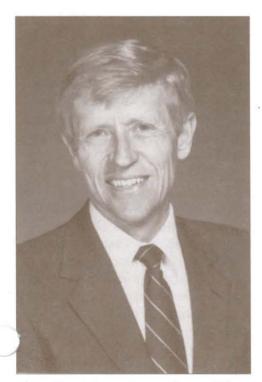
# the Practical Farmer

# Practical Farmers of Iowa Newsletter

Vol. 14, #3 Fall 1999

# ADJUST YOUR VISION AT THE ANNUAL MEETING

John Ikerd believes that the future of farming depends on a fundamentally different vision. When he spoke last February at the Northern Plains Sustainable Agriculture Society's Winter Conference, he quoted leverend Jesse Jackson, "If you can conceive it and believe it, then you can achieve it." Then Dr. Ikerd added, "The future of rural America belongs to those with the courage to seize it."



John Ikerd, keynote speaker at PFI January meeting.

This winter John brings his message to the Practical Farmers of Iowa as keynote speaker at our Annual Meeting on Saturday, January 15, 2000. He's entitled his address "The New American Farmer."

But there's nothing new about John Ikerd's commitment to American farms, especially sustainable ones. "My definition of sustainable agriculture...meeting our needs today, leaving equal or better options for the future." Raised on a small dairy farm in southwest Missouri, he was educated at the University of Missouri with BS, MS, and Ph.D. degrees in agricultural economics. He has worked with Extension agricultural

#### IN THIS ISSUE

- 1 Annual Meeting Program
- 6 Sustainable Ag Award
- 6 Child Care Options
- 8 Conference Help Wanted
- 8 Endowed Fund & Membership
- 9 Notes and Notices
- **10** Stock Up for Winter Reading
- 11 A Century of Farming — Rick Exner
- **12** The Editor Muses
- 12 Over the Back Fence — Nan Bonfils
- 13 Trials and Field Days in Review — Rick Exner
- 14 Field to Family Project — Robert Karp
- 14 Local Food Systems — Gary Huber
- 16 Summer Field Days Out & About — Rick Exner
- 18 Audubon County Family Farms — Cindy and Vic Madsen
- 18 Summer Interns — Lorna Wilson
- 19 Projects Proposal Form
- 22 PFI on the Internet — Rick Exner
- 23 1998 On-Farm Trials, Part IV — Multiple-Treatment Varieties — Fertility Trials
  - What About Hogs?
- 27 Rollin' the Cob
- **30** Getting to Zero with GMO'S — Rick Exner
- **31** Global Warming — Robert Hogg
- **32** Footprints: Pigs without Pesticides — Tom Frantzen
- 34 Bits of Sustenance

"The future of rural America belongs to those with the courage to seize it."

economics at North Carolina State, Oklahoma State, and the University of Georgia. In 1989 he returned to the University of Missouri, under a cooperative agreement with USDA, to provide state and national leadership for research and education related to sustainable agriculture. He is currently wrapping up duties as State Co-coordinator of the Sustainable Agriculture Professional Development Program for Missouri.

John joins the PFI Annual Meeting on the cusp of retirement, a milestone that can undoubtedly affect anyone's outlook. We welcome his, knowing that it will be "focused on challenging the current industrial/ economic food system and developing a positive vision for sustaining a desirable quality of farm life."

#### **Abundant Workshop Choices**

As we go to press, not all of the workshop details are nailed down. But the puzzle pieces are beginning to fall into place and we think we have enough of the big picture to lure you to Ames in January. Here's a

## Winter Meeting Schedule

#### Friday evening, January 14

7:30 P.M. Registration opens
7:30 Refreshments and dancing Cash bar for adults Music from The Pretty Good Band
8:00 Jerry DeWitt's slides of

Sustainable Agriculture Across America, then dancing until 9:30

#### Saturday, January 15

7:00 A.M. Coffee available

- 7:30 Registration opens
- 8:30 Welcome-PFI President Dave Lubben Sustainable Ag Achievement Award
- 9:30 Workshops round I
- 10:30 John Ikerd, The New American Farm
- 11:30 The Future of PFI membership meeting
- noon Iowa Bounty Buffet
- 1:30 P.M. District meetings
- 2:15 Workshops round II
- 3:15 Producer posters and displays, refreshments
- 4:00 Workshops round III

preview of some of the concurrent sessions you'll have to choose from.

Many PFI members know Dr. Kathleen Delate, ISU's Assistant Professor of Horticulture and Agronomy, Organics Specialist. She'll co-present with PFI member Jim Boes of Heartland Organic Marketing Co-op in Greenfield, Iowa. They've entitled their session "**Update on Organics, ISU Research, Certification, and Markets.**"

Jim Boes will also be part of an additional session focusing on the **"Economic Outlook for Organic Producers."** Other panelists are Gary Bogenrief, general manager of ProfiSeed International in Hampton, Iowa, and Cullen Harder, organic buyer for Agri Trading Corporation, Eden Prairie, Minnesota. They will discuss opportunities for growers in domestic and international markets.

"GMOs" continue to be a hot topic. ISU economist Dr. Robert Wisner will speak about emerging types of GMO crops and the ever-changing market for them. Handling, segregation, and documentation practices are also part of the producer's concern. We have invited Dr. Charles Hurburgh, professor of Agriculture/Biosystems Engineering to lend his expertise and handle your questions.

Dr. Tom Moorman will lead a workshop on **"Soil Quality."** Tom's a soil microbiologist with the USDA-ARS National Soil Tilth Laboratory in Ames. He is involved in projects looking at farming system effects on soil quality, microbial processes in buffer strips, and microbial degradation of pesticides in the environment. Tom will discuss with workshop participants the contributions of soil microorganisms to soil quality and the effects of farming practices on critical microbial populations and processes.

Back by popular demand, Dr. Randy Kidd, D.V.M. from McClouth, Kansas, will speak about **"Realities** of Holistic Veterinary Practices." Dr. Kidd will describe current practices such as acupuncture, bach flower remedies, chiropractics, homeopathy and nutrition as well as conventional modalities in caring for farm animals. He will lead an open discussion on the realities of putting theory into practice. If you missed Randy last January, here's your chance.

Livestock producers may want to tune into Terry Gompert, Extension educator with University of Nebraska as he discusses "**Grazing Standing**  "No matter what you call it, grazing forages instead of harvesting and hauling them says dollars in the pocket."

**Crops.**" He will share profitable experiences grazing corn, turnips, and other standing crops. Gompert writes "No matter what you call it, grazing forages instead of harvesting and hauling them says dollars in the pocket. The advantages of grazing versus harvesting are quite obvious: 1) low or no harvesting costs; 2) mineral recycling at no cost; 3) potentially low or no harvesting quantity and/or quality lost; and 4) lower feeding costs."

"Choosing and Using Open-Pollinated and Synthetic Corn Varieties" is another workshop. As seed technology fees rise, use restrictions tighten, and market options narrow, a few corn producers are re-examining open-pollinated seed. Some new and continuing breeding programs are leading to corn that stands and yields much better than the corn that grandpa grew. Dr. Kendall Lamkey is an ISU corn breeder whose open-pollinated "synthetic" varieties are usually used to make hybrids but can be used and replanted by farmers. We've also invited Dr. Walter Goldstein of the Michael Fields Ag Institute who has developed an open-pollinated variety using traits from corn around the world. Are these viable alternatives? What would Iowa farmers need to do to find out? How would you maintain the quality of "OP" corn on your farm? Lamkey and Goldstein will assess the level of interest and discuss these issues with participants.

"Weeds on the Landscape" What are weeds telling us as they make their way across the fields, settling into favorite spots, and changing from year to year? Weed scientist Dr. Don Wyse, Director of the Minnesota Institute for Sustainable Agriculture, looks at the plants we call weeds from an ecological perspective, observing how "pre-adapted" weeds move into particular cropping systems and how weeds evolve in response to the things we do to them. Participants will explore why thinking in terms of weed biology prepares farmers for the challenges weeds bring to cropping systems.

Dr. Matt Liebman, cropping systems agronomist at Iowa State University, moved to Iowa from Maine

| PLEASE PRE-REGISTER BY  | ANUARY 1 !  | (please print) |                               |               |
|---|---|----------------|-------------------------------|---------------|
| Name  |   | Address        |                               |               |
| City  | State   | Zip            | Phone                         |               |
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| (There will be the usual \$20   |   |                |                               |               |
| Discounted Student Rate: \$10.0<br>Please pay in advance for the lo     |   |                |                               | .=            |
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| MAKE CHECK PAYABLE TO   | PFI-TOTAL A   | AMOUNT DUE     |                               | =             |
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| Yes, I want to help with re<br>workshop recorder (specify title_        | -   |                |                               | )             |
| Send this form with your check t call: (515) 294-8512. <i>Motel Res</i> |   | -              |                               |               |

in 1998 and enjoys the warmer climate, more fertile soils (where are the stones?), and largely untapped horticultural potential. He'll present a workshop on

**"Extending the Growing Season."** Here's what he says. "Crops require sunlight, water, nutrients, carbon dioxide, and adequate temperature to grow. By increasing temperature and reducing air movement, hoop houses, fabric and plastic row covers, and other tools can permit vegetable production earlier and later than is otherwise feasible. Cold-adapted cover crops also make use of growth resources in the fall and early spring, and improve the quality of ground used for vegetable production." Matt will discuss the use of season extending structures and crops in northern New England and balmy Iowa.

If you've ever wished there were alternatives to the prolonged stooping, kneeling, lifting and carrying, and repetitive tasks so common in small acreage vegetable production, you are not alone. Seventy percent of small-scale, fresh market vegetable growers surveyed in the upper Midwest reported pain in their lower backs over the last year. Marcia Miquelon will lead a workshop to promote **"Healthy Farmers."** She'll share ideas, plans and sources for tools and techniques that improve work efficiency, maintain health and safety, and increase profits for growers. Marcia is an outreach specialist for the University of Wisconsin-Madison's *Healthy Farmers, Healthy Profits* project.

Many farm families consider expanding an operation or launching a new business these days. In **"Tips for Business Start-Ups,"** Liz Garst will provide practical advice, cite available resources, and warn you of the pitfalls as you contemplate a new venture or a new spin on an existing one. Liz is currently manager of Garst Farm Resorts in Coon Rapids. She has a strong background in banking and agriculture, as well as a special interest in eco-tourism. Several PFI members heard Liz speak on this topic at a Women, Food and Agriculture Network meeting a year ago and recommended her for a larger audience.

How does a producer preserve maximum independence and profitability in the changing structures of agriculture? **"Trends in Consumer Driven Marketing"** is a workshop designed to help farmers answer this vital question. What are the trends and how do you position yourself to take advantage of them? Our panel consists of Dan Looker, business editor of <u>Successful Farming</u> and Mary Myers from CDS, Cooperative Development Services, Madison, WI. In addition, Neil Hamilton, law professor at Drake

# Child Care & Youth Activities Registration

For details about child care and youth activities, see p.6. In each category list the name and age of children who will need these services.

#### Child care - Ages 5 and under

to be cared for at Gateway Holiday Inn, \$12.00 per child (does not include lunch) payable on January 14 or 15.

#### Youth Activities – Ages 6 and up

Transportation to Y Camp will leave the hotel at 8:30 A.M. Bus returns to hotel by 5:00 P.M. \$15.00 per child (includes lunch) payable on January 14 or 15.

University, and Mary Swalla-Holmes, ISU Extension value added specialist, have been invited.

"The Rural Midwestern Ideals of Henry A. Wallace," presented by Jess Gilbert, will look at Iowa's geneticist and farm editor who became U.S. Secretary of Agriculture (1933-40). Wallace was part of a long Midwestern tradition of rural reform. He advocated the ideals of citizen participation in government, public service, an interdependence between rural and urban America, participatory research by farmers and scientists together, and grass-roots democracy (economic as well as political). Gilbert, a rural sociologist from the University of Wisconsin-Madison, will discuss these and related ideals that Wallace tried to put into practice during the 1930s. Gilbert is interested in how such agrarian traditions might be renewed today.

"Managing Parasites in Organic Livestock **Production**" New markets are opening for organically produced meats, but it may take significantly more time and feed to bring animals to market weight if gastrointestinal parasites are not controlled. How can this be accomplished without synthetic chemical vormers? Veterinary microbiologists George Beran and Julie Jarvinen will describe what we know about structuring production systems to optimize sanitation, alternative treatments that have been used, and how producers can make their own assessments of parasite pressure from fecal samples. Frances Zacharakis-Jutz (daughter of Jeff and Susan) will demonstrate how she monitored parasites in her family's goat herd this summer. Find out how you can help PFI research alternative techniques and treatments.

"Midwest Value-Added Pork Initiatives" Paul Willis, who helped start the Niman Ranch Pork Company, and Mark Kastel, who represents Coulee Region Organic Produce Pool (CROPP), will discuss how you can get involved with these efforts, which are creating additional economic benefits for farmers who are using sustainable production systems.



Try something new and different: COB ROLLS

A new twist on the concurrent sessions this year is that some of them will be designated as Cob Rolls. You'll recognize this name from "Rollin' the Cob", a newsletter feature. Here's a reminder about the nature of Rollin the Cob. Ron Rosmann says that's when someone comes into the yard and a discussion gets going. While you're talking, maybe you've got one foot up on the bumper of the pickup, or you're tossing sticks for the dog. If there are a few corncobs lying around, you may absentmindedly toe them about during the conversation. And that's "rollin' the cob."

The concurrent sessions called Cob Rolls are intended to capture the flavor of that backyard conversation Ron describes. There won't be any corncobs at the Holiday Inn, but we know that there will plenty of good talk. At a Cob Roll, the initial speaker will present a concept, or establish a proposition, or state an opinion, or set forth a problem. After that, the content is up to the participants; the speaker's role changes to that of facilitator.

Currently we have three Cob Roll sessions on the program: Farmer's Market/Super Market, kicked off by Connie Tjelmand and Larry Cleverley; Getting Families More Involved in PFI, led by Lorna Wilson; and Ag Crisis: Responding with Responsibility, led by Beth Fleming, ISU Extension Family Specialist.

In **"Farmer's Market/ Super Market – What works for you?"** you'll hear from two PFI members initially. Larry Cleverley is a very successful market and wholesale produce grower. Connie Tjelmeland has a prosperous egg business, among other farm enterprises. They'll report briefly on their experiences to start the cob rolling. Participants will join in with their marketing ideas from CSAs to school cafeterias to restaurants. Field to Family staff will be the facilitators.

We invited Lorna Wilson to lead a discussion about "Getting Families More Involved in PFI" after her compelling remarks on the topic at a summer field day. What does it take to make an organization like this really work for its members? Bring your ideas.

Finally, join Beth Fleming for a cob roll on **"Ag Crisis: Responding with Responsibility."** What does it take to be able to see a problem as a challenge, to move from a mentality of dependency to one of responsibility? Is it simply a matter of attitude? What about the role of faith? Beth Fleming will guide this discussion. All voices are welcome. You may recall Beth's name from last year's meeting when she led a workshop on Multi-generational Farm Families; her workshop got high marks.

We're trying out the Cob Rolls in order to allow for more member participation. We hope to capture the spirit of some of those great conversations that tend to happen in the hallway, over coffee, or between sessions and bring the talk into a meeting room. Will it work? That's up to you. Give it a try and let us know what happens as you fill out your meeting evaluations.

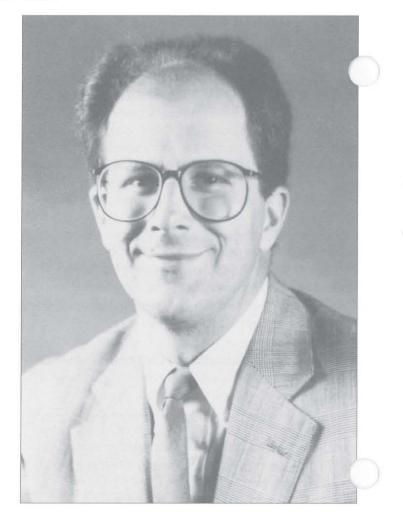
# SUSTAINABLE AG ACHIEVEMENT AWARD TO MARK HONEYMAN

Mark Honeyman, associate professor of animal science at Iowa State University, has been chosen to receive PFI's Sustainable Agriculture Achievement Award. Dr. Honeyman teaches swine management and animal nutrition, along with advising undergraduates in animal science at ISU. He also coordinates the ISU Ag and Home Economics Experiment Station's Research and Demonstration Farms, a statewide network of eleven research farms. Honeyman conducts research in swine nutrition and production, focusing on alternative feeds and systems. He is keenly interested in the role of livestock, particularly swine, in sustainable farming systems.

At one time, Honeyman taught a student-managed farm/course at ISU and was in charge of the Off-Campus Programs in Agriculture. Previously he was a partner in his family's farming operation in southwest Iowa. He earned his B.S., M.S., and Ph.D. degrees from Iowa State University.

Honeyman's work in alternative swine production systems has been extensive. He has researched outdoor farrowing systems, and the use of hoop structures for finishing pigs and gestating sows. He organized a demonstration of a Swedish deep-bedded feeder pig production system that uses group lactation, no feed antibiotics, and minimizes pig stress.

"PFI has been a supporter as well as an inspiration for the work I've been involved with."



Honeyman's work has been primarily on ISU outlying research farms or with farmers. He was a contributing author to the new bulletin *How to Conduct Research on Your Farm or Ranch*. Honeyman has a keen interest in family-based sustainable agriculture.

"Practical Farmers of Iowa represents the best of rural Iowa. PFI is interested in building strong farm families and viable rural communities in a clean environment. PFI has been a supporter as well as an inspiration for the work I've been involved with." "

# SATURDAY CHILD CARE OPTIONS

#### For the wee ones five and younger

A suite will be set aside at the Gateway Holiday Inn to provide care for the wee ones. Theresa Jones, professional day care provider, will be in charge for the day with a younger support crew. Theresa is the woman who supervised the child care for us last

# Friday Night is Family Night

Come on over and bring the kids! Friday, January 14, from 7:30 – 9:30 P.M. is family night in the Central Prairie Room at Gateway Holiday Inn, Ames. The conference registration desk will open at 7:30 so you can take care of a little business and avoid the Saturday morning rush. Then relax and enjoy the evening.

Tap your toes to the sounds of the Pretty Good Band, starting at 7:30. Refreshments and cash bar available too.



Around 8:00 P.M. Jerry DeWitt from ISU Extension will present a slide show on the sights and scenes of sustainable agriculture across America. His presentation will be based upon his travels and work in sustainable agriculture during the last several years and his partnership with black and white documentary photographer, Cynthia Vagnetti, from

January in the afternoon. She's delighted to return. This sitter service is designed so that you, the parents, can participate fully in the conference activities. Still, parents should be prepared for interruptions in their day according to their child's needs. Likewise, parents are invited and encouraged to spend time in the child care room. The cost of the childcare service is \$12.00 per child. The fees go toward paying the staff and covering costs of snacks and art/play materials.

#### For school children ages six and above

Capitalizing on a fabulous summer camp experience for PFI kids, we have contracted with Y Camp once again to provide a program for school age children. Y Camp staff will pick up participants at the Holiday Inn at 8:30 on Saturday morning. They will supervise a full day of indoor and outdoor activities at the Y Camp, serve a hot lunch, and return the children o the hotel by 5:00 P.M. The cost of this service is \$15.00 per child, including transportation, lunch, and programs from the excellent Y Camp staff. Children must be at least six years old to participate in the Y Washington DC. Their work in 1998 led them to more than 27 farms and ranches in 20 states where they photographed and interviewed farm and ranch families. Their upcoming book, "People Sustaining the Land" will be available next spring.

After that, the band plays on with family dancing until 9:30.

All are welcome. You do not have to be staying at the Holiday Inn to join in on the Friday night festivities. Everyone had a blast last year, so we hope to have more good folks out in 2000.

For hotel reservations at the Gateway Holiday Inn call (515) 292-8600 or 1-800-Holiday. Discounted rooms at the PFI group rate available until December 24. For other housing options, see Over the Back Fence, p. 12.

Camp option; there is no upper age limit. This is the only child care program offered by PFI for school age children this year; there is no supervision available at the hotel.

# Is your child old enough to be a full conference participant?

That's a family decision. Young family members who are involved in farm operations/enterprises and engaged in workshop topics are welcome to attend as conference participants. Families need to be clear that there is no separate or additional program designed for older children at the hotel. However, there is no upper age limit for participating in the Y Camp option (see above).

#### What about swimming?

The pool at the Gateway Holiday Inn is open from 6:00 A.M. to 10:00 P.M. with NO lifeguard. Unfortunately ONLY REGISTERED OVERNIGHT GUESTS of the Holiday Inn may use the pool. Therefore,

# **Board Elections - Districts 2 and 4**

As part of the annual meeting there will be district meetings after lunch on Saturday, giving you a chance to meet your PFI neighbors and plan district events. Elections will be held for board members to serve in two districts – District 2 (North Central), and District 4 (Southwest).

The search is underway for members to nominate. Contact Ron Brunk (515-858-3239) in District 2 or Steve Williams (712-826-2107) in District 4 if you are interested in serving. President Dave Lubben (319-465-4717) will also handle nomination suggestions; nominations will be accepted from the floor as well.

swimming will not be part of the program organized by PFI.

#### Let us know your plans

It helps to know what your intentions are for child care. So please fill out the paperwork on page 4. But we won't take any money for child care till the day of the event. We know how plans can change! 📽

# IT'S YOUR CONFERENCE – MANY HANDS MAKE LIGHT WORK

Staff and board work extra hard this time of year to plan a worthwhile conference. But there are many tasks that simply can't be done ahead of the event and here's where you can help:

**1. Registration:** We need people to handle walk-in registrations Friday evening and early on Saturday morning. The job involves being a greeter, collecting

#### Silent Auction to Support Summer Camp

Randy Nowotny, a PFI member from Victor, will donate hand crafted furniture for a silent auction at this year's annual meeting. The PFI Board has designated that all money raised by the auction go to the scholarship fund for PFI Summer Camp. This auction is a first for PFI and we hope you'll join in the fun. Thanks, Randy. money, and doing a little paper work. Participants who have pre-registered will still check in at the information desk to pick up their conference program and get a name tag. So, it's going to be a very busy place. Child care registration will be handled at the same tables. You need a cool head and a big smile for this job!

**2. Child care:** All families will register their children and sign waivers, so we will need people to assist with this registration on Friday evening and Saturday morning. In addition, you may volunteer to spend some time in the toddler room. If you have an older child who is at loose ends about how to get involved with the conference, helping with toddler care could be an excellent choice.

**3. Workshop host:** For each workshop session we need one designated person, besides the moderator, to keep things running smoothly. This person would be the "gopher" if there's a problem during the session and will watch the clock to assure a smooth start and a timely wrap-up. If you look over the list of workshops and see something you definitely want to attend, volunteering to be the host guarantees your place.

**4. Workshop reporter:** Recorders need to take notes and write a brief summary of the workshop content. Then Nan will edit your writing for the winter newsletter that she puts together in January. Your report gives everyone a history of the event and will be especially helpful to those who cannot attend. Again, if there's a workshop you're particularly keen to get in on, this job is for you.

**5. Silent auction:** This is the first fund-raiser of this kind for PFI and we will need help monitoring the bidding sheet throughout the day.

Thank you for getting involved. Your help is welcome. You can use the form on page 3 to enlist or call Nan, PFI program assistant, at 515-294-8512 to offer your services. For email it's nanb@iastate.edu. Thanks.

# ENDOWED FUND AND MEMBERSHIP UPDATE

Nan Bonfils

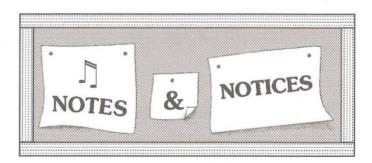
Martha Cline, a development consultant from Adel, will add her energy and professional experience

| Farmer   | SOWING SEEDS FOR THE FUTURE OF PFI   |
|--|--|
| Farmers helping<br>farmers make decisions<br>Farms · Families · Communities<br>protect the environment.<br>in this form to the address | Any season is the right time to sow seeds for the future of PFI. Your gift to the<br>Practical Farmers of Iowa Endowed Fund is welcome at any time. Created to assure<br>long term financial stability for PFI, the fund began with an initial investment of<br>\$25,000 from Jean Wallace Douglas through the Wallace Genetic Foundation.<br>Additional donations have come from PFI Board members and individual members.<br>Currently the fund is managed by the ISU Achievement Foundation. Your tax<br>deductible gift will support profitable farming practices that are safe for people and<br>Please join the PFI Board in growing the Endowed Fund by completing and sending<br>below. Thank you. |
| Name:  | Address:   |
| Town /City & State _   | Zip code   |
| Please send me inform  | ble to PFI Endowed Fund)<br>nation on other giving options<br>neone about other giving options.  |

to growing the endowed fund. Martha began working with staff in September to become better acquainted with PFI and its goals. In October the board contracted with her to develop a case statement and create a feasibility study of prospective donors. Martha, who's done similar work for The Nature Conservancy, Farm Safety 4 Just Kids, and other nonprofits, is an Iowa native. She's going to be a big boost to the campaign! You'll be hearing more about progress on this project at the Annual Meeting.

Have you sent back your membership **agreement form?** We are swimming in them here at the office, but we know there are lots more out there. This is your opportunity to update us on your vital stats. For one thing, it's how we keep tabs on vour accurate mailing address and phone number. For another, we added a place for email addresses and now discover, not surprisingly, that a high percentage of PFI members are wired. The response rate to "You name it!", a new feature on the back of the form, has been disappointingly low. Still it reveals intriguing interests among members. From home schooling to prairie restoration, from switch grass for fuel to brick ven pizza, this is all grist for a new directory and better networking between PFI members. So if that 8 x 14 inch paper is still buried on your desk, drag it out and let us hear from you. Don't forget to enclose a

check if your membership needed renewing. Take care of it now and you'll be all set for the annual meeting. Thanks!



# Solar Power, Stories and Sisters Winter Retreat for PFI Women

The 5<sup>th</sup> annual Practical Farmers of Iowa Women's Retreat will be held February 5 and 6, 2000 at Prairie Woods, a Franciscan retreat center near Cedar Rapids. The retreat will include a tour of straw bale hermitages and solar power technologies at the center and a talk about agricultural applications; a lecture on Hildegard of Bingen, an herbalist among other things; a book review; and personal reflections on life in agriculture. Prairie Woods offers trails through prairie and forest, meditation centers, mas-

sage therapy, and cozy quarters. We are working with them on providing local food for the retreat, too. For more information, contact Kate Hogg at 319-247-0223 or rkhogg@aol.com. Please join us!

# ♪ PFI Camp 2000 Set for Early June

Next year is our 6<sup>th</sup> PFI Camp! This past summer, the PFI campers enjoyed the YMCA Camp staff and programs so much that they requested to return next year! The year 2000 theme will focus on the farms, prairies, waters, and woodlands of the of the past and future. A few of the planned activities include prehistoric Iowa agriculture and archaeology, a visit to Living History Farms and a modern organic farm, agroecology field studies, and a project to design farms for the future that preserve natural resources and improve quality of life for farm families, consumers, and Iowa communities. Of course there will again be horseback riding, canoeing, swimming, hiking, and another family picnic! Call Nan at (515) 294-8512 or Shelly at (515) 294-0877 with questions.

#### **Camp Logo and Theme Contest**

Come up with a catchy theme and/or logo to highlight the 2000 Camp's focus on farms, prairies, waters and woodlands of the past and future and win a \$25 scholarship to camp! There can be both a theme and logo winner. Send in your entries by February 1, 2000 to PFI Camp, 2104 Agronomy, Ames, IA 50011.

# ♪ Land Owner Seeks Farmer

Owner seeking tenant to operate 160 acre farm south of Thompson, IA. Farm has been operated conventionally but will be transitioned to certified organic. Two sets of buildings, one house, about 20,000 bu. grain storage. Owner will be adding to land holdings in area as opportunity allows. Operator must be committed to organic farming and have necessary skills to handle such an operation. Lack of financial resources should not be considered an impediment to pursuing this opportunity. Contact: P.E. Robinson, 1400 W. 6<sup>th</sup> Ave, Cheyenne, WY 82001; phone: (307) 772-0243; e-mail: phil@persoftware.com

# J Sustainable Projects Proposal Due in February 2000

It's time once again to think about your ideas for a sustainable ag project on your farm or in your community. PFI funds several projects designed by members each year. Use your imagination and don't be afraid to team-up. For example, Dr., Randy Kidd, a holistic vet from Kansas has expressed an interest in working with PFI producers. Nan has details at 515-294-8512. The paperwork you need is on page 19 and 20 in this newsletter. The deadline is February 1, 2000.

# STOCK UP FOR WINTER READING

## Put Your Ideas to the Test: How to Conduct Research on Your Farm or Ranch

Farmers and ranchers seeking to cut production costs or improve stewardship of natural resources often experiment with new methods. Designing and carrying out simple research tests in a more organized fashion, however, can provide reliable, valuable answers to production questions. This bulletin describes how to plan for research at the farm level, with practical tips for both crop and livestock producers as well as a comprehensive list of more in-depth resources. It's available at no charge from

the Sustainable Agriculture Network at www.sare.org/ san/htdocs/pubs/or call 301-504-6422 or email aadeymi@nal.usda.gov



#### Marketing Sustainable Agriculture: Case Studies and Analysis from Europe

Gaining insights from successful marketing strategies is the purpose of this new publication The report describes marketing initiatives through the eyes of an international group of farmers, retailers, and agriculturists who visited the projects in Switzerland, Denmark, France, Germany, England, and the Netherlands. Edited and produced by the Institute for Agriculture and Trade Policy, the publication is available from their office at 2105 First Avenue South, Minneapolis, MN, 55404. The cost is \$15.00. Contact Ven at 612-870-3411 or vtran@iatp.org

## The Legal Guide for Direct Farm Marketing

The much anticipated book by Neil Hamilton was published in June and is now available to the farm direct marketing community. The work was supported by the U.S. Department of Agriculture, Cooperative State Research, Education, and Extension Service under a SARE (Sustainable Agriculture Research and Education) Professional Development Program grant. The author notes

that, "[the] book was written to serve two main categories of readers involved in the exciting process of direct farm marketing ...farmers[and] advisors." The book provides valuable insights to both groups.



It also provides practical answers to commonly asked questions in every chapter. Throughout the book, sidebars note important details and provide checklists. The appendix includes more than 25 pages of direct farm marketing resources. An index allows the reader to easily locate topics of interest. Copies can be purchased for \$20.00 (plus \$2.00 for postage) rom: Drake University Agricultural Law Center, Des Moines, IA 50311. Make checks payable to Drake University. Call (515) 271-2065 for information on volume discounts for orders of 20 copies or more.

#### Farmer's Guide to Disaster Assistance

The Farmers Legal Action Group (FLAG) has just published the third edition of the Farmer's Guide to Disaster Assistance. The guide discusses how the various assistance programs work, what benefits are available, how to apply for aid, and how agencies determine eligibility. We have a sample copy in the PFI office. To order your own, call 651-223-5400. The \$18 purchase cost may be waived for some farmers. *Iowa, 1846-1946.* Maybe I came to the topic more ignorant than most people, but I bet anyone could pick up something of interest from the book. For instance: "What was considered the premier forage in Iowa in the 19<sup>th</sup> Century?" "What happened to agriculture during and after the Civil War?" "What factors gave rise to the Grange movement and what led to its downfall?" "Why did Iowa agriculture develop as a system of independent family farms instead of large, plantation farms?"

The answers provided for some of these questions, of course, are a matter of opinion. The opinions provided in A Century of Farming are those of Iowa State College faculty in 1946, the year Iowa celebrated its statehood centennial. As such, the book is a "historical history" that reveals something about the time in which it was written as well as about the period it covers. In 1946 agriculture had recovered from the cycles of drought and low prices that had marked it for decades; rural communities were populous, and their institutions were strong; and agriculture was just on the cusp of technological changes. Statements like "it is probable that within another ten years lowa will have its worst weeds well under control" are perhaps reminiscent of some more recent euphoria. It is also interesting to read how staunchly the rightness and fitness of family farm agriculture is defended.

The 353-page book (36 photos) is a little encyclopedic, with topics as specific as the history of Iowa creameries and the diseases of poultry. If Trends in Farm Structures is not your cup of tea, I recommend the chapters Struggle for Land Ownership (by longtime legislator William G. Murray), The Soil that Grows the Crops (Hey, it's my field.), The Marketing Phase of Iowa Farm Living, The Farm Standard of Living in Iowa, Farmers' Organizations, and The Pattern of Farm Management. If your library doesn't have this book, it can be obtained for you through the wonders of Inter-Library Loan; the ISU Parks Library has three copies.

# A CENTURY OF FARMING

**RickExner** 

With farming in a time of crisis, it can be instructive to step back and take in the "big picture." Histories provides us a way of doing that, and last summer I read sort of a "historical history," A Century of Farming in



# THE EDITOR MUSES

Seems like *value added* is getting to be more than a buzzword. At our farm, we just keep piling it on--the work, that is. The value we sometimes question. This summer we added free range eggs, bundled firewood, grass fed beef, and organic vegetables to the list of enterprises. We're still not sure how much money we made, but we ate well and we'll stay warm all winter. Clearly, we will have to use units other than dollars to measure the *value* in *value added* in.

That's how we hope you'll approach the Annual Meeting. We know that the cost of mileage, an overnight stay, possible child care, and meals all add up to a conference that is no cheap date for PFI families. That's why we raised neither registration fees nor the price for the Iowa buffet from the charges a year ago, although the actual costs have certainly increased. Child care costs remain in check. We are seeking sponsors to cover the costs of refreshment breaks and we anticipate using grant money to cover expenses for many of our speakers. Still, putting on the conference is no cheap date.

How can you help add value? First of all, you can be there. And maybe this is the year to bring along a neighbor. You can help publicize this year's special conference registration fee (\$10) to students in your community. As ever, we depend on recruited members to lead many workshop sessions. We're also looking for volunteers to assist with registration, child care, video coverage, hosting and reporting on workshops, and the silent auction. Contact me for details on how you can get involved [515-294-8512 or nanb@iastate.edu]. PFI needs your energy. You add the value. And what you receive from the Annual Meeting will not be measured in dollars. See you in January.

Cheers! Nan



# **OVER THE BACK FENCE**

Nan Bonfils

Over the Back Fence, a relatively new feature to this PFI newsletter, was developed last winter in response to conversations at the PFI Women's Winter Gathering. Like good neighbors, how ever far apart they may live, PFI members are ready to tackle the problems they bring to each other's attention. The first problem we tackled was housing for the Annual Meeting. How can we arrange overnight accommodations so that more PFI families can attend the annual meeting without facing a hefty hotel tab?

Several PFI members in the Ames area offered their homes as places to stay. 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). 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. Anybody else want to volunteer?

In addition, here is a list of other possibilities that may save you a few dollars. All are within five miles of the Holiday Inn meeting site. The first one is just across the highway.

Baymont Inn (formerly the Budgetel) 515-296-2500 or 800-428-3438

Americinn Motel 515-233-1005 or 800-634-3444

Best Western Starlite 515-232-9260 or 800-903-0009

Comfort Inn 515-232-0689 or 800-228-5150

Hampton Inn 515-239-9999 or 800-426-7866

Heartland Inn 515-233-6060 or 800-334-3277

Howard Johnson Express Inn 515-232-8363 or 800-798-8363

ISU Memorial Union 515-292-1111

Ramada Inn 515-232-3410 or 800-922-7384

Super 8 Motel 515-232-6510 or 800-800-8000

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# TRIALS AND FIELD DAYS IN REVIEW

**RickExner** 

In September PFI completed a three-month season of field days that spanned floods, an inferno, and the beginning (maybe) of drought. Of course it wasn't only the weather that was testing the mettle of those in farm country this summer. The overall situation in agriculture kept many away from events, including PFI field days. I had to appreciate those who did come out to learn the latest in production and marketing, and I *really* have to admire the PFI cooperators who, in spite of major changes shaking their farms, were gracious about sharing "lessons learned" with their field day guests. Check the Out and About page for some snaps from the second half of summer. Additional pictures are on the PFI Website.

PFI members also provided a boost this field day season by extending invitations to individuals who have attended multiple field days in the past and yet are not PFI members. There are nearly as many Iowans of this sort as there are members! Part of our intent was to nudge these folks toward *becoming* members. Thanks to the more than 30 people who brovided a friendly voice over the telephone.

Despite all the obstacles, some really interesting on-farm research took place this year. I'll just mention a few.

**Hoops:** As you may know, PFI cooperators are getting the numbers on hoophouse hog systems. One of the issues with hoops is labor. A bulletin by Midwest Plan Service estimates 0.4 hours per pig, compared with 0.2 for a typical confinement. However, the first few seasons of data from PFI suggest an average around 0.27 hours, according to Extension economist Mike Duffy.

**Veggies:** Producers growing for farmer's markets and CSAs have to balance the timing and labor needs for each crop with client preferences. At One Step at a Time Gardens, Jan Libbey and Tim Landgraf are putting the clock to most of what they do. They hope not only to get a better idea of where their own

Thanks to the more than 30 people who provided a friendly voice over the telephone.

# Anyone know where to get oil of chenopodium? How about areca nut, santonin, mucuna beans, or quassia?

resources should go but also to refine the methods that other producers can use to get similar information.

**Hybrid Corn:** What would you do to get another 5 bushels per acre? Gary and Venita Wilcox, cooperators through the Iowa Farm Bureau, read about Minnesota farmers growing two hybrids in alternate rows. The cross pollination sometimes resulted in increased seed yield. Coincidentally, the scientist involved in that work is now at ISU. Dr. Mark Westgate explained at the field day that you have to pick your hybrids carefully. They must not share any parental inbred lines, and of course they should silk together. In Minnesota, 5 bushels was a reasonable expectation; we will see how the Wilcox trial turns out.

**Open-Pollinated Corn:** As the seed industry moves to new technology and technology fees, some producers are taking another look at open-pollinated varieties. Scientists now have some new varieties for farmers to try, and cooperator Dan Specht demonstrated several at his field day. Walter Goldstein, of the Michael Fields Agricultural Institute, has been developing an open-pollinated corn population based on traits from maize around the world. ISU corn breeder Ken Lamkey works with inbred lines, which he describes as "synthetics." Synthetics can be planted as open-pollinated varieties, and some compare well with hybrids for yield, believes Lamkey.

**Parasites:** The markets for organic meat will be stifled unless farmers find ways to control gastrointestinal parasites in livestock. Consequently there is renewed interest in herbal treatments and sanitation methods that were employed before the age of synthetic wormers. Susan Zacharakis-Jutz and her daughter Frances are among the first to evaluate an herbal wormer product in a controlled trial. Working with scientists at the ISU College of Veterinary Medicine, I have been checking texts from as far back as the 1860s for potential treatments. Anyone know where to get oil of chenopodium? How about areca nut, santonin, mucuna beans, or quassia?

Stay tuned. The trials of summer turn into the workshops of winter. 👻



# FIELD TO FAMILY PROJECT UPDATE

Robert Karp

The Field to Family Project of PFI, in partnership with the Department of Hotel, Restaurant and Institution Management at Iowa State University, has received a \$12,000 Extension 21 Value Added Agriculture grant. The purpose of this pilot project is to form a closer link between farms and schools in central Iowa. The goal will be to increase the use of locally grown foods in the school lunch programs of one or more school districts.

This will be the first such organized effort in Iowa. There are several pilot projects of this nature around the country, however, which have proven very successful not only at supporting small farmers, but also at improving school nutrition, which is a major concern. A recent USDA survey, for example, showed that 35% of National School Lunch Program participants eat no fruit on an average day and 25% eat no vegetables. It is also hoped that an Extension publication will result from this project which will help other communities undertake similar efforts. PFI members

Community Food Security projects attempt to address local hunger and nutrition problems from a holistic perspective that emphasizes the importance of strengthening local agricultural production. will be kept posted on the progress of this exciting new project.

In addition, Robert Karp, Co-Director of the PFI Field to Family Community Food Project, has received a "Share the Learning" grant from the ISU Vision 2020 project. The grant will pay for Robert to go to several communities to introduce the concept of Community Food Security, to share experiences developing the Field to Family Project in the Ames area, and to provide support and facilitation to communities wanting to develop projects of their own.

Community Food Security projects attempt to address local hunger and nutrition problems from a holistic perspective that emphasizes the importance of strengthening local agricultural production. Community Food Security projects can include community gardens, youth gardens, farmer's markets, programs that increase the use of fresh, locally grown foods in local school lunch programs, cooking classes, community supported agriculture projects that embrace low income families, food policy councils, food bank farms and much more.

Robert is looking for individuals who are interested in bringing together a group of stakeholders in their community to learn about Community Food Security and discuss the potential for developing local projects. If you are interested, he can be contacted at the PFI Field to Family Project office by telephone at (515) 232-5649 or by email at robertftf@isunet.net

# LOCAL FOOD SYSTEM RECOMMENDATIONS RELEASED

Gary Huber

The Local Food Systems Task Force appointed by Secretary of Agriculture Patty Judge released its recommendations in September. The setting was Bistro 43 in Des Moines. On hand were task force members and people from the Department of Agriculture and Land Stewardship, Iowa State University, the Leopold Center for Sustainable Agriculture, the Governor's office, the Iowa Hospitality Association, and the Iowa Farm Bureau Federation. Also attending were farmers who supplied foods and a large number of people from various media.

The task force met six times starting last April to develop its recommendations. The group was facili-

tated by Mike Thompson and Kathy Hall of Iowa Mediation Service. PFI members on the task force included myself and Kamyar Enshayan, Larry Cleverey, Jan Libbey, Patti McKee, Mary Swalla-Holmes, Denise O'Brien, Neil Hamilton, Rich Pirog, and Carol Hunt.

Another member was State Horticulturist Mike Bevins, who was given the responsibility of forming and operating the task force by Patty Judge. Others included Larry Jacobsen of Allen Memorial Hospital, Naomi Maahs of the Iowa Fruit & Vegetable Growers Association, and Ann Thorp-Brouwer, who operates Produce LTD., a company that markets Iowa-grown produce.

The task force's recommendations were introduced and described to attendees by Neil Hamilton. In their simplest form, they are:

1. appoint a full-time, statewide local food systems coordinator to help implement the recommendations

2. formalize the task force into an on-going working group

3. research how Iowa foods are produced, processed, distributed, and consumed

4. build public awareness and understanding of local food systems and its implications for Iowa's economy, environment, and communities

5. provide training and technical assistance to strengthen local food systems

6. allocate resources and target a percentage of state and federal agriculture programs to help develop infrastructures for local food systems

7. create incentives and opportunities for linkages among Iowa producers, processors, distributors, and consumers, such as having state institutions develop plans to increase purchases of local foods

8. establish an Iowa Food Policy Council that includes representatives from the Task Force on Local Food Systems.

Patty Judge was given an opportunity to give her thoughts on these recommendations. She said they were excellent ideas and very timely. She also said he next step would be to sit down and determine how to make them happen. She has since set a November 8<sup>th</sup> follow up meeting with the task force to discuss how to proceed. The meal also helped make the potential impact of the task force recommendations real, immediate, and tangible.

Another person who spoke at the event was PFI member Larry Cleverley, who provided most of the vegetables used by Bistro 43 for the meal. Larry said he doesn't grow commodities for large agribusinesses. He grows food for people, which means he often hears the question, "How much do you want for that?" He continued by saying, "As a businessman, that is music to my ears."

Jeremy Morrow, Bistro 43's co-owner and its chef, also spoke about the importance of local foods for their restaurant, noting the key benefits as freshness and taste. The meal served that day was an excellent example. The tomato and basil salad, which was served with a garlic vinaigrette, was wonderful. The main course of sage-roasted pork loin was succulent and full of flavor, with the meat coming from the Berkshire breed and provided by Eden Farms, a network of producers led by PFI member Kelly Biensen.

Neil Hamilton and Iowa Secretary of Agriculture, Patty Judge, enjoyed a luncheon of local foods at Bistro 43.

The fingerling potatoes were tossed with fresh thyme and topped with a section of braised sweet corn, making for a delectable treat. And the wilted greens that were included as a side were done perfectly. To top off this delicious meal was a dessert of incredible taste and texture – a Creme Brulee made by Kristen McCauley-Morrow of Bistro 43. This treat was topped with red and gold fall raspberries from PFI



#### the Practical Farmer

# **1999 Summer Field Days Out and About, Part II**



Dan Wilson led discussion on pasture pigs at the Aug. 28 field day.



Tim Daley of Dunn International Ltd. described combine settings for organic and tofu-type soybeans at the Sept. 4 field day of Jeff Klinge and Deb Tidwell.



It was OK to paint the wall at the Sept. 18 field day of Jan Libbey and Tim Landgraf.



Frances Zacharakis-Jutz went to the State Fair with her project on gastrointestinal parasites of goats. Cornell biology teacher Laura Krause assisted Frances.



Healthy Farmers, Healthy Profits rep Marcia Miquelon showed a mesh bag for easy washing of salad greens while Virginia Moser held the washtub.



Virginia Moser's daikon radishes were a hit with visiting Japanese Extension agents. They reciprocated with packages of dried miso soup from Iowa soybeans.

**1999 Summer Field Days Out and About, Part II** 

Kathy Dice showed off the nursery inventory of edible nuts and fruits at the Red Fern Farm.



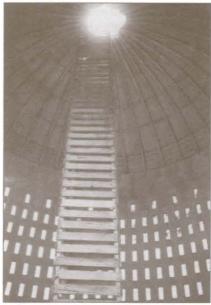
Getting there was the important thing. Participants at the Wilson field day never seemed to notice how they were traveling.



The cows in the corn formed the backdrop for Russ Bredahl, who described grazing maize at the Neely-Kinyon field day.



The corn that squeaked the loudest... Gary Guthrie described how he beat earworms by treating silks with a mixture of oil and Bt.



This 1950's corn crib on the farm of Arlyn and Annette Valvick revealed much hand work, including the poured cement dome.

These and other pictures are also available on the Worldwide Web at http://www.pfi.iastate.edu. Go to Photo Albums.

members Dean and Judy Henry, who operate The Berry Patch near Nevada.

This wonderful example of the experience of food prepared with the finest ingredients available anywhere was clearly a hit for those who attended. The meal also helped make the potential impact of the task force recommendations real, immediate, and tangible. Hopefully, the meal will also help encourage timely progress in making the task force's recommendations a reality.



# AUDUBON COUNTY FAMILY FARMS TOUR

Vic and Cindy Madsen, Audubon

In September, Audubon County Family Farms hosted approximately 45 of their Des Moines Farmer's Market customers. The goal of the afternoon was for the consumers to visit some of the farms where the food they buy is grown.

The tour included an apple orchard with bee hives, an honor system produce stand in town, and a diversified crop and livestock farm. The afternoon ended with a local products meal served at the Historical Society Farm. Two members of the Historical Society volunteered their time to show us their elk, one room schoolhouse and museum.

It was interesting that two of the families included people who had been on last year's tour also. This time they brought more family members.



Left: Urban visitors surrounded Eric Madsen and his lamb at Audubon County Family Farms Tour. Below: The tour stopped at Bluegrass Gardens, an honor system market.



From the questions and comments it was obvious that both the children and adults appreciated the chance to get out in the country and on a farm. It is also apparent that there are consumers out there who care about who produces their food and how it is raised.

The event was supported by a PFI Sustainable Projects grant.

# **INTERNS ON THE WILSON'S FARMS**

Editor's note: Every so often the stars come together and we have a young person wanting to learn, a family willing to host, and a little funding. That was the case this summer in northwest Iowa.

Lorna Wilson, Paullina

D&C Wilson Farms had the opportunity to host two ag interns this summer. Our first intern was Mike Leichty, who is a senior at Dordt College in Sioux Center, Iowa.

Mike was a joy to have as a part of our family. He fit right in and picked up quickly our methods of working with the hogs. It was a real pleasure to be able to mentor someone who was seeking alternative methods in farming. Mike was with us just before the PFI tour at our farm and was a big help in getting little jobs done that needed doing before the tour.

Our second intern was Toaw Sirirak, an ag exchange student from Thailand. Toaw had only a limited background in agriculture, so this was a totally different experience from the time we spent with Mike. Toaw was here to learn all he could about U.S. culture and English, as well as work on a hog farm.

Even thought these two men came from totally different backgrounds, I was surprised at the number of similarities in the two. First of all both men were very keen observers, they were able to catch on to our routine very quickly. They both were quite curious and

...it was good for us to view our operations through the eyes of two other people from different backgrounds.

#### Summer interns continued from p.18.

asked a lot of questions which made it easier to know what they were interested in. It also made it easier to share with them because you knew by the questions whether you were properly explaining all of the details of how our farm works. Toaw and Mike were both very teachable. They were open to discuss different ideas and philosophies. We had some good mealtime conversations with both of these men. Finally, the time both men spent with us was too short.

So how did the Wilson's benefit from the internship program? Obviously it was a big help to have another pair of hands around to share the work load. Even more than that, it was good for us to view our operations through the eyes of two other people from different backgrounds. We also had to slow the pace down a little bit and take the time to talk. This is something we don't always do very well. It was also good to be around a couple of young men that had so much interest in where family farms are headed today.



Torray Wilson, Mike Leichty and Carla Wilson at the Dordt College field day.

So would we host another intern? The answer is yes, but we would try to make the time they are with us be a longer time. One week is not long enough. We would also be more specific in the time of year when they came, because it does take more time in the beginning of the program to get used to one another.

In the future PFI members need to look at interns as a way of training the next generation of young people in the proper respect for the land and how they as farmers fit into their communities. There are many

# I know now that the traditional family farm is still possible...

of our members that have a lot to share. Why not share it with an intern?

## Mike Leichty, Dordt College, replies

I toured Colin and Carla Wilson's farm last year with the Swine Science class from Dordt College. I was very interested in their Swedish-style farrowing barn and the specialty market for their hogs. I found out about the internship program through the North Central Institute for Sustainable Systems and thought an internship with the Wilsons would be a good opportunity to learn more about their swine operation. I went to the Wilsons expecting to learn about their Swedish deep-bedded farrowing barn and thought I would possibly be exposed to some pasture farrowing also. I didn't know what else to expect.

I stayed with Dan and Lorna, but ate some meals with Colin and Carla. Their families made me feel right at home. I really appreciated the closeness of their families and was impressed with how they treated each other. Their Christian faith makes a difference in their lives – in the way they farm and in their family life. The Wilson farm is a perfect example of a family farm. Their families all work together to make the farm operation successful.

I followed Dan and Colin around and helped when I could. I helped chore the pasture hogs every morning with Dan and went to Colin's later to help with the Swedish barn. I did a lot of hog work – I helped vaccinate hogs and sows, load and sell hogs, and move hogs and pregnant sows out to the pasture. I mowed weeds under the electric fence with a weedeater to keep the pasture pigs from getting out. I helped move the A-frame farrowing huts and other pasture buildings to get ready for the late-summer pasture farrowing. I helped chore rotationally-grazed sheep and Joel Salatin-style pasture laying hens and broilers. I basically helped with whatever the Wilsons were doing on the farm.

One evening I went with Dan and Colin to a marketing meeting. I heard Dave Lubben speak and learned about how a marketing group works.

This experience was very valuable to me. I know now that the traditional family farm is still possible and that not everyone has to have hog confinements to be successful. I was most impressed with the pasture farrowing and hope to try it myself someday. I appreciated how the Wilsons allowed me to work instead of just watching. They gave me an accurate, honest experience of life on their farm.

# **PFI ON THE INTERNET**

RickExner

PFI is the latest sustainable agriculture organization to appear on the Worldwide Web, now at http:// www.pfi.iastate.edu. You may remember in the spring issue of *The Practical Farmer*, we asked you, the membership for help. We had a "wimpy" Web page up for a year, but found it nearly impossible to update because we were relying on people at ISU who don't have the time. Several PFI members stepped forward, including Ed Yedlick and Paul Hudson. Paul basically convinced me that it's not such a big deal anymore to put up a website. He's right. There is software now that makes the job similar to running a word processor.

The PFI website doesn't carry all the benefits of membership, but it brings together many of our most successful activities, and it offers you the chance to interact with others who share your interests. As the screenshot shows, the home page offers departures into the following areas:

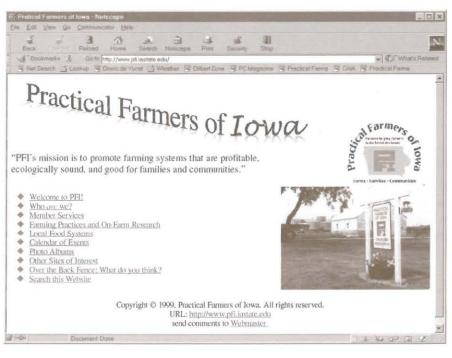
Welcome to PFI! Who are we? Member Services Farming Practices and On-Farm Research Local Food Systems Calendar of Events Photo Albums Other Sites of Interest Over the Back Fence: What do you think?

"Who are we?" contains links to PFI board members, staff, and members who have been profiled in the newsletter over the years. "Member Services" links to items such as a sample of the newsletter, upcoming and recent PFI events including PFI Camp, and the PFI Lending Library. The Member Directory will appear here as well. When you received your Membership Agreement and Information Form this fall, there was a check box to indicate willingness to be part of the Directory and another box to check if you want to share the information with other PFI members on the Web. As with the regular Member Directory, this will be information from and for those participating. If you agree to appear on the PFI website, your newsletter mailing label will include an access number that will get you into the online Member Directory.

Every PFI workshop reminds me how interactive a group PFI members are. "Over the Back Fence" is an experiment in interaction. Think of it in terms of the party line telephone. We've started off with some general discussion categories: In the field, Sustainable living, Local food systems, PFI Camp, Women's activities, and "Rules of thumb." When you go to Over the Back Fence, you'll see that I have already added a few rules of thumb (not all serious) that I have picked up from PFI members this summer. These and other entries appear at the top of the screen. You can double-click on one to read the full text, and you can continue the 'thread' by responding to that particular posting. Over the Back fence still has a few bugs, but if should be functioning by the time you read this.

We have tried to make the PFI web pages attractive without being too slow to download over the

#### Internet continued p. 27.



# PFI 1998 ON-FARM TRIAL RESULTS - IV

(Editors' note: Results of PFI 1998 on-farm research have appeared in *The Practical Farmer* over the course of this year. We close this review of 1998 trials with a look at varieties and fertility trials. If anyone wasn't convinced of the importance of variety selection at the end of 1998, they could hardly ignore the issue in the fall of 1999. These trials suggest ways farmers of all kinds can take advantage of premiums and avoid technology that doesn't pay off. The fertility experiments were originally titled "More" Fertility Trials, because they didn't fit neatly in the nitrogen or manure management categories. Yet as you will see, many of them bear on nitrogen in one way or another.

#### **Multiple-Treatment Variety Trials**

Nowadays the choice of crop varieties is a decision that reflects not only potential yield but also stress tolerance, genetic technologies and their associated fees and restrictions, and even marketing to various identity-preserved niches. The Dordt College Agriculture Department modified a variety comparison they carried out in 1997. This involved a Northrup King hybrid, its Bt-enhanced (and more expensive) isoline, and a Viking hybrid whose seed is the least expensive of all. With only four reps in the 1997 trial, the yield differences were not statistically significant, but the Bthybrid's yield was greatest and the Viking hybrid yielded least of the three.

In 1998, Rob De Haan, Director of the college's Ag Stewardship Center, substituted a different cheap Viking hybrid in the trial. And in 1998 corn borer pressure was light across the state. There was no significant difference in yield between the two NK hybrids, and the Viking number yielded best of all (Table 1). That made the cheap hybrid the financial winner in 1998, even though its greater yield and harvest moisture entailed a significant drying cost.

# **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.

|              |               |                  |                            | TREATMENT "A"                |                     |       |              |               |  |  |
|--------------|---------------|------------------|----------------------------|------------------------------|---------------------|-------|--------------|---------------|--|--|
| COOPERATOR   | CROP          | PREVIOUS<br>CROP | YIELD<br>SIGNIFI-<br>CANCE | DESCRIPTION                  | YIELD<br>(bu. or T) | STAT. | TRT<br>COSTS | \$<br>BENEFIT |  |  |
| DORDT        | CORN          | CORN             | *                          | NK4640                       | 159.3               | b     | \$40.03      | \$11.09       |  |  |
| DORDT        | SOY-<br>BEANS | CORN             | **                         | SOI2537<br>ROUNDUP-RESISTANT | 65.0                | b     | \$29.19      | \$8.81        |  |  |
| NEELY KINYON | SOY-<br>BEANS | CORN             | **                         | HIGH-OLEIC                   | 49.2                | b     | \$236.43     | \$6.45        |  |  |

Dordt College carried out a similar trial in soybeans. There the varieties were a typical field soybean, its Roundup-resistant cousin, and a large-seeded tofu-type soybean. As Table 1 shows, the Roundupresistant soybean yielded significantly better than the conventional field soybean, and both yielded significantly more than the tofu soybean. The economic figures shown for the trial reflect both the fact that the same, non-Roundup herbicide was used on all the varieties and that all the soybeans were marketed together at the same price.

The Neely-Kinyon Farm, Greenfield, compared a tofu soybean, a typical field variety, and a soybean whose oil is high in oleic acid. These were marketed



At the Dordt College Ag Stewardship Center, Ron Sterler (right, with clipboard) layed out soybean niche marketing opportunities. Sterler is leading the drive for a custom processing plant in northwest Iowa.

The Neely-Kinyon Farm, Greenfield, compared a tofu soybean, a typical field variety, and a soybean whose oil is high in oleic acid.

at \$6.50, \$5.20, and \$5.85 per bushel, respectively, and hauling costs were added to markets in Atlantic, Greenfield, and Fontanelle, respectively. The tofu soybeans were not sold as organic or pesticide-free. The field soybean yielded significantly more than the others, but was the least profitable by this calculation (Table 1). The tofu-type soybean was most profitable even though its yield was least of the three.

## **Fertility Trials**

Dennis and Eve Abbas, Hampton, asked a question pertinent to their organic farming operation. Like the previous trials it relates to nitrogen, although at first glance it may appear to be a population study. On the Abbas farm, the system supplies the nitrogen; in other words, N generally comes from green manures, other crop N contributions, and the farm livestock, not from off-farm purchases. Wanting to match crop needs with the ability of the farm system to supply N, Dennis hypothesized that a lower corn population would need less N than a high population,

|                  |                        |       | Mult         | iple Tr       | eatment V                       | ariet                  | y Tri | als          |               |   |
|------------------|------------------------|-------|--------------|---------------|---------------------------------|------------------------|-------|--------------|---------------|---|
| Т                | TREATMENT "B"          |       |              |               |                                 | TREATMENT "C"          |       |              |               |   |
| DESCRIPTION      | YIELD<br>(bu.<br>or T) | STAT. | TRT<br>COSTS | \$<br>BENEFIT | DESCRIPTION                     | YIELD<br>(bu.<br>or T) | STAT. | TRT<br>COSTS | \$<br>BENEFIT | OVERALL<br>COMMENTS   |
| NK4640Bt         | 166.4                  | b     | \$51.12      | \$0.00        | VIKING 4721,<br>CHEAP<br>HYBRID | 178.6                  | a     | \$39.39      | \$36.29       | CHEAPER HYBRID<br>HAD DRYING COST<br>BUT CHEAPEST<br>SEED, GREATEST<br>YIELD  |
| SOI237           | 72.5                   | a     | \$20.26      |               | ASGROW<br>2242 TOFU<br>SOYBEAN  | 62.1                   | c     | \$22.78      | \$0.00        | SAME SALE PRICE<br>USED FOR ALL<br>VARIETIES  |
| FIELD<br>SOYBEAN | 53.8                   | a     | \$234.64     | 5111111       | TOFU-TYPE<br>SOYBEAN            | 44.9                   | c     | \$238.39     | \$8.50        | NET PROFIT OF<br>\$51.43, \$44.98, AND<br>\$53.48,<br>RESPECTIVELY.<br>PRICE OF \$5.85,<br>\$5.20, AND \$6.50,<br>RESPECTIVELY. |

#### WHAT ABOUT HOGS?

In 1998, eight PFI members who raise pigs in hoophouses or other deep-bedded systems began working with ISU scientists to document these operations. With support from the Leopold Center for Sustainable Agriculture, ISU has expanded the study of hoophouse production on ISU farms. As important as this is, it leaves information gaps that only on-farm research can fill. And with hundreds of Iowa farmers constructing hoops every year, there is a critical need for information now.

Meeting with ISU Extension Ag Economist Michael Duffy and with Mark Honeyman, Director of Outlying Research Farms for ISU, PFI producers agreed the first priority is information on labor requirements. In 1998 they began keeping their times in metal notebooks hanging in their hoops and confinement units. (Thanks to Mike Duffy for the notebooks!)

Duffy's team is starting to evaluate those records, and first results are encouraging. In its bulletin on hoophouses, the Midwest Plan Service estimates a labor requirement of 0.4 hours per pig in hoops, compared with an estimated 0.2 hours in conventional confinement. However, PFI labor records have averaged only about 0.27 hours per pig.



Wayne Fredericks spoke at the Weis field day.

Meanwhile cooperators continue to collect records on wintertime production. They are also sending Duffy production information on feed, daysto-market, and carcass characteristics.

Cooperators who have kept swine records include:

Dennis and Eve Abbas, Hampton Wayne and Ruth Fredericks, Osage Larry and Judy Jedlicka, Solon Vic and Cindy Madsen, Audubon Paul and Karen Mugge, Sutherland Dave and Becky Struthers, Collins Steve and June Weis, Osage Colin and Carla Wilson, Paullina

the Practical Farmer

| Table 2. "      | A/B" Fer      | tility Trials                   |                |                        |                       |  |
|-----------------|---------------|---------------------------------|----------------|------------------------|-----------------------|--|
| COOPER-<br>ATOR |               | TREATMENT                       | TREATMENT "B"  | 0                      |                       |  |
|                 | CROP          | DESCRIPTION                     | YIELD<br>(bu.) | TREAT-<br>MENT<br>COST | DESCRIPTION           |  |
| ABBAS           | CORN          | 28,000<br>PLANTS/ACRE           | 106.2          | \$18.68                | 21,000 PLANTS/ACRE    |  |
| MUGGE           | CORN          | BROADCAST<br>20+50+65           | 172.2          | \$1.99                 | DEEP-BANDED 24+62+82  |  |
| OLSON           | SOY-<br>BEANS | BANDED P&K<br>FOR 1996          | 59.1           | -                      | NO FERTILIZER IN 1996 |  |
| OLSON           | CORN          | N WITH<br>UREASE<br>INHIBITOR   | 134.3          | \$29.71                | N W/O INHIBITOR       |  |
| STRUTHERS       | CORN          | ACA IN<br>FURROW.AT<br>PLANTING | 112.9          | \$4.08                 | NO ACA                |  |

so he compared 21,000 and 28,000 plants per acre. This makes sense in an intuitive way, but it runs counter to tools like the late spring soil nitrate test, which does not differentiate recommendations based on population.

# On the Abbas farm, the system supplies the nitrogen.

We'll have to wait for 1999 data to know the answer. First the field suffered severe green-snap in one of the summer's wind storms. Then harvest took Dennis away at a time when the stalk nitrate test would have provided an important piece of the puzzle. Midsummer leaf nitrogen was significantly higher in the lower population corn, suggesting that individual plants were closer to N sufficiency in the lower population. Yields, however, were very similar (Table 2). Yield-per-acre, of course, is a function of both yieldper-plant and plants-per-acre. Another year might show the same results – but only time will tell.

Two other cooperators evaluated products intended to improve the efficiency of crop nitrogen utilization. Jeff and Gayle Olson, Winfield, surfaceapplied 72 lbs N per acre as urea-ammonium nitrate solution – with and without a urease inhibitor – to corn following soybeans (Table 2). The inhibitor is designed to slow the breakdown of urea to volatile ammonia nitrogen. The product did not improve crop yields in this trial. It may be that the urea was incorporated into the soil by the 0.2-inches rain that fell the day after application. Additionally, the 80 lbs N later sidedressed over the whole trial may have obscured any loss of nitrogen.

Dave and Becky Struthers evaluated the product called ACA (ammonium zinc acetate), which is said to improve crop nitrogen utilization. There was no effect on corn yield (Table 2), but the late spring soil nitrate test of 32 ppm indicates that nitrogen was not limiting to begin with. Dave includes in the cost of the practice part of the price of the electric pump he had to buy in order to furrow-apply the ACA with the planter.

Deep-banding of nutrients has been a continuing interest for PFI's no-till and ridge-till cooperators. ISU agronomist Antonio Mallarino, working both on farms and ISU experiment stations, has found that corn in these reduced tillage situations sometimes responds to deep-banded potassium – even though the soil already tests adequate in that nutrient. (See *The Practical Farmer*, vol. 13, #3, Fall, 1998 and PFI's website.) Paul and Karen Mugge repeated part of a 1996 trial, comparing broadcast to deep-banded NPK fertilizer.

Fall 1999

|   |                |                        | 34. U          | "A/                 | B" Fer      | tility Trials            |   |
|---|----------------|------------------------|----------------|---------------------|-------------|--------------------------|---|
| C | TRT "B         | "?                     | DIFFER         | ENCE                |             |                          |   |
|   | YIELD<br>(bu.) | TREAT-<br>MENT<br>COST | YIELD<br>DIFF. | YLD<br>LSD<br>(bu.) | YLD<br>SIG. | \$ BENEFIT<br>OF TRT "A" | COMMENT   |
|   | 105.0          | \$14.09                | 1.2            | NS                  | 5.1         | -\$4.59                  | HIGHER LEAF N (2.99 VS<br>2.71%) IN LOW POP, NO<br>STALK NITRATE        |
|   | 176.0          | \$4.19                 | -3.8           | NS                  | 3.8         | \$2.20                   | BANDING ALMOST<br>SIGNIFICANT, CHANGES<br>"TRT A \$ BENEFIT" TO -\$7.21 |
|   | 58.6           |                        | 0.5            | NS                  | 2.6         |                          | 11.8 BU BENEFIT IN 1996, 1.8<br>BU (NONSIGN.) IN 1997                   |
|   | 135.0          | \$26.19                | -0.7           | NS                  | 2.0         | -\$3.52                  | 0.2" RAIN THE DAY AFTER<br>PREPLANT N/AGROTAIN<br>APPLICATION           |
|   | 112.1          | \$0.00                 | 0.8            | NS                  | 4.8         | -\$4.08                  | LSNT OF 32 PPM INDICATES<br>N WAS NOT LIMITING                          |

In 1996 the yield difference was not significant; in 1998 the difference was also not statistically significant at the 95 percent confidence level, but it was very close to being so. If you consider the 3.8-bushel difference to be a real treatment effect, then the \$2.20 greater cost of deep banding is offset by a yield benefit of about \$9.40. Just as Paul Mugge saw no carryover effect in 1997 soybeans following his 1996 corn trial, Jeff and Gayle Olson found no benefit to 1998 corn from deep banding for the 1996 crop (Table 2). **\*** 

#### Internet continued from p. 22.

phone lines. If you can't wait for the pretty pictures, there will usually be text you can read or click on to keep moving. Newer Web browser software will work somewhat better than old versions, but the greatest difference among our viewers may be in screen resolution. Some compromises have been necessary to make the pages readable for both 800x600 and 1024x768 resolutions. Now I'm waiting for some feedback. Is anyone out there?



At the '98 field day, Extension Crops Field Specialist John Creswell visited with Dave Struthers about the two fertility trials.



Editor's note: This issue of the newsletter sees the return of *Rollin' the Cob*. We would like to open up this *Cob* column to other readers on a rotating basis. Would you be interested in taking part for an issue or two? Do you *have* an issue you think would be worth discussing? Contact Rick Exner at 515-294-5486.

In these difficult times, both producers and information providers are struggling to meet the challenge. What should the Extension Service be doing? Here

are three points of view, two of them from farmers and one from an Extension director who also farms.

#### WHERE CAN EXTENSION/UNIVERSITIES BE MORE USEFUL TO THE PEOPLE OF IOWA?

Ron Rosmann, Harlan

Depending on your point of view, there have been a number of negative megatrends taking place in agriculture over the past thirty years or so. Four of the more important ones in my mind are:

- 1. The loss of indigenous knowledge and skills of farming.
- 2. Continued decline of many rural communities.
- 3. Decline in the producer's share of the agricultural dollar.
- 4. Aging farmers and fewer beginning farmers.

Until quite recently, Extension and universities have dealt with another megatrend for much of that time, namely that of developing and refining the technologies to keep producing more and more raw food commodities. Now it appears that much of that technology is shifting to the private industry sector with an even more accelerated decline for family farms and rural communities. What are we to do? Heartbreaking structural changes in agriculture appear more imminent on the horizon all the time. Are we to give up? Of course not! There is much hope to be found. For our farm and for an increasing number of farms, that hope lies within organic agriculture. Extension and universities can be a part of that hope if they are willing to make a significant shift in their priorities.

The declining share of the agricultural dollar to the producer and declining rural communities both share the same common problem - the loss of markets. Many groups and individuals have been working to change that situation through alternative forms of production and the marketing of organic, natural, identity preserved, and other niche and value-added foods. The goal is to build up local farms, economies and communities. Extension and universities could do so much in this area by assisting in setting up and working with the whole gamut of new infrastructure and entrepreneurial activities that make up alternative production and marketing systems. Universities and Extension could partner with consumer and environmental groups to create and make available the kind of food products that will be good for people and the land. These activities could include working with

Emphasis on component research and technology have too often served as blinders for what really needs to be better understood.

CSAs, farmer's markets, direct marketing cooperatives, school and community gardens, associations and so forth. There is much work to be done in the areas of market feasibility, product development, certification and quality control, and helping to build the wholesale and retail industry relationships with producer groups.

The other two megatrends, loss of knowledge and skills of farming and the decline in new, beginning farmers, also both share two commonalities in my mind; that is emphasis on the wrong subject matter and worshiping at the altar of technology. By loss of knowledge and skills I mean such examples as diverse cropping systems and rotations, knowing how to make small grains profitable or knowing how to make grass more productive. When it comes to farming systems, only recently have universities begun to study such things. Emphasis on component research and technology have too often served as blinders for what really needs to be better understood. Other examples of our loss of indigenous knowledge abound. Reliance on livestock antibiotics has replaced to some extent the knowledge base of good animal husbandry practices. Reliance on herbicides has replaced knowing how to set a cultivator. Extension and universities could utilize internships within ag curriculums on interested and dedicated organic farms as one way to address the skills and knowledge loss. This could be one creative way to team up beginning farmers with retiring farmers.

If we are to have small and medium-sized owneroperated family farms in the future, we must be willing and able to create the kind of infrastructure and economies and support systems to make it happen. Extension and universities should play a critical role in ensuring that it happens.

Research and education programs need to adopt a holistic philosophy.

#### Tom Frantzen, Alta Vista

Last year I attended two farm conferences in Visconsin. Each program featured a livestock health section given by a speaker with a Ph.D. in animal science. I asked this question to each presenter, "What is the ecological role of a parasite?" The first doctor of animal science shouted an angry response, insisting that there is no possible ecological role in a parasite's life cycle. The speaker at the next conference responded to the same question by assuring me that parasites play a definite ecological role, and that we know very little about these interactions.

How can two highly educated animal science specialists have such conflicting opinions? Research and education programs need to adopt a holistic philosophy. Research projects need to focus on connections of interdependence. The alternative, research on management "side effects," runs to activities like "doing something" about lagoon odors or genetically engineering livestock to "fit" confinement facilities.

The February, 1999 newsletter of the Center for Rural Affairs carries an excellent article on ag reearch. It points out that of 30,000 USDA-supported research projects, only 34 were specifically on organic agriculture topics!

#### Margaret Smith, Hampton

Well, Iowa State University (ISU) Extension is a subject near to my heart and something I ponder nearly every day. As the Extension Education Director in Hardin County, I am faced with trying to make research results from Iowa State University available to all in our county. ISU Extension's major program areas are: Agriculture and Natural Resources; Families, including Family Life, Nutrition, and Resource Management; Community Development; and Youth Development. There is a plethora of results and conclusions from numerous research studies within the multiple departments of the university.

I am always searching for the best delivery methods and what combination of methods can be used to reach people with information. How do I best reach swine producers with the latest on nutritional information – a meeting, a mailing, on the radio, via the hewspaper? Or, do I do one-on-one visits? More important is how we help people to integrate that new information into their decision process. I often struggle not with results coming from ISU research, but with the underlying premise of many research studies. Are our university researchers (at ISU, University of Iowa and University of Northern Iowa) really addressing the needs of Iowans? An example is the work at ISU on 'inventing' new foods. Do Iowans need more choices of snack foods, or processed, shaped, and formed entrees? Or do we really need to understand why people don't cook and eat the nutritious foods readily available to them? And, although we all use processed foods, few of these are made in Iowa. Will Iowans be the beneficiaries of 'new food' developments? Where is the research (and support from Iowa government) to increase food processing here in the state?

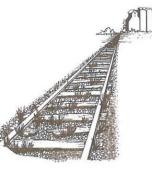
I think that our universities should be directing research and education toward topics that truly benefit their constituents – the people of Iowa. Easy to say, but hard to accurately assess. Individual researchers and Extension educators do think that what they are doing is beneficial. We need a better method of defining research needs and evaluating their local impact. Asking people directly about their needs comes to mind as a way to start.

Tremendous resources are devoted to research and education that helps fine-tune growing corn and soybeans in a two-year rotation. This system, which dominates the Iowa landscape, results in soil loss beyond suggested limits, and is not economically viable without federal government subsidies. Where I grew up, we call this beating a dead horse.

I agree with Tom Frantzen about the need for a holistic approach from the state universities. Does their mission concur with the goals of the (majority of the) people of Iowa? Are decisions and research efforts evaluated considering these goals? For example, what are the social, economic, and environmental effects of researching and teaching about new implants, disease, and parasite control strategies in feedlot cattle? Without asking these questions, we keep bouncing around from one interesting topic or agricultural production method to another, with a

More important is how we help people to integrate that new information into their decision process. tremendous waste of human, financial, and natural resources in the interim.  $\$ 

# GETTING TO ZERO WITH GMO'S



The recent news about European and Japanese resistance to transgenic foodstuffs has U.S. producers wondering how they are supposed to market their grain. A twotier market is developing with a pre-

**RickExner** 

mium of perhaps twenty-five cents (some say 40-50 cents) for corn or soybeans that are non-GMO (genetically manipulated organisms). You may have thought you were growing non-GMO grain, but how do you convince your customer? Getting to "zero" GMO content may in some cases be impossible.

There are several points where non-GMO crops can become contaminated: the seed you buy; the equipment you use for planting, handling and crop storage; and the facilities used in every stage of getting your crop to the consumer. Add to that cross pollination, in the case of corn, and the possibility that some microbes in the soil could test positive for certain GMO genes.

Director of ISU's Molecular Biotechnology Center, Walter Fehr, has pointed out that corn pollen remains viable an average of 20 minutes from the time it is released. In a twenty-mile-per-hour wind, he points out, viable pollen could in theory travel a long distance. Now, it is true that most pollen travels only a few feet. The Genetic and Crop Standards of the Association of Official Seed Certifying Agencies sets 660 feet as the minimum separation distance for production of genetically pure corn seed (depending on the seed types, pollination timing, and natural barriers involved). Could 660 feet qualify as a "good faith effort" to avoid contamination? Two answers: "depending on how zero contamination is defined" and "good faith" increasingly must be augmented with testing.

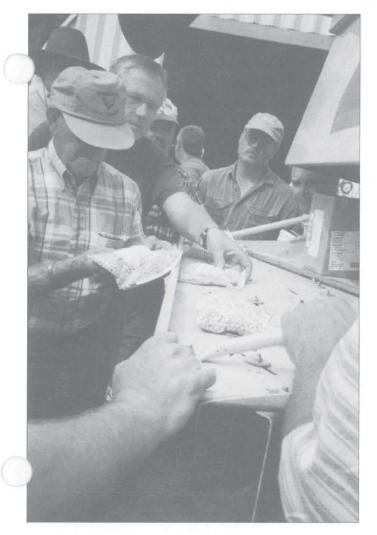
You may have thought you were growing non-GMO grain, but how do you convince your customer?

There was not complete agreement among the people I spoke with on this topic. That is to be expected, given that everyone holds just a piece of this fast-changing puzzle. The Web page of Fairfieldbased Genetic-ID Inc. (http://www.genetic-id.com/ index.htm) states that on October 21 the European Union adopted a GMO labeling requirement for grain containing over 1% GMO. However that does not mean that grain testing less than 1% is automatically classed as non-GMO. Genetic-ID suggests that, although no level has formally been set in Europe, some consumer and retail groups there are advocating a limit on the order of 0.1%. Tim Daley of Dunn International Ltd. indicated to me that Japanese buyers are presently accepting grain as non-GMO if it contains less than 0.1% GMO grain.

Jim Boes of Heartland Organic Marketing Co-op remarked that no matter how accurate a test may be, is not possible to prove the negative (no GMO content) with absolute certainty. Heartland and Dunn are using the ELIZA "strip" test (for proteins), while Genetic-ID uses the more precise and more expensive PCR test (for DNA). Boes said he would prefer relying on organic certification alone, but he has experienced contamination of organic grain through the combine as well as through certified seed. "You're only going to be sure of clean seed if you use foundation seed." said Boes. Several of those I spoke with suggested that farmers buy next year's seed early since supplies of non-GMO seed may be limited. It might also be a good idea to save samples of purchased seed and of grain harvested. If questions arise later, these samples could help narrow the focus.

There will be a new crop of forms for everyone to sign. Many will simply verify that the party performed in a manner designed to avoid contamination. That is different than stating there is no contamination. Testing at points along the production chain will be

There will be a new crop of forms for everyone to sign.



At the Klinge/Tidwell field day, Tim Daley provided soy bean samples showing good and poor combining.

necessary proof that everyone is doing their part. Genetic-ID now has a non-GMO certification program under which the company assumes liability for certified grains. NC+ Organics (www.ncorganics.com), a division of NC+ Hybrids, is offering organically and conventionally grown seed that is "independently sampled, tested, and certified as non-GMO."

Getting to zero will be easier when Europe and Asia decide what zero-GMO is. Then producers and agronomists can decide on a crop-by-crop basis whether it is feasible to attempt, and grain dealers can develop the documentation and facilities necessary to move the grain to the customer. Check the American Corn Growers Association's survey of elevators' plans for segregation and handling, available at http:// cga.org – but follow up with phone calls to see if elevators stuck to their plans. Until this all shakes out, ask questions and pay attention to the news. "Not only is the mean temperature likely to rise, but so is the incidence of extreme events such as heat spells, droughts, and floods."

# WHAT GLOBAL WARMING MEANS TO AGRICULTURE

#### Robert Hogg, Cedar Rapids

Editor's note: Robert M. Hogg, a PFI member, is global warming project coordinator for Ecumenical Ministries of Iowa. For more information, you can contact him at 515-255-5905 or by email at Rkhogg@aol.com

Farmers should be concerned about the threat that global warming poses for family farm agriculture. Some of the most important threats to agriculture from global warming include more pests, more animal diseases, changes in precipitation, and other extreme weather events.

In "Climate Change and the Global Harvest' (Oxford University Press, 1998), Cynthia Rosenzweig and Daniel Hillel, climate scientists at NASA's Goddard Institute for Space Studies, made the following conclusions:

"If the buildup of greenhouse gases in the atmosphere continues without limit, it is bound, sooner or later, to warm the earth's surface. Such a warming trend cannot but affect the regional patterns of precipitation and evaporation, the biophysical processes of photosynthesis and respiration, and indeed the entire thermal and hydrological regimes governing both natural and agricultural ecosystems." (p. 4)

"Not only is the mean temperature likely to rise, but so is the incidence of extreme events such as heat spells, droughts, and floods." (p. 37)

"Under changing climate conditions, records of past climate variability will no longer be reliable predictors of future events, and thus the likelihood of damage by unexpected extreme events will rise." (p. 148)

"Agricultural pests, overall, are likely to thrive under conditions of increasing atmospheric carbon dioxide concentrations and rapid climate change." (p. 262) Fortunately, policies to limit global warming could present new economic and environmental opportunities for the family farm community.

"Farmers' strategies grow out of experience. Under progressively changing climate conditions, the past will be a less reliable predictor of the future, and the accumulated experience obtained to date will be less useful as a tool for coping with what might be a very different future." (p. 262)

Rosenzweig and Hill recognize that farmers may be able to adapt to some climatic changes, and that increased carbon dioxide may "fertilize" certain crops. Even accounting for such factors, however, they conclude that with a warming of 2.5 degrees Celsius, or 4.5 degrees Fahrenheit, agricultural production in Missouri, Iowa, Nebraska, and Kansas would probably decline by about ten percent. (p. 183)

Such a rapid climatic change could jeopardize smaller family farm producers who might lack the resources to invest in adaptation technologies, or to weather the climatic disruptions that are likely to occur. Limiting global warming is necessary to make sure that traditional family farm agriculture can be an important part of our future.

Fortunately, policies to limit global warming could present new economic and environmental opportunities for the family farm community. Some potential economic benefits include payments to farmers for carbon sequestration through conservation tillage, crop rotation, and tree planting on marginal farm lands, or for additional development of wind power and biomass energy.

By recognizing the global warming threat sooner rather than later, we can effectively limit global warming, and create significant new economic and environmental opportunities for family farmers in Iowa. If we do not get involved, however, we face the risk of more serious climactic changes, and the need for more rapid reductions in greenhouse gas emissions, without the "luxury" of designing policies to protect the family farm community.

# FOOTPRINTS OF A GRASS FARMER Pigs without Pesticides

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Tom Frantzen, Alta Vist.

Paradigms are defined as deep seated beliefs. Paradigms shape our lives and our thinking. Most farmers have the deep seated belief that hard work and good management will ensure the survival of their operation. A major paradigm shift would be the realization that all those production efforts will fail if the farm cannot find access to profitable markets. The current disaster in the hog market is forcing such a change in thinking. New hog markets developed from very specific alternative production practices that are closely tied to consumer demands may well be the new paradigm for certain hog farmers. Pesticide-free pork is being asked for by a growing consumer base. How can we fill this need? Where will we go for information about pesticide-free practices? Will it be organic?

The beliefs that we cling to so tightly come largely from those people that we associate with. If we were raising hogs in a remote village in rural China, our knowledge of production practices would be very different from what we know about this in rural Iowa. The knowledge comes from the experiences of our culture. Market demands are forcing us to look for alternatives to the use of chemicals in hog production. We are thus literally forced to seek out new, or possibly very old, sources of information about such practices. Uncovering these new practices, testing their validity, and sharing the experience will be a significant challenge for those of us who want to raise hogs and market them alternatively.

Why not follow the example of chemical-free or certified organic grain production? I think that the parallels are there. The first significant change that is necessary is to adopt a new attitude. By 1985 I knew, after 12 years of farming, that my crops would fail if I cut out chemical use. Four years later, after much exposure to people like Dick Thompson, a nationally recognized pioneer in chemical-free farming, I had a new belief. I could raise crops without chemicals, but I needed to associate with the farmers who were doing that. There was a lot to learn, there still is!

Since 1985 a nationwide effort has produced many volumes of know-how on ways to cut out pesticide use, especially on crops. This knowledge is used heavily by the organic farmers. The massive We need good partners from the scientific community now more than ever.

growth of the organic industry is rooted in this production knowledge. The Upper Midwest Organic Farming Conference, the largest of its kind in the country, serves to expand this information base. Farmers who are producing pesticide-free crops use nearly the same information as organic farmers.

I think that it is important to observe the current conditions of both of these markets. With over production of both corn and soybeans (pesticide-free or certified organic), prices are down and contracts are hard to find. However, the certified organic grains are far more stable in the market place than the others. I would expect the same conditions to be created in the livestock markets.

To sum this up, it all begins with a change in farmer attitude. This opens the door for shared learning. New skills are developed and, in time, this roduction package is tied into the marketing. The value of the specialized commodity is preserved by the integrity of the label. The certified organic label is the most recognized and consumer appreciated label that exists today.

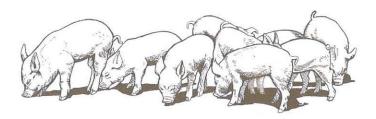
The Practical Farmers of Iowa has assisted many farmers in learning new skills when it comes to pesticide-free grain production. Our excellent history of combining the researcher and farmer together as partners provides a solid base for future projects. We have initiated several projects on livestock. A good example is the Wilson trials on feeding barley to finishing hogs. We know from experience that livestock trials are significantly more complex than row crop research. We need good partners from the scientific community now more than ever.

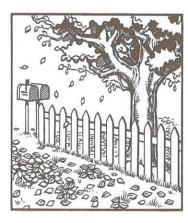
We will also need far better communication with the alternative animal health practitioners, consultants, and manufacturers of neutriceuticals. Last spring, for example, I encountered a serious problem with small pig scours. Neither hog market that I roduce for would allow any antibiotic use. I called erry Bruinetti, a holistic animal health specialist from Pennsylvania. He referred me to a Des Moines based company that sells a pig scour product. This paste contains an antibody that is specific for common e-coli scours, but is not an anti-biotic. Communication, feedback on product performance and information dissemination are all essential. The bottom line here is that we will need PFI and all of the interested researchers we can find.

Producing pork without pesticides will probably follow the example of the organic dairy industry. Fifty years ago all milk was produced in a pesticide-free environment. Twenty years ago there was some milk produced without chemicals, but who heard about any special markets for that? Ten years ago organic markets for dairy products were developing and a growing number of farmers were filling the demand. These farmers needed information on chemical-free pest control and animal health practices. That body of information exists today and is growing steadily. Organic products are found in most large grocery stores now. Health food stores have carried these products for years. We will do well to follow this trend with pork!

I probably gave the impression with the title of this article that I was going to talk about specific practices that could eliminate chemical use in raising pigs. I am experimenting with several such practices. It will do little good and possibly some harm to discuss their performance prematurely. What is needed is time to coordinate a replication of experiments with several producers. And this needs to be done with each of the potentially promising concepts that are available. That's a lot to do!

What is needed is time to coordinate a replication of experiments with several producers.





# BITS OF SUSTENANCE

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

# For Your Consideration

Jan Libbey, Kanawha

As the season draws to a close, and I have time once again to look up and around, my mind lets forth a rush of ideas. The ideas have been held all summer behind the demands of farming. I work solo much of the time now and the pressures subside. In this new space the ideas, like the winds of fall, toss around. I offer two journal entries marking reflections as these ideas moved into my consciousness and two concepts, in progress, to mark ideas that grow out of the land and idea work.

9/22 I sat under the tree today pondering this image of seasonal flow – still seeking the fuller image, and today I think it's about understanding time in its full cycle – seasonally. I feel caught up in this longer-frame time flow – something my wrist watch and printed calendar can't capture.

9/30 Today the corn husks blow – it's cool in shade, warm in sun. The horizon lays low as fields are combined and I feel a sorrow at the land energy that feels to be going away. I feel a sorrow, I feel the hollow of end of season.

Concepts in progress: 1. Ispoke to a value-added agriculture tour in September. I was reminded of the various interpretations of "value-added agriculture" and wanted to share some of the ideas knocked loose in my head with our CSA members: (from CSA weekly newsletter) I would suggest when we discuss "value-added agriculture" that it is important to consider what we want our agriculture to DO for US. Local foods define "value-added agriculture" further by articulating what values we can harvest from Iowa agriculture for Iowa communities... The local foods movement emphasizes how agriculture adds value through feeding us directly and spiritually, being sustainable economically, environmentally, and socially. Words are powerful. Agriculture that adds value to our communities is truly "valueadded agriculture."

2. For those who have been working with sustainable agriculture and local foods issues in particular, we sometimes take for granted that the jargon we use is commonly understood. Take these two pieces juxtaposed:

- (a quote from one of our CSA members) "Every night we pray over our food and we say a special word of thanks to you and your family knowing you grew our food."

- In a discussion on the potential for a local foods feature with Iowa Public Television, I was asked to clarify what I meant when I said "local food reconnects us to a sense of the sacramentality of our food, as opposed to treating our food as a commodity".



Jan Libbey, with family (above) and a delivery of veggies from her CSA (below).



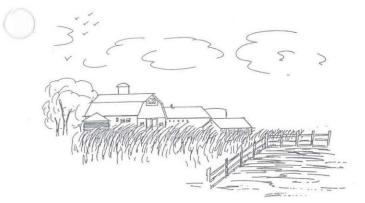
I remind myself that people are at different places on the spectrum of local foods/agriculture language nd I am working, amidst this windy fall, on the words meet and invite people along the journey.

Editor's note: This bit from Vic came out of his remarks at the Swine Systems Options Conference held earlier tis year, organized by the Leopold Center for Sustainable Agriculture

## Watching The Pigs at The Armstrong Farm

Vic Madsen, Audubon

I think we sometimes get so busy trying to make ends meet and get everything done that we forget about the people side. It's pretty well accepted that people who enjoy their work do a better job. [One] example: One of the Iowa State outlying research farms is the Armstrong Farm in southwest Iowa. A few years ago, they remodeled a hog house into a farrowing barn that uses straw, box pens and group lactation. One end has a room with large windows for visitors. The first time I went to their field day, I got started



watching the sows and pigs, lost track of time and missed lunch. The second time I visited, I started watching the people as well. Almost everyone had smiles on their faces. They were enjoying themselves. It was a people-friendly environment.

## **Checking Fields**

Anonymous

Out of range for the time being, you make your way along the contours without the distracting soundtrack of radio, stubble stalks standing at attention for this annual review of the fields.

Several seasons later, the landscape has changed. After the season of rain the tinder piles were evident.

After the season of heat you knew who weren't speaking.

After the season of bad news it was clear what was being eroded.

Over the hill there is a frequency for surprise and disappointment. Somewhere there's a country song about how your blood contributed to the organic matter. So what are you doing out here, the breeze tootling through your soil probe? Going through the motions as if the sun will rise tomorrow in this field that you will smell every February for the rest of your life.

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