained very well. For example, if your management decision involves a problem, such as, your neighbors are complaining seriously about the odor from your liquid swine manure, you are encouraged to use the Cause and Effect test. What is the cause of the problem? Neighbors too close by? Not injecting the manure? Not using a pit treatment? You read about a farmer from Indiana who "solved" his odor problem with a mere investment of $85,000. Is be doing it right? Would the investment cash flow? Using the holistic test of cause and effect will ask many hard questions about odors and liquid manure. If the same manure was produced from livestock living in a deep bedded system and composted when the building was cleaned out, odors may be near nonexistent. Switching to a solid manure system would deal with the cause of the odor. This powerful test often reveals layers of side effect management.

Another example of using the testing guidelines may involve a decision about increasing or decreasing the numbers of an organism. Here we use the test of Biological Weak Link. Your holistic goal calls for a

growing population of prairie chickens. Biologists assure you that nesting is the birds life cycle weak link. You design a wildlife area adjacent to your grazing cell. A high school advanced biology class assists you in monitoring the birds reproductive success. Included in the monitoring is a grazing plan that schedules a rest period in the paddocks next to your wildlife area when the prairie chicken nests are vulnerable. The weak link test in this example requires a holistic goal, requires periodic monitoring of the organism, and encourages management practices that respect those goals.

I enjoy reading and abhor the thought of burning a book. However, I am seriously considering burning the three old copies of Holistic Resource Management. The new edition explains these sustainable management concepts in a superior form. I especially recommend this book to anyone who has read the first edition and experienced frustration with understanding and applying its concepts.

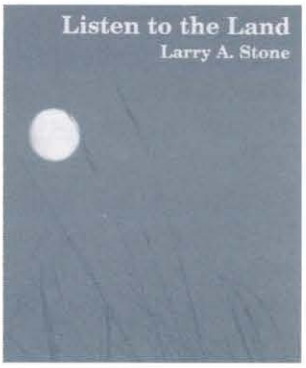
The book is available from Center for Holistic Management, 1010 Tijeras NW, Albuquerque, New Mexico 87102. Email center@holistic management.org. Website www.holistic management.org

Listen to the Land, by Larry A. Stone Reviewed by Nan Bonfils

For years Sunday morning rituals at our house included two or three precious minutes to enjoy Larry Stone's weekly column *Outdoors*, in the *Des Moines Register*. It was always a welcome slice of time and writing. Two springs ago Larry left his *Register* job and his column was taken over by another writer.

But the insights and observations of Larry Stone are not gone. I was delighted to receive a copy of his new book, Listen to the Land, Selections from Twenty-five Years of Naturalist Writing in the Des Moines Register, just published by Mid Prairie Press. It seems that Larry, a PFI member, had been checking out the flyer his wife Margaret got about the PFI women's winter gathering. He'd noticed a book sharing segment on the program. Would I care to share a response to his book?

So I did take along Listen to the Land to the women's gathering. Having barely skimmed it, I hardly did the book justice when I spoke of it. Lately I've been able to spend more time with the book and realize that Larry Stone sent me something wonderful! Listen to the Land is a terrific celebration of lots of things to love about Iowa – rivers, prairies, wetlands, critters. In fact habitats shape Stone's table of contents. Each piece first appeared in the *Register* and is reprinted with its original publication date.



I liked being surprised to reencounter a piece like "Surviving Nature's Beauty", which Stone wrote about an afternoon on cross country skis after a February snow storm. "...The snowplow. Amber lights flashing, engine whining, blade clattering over the gravel, the huge truck unceremoniously sweeps the pretty snow into a heap in the ditch. The driver grins and waves, no doubt thinking he's rescued you. Suddenly you're back in touch with civilization. You can welcome the school bus, get important mail, go shopping, drive to yet another urgent meeting, smell the diesel fumes. Rescued? From what?"

I smiled when I read that in 1997 and again last weekend. For many of us, reading Listen to the Land is like hooking up with an old friend. For others, Larry's voice may be brand new. Either way, you can easily engage.

The pieces are short. Let's be practical. When no one seems to get in more than twenty minutes of reading before some duty or another calls, brevity's a plus. Don and I have been taking turns dipping in and out of the same copy.

It's a book the whole family can enjoy. As an extra treat, there are Stone's photos. Check out the clouds over Woodbury County in Chapter One, Almanac.

Stone's mission isn't heavy handed. He's out to "spread a message of nature conservation and appreciation...and I want them to understand that they don't have to go to Yellowstone National Park to experience nature. You step out your own back door and do it right here."

He delivers his message with a grin. "It *must* be spring...I want it to be spring....if the geese think it's spring, who's a mere human to argue?" Thanks,

Larry, for letting PFI know about this opportunity to reconnect, not just in Sunday newsprint, but on our own bookshelves. Listen to the Land is a great book to receive – and give.

Listen to the Land is starting to show up in bookstores. You can also order directly from Larry by calling 1-888-807-1828. The cost is twenty dollars which includes tax and postage. Ask for an autograph.

BITS OF SUSTENANCE

The Bits of Sustenance pages are a place where PFI women can share their writing – stories, poems, letters, book reviews, experiences. Hopefully, Bits of Sustenance will give every reader something to ponder.

Spring Came in a Snowstorm

by Judy Jedlicka

Editors note; Judy submitted this story almost a year ago. At her suggestion, we've saved it for this timely presentation. Thanks, Judy, for your contribution.

After lunch I took the half mile walk to the pasture. We were having a late snowstorm, but my Carharts kept the chill out. I wanted to see if anyone was calving – how they were handling the weather. Not far into the timber, down protected by a thirty-five foot cliff, was a Charolais-colored cow with sawed off horns, in labor. I watched as she labored, struggling to bring new life into this world. Snow and rain blowing strongly against her straining body, head outstretched (my teeth clenched). She gets up, walks in a small circle, then it starts again. Then, two little black hooves come, then they go. Back and forth, back and forth it stretches out the minutes to an hour or more.

I decide to help. She is reluctant to accept my help. I talk and coax her until her eyes change from a fearful, vulnerable "Get away from me!" to a desperate "Help me, do something, anything." I grab one tiny foot and slip off. I grab both little feet, one in each hand, just above the hoof at the narrowing. I strain. She strains. Together we work as if we are one. For a picture of time, we are.

I never notice the cold blowing snow the half mile back to the house. I'm flying high all afternoon. The afternoon spring came in a snowstorm.

"Keep pushing, Mama, " I whisper. She has quit. I still coax and whisper, gently with the voice soft and sweet. Yet my body and muscles pull and stretch and strain. It's not coming. My shoulders ache. "I won't quit on you, Mama. Nor your little one."

A black nose peeks out and wiggles like a rabbit's. A black tongue licks a tiny muzzle, as if sucking already. He is so ready for life he can taste it. Mama strains. I strain. Mama bellows loud and long. I groan softly with the strain so as not to stress her. Mama's body releases, baby comes with a few more pushes and pulls from the mama cow and farmer team. The calf is out to the hips. Mama stands up and says, "Okay, I can take it from here." I step back fifteen feet. One last push and baby is born soft and wet and slick. With a slap on the ground, he is breathing.

My team moment has ended. Mama cow gave more to me than I ever gave to her. New life! Springtime! I love it! Soft and gentle and sweet in a cold, blustery, wet, windy snowstorm so thick I can't see thirty yards in front of me. I watch as the bags and fluids are passed. Clean and good color. I stay close to watch Mama lick baby clean and dry. Soon the baby is up and trying to suckle. How beautiful and natural the world is. I never notice the cold blowing snow the half mile back to the house. I'm flying high all afternoon. The afternoon spring came in a snowstorm.

Preserving the Records of Rural Women

By Doris Malkmus, Rural Women's Project Archivist

The Iowa Women's Archives at the University of Iowa Libraries began a rural initiative in 1998 to save records that document rural women's experience during rapid change in rural life. The Iowa Women's Archives seeks to augment organizational records with personal papers that reflect the whole woman and how their farm activities were coordinated with family, employment, education and political outlook. To provide a fuller and more authentic picture of rural women, the archives seeks a strong representation

from women involved in alternative agriculture. There needs to be more documentation about the diversity of Iowa women who farm. We work collaboratively with Iowa State University and the State Historical Society of Iowa in our efforts to identify and preserve the papers of as many rural women as possible.

Many women do not associate their personal papers with history making, but letters, diaries, journals, scrapbooks, farm and household accounts, business files, employment records, and photographs are sometimes the only records of family and rural life. These papers convey the human dimension of long term changes in a way that textbooks cannot. Once donated, local teachers and students, researchers and historians use these collections to learn more about Iowa women's history and culture. Contributing papers to the Iowa Women's Archives is one way of promoting women's history – it helps teachers, students and young women challenge stereotypes of passive womanhood----it gives women a chance to speak for themselves.

IOWA WOMEN'S ARCHIVES

Everyone is welcome to visit the archives at the University of Iowa Main Library or to have a "virtual visit" by surfing the web site at http://www.lib.uiowa.edu/iwa/. Individuals interested in donating papers can contact the Iowa Women's Archives by writing to 100 Main Library, University of Iowa, Iowa City, IA 52242 or by calling (319) 335-5068. Staff is always eager to answer questions or help make arrangements.

Many women do not associate their personal papers with history making, but... These papers convey the human dimension of long term changes in a way that textbooks cannot.

PFI CAMP 1999

New Location and New activities
at the YMCA CAMP
north of Boone, Iowa
Friday June 4th to Sunday, June 6th, 1999

Teen Counselor/Assistant Staff Leadership Camp
June 3-4 for training orientation and fun

Please call right away if you have a school conflict with any of these dates.

Families are welcome –
there are very nice cabins!

For more information contact Shelly Gradwell at (515) 294-0887 or shellyg@agron.iastate.edu

PFI Membership Application and Renewal Form

Name _____

Address _____

City _____

County _____

State _____

Zip Code _____

Phone # (____) _____

This is a
____ new membership
____ renewal

Do you derive a significant part of your income directly from farming in Iowa?
____ yes ____ no

Individual or family membership: $20 for one year, $50 for three years.

Please enclose check or money order payable to "Practical Farmers of Iowa" and mail to:

Practical Farmers of Iowa
2035 190th St.
Boone, IA 50036-7423

CORRESPONDENCE

Correspondence to the PFI directors' addresses is always welcome. Member contributions to *the Practical Farmer* are also welcome and will be reviewed by the PFI board of directors.

District 1 (Northwest): Ken Wise, 2820 Wadsley Ave., Sac City, IA 50583-7637. (712) 662-7716.
Colin Wilson, PFI Vice President, 5482 450th St., Paullina, 51046. (712) 448-2708.

District 2 (North Central): Ron Brunk, 12789 240th St., Eldora, IA 50627-7518. (515) 858-3239.
Steve Weis, 2191 440th St., Osage, IA 50461-8211. (515) 737-2566, sweis@juno.com.

District 3 (Northeast): Michael Natvig, 20074 Timber Ave., Cresco, IA 52136. (319) 569-8358.
Walt Ebert, 1273 120th St., Plainfield, IA 50666-9647. (319) 276-4444.

District 4 (Southwest): Steve Williams, 2937 102nd St., Villisca, IA 50864-8525. (712) 826-2107.
Donna Bauer, 1667 Hwy. 71, Audubon, IA 50025. (712) 563-4084 phone and fax, tdbbauer@juno.com.

District 5 (Southeast): David Lubben, PFI President, 24539 Hwy 38, Monticello, IA 52310. (319) 465-4717. dave_lubben@jemm.com
Susan Zacharakis-Jutz, 5025 120th St. NE, Solon, IA 52333. (319) 644-3052. zjfarm@ia.net

PFI Executive Vice President & Treasurer: Dick Thompson, 2035 190th St., Boone, 50036. (515) 432-1560.

Coordinators: Nan Bonfils, (515) 294-8512, nanb@iastate.edu, Rick Exner, (515) 294-5486, dnexner@iastate.edu, Room 2104, Agronomy Hall, ISU, Ames, Iowa, 50011.
Gary Huber, (515) 232-7162, ftf@isunet.net, Field to Family, 917 Burnett Ave., #3, Ames 50010.

PRINTED WITH SOY INK™

PRACTICAL FARMERS OF IOWA
MEMBERSHIP DISTRICTS

Acknowledgment:

The Practical Farmer and the PFI on-farm demonstrations are supported, in part, by Iowa State University Cooperative Extension, and the Leopold Center for Sustainable Agriculture.

Printed on Recycled Paper

Practical Farmers of Iowa

2035 190th St., Boone, Iowa 50036-7423

Bulk Rate
U.S. Postage
Paid
Permit No. 200
Ames, Iowa

Address Service Requested

*********************3-DIGIT 501
S2 P3 9353650 114296
NAN BONFILS AND ADAMS
1579 P AVE
MADRID IA 50156-7568