

# the Practical Farmer

Practical Farmers of Iowa Newsletter

Vol. 13, #3  
Fall 1998

## ANNUAL MEETING TO BRIGHTEN YOUR WINTER

Commodity prices got you down? Weather not cooperating? Cheer up! Head on over to Ames for a little new year attitude adjustment at the PFI Annual Meeting and Winter Workshops. If you haven't circled January 8 and 9, 1999 on your calendar, grab the pen now. It's your chance to connect with 100's of other PFI members at the Holiday Inn Gateway Conference Center. Our two keynote speakers, Loren Kruse and Odessa Piper, will enliven you.



Odessa Piper, featured speaker at PFI January meeting.

**Odessa Piper** joins us from Madison, Wisconsin, where she is head chef and proprietor at L'Etoile Restaurant. Odessa is committed to regional reliance. The local farmers market outside L'Etoile's front door supplies inspiration and raw materials for Odessa and her menus. "I believe that respect for nature and all that grows is the beginning of the understanding of good food.

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**“Choosing lovingly grown food from within our region keeps our communities intact.”**

Choosing lovingly grown food from within our region keeps our communities intact. This is the happy result of sustainable agriculture.”

Seasonal menus at L’Etoile, established in 1976, showcase ingredients procured directly from local organic farms, even in the coldest months. “We strive to work with ingredients that are cultivated in accordance with their natural cycles and are grown in their native and adapted soils.” Piper’s restaurant serves pork from Niman Ranch, Inc., in California. A number of PFI producers are now sending pigs to Niman.

In addition to assisting many local initiatives for sustainable food choices, Odessa is a consultant to *The Center for Integrated Agricultural Systems* at the University of Wisconsin-Madison. Odessa serves on the board of Chefs Collaborative 2000, a national organization of chefs working in collaboration with farmers, communities and educators to teach and promote sustainable food choices for the next century. She believes that articulating and supporting the connections between farmers, soil, cooks and the local economy is crucial. She promises to be practical, anecdotal, and inspirational.

You will have at least three opportunities to engage with Odessa. First, she will be on hand for Friday Family Night on January 8. This informal evening at the South Prairie Room at the Gateway Holiday Inn begins at 7:30 P.M. with two cash bars – one for ice cream sundaes and another for liquid refreshments – and music and dancing from the Pretty Good Band. Odessa Piper will treat you to a tale or two at 8:00 P.M. and then the band plays on.

Next, Odessa will speak to all conference participants on Saturday morning. Her title will be *Spirit of Place, the meaning and practice of regional reliance*. In keeping with Odessa’s themes, the Iowa Bounty lunch following her presentation will feature products from PFI farms.

Finally, Odessa will sit in on a Saturday afternoon panel on *Local Food Systems for Regional Reli-*



**Loren Kruse, Editor in Chief of Successful Farming magazine, is Saturday’s first speaker.**

ance. Robert Karp, from PFI’s Field to Family Project, will guide the panel, which will provide an excellent follow up to Odessa’s earlier sessions. PFI members Carol Hunt, Kamyar Enshayan, and David Tousain will also join the panel.

Odessa’s visit is made possible by a grant from the Leopold Center for Sustainable Agriculture.

**Loren Kruse**, is a writer familiar to many of us as he is currently the Editor in Chief of *Successful Farming* magazine. He also owns and manages a crop, livestock, and Christmas tree farm in Grundy County, Iowa. So when he strides to the podium, he knows from whence he speaks. Loren will kick things off on Saturday morning with his ideas on *How to Grow More Joy in the Farming Business*, and who doesn’t need to hear about that? We know that at least one of his points will be about giving back gener-

**“...solutions can be found right on the farm and within the minds of farmers themselves.”**

ously, and we are very thankful that Loren has chosen to spend a Saturday with us.

Loren writes, "While there is no consensus government solution to the problems of our broad industry of agriculture, there are thousands of individual solutions for farms to be strong and sustainable. Those solutions can be found right on the farm and within the minds of farmers themselves. PFI is a great example of farmers working together to find and share practical ideas they can take right to the field, barn, or market."

### More Choices

In addition to these highlights, there are many other fine workshops from which to choose. There are sixteen concurrent sessions on Saturday, all made possible by the generous participation of PFI members and professionals they have recommended. Full program notes will be available in January, but here are a few highlights to whet your appetite.

Dr. Margaret Mellon, from the Union of Concerned Scientists, Washington D.C., will join in two workshops. In **GMOs: Updates, Assumptions and Concerns** Mardi will provide an update on the commercialization of transgenic crop technology. She will discuss national and international transgenic crop acreage, environmental and health risks of transgenic crops – new allergens, outcrossing, and effects on beneficials – and the possible loss of *Bacillus thuringiensis* (Bt) as a result of resistance. Margaret, who goes by Mardi, is eager for conversation with farmers so bring your ideas and opinions.

The second workshop, called **Seeds for the Future**, is a freewheeling discussion of where current trends are taking U.S. agriculture. What role will farmers play in the future – independent entrepreneurs, contract growers, wage laborers? Will the engine of agricultural innovation shift completely to the private sector? In an era of sterile seeds, global trade, and vertical integration, what will be the rela-

tionship of producers and consumers? Round table discussion includes Mardi, Ricardo Salvador, ISU Agronomy, and Donald Duvick, affiliate ISU professor of plant breeding and formerly Vice President for Research at Pioneer Hi-Bred. All voices welcome.

Margaret has a Ph.D. in molecular biology with post-doctoral experience in animal viruses. She is also a lawyer. She has been with the Union of Concerned Scientists for six years, after eight years with the National Wildlife Federation working on genetic engineering. Mardi says, "I'm delighted to be coming to Ames to talk with you – and learn from – the Practical Farmers of Iowa about biotechnology. PFI sees agriculture whole – as an economic activity, a relationship with our environment, and a way of life. This is the only context within which to address the momentous changes underway in agriculture under the banner of biotechnology."

If you're concerned about the loss of Iowa's farmlands and natural areas, you may want to connect with LaVon Griffieon, an Ankeny farmer, and Representative Ed Fallon. These two will team up for a workshop on **facing the challenges of urban sprawl**. They represent, among other things, 1000 Friends of Iowa, a non-profit group committed to "our

### Winter Meeting Schedule

#### Friday evening, January 8

- 7:30 Registration opens
- 7:30-8:30 Make-your-own-sundae bar for families  
Cash bar for adults  
Music from The Pretty Good Band
- 8:00 Odessa Piper's family fable, then dancing  
with the Pretty Good Band until 9:30

#### Saturday, January 9

- 7:30 Registration opens
- 8:30 Welcome-PFI President Dave Lubben
- 8:45 Loren Kruse *Growing More Joy  
in the Farming Business*
- 9:15 Sustainable Ag Achievement Award
- 9:30 Break
- 9:45 Workshops round I
- 10:45 Odessa Piper *Spirit of Place, the  
Meaning and Practice of Regional Reliance*
- 11:30 Lunch featuring Iowa grown products
- 1:00 General meeting
- 1:20 District meetings
- 2:00 Workshops round II
- 3:00 Producer posters and displays  
(break with refreshments)
- 4:00 Workshops round III

***In an era of sterile seeds, global trade, and vertical integration, what will be the relationship of producers and consumers?***

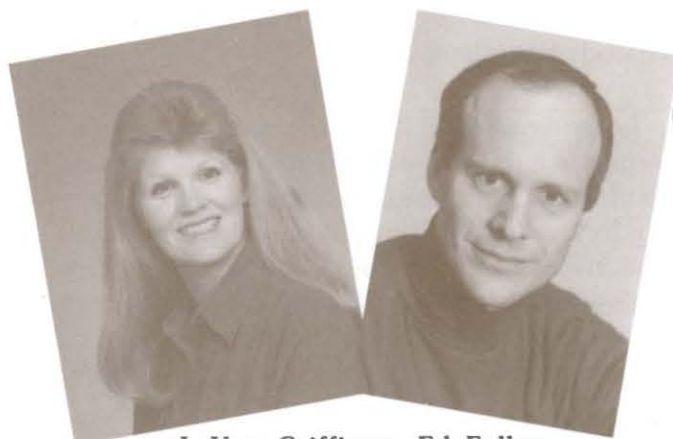
## Sustainable Ag Achievement Award to Jean Wallace Douglas

Jean Wallace Douglas will receive PFI's Sustainable Agriculture Achievement Award. Mrs. Douglas is the daughter of the late Henry A. Wallace, Secretary of Agriculture and Vice-President under Franklin Roosevelt. She currently serves as President of the Wallace Genetic Foundation, which distributes grants in the areas of sustainable agriculture, environmental education and conservation of natural resources. She is past president of America The Beautiful, which distributes donations of surplus seeds from seed companies to thousands of community action committees, hunger relief projects, community gardens and environmental projects through its Operation Green Plant program. She is past president of the Henry A. Wallace Institute for Alternative Agriculture, located in Greenbelt, Maryland.

Mrs. Douglas strongly believes in the importance of farmland preservation in order to protect open spaces, to provide sources of locally grown produce and to continue the tradition of the family farm. She was an early advocate of alternative farming, recognizing the potential risk of pesticide usage to the environment. She stressed the importance of maintaining the health of our soil and water for future generations.

Mrs. Douglas is the first woman to be selected to receive this PFI award, which goes to her for her crucial support for sustainable agriculture in Iowa and elsewhere. This support includes PFI's first-ever grant in 1987, which was vital to PFI's success. She was also instrumental in establishing the Henry A. Wallace Endowed Chair for Sustainable Agriculture at ISU.

Mrs. Douglas is married to Leslie Douglas, a stockbroker with Folger Nolan Fleming Douglas. They have one son and two daughters, all of whom serve as trustees of the foundation, and six grandchildren. As we go to press, we are hoping Mrs. Douglas will be able to travel to Ames to accept her award in person at the January meeting. If not, her cousin, Ann Fleming of Carlisle, will be on hand to accept the award on her behalf.



**LaVon Griffieon, Ed Fallon**  
to speak on farmland preservation.

farms and rural communities, our urban neighborhoods, our woodlands, prairies, and wetlands, our historical and cultural landscapes."

Representative Ed Fallon has worked in the Iowa Legislature for six years, representing the north-central Des Moines area. Land use issues are a priority for him. His efforts led to the legislative action that created a statewide commission to deal with these issues. An avid urban gardener, Ed is dedicated to revitalizing the urban neighborhood where he lives.

LaVon Griffieon was raised on a northwest Iowa farm and these days farms with her husband, Craig, and four children, on over 900 acres just north of Ankeny. LaVon is committed to rural education for urban youth and adults. Her well chosen words frequently appear in the Des Moines Register.

**Soil Quality and Weed Management: What's the Connection?** – presented by Matt Liebman, ISU Department of Agronomy. Many farmers seek to improve soil quality through the use of forage and green manure crops, livestock manures, composts, and other organic amendments. Data from corn, dry bean, and potato cropping systems indicate that organic soil amendments can improve weed management as well as soil quality. Ecological factors and farming practices that contribute to weed suppression in soils receiving organic amendments will be discussed.

**Outlook on Organics** – Kathleen Delate, ISU organic specialist, will provide an update on organic crop production research across six sites in Iowa. Copresenters Larry Cleverley, Ron Rosmann, and Larry Boes, will open a discussion on the future of organic

farming in Iowa, including marketing and progress on certification standards.

**Hoop House Composting and Manure Management** – presented by Tom Richard, ISU Department of Agricultural Biosystem Engineering, along with a panel of PFI members.

**Lessons of Life from CSA** – PFI member panel with Gary Huber, Onion Creek Farm, Jan Libbey, One Step at a Time Gardens, & Gary Guthrie, Growing Harmony Farms.

**Pigs, Profits, and Marketing Networks** – Kendall Thu, University of Iowa, provides an update on the environmental, public health and social consequences of industrialized livestock production. PFI panelists Dan Specht, Ken Rosmann, and Paul Willis represent a variety of marketing models to provide alternatives.

**Cost Cutting Ideas** – Dave Lubben leads a PFI panel.

**Value Added from Beans to Tofu and Beyond** – a panel featuring PFI member Tom Lacina, Paul Lang, *Natural Products*, and Lesley Lloyd, *Optimum Quality Grains*.

**Women Growing Together – a new way to connect** guided by PFI members Virginia Wadsley and Mary Holmes.

**Realities in Holistic Veterinary Practices** – Dr. Randy Kidd, from McLouth, Kansas, and PFI panel members Steve Weis, Susan Zacharakis-Jutz, and Francis Thicke.

**“I love my family, BUT...” Multigenerational Farm Family Issues** – presented by Beth Fleming, ISU Extension Family Life Specialist. Having a mix of generations on the family farm makes for lots of laughter and love, along with a dose of potential trouble. Beth will guide the group in looking at some issues that may hit close to home and discovering some ways to resolve potential conflicts.

**Flaming for Weed Management** – producer round table with Richard DeWilde, Harmony Valley CSA Viroqua, WI., PFI member Joe Fitzgerald, farm manager for New Melleray Abbey, and others.

**Farming Without Inheriting – Is it possible?** – Join Duane Sand in a brainstorming session that tackles some tough questions about the next generation of farmers. Is there room for small farms growing

**PLEASE PRE-REGISTER BY JANUARY 1! (please print)**

Name \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

Pre-registration Fee: \$5.00 per person or \$10.00 per family ..... = \_\_\_\_\_  
 (Registration at the door will be \$10.00 per person & \$15.00 per family.)

Annual Membership Fee: \$20.00 per person or family ..... = \_\_\_\_\_  
 (There will be the usual \$20 door charge for nonmembers and PFI memberships not current.)

Please pay in advance for the Iowa Bounty noon buffet at the Gateway Holiday Inn (optional):

	Adults		Children (4-12 years old except those going to Camp Hantesa)	
Sat. Noon Buffet:	_____ x \$10.00	+	_____ x \$5.00	= _____

CHECK TO PFI ENCLOSED FOR TOTAL ..... = \_\_\_\_\_

Check if interested in bringing a noncommercial *Poster or Display* illustrating a sustainable agriculture idea or project: \_\_\_\_\_

Yes, I want to help with \_\_\_\_\_ registration, \_\_\_\_\_ child care, \_\_\_\_\_ workshop recorder (specify \_\_\_\_\_)

Send this form to: Nan Bonfils 2104 Agronomy Hall, ISU, Ames, IA. 50011. For more information call: (515) 294-8512. *Motel Reservations* (by Dec. 23): (515) 292-8600 or 1-800-Holiday. (Request PFI group rate.)

conventional commodities? Can a farm employee make the transition to independent operator? Are there viable models for becoming a farmer or do we need to create new ones? Where are the opportunities? What are the niche markets?

If you haven't taken care of your registration, dig out the poster we sent you or use the form included in this newsletter. (See previous page.) The pre-registration fees save you money before January 1 and we need to know your plans in order to prepare food.



Your vote counts. District board members will be elected at the January meeting. Nominations? See p.7.

### Friday Night is Family Night

Come on over and bring the kids! Friday, January 8, from 7:30 – 9:30 P.M. is family night in the South 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.

Design an ice cream sundae and tap your toes to the sounds of the Pretty Good Band, starting at 7:30. Cash bar available too, with a special getaway spot for ladies in the Gallery. At 8:00 our special guest chef, Odessa Piper, will treat you to tale or two. 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.

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 23.

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## Child Care & Youth Activities Registration.

For details about child care and youth activities, see p.7. 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 payable on January 9.

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### Youth Activities – Ages six and up

Programs at the Holiday Inn at 8:30 A.M. followed by transportation to Camp Hantesa at 9:30 A.M. Bus returns from Camp Hantesa at 5:00 P.M. \$15.00 per child (includes lunch) payable on January 9.

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## IT'S YOUR CONFERENCE - NOW IS THE TIME TO LEND A HAND

We have a large box of gold stars ready to distribute to anyone interested in volunteering some time on Friday night or during the day Saturday.

Many hands make light work, and here are some of the many ways you can help.

**1. Registration:** We need people to handle walk-in registrations starting Friday evening and early on Saturday morning. The job involves being a greeter, collecting money, and doing a little paper work. Participants who have pre-registered still check in at the information desk to pick up their conference program and get a name tag. So, it's a very busy place. Child care registration will be handled at a table nearby.

**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 help:** For each workshop session we need one designated person, besides the moderator, to keep things running smoothly. If you volunteer for this job, you need to take notes and write a brief summary of the workshop content that Nan can edit for the winter newsletter. This person would also be the "gopher" if there's a problem during the session. If you look over the list of workshops and see something you definitely want to attend, volunteering to be the helper guarantees your place.

Thank you for getting involved. Planning the conference is a huge undertaking for the PFI board and staff. But the actual event belongs to you. Your help is welcome. You can use the form on the facing page to enlist or call Nan, PFI program assistant, at 515-294-8512 to offer your services. Thanks.

***We have a large box of gold stars ready to distribute to anyone interested in volunteering.***

### Board Elections at Annual Meeting

As part of the annual meeting there will be a gathering of the membership-at-large after lunch on Saturday. District meetings follow, giving you a chance to meet your PFI neighbors and plan district events. Elections will be held for board members to serve in all five districts.

The search is underway for members to nominate. Contact President Dave Lubben (319-465-2053) if you are interested in serving. Nominations will also be accepted from the floor.

### WINTER MEETING CHILD CARE OPTIONS ON SATURDAY

#### 1. For the wee ones ages five and under

A room will be set aside at the Gateway Holiday Inn to provide care for the wee ones. A paid competent adult care giver will be in charge for the day with a younger support crew. This sitter service is designed so that you, the parents, can participate fully in the conference activities. Of course, in this situation where many very small children are connecting with care givers and playmates unknown to them, there is bound to be anxiety. 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. (Teenagers who want to volunteer some time babysitting should contact Nan, PFI program assistant, at 515-294-8512.) The cost of the child care service is \$12.00 per child. The fees go toward paying the staff and covering costs of snacks and art/play materials.

#### 2. For school children ages six and above

Annette Brown, 4-H Youth Development Specialist, ISU Extension, will provide a special program for children age 6 through 11 from 8:30 A.M. - 9:30 A.M. at the Gateway Holiday Inn. Following that, a bus (or van, depending on number) will transport children to a full day of programs at Camp Hantesa, 1450 Oriole Road, Boone, Iowa. Camp Hantesa staff will supervise the children in guided activities including nature programs, crafts, and games. Hantesa likes to emphasize outdoor activities, depending on weather, so children need to dress appropriately. (It might even be smart to send along a change of duds.) Hantesa

will serve two snacks and a hot lunch, and return the children to Gateway Holiday Inn by 5:00 P.M. The cost of this service is \$15.00 per child, including the lunch and snacks. Children must be at least six years old to participate in the Hantesa 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.

### 3. 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. They must pay the registration fee. Beth Flemming, ISU Extension Family Life Specialist, will provide a special program for kids age 12 and older at 8:30 at Gateway Holiday Inn. It's called *Living in a Pressure Cooker: What's a Kid to Do?* Beth asks "What kinds of stresses do youth have today? What can be done to deal with them? Come learn, participate, and have fun as we explore together ways to live well in a stress-filled world." Beth's program ends at 9:30. Thereafter 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 Hantesa program which begins at 9:30 (see #2 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, swimming will not be part of the program organized by PFI.

## THE EDITOR MUSES

In what now seems like another life entirely, I worked as a professional copywriter for a huge mail order catalog. (You probably have at least two of their tomes accumulated at your house already this season.) I worked in a cubicle surrounded by other writers and artists. Our bosses created an elaborate system of production schedules and impossible deadlines which we liked to rename. There was the wet ink deadline and the dry ink deadline; the just kidding deadline and the no kidding deadline; the last chance; the drop

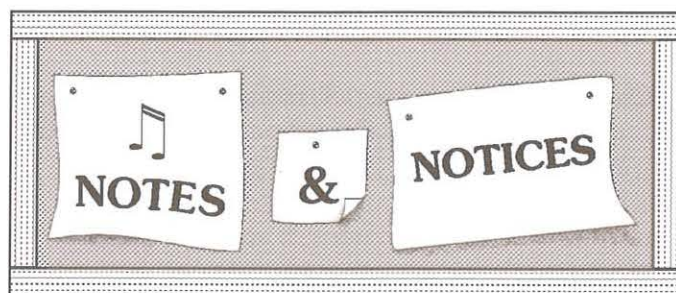
dead; the you-must-be-joking deadline. I suspended a sign over my desk reading "Deadlines amuse me."

Having outlived all of those deadlines and more, this fall newsletter goes to press just in time for the winter solstice. I trust that you will have many blessings to celebrate in your life between now and when we meet in the new year. No doubt a few mishaps too. I'm looking forward to getting to know you better at the annual meeting. Meanwhile, Happy Holidays to you and your family, whatever you might be celebrating.

Cheers!

Nan Bonfils

P.S. Next newsletter deadline is February 22, 1999.



### 🎵 Attorney General Cautions on Fertilizer Over-application

Iowa Attorney General Tom Miller's office has issued a farm advisory bulletin titled "Do You Really Need to Apply P and K Fertilizer for Next Year?" The article notes that over two-thirds of soil samples submitted to ISU now test "high" or "very high" in phosphorus; statistics are similar for potassium. At these levels, no yield response to additional fertilizer can be expected.

PFI research conducted with Iowa State University showed that the over-application problem is widespread. Through a survey and a complex telephone interview, a cross-section of Iowa farmers was divided into "sustainable" and "conventional" producers based on their farming practices and values. ISU agronomist Antonio Mallarino visited 127 cornfields around the state, taking soil samples and measuring yields. While cornfields in 85 percent of "conventional" fields showed phosphorus levels of high or very high, 74 percent of the "sustainable" cornfields were also in



these categories. The breakdown was exactly the same for potassium.

The Attorney General's message warns farmers to make sure they see the actual results of their soil tests, not just the fertilizer recommendations that may come from the lab or a consultant. ISU's recommendations are widely available and a good basis for comparison. In a period when grain prices drop below the cost of production, unnecessary expenditures on fertilizer are the last thing farmers need.

### **Fourth Annual Food System Conference**

Saturday, January 30 (snowdate: Sat. Feb 6) from 8 A.M. to 4:30 P.M. in Grinnell at the Grinnell United Church of Christ. This conference will provide an opportunity for people who are involved with the development of local food sources to come together to network. There will be news from the 1998 season. Denise O'Brien will present the keynote. Afternoon features two workshop sessions, each session providing three tracts to cover production, marketing, and community/organization aspects. Sponsored in part by the Leopold Center for Sustainable Agriculture. For more information contact Jan Libbey, conference coordinator at 515 495-6367 or email libland@kalnet.com

### **Upcoming North of the Border**

#### *Land Stewardship Project Conference*

January 21 in the Rochester, MN. area will feature Joel Salatin. His speech, "You Can Farm", focuses on going beyond direct marketing to relationship marketing. For registration information call 507-523-3366 or email lspse@rconnect.com

#### *Tools and Rules for Adding Value on the Farm: Value Added and Marketing Conference*

February 9<sup>th</sup> and 10<sup>th</sup> 1999, Holiday Inn, Eau Claire, WI. Contact: Larry Swain, Rural Development Institute, UW-River Falls phone 715-425-3083 email swain@wisplan.uwex.edu

#### *Through the Farm Gate to the Dinner Plate: The Minnesota Organic Conference*

February 16<sup>th</sup> and 17<sup>th</sup>, Kelly Inn, St. Cloud. Contact: Jan Gunnink, 507-237-5162

#### *The 2<sup>nd</sup> Annual Minnesota Grazing Conference*

February 19<sup>th</sup> and 20<sup>th</sup>, Victoria Inn, Hutchenson  
Contact: Jan Gunnink, 507-237-5162

#### *Take Your Farm to School Workshops*

The Michael Fields Agricultural Institute, located in East Troy, Wisconsin, is hosting winter workshops under the banner "Take Your Farm to School." This year several workshops will be located in Southwest Wisconsin (Viroqua). Call 414-642-3303 to register.

January 22, 23, 24. *Soil building with organic matter; planning for sustainable farming.*

January 24. *Farm planning: Part I*

February 12-14. *Farm planning: Part II*

### **Fourth Annual Winter Retreat for PFI Women**

Plans are evolving for the PFI Women's Winter Gathering to begin midday on February 13, 1999. The site is the Scenic Valley Conference Center in rural Boone County. Treat yourself to a getaway designed with PFI women in mind. We'll get going on Saturday afternoon and wrap up around noon on Sunday. That way we can all be back home in time to get in on St. Valentine's Day goodies. Nan Bonfils will handle registration through the PFI office (515-294-8512) or via email (nanb@iastate.edu) or by fax (515-294-9985). She is also accepting ideas about the program's content. Some women have already called in to be sure their name is securely on the list of interested participants. Not a bad idea. With so much positive energy flowing for PFI women these days, we could get a record-breaking turnout, and we do have a finite number of beds. Stand by for details, but mark your calendar now. And give Nan a call if you're really keen. 515-294-8512

### **Swine Systems Conference February 17**

Get ready for the sequel to the February, 1997 conference on hoophouse hogs. The first such meeting was very highly rated by participants. One producer said it gave him the courage to even stay in hogs. Like the last conference, this effort is led by Rich Pirog of the Leopold Center for Sustainable Agriculture.

Since last summer, swine producers, farm organization representatives, and ISU scientists have been meeting to set the program. Workshop titles will include: Getting started with hoop structures; Composting hoop structure bedding/manure; Marketing opportunities with alternative swine systems; Decision-making – identifying critical points and picking the system that's right for you; Research/demonstration updates; Using hoop structures for gestation or breeding barns; Outdoor production systems; Regulatory and other challenges to pork production; Remodeling existing structures; and Using hoop structures for early weaning or farrowing. Both producers and scientists will present and lead discussions. The conference, which takes place in the Scheman Continuing Education Building at the ISU Center, will cost \$15 (\$10 without lunch), and preregistration is strongly encouraged. Call 515-294-5961 for registration information; call the Leopold Center at 515-294-3711 for information about the program.

### **The 10<sup>th</sup> Annual Upper Midwest Organic Conference**

March 5 and 6, Sinsinawa Mound, WI. *Organic Works at Home and Around the World*. Contact: Faye Jones, Conference Coordinator phone, 715-772-6819, email: fjeoc@win.bright.net or On the Web: <http://agile.net/UMOFC/>

### **Holistic Management Training in March**

PFI is sponsoring two different training opportunities in March, 1999, one a one-day session and the other a three-day workshop. Both will be open to producers and to staff of Extension and other agencies. There will be a charge for the training, but support will also come from a grant from the SARE Professional Development Program. The locations of these events are yet to be determined.

On Friday, March 12, William Casey will lead a one-day training that will both introduce Holistic Management (HM) and draw the parallels and distinctions to the ISU Extension Strategic Management program, whole-farm planning, and other holistically oriented planning tools. Casey, a certified HM educator, was one of the trainers at the session PFI organized last year. He also teaches farm management at

Southeastern Community College, and he raises and markets beef cattle.

Monday-Wednesday, March 29-31, certified HM trainer Ed Martsof, from Morrilton, Arkansas, will lead a three-day holistic management training session. Ed also has worked with a number of PFI members at workshops in the past. He would like for the second day of the training to take place on the farm of someone who has had some exposure to HM and is trying to use the tools in their own operation. Suggestions, anyone? Please contact PFI coordinator Rick Exner if you might like to volunteer your farm or have other questions (515-294-5486).

### **Searching for a Farm**

My name is Joe Rude. I was born in Marshalltown and grew up working on the family farm. After getting married and having two sons, my wife Wende and I want to get back to Iowa and raise our family on a farm. We'd appreciate any leads on available farms, whether yours or a neighbors. We plan to practice sustainable agriculture and see it advantageous to be in the neighborhood of another "practical farmer." We have down payment and can go through the bank to buy immediately, or be flexible with a multi-year transition for someone wanting to slow down and stay on the farm. To be near both sets of aging grandparents and other relatives, we are limiting our search to Story, Boone, Marshall, Dallas and Guthrie counties or thereabouts. Please contact us at 515-224-2989.

### **Seeking Operator**

Seeking operator for organic farm operation with some livestock. Send resume to P.O. Box 313, Hampton, IA. 50441

### **Opportunity for Beginning Organic Farmer**

In recent years cropland has been rented to a neighbor. However, lease has been cancelled at end of crop year 1998. So I have the farm for rent on March 1, 1999. 120 acres, two miles SW of Traer, Perry Twp., in North Tama County. Tillable acres: 114.3 (FSA figures). Good tillable land, gently rolling, Tama and Dinsdale silt loam soil types. Some old buildings, house not in condition to rent. Room for

# SUSTAINABLE PROJECTS 1999

## PROPOSAL FORM

### PRACTICAL FARMERS OF IOWA

*Sustainable Projects* is designed to help citizens of Iowa carry out activities that focus on agriculture and the environment. Sustainable agriculture has been described as preserving the soil and water resources as well as the people involved in agriculture. What could a Sustainable Project be? Maybe you want to undertake an on-farm trial like those used by the farmer cooperators in Practical Farmers of Iowa. Maybe you would like to create a specific program for the local school or FFA that teaches about the relationship of farming to the environment. Perhaps you are part of a group that needs some support to have an educational booth at the county fair. Maybe you could use some funding to bring your community leaders together on a related issue. Be creative!

Proposals for up to several hundred dollars will be accepted. (PFI cooperators, for example, receive up to \$400 for an on-farm trial.) It is legitimate to include in the proposal payment for your own time. Itemize labor and other costs in the budget you submit. Large equipment purchases will *not* be funded; however, equipment leasing may be used in proposals to defray equipment costs.

In return for funding your Sustainable Project, we ask that you agree to share both the results and the *process* that you went through carrying out the project. That will help us to build on past experience and share the successes of the program. A credible "feedback," or reporting plan is one of the criteria on which proposals will be evaluated! Plan on sharing your project with a poster or display at the PFI annual meeting.

Projects will be chosen by a committee consisting of PFI members and board representatives, the PFI coordinators, and representatives of ISU and the Leopold Center for Sustainable Agriculture. Proposals for 1999 are due by Feb. 1. Committee decisions will be announced in March. Project reimbursement will be made upon receipt of a final report.

Please return this proposal form to: Practical Farmers of Iowa, 2104 Agronomy Hall, Iowa State University, Ames, Iowa 50011.

Name of Project \_\_\_\_\_

Name Submitting \_\_\_\_\_

Address \_\_\_\_\_

Zip Code \_\_\_\_\_ Telephone \_\_\_\_\_

(OVER, PLEASE)

Please print or type. Use additional paper if needed.  
Please include an itemized budget.

Please describe the problem that this project will address and why there is a need for the project.

Please describe what you will do in the planned project. Be specific.

How will you communicate to the public about the project? What kind of reporting to Sustainable Projects will you carry out?

What is the amount of money you need to carry out the proposed project? Please itemize.

livestock and pasture. Land was in ridge till system from 1968 through 1994 and farmed conventionally the last 4 years. Land well protected from soil erosion or last 30 years. Utilities: Electric power, on county water line, telephone line to building site. Farm is not for sale. The farm will be in transition to organic farming system beginning March 1, 1999. This is an opportunity for an organic farmer or a beginning farmer. I wish to keep the farm as a small farm and not make it an add-on to a larger farm. Contact owners: Harold and Patricia Wright, 1718 Clark Ave., Ames, IA. 50010-5345, phone 515-232-3361.

### 🎵 Niman Hams Available

PFI member Paul Willis of Thornton, a main person behind the effort to market sustainably-produced pork to California, called to say hams and bacon from the hogs are accumulating at Webster City, which is where they are processed. These are very high quality products. The Niman Ranch Applewood Smoked Boneless Pit Hams come as half (about six pound) or whole (about 12 pound) hams. The Niman Ranch Applewood Smoked Center Cut Bacon comes in ten pound cases with 12-14 retail packs per case.



If you are interested in purchasing any of these products (they'd make great Christmas gifts), give Paul a call at 515-998-2683. Talk to Paul about picking up your hams at one of four locations. 🐷

## AUDUBON COUNTY FAMILY FARMS HOSTS TOUR

Charles Carpenter & Donna Bauer

Members of Audubon County Family Farms hosted a day of farm tours on Saturday, September 26 for a group of their farmers market customers from Des Moines. Twenty visitors came for the day on a tour bus sponsored by the Leopold Center for Sustainable Agriculture at Iowa State University.

The group first got a roadside view of the farm of Leo and Mari Schultes north of Viola Center. Leo described his livestock operations, including hoop house hogs, and Mari described her herb business.

The bus continued on to neighboring Beaver Creek Farm where Charles Carpenter and David Tousain showed the visitors their apple and cherry orchard, honeybee hives and solar house.

## GIFTS TO PFI

My mother taught me that it was never too late to say thank you, although it was less than courteous not to be prompt about it. At the risk of maternal wrath, here's a list of PFI members and supporters who have given cash gifts above their membership in recent

years. The money has been set aside in a growth fund for the future of PFI. We hope that all PFI members will continue this generous trend in the new year. Thank you, everyone!

Jim and Beth Ahrens  
Robert C. Bahrenfuse  
Ted and Donna Bauer  
Dr. Ercil V. and Maxine Beane  
Eddie Broders  
Charles Cawley  
Deb Cooper  
Penny Hughes and Joe Dever  
Aaron Easton  
Walter and Gartha Ebert  
Laura Jackson and Kamyar Enshayan  
Lue Jarnagin and Rick Exner  
Cornelia B. and Jan Flora  
Eric and Ann Franzenburg  
Roger W. and Theresa Frimml

Gil and Ardyth Gillespie  
Tomihiro Hayashi  
William F. and Pat Heidenreich  
Kay Neumann and Jon Judson  
Jeff and Susan Zacharakis-Jutz  
Ann Lennartz  
Timothy Landgraf and Jan Libbey  
Dave and Lisa Lubben  
Vic and Cindy Madsen  
Paul and Karen Mugge  
Christian E. Oelberg  
Jeff and Gayle Olson  
John Pesek  
Brent G. and Mary B. Peterson  
Edwin Ramsey

Don and Veronica Ray  
Jack D. Reif  
Clare Hinrichs and Tom Richard  
Duane and Marilyn Sand  
Merl F. Stewart  
Kenneth E. Suter  
Scott and Julie Swanson  
Rex and Lisa Thompson  
Richard and Sharon Thompson  
Mark and Connie Tjelmeland  
Ralph and Pat Watkins  
Steve and June Weis  
Dan and Lorna Wilson  
Colin and Carla Wilson  
John and Rosie Wurpts

**The entire group...was enthusiastic about seeing Audubon County and visiting the farms.**

The group then traveled to the diversified livestock farm of Dean and Deanna Hansen where they were shown hoop house hog production, calves, laying hens, turkeys and herb gardens. Across the road, on the farm of Dennis and Cheryl Hansen they saw sheep production.

The entire group, which included children and adults, was enthusiastic about seeing Audubon County and visiting the farms. They were able to hold young piglets, pet some animals and pick apples. They were especially interested to see the farms where products they purchase at the farmers market are produced. Local members believe it is important to build relationships with urban customers and enjoyed getting to know their customers. The last stop of the day was at Nathaniel Hamlin Park where Lucille Wiges gave a tour of the museum grounds. The visitors were then served a dinner prepared from local products and served by the group.

In a report to the Leopold Center, here's what Audubon Family farms identified as "Lessons Learned": Urban consumers are willing to spend a day touring farms and learning more about how their food is raised and where it comes from. And, from their comments, they would be willing to pay for this experience.

Having the shared experience of the "bus ride" was an important contributor to the success of the day. One participant reported that when the group arrived back in Des Moines they were saying "How much fun it would be for the group to get together again -- perhaps a potluck where everyone brought something from the farmers market."

The urban consumers would like to repeat the experience next year and were talking about bringing their friends.

For the farmers, the experience bolstered their confidence in their ability to direct market and more clearly defined what "relationship marketing" means.

Audubon County Family Farms is a group of independent farm families working to diversify and strengthen Audubon County's economy through direct marketing of their farm production. For the past two years they have received grants from the Leopold Center for Sustainable Agriculture to help with marketing. Donna Bauer is coordinator. Other members who participated in the event were Cindy and Vic Madsen Jr., Ruth and Dale Henriksen, and Ann and Steve Brinkman.

## PFI LIBRARY UPDATE

Here's a sampling of resources from the PFI district lending libraries. This newsletter covers the topics vegetable crops, culture/policy, and energy.

Contacts for the district libraries are:

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



## NEW ISU PASTURE MANAGEMENT PUBLICATION AVAILABLE

Merlin Pfannkuch, Ames

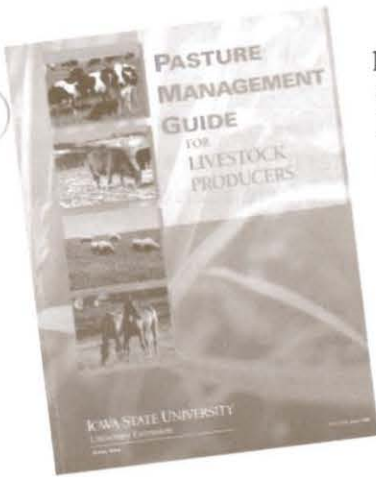
A new full-color 104-page "Pasture Management Guide for Livestock Producers" is available from Iowa State University Extension. The guide gives an overview of most of the important issues facing pasture managers, such as aspects of pasture plant species, growth and development of forage plants, pasture improvement, animal nutrition and forage management, and managing grazing animals. The guide also includes an introduction to rotational grazing and management-intensive grazing practices, but it is not designed for those who have been practicing management intensive grazing for several years.

## PFI Library Holdings: Alternative &amp; Vegetable Crops, Culture/Policy

Topic	Title	Author/Publisher	Library
Alt Crops & Veggies	Amaranth: Perspectives on Production	MN Ext. Service	Northeast
Alt Crops & Veggies	Encyclopedia of Organic Gardening	Rodale Press	Northwest
Alt Crops & Veggies	Establishing a Nut Grove (video)	Univ. of Guelph	Northeast
Alt Crops & Veggies	Introduction to Permaculture	Mollison	Northeast
Alt Crops & Veggies	Rodale's Garden Problem Solver	Ball, I	Northeast
Alt Crops & Veggies	Spotlighting Alternative Crops	Steel, Sam	Northwest
Alt Crops & Veggies	Square Foot Gardening	Bartholomew, Mel	Northeast
Alt Crops & Veggies	SSE Fruit, Berry, and Nut Inventory	Seed Savers Exchange	Northeast
Alt Crops & Veggies	SSE Garden Seed inventory	Seed Savers Exchange	Northeast
Alt Crops & Veggies	SSE Yearbook	Seed Savers Exchange	Northeast
Alt Crops & Veggies	The Complete Book of Composting	Rodale Press	Northwest
Alt Crops & Veggies	The Organic Way to Plant Protection	Rodale Press	Northwest
Alt Crops & Veggies	Tree Crops	Smith, J.	Northeast
Alt Crops & Veggies	Tree Crops	Smith, J.	Stonecypher
Culture/Policy	A Sand County Almanac	Leopold, Aldo	Northwest
Culture/Policy	Agroecology: The Scientific Basis of Alternative Agriculture	Altieri, Miguel	Northwest
Culture/Policy	Agroecology: The Scientific Basis of Alternative Agriculture	Altieri, Miguel	Southeast
Culture/Policy	Agroecology: The Scientific Basis of Alternative Agriculture	Altieri, Miguel	Southwest
Culture/Policy	Alternative Agriculture	National Research Council	Northeast
Culture/Policy	Alternative Agriculture	National Research Council	Lubben
Culture/Policy	Alternative Agriculture	National Research Council	North Central
Culture/Policy	Alternative Agriculture: Scientists Review	CAST	North Central
Culture/Policy	Alternative Approaches to On-Farm Research	SARE	Northwest
Culture/Policy	At Nature's Pace	Logsdon	Northeast
Culture/Policy	Broken Heartland: The Rise of America's Rural Ghetto	Davidson	Northeast
Culture/Policy	Chicken Little, Tomato Sauce and Agriculture	Gussow, Joan Dye	Northeast
Culture/Policy	Committee	US Congress	North Central
Culture/Policy	Dividing the Waters: Food Security, Ecosystem Health, and the New Politics of Scarcity	Postel, Sandra	Northwest
Culture/Policy	Dr. Twisted Visits a Farm	Enshayan, Kamyar	Northeast
Culture/Policy	Dr. Twisted Visits a Farm	Enshayan, Kamyar	North Central

PFI Library Holdings (Continued): Culture/Policy, Energy, Fiction			
Culture/Policy	Family Farming, A New Economic Vision	Strange, Marty	Northwest
Culture/Policy	Family Farming, A New Economic Vision	Strange, Marty	Southwest
Culture/Policy	Farmers for the Future	Looker, Dan	Northeast
Culture/Policy	From the Ground Up: Wisconsin Sustainable Farmers Tell of Their Practice and Vision	Irwin, Mike	North Central
Culture/Policy	Interdependencies of Agriculture and Rural Communities in the 21st Century	The North Central Region 198 Conference Proceedings	North Central
Culture/Policy	Nature's Silent Music	Callahan, P.	Northeast
Culture/Policy	New Dimensions in Rural Policy: Building upon our Heritage	Subcommittee on Agriculture and Transportation of the Joint Economic Committee	North Central
Culture/Policy	New Partnerships for Sustainable Agriculture	Thrup, Lori Ann	Northwest
Culture/Policy	New Roots for Agriculture	Jackson, Wes	Northeast
Culture/Policy	One Straw Revolution	Fuquoka	Northeast
Culture/policy	Perils Amidst the Promise - Ecological Risks of transgenic Crops	Union of Concerned Scientists	Northwest
Culture/policy	Reshaping the Bottom Line: On Farm Strategies for a Sustainable Agriculture	Granatstein, David - LSP	North Central
Culture/Policy	Shattering: Food, Politics, and the Loss of Genetic Diversity	Fowler and Mooney	Northeast
Culture/Policy	Sustaining Civilization (speech on video)	Savory, Allan	Northeast
Culture/Policy	The Corporate Reapers: The Book of Agribusiness	Krebs, A. V.	Northeast
Culture/Policy	The Farming Game	Jones	Northeast
Culture/Policy	The Future of the Iowa Soybean Industry	ISU	Northwest
Culture/Policy	Tough Choices: Facing the Challenge of Food Scarcity	Brown, Lester	Northwest
Culture/Policy	What are People For	Berry, Wendell	Northwest
Culture/Policy	Who Will Feed China?	Brown, Lester	Northwest
Energy	Award Winning Farm Energy Projects	IA Energy Policy Council	Northwest
Energy	Landowner's Guide to Wind Energy	Izaak Walton League	Northwest
Energy	Life and Energy in Agriculture		Northeast
Energy	Power Surge - Guide to the Coming Energy Revolution	Flavin & Lensen	Northwest
Energy	Powering the Midwest	Union of Concerned Scientists	Northwest
Fiction	A Thousand Acres	Smiley, Jane	Northeast
Fiction	Butterfly Against the Gale	Alfred, N	Northeast





Authors of the publication are ISU agronomists Steve Barnhart, Ken Moore, and Charlie Brummer, and ISU animal scientists Dan Morrical, Jim Russell and Peggy Miller. Copies of the publication (Pm-1713) are available for \$10 from county extension offices or

Extension Distribution Center, 119 Printing and Publications Building, ISU, Ames, IA. 50011; (515) 294-5247. 🐾

## ORGANIC FUTURE LOOKS BRIGHT – MEET KATHLEEN DELATE

Nan Bonfils

Kathleen Delate transplanted herself from Hawaii to Iowa in July 1997 to join the ISU faculty as Assistant Professor of Agronomy and Horticulture, Organic Specialist. She's been busy ever since and the summer of '98 has really kept her hopping. On one of autumn's last and brightest days she paused to reflect. "My husband can't believe it. Here I am actually wishing that winter would get here. Just so I can stop." Stop? Well, maybe slow down a bit. But one suspects that even a slowdown could be overly optimistic considering the many projects that engage Kathleen.

Last February she conducted a series of focus groups sponsored by the Leopold Center for Sustainable Agriculture. Spread across six Iowa communities, the turnout rate for invited participants was nearly 83%. Over 50% of the participants were also PFI members. Farmers definitely wanted to speak out on field crops, horticulture crops, and livestock, as well as ISU's role in research, teaching, and extension work about organic farming.

***"We're looking at insect data, soil data, weeds, – a complete agri-economic analysis."***

Kathleen was ready to listen. The information gathered from the focus groups helped shape the research conducted by Kathleen and her team in the summer of '98. Farmers requested information about effects of two-year vs. four-year rotations on a range of subjects including soil fertility, nematodes, and insect populations.

Kathleen also evaluated different commercially produced soil amendments available on the market.

Kathleen's team will analyze the results from 25 acres at six sites. She'll be presenting the results at a workshop at the PFI annual meeting. Going into the 1998 growing season she was told "...if you can get a good yield this, year, we'll be impressed." So she's optimistic about the yields of up to 177 bushels per acre of organic corn and up to 52 bushels per acre of organic soybeans. "This is all thanks to my crew, who got in there and did the cultivation." Kathleen is looking long term, planning research on her plots for a twelve year minimum.

Her analysis is thorough and comprehensive. "Some agronomists plant it and then harvest it for yields. But we're looking at insect data, soil data, weeds, – a complete agri-economic analysis." Kathleen has high praise for Cynthia Cambardella's soil analysis of seven parameters to measure soil health in physical, biological, and structural categories. Mike Duffy is a key player in the economic analysis.

Kathleen thinks that the future looks bright for organic producers. "Even in a recession situation, the demand from Asia will be there. Farmers may sacrifice a bit from current premiums, but the market will stand." She's also optimistic about the attitudes of cooperation and camaraderie that predominate in the organic industry. "Although with growth it's bound to



**All aboard! Kathleen Delate is the last link in the pumpkin brigade.**

take on a more corporate structure, larger scale does not spell disaster. It's possible to maintain ideals."

Kathleen serves on the state organics standard board working on Iowa Chapter 190C, written in response to delays in coming to an agreement on standards at the federal level. "In fact, Iowa just might submit its final version as a model for federal standards," says Kathleen. "The Iowa standards will be in addition to existing ones designed by private certifiers. The organic industry will err on the side of caution."

Let's keep an eye on Kathleen this winter and see if she slows down at all. You can catch her at the PFI annual meeting.

## PFI RESEARCH WITH IOWA FARM BUREAU

Rick Exner

You may have noticed in the field day guide this year that several events were listed as *In cooperation with the Iowa Farm Bureau*. "What's that all about?" asked a long-time PFI member I saw at a field day last summer. "When was there a discussion of this?" There are probably other people with similar questions, and they're legitimate ones.

On the face of it this could seem like an odd match-up. PFI consists of a diverse group of philosophies and farming styles, but the distinguishing common interest is something we call sustainable agriculture. Generally, that's taken to mean: input substitution or reduced inputs; management-intensive rather than capital-intensive approaches; emphasis on community-based solutions over technology-based or industrially-based ones; and environmental awareness. Many people do not associate the Farm Bureau with sustainable agriculture.

So what could cause PFI to overlook differences and propose collaboration? And it was, in truth, Practical Farmers of Iowa that made the offer. The PFI board and staff consistently work to broaden the audience for sustainable agriculture and on-farm research. When you put together a proposal, you look for the common ground, not the areas of difference. We have given proposals to the Soybean Promotion Board, the Iowa Corn Growers Associa-

tion, and the Iowa Pork Producers, and we'll continue efforts to "mainstream" sustainable agriculture in this way. We were fortunate in 1998 that support from the Leopold Center for Sustainable Agriculture allowed PFI to extend the offer to the Iowa Farm Bureau, and we hope the relationship can continue.

The interests shared by PFI members and Farm Bureau members are many. At the field days of those IFB cooperators, there were plenty of questions relating to the things PFI members know well – practices, products, marketing, and some farming philosophy. I think PFI can make a real contribution here. We know how to do on-farm research, we are experienced in farming practices and technologies that are both sustainable and profitable, and we are making new markets. To me this collaboration says the organization is secure in the values and skills it brings to the table.

I do think there is the possibility for this arrangement to fall short of its potential. That will happen if field days are segregated events, with IFB field days attended only by an IFB crowd and vice versa for the field days of PFI members. Then we will have transferred the skills and nothing else. I think many would agree that PFI is much more than a set of skills.

## CALLING THE WOMEN OF PFI – HAVE YOU SENT IN YOUR COMPLETED SURVEY?

In early November a survey went out to about 500 PFI households in an attempt to get in touch with the women of PFI. The recipients were chosen from the PFI database if they were current members living in Iowa or Iowa members whose membership had only recently expired. Did you get yours? What have you done with it?

### What's the idea behind the survey?

Here's a little background information. As PFI women have gathered at Women's Winter Gatherings and other events, we've realized that we really don't know much about each other or our connection to the organization. The women listed below decided to try a survey as a first step in becoming better acquainted. The ultimate goal is to create mutual support in our daily lives and our relationship with PFI.

### Who's conducting this survey, anyway?

Seven PFI women are directing the project. They are:

Virginia Wadsley, writer and historian (515-255-5269)

Sue Jarnagin, rural sociologist (515-292-6802)

Donna Bauer, farmer and PFI board member (712-563-3118)

Mary Holmes, ISU extension staff (515-294-6946)

Deb Cooper, part-time PFI support staff (515-292-5125)

Connie Lawrance, CSA farmer (515-795-2215)

Nan Bonfils, farmer and PFI program assistant (515-294-8512)

You're welcome to call any of us with your concerns and questions.

### Do I have to fill out every line?

No, certainly not. In fact, you don't even have to identify yourself. All information will remain confidential within the group described above. We hope you'll be candid with your thoughts and comments. Make the survey work for you by elaborating your answer where needed.

### What will become of the answers?

Again, your individual answers will remain confidential. Your responses will be compiled with the others we receive. In turn, the results will help shape future support networks, programs, and educational materials for PFI women.

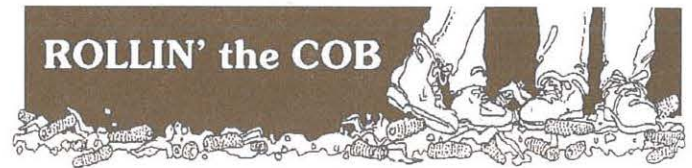
### How will we find out what the results are?

We'll use a variety of channels to get the results back to the participants. This newsletter may be one vehicle. A separate mailing of the results is also a possibility. We should be able to give you a progress report at the PFI annual meeting in January and again at the PFI women's winter gathering in February.

### The survey said November 20. Is it too late to hand mine in?

We appreciate how busy you are. So if your survey is buried in the to do pile, you can fish it out any time. Fill it out and sent it to PFI 2104 Agronomy Hall, ISU, Ames, IA. 50011. If it slipped into the recycle bin,

Nan can send you a new one. Call 515-294-9512. Likewise, call Nan if you think we missed you entirely. We are eager to hear what you have to say. ☺



**"Weed management" is the topic chosen by the four cob rollers. This year the weather made weeds a challenge for producers. At the same time, many farmers are making changes in their farming operation to reduce costs and/or enter new markets. Here are some thoughts from the battlefield.**

### Tom Frantzen - Managing 'plants out of place'

When a complex ecosystem like a wet prairie is disturbed in order to grow an annual row crop, weeds (plants that are 'out of place') are a natural reaction.

We spent \$35 per acre to pull pigweed and black nightshade from our organic soybeans this year. 'Plants out of place' are not cheap to remove, chemicals or not. To reduce the potential weed pressure, we utilize these practices.

1. Our soybean meal comes exclusively from J&L Custom Processing, in Riceville. The expelling, extruding and screening processes eliminate viable weed seeds in the animal feed. This is not the case with the processor, a large multinational corporation, that used to supply our soybean meal.

2. We eliminated liquid manure handling and now compost almost all of our solid manure. The heating process in composting destroys the viability of weed seeds.

3. Most of the farm is in a corn-beans-oats-hay-pasture rotation. After the pasture, the soil is carefully moldboard plowed. The plow buries surface weed seeds and suppresses deep-rooted perennials like quackgrass. The following soybeans are ridge planted in early June, late enough to give them the advantage against weeds. Every effort is made to plant the oats that follow the soybeans as early as possible in the spring. A year of haymaking follows the oats. This hay cutting again disturbs weeds from seedmaking and depletes their resources. Typically, a year of intensely

grazed pasture follows the hay year. Composted manure is spread on the pasture before it is turned over with the plow.

Row crop agriculture will always battle 'plants out of place.' Efforts to suppress these competing plants need to be directed at the cause of the problem. The lowest cost and most sustainable solution can be found in pastures.

### **Margaret Smith – Implementing changes**

Our biggest change in weed control strategy for row crops is implementing a five-year rotation rather than alternating corn and soybeans. The rotation is: corn-soybeans-corn-forage (seeded with oats)-pasture. With two years of solid-seeded forages and the haying and grazing that brings, we are reducing our seedbank of annual weeds. How much? We don't know. I have noticed a lot of foxtail in the seeding year of the forages with the oats companion crop. When the oats come off for either hay or grain and straw, the foxtail comes on like gangbusters. We don't see much in the grazing year of the rotation before going back to corn, but do still see some. It is the one annual weed we may not be helping with this rotation.

Because these acres are in transition to organic certification, we can't use any herbicides. There's nothing like this sort of challenge to send you searching for that buried agronomic information! Tillage is an ancient tool, but expensive in both dollars and – potentially – soil and organic matter. Of course we must till a fair amount in this rotation both to kill the sod and to control weeds. We do see worse annual weed pressure, though, when a row crop is planted after working down the preceding row crop than we see when we plant into ridges.

We have not yet experimented with any cover crops. We are so far north that our growing season makes it hard to fit anything into this rotation. I do think there may be potential in rye following corn and before soybeans.

***There's nothing like this sort of challenge to send you searching for that buried agronomic information!***

We will be experimenting with a flame weeder next year in both corn and soybeans. I hope that the learning curve isn't too steep!

### **Ron Rosmann – Rough year sparks creativity**

1998 was one of the toughest years ever in our 25 years of farming. Hail and high winds created havoc with most of our crops. Our barley was a 75% hail loss. The corn was also hit hard with only half a final stand due to hail on May 21<sup>st</sup> and green-snap on July 15<sup>th</sup>. Our weed management strategies were also put to the test and I'm afraid we received a failing grade in some corn and bean fields this year. After 15 years of experience with little or no herbicide use, we were feeling quite good in general about weed control progress until this year. If water hemp were a marketable crop we'd be in the money this year.

Our usual strategies of ridge-tillage, rotary hoeing, two cultivations with our two Buffalo cultivators, coupled with crop rotations of alfalfa, small grains, and pasture and row crops did not suffice this year. There was just too much rain and stormy weather in May, June and July. What this year points out to us is that maybe we have become too lax with some things pertaining to weed management. Maybe we need to start thinking about some new ideas and make sure we are doing all the old ones correctly.

One area we are working on to some extent is collecting weed seed from the combine and doing a better job of cleaning the soybeans at the auger before they go into the bin. I built a large wooden box attached to the combine below the clean grain and return elevators on our 1420 IH combine. This is for collecting weed seed from organic soybeans going into overhead bins in our corn crib where an auger would not fit. It worked well but proved to be time-consuming, as it had to be cleaned out quite often. At the steel bin site, we installed a #6 screen on our grain cleaner. This has 6 holes per inch. We put the all-solid screens (no holes) back on the combine so as much weed seed as possible would end up in the wagon. This system worked very well. Why we haven't done it in previous years is beyond me. It seems so obvious now. Of course for corn, the weed seed stays largely out in the field, since not as much is stripped by the combine corn head. All of this weed seed was scooped onto a manure spreader and put on a separate pile next to

***We put the all-solid screens (no holes) back on the combine so as much weed seed as possible would end up in the wagon.***

our manure compost windrow, either to be composted or burned.

Here are some other ideas we hope to follow through on for next year:

1. Better crop rotations in all fields. The two fields with the weakest long-term rotations (not enough hay or pasture) had the most weeds. One will be put to oats and two years of alfalfa. The other will be oats and pasture for four to five years. We have started rotating our semi-permanent pastures to row crops after being in pasture for 7-8 years.

2. With ridge-tillage, we have not felt the need to delay planting of corn and soybeans like most conventional-tillage organic farmers. Maybe we need to start delaying soybeans to June 1<sup>st</sup> at least, instead of May 14<sup>th</sup> like this year. In some fields where it is tough to ridge-till because of terracing, contours, and point rows, we may try some disking and later planting of soybeans.

3. Cover crops: We have not done the drilling of oats and rye on our ridges as Dick Thompson does with a mounted drill. One year in the past, I plugged the holes of our conventional pull-behind drill except for those on the ridge. However, I couldn't get it to trail properly on the hillsides and ended up with too much cover-crop in the valleys, where it proved difficult to take out the following spring.

One thing we have had success with and will try to expand on is the planting of rye and turnips after barley and oats on fields going to corn the following year in a short rotation. This year, we added hairy vetch to the mix. Next year, we may plant buckwheat around Aug. 1<sup>st</sup> when the small grain is harvested. By Sept. 1<sup>st</sup> this could be disked under. Rye and vetch and turnips could then be planted for late fall grazing and as a cover crop for weed suppression. Buckwheat is a fast-growing smother crop and has the ability to use phosphorous deeper in the soil than some other

crops, thereby increasing the amount of phosphorous available to following crops.

We have also had success in the past with the seeding of hairy vetch at the second cultivation of corn. We should go back to doing some of this for nitrogen production, weed competition, and for fall grazing by our cows and calves. Time and labor seems to be a limiting factor for this.

The good news, in spite of all the weeds and stormy weather, is that our soybean yields and quality are still quite good. 40-50 bushel yields and organic premiums may be our salvation this year.

### **Roger Schlitter - Trim your costs**

This is an area where I lack the specific product knowledge to talk about your choices and how to come up with the "right" choice for next year. However, I have some thoughts that may be of help to you as you plan for the future.

I find that as we face another period of poor prices and the possibility of these prices continuing for at least another year, farmers are looking more closely at their costs and the options they have to reduce costs and/or improve performance. This applies to the full range of inputs used in farming. The reality is that when prices and yields are good, we tend to get complacent. It becomes easier to pick up the phone, call our suppliers and ask them to "spray it" one more time, put on the "same fertilizer" as last year, and use some of that "new seed" with all the technology built into it

Thin margins require us to rethink all the things we do. It may be time to evaluate each step of your production cycle and see if anything needs to be changed. Sometimes small adjustments can make a big difference. This thought process should be applied to each part of your crop or livestock operation. Chances are that you will find some places that have become a little lax during the good times. Go back to

***It may be time to evaluate each step of your production cycle and see if anything needs to be changed.***

the basics and keep things as simple as you can. Make the most of all your inputs (for crops or livestock) by being timely and precise with their use. However, do not give in to the temptation to cut out something that will cost more to do without than if you use it (for example: proper supplement levels in feed, proper nutrient levels in soils for an average crop, or adequate cultural practices and/or chemicals for good weed control).

I know that most of you do these things already, but if you can find one or two additional things that save or generate a few more dollars per acre or per animal raised, the process will be successful. 🍀

## Field to Family Project Update

Robert Karp  
and Gary Huber

The short history of PFI's Field to Family project, to use an image, has been like adding layer upon layer to an onion. Field to Family started in early 1997 as an education and outreach wing of a local community supported agriculture (CSA) project to demonstrate the potential for new types of relationships between producers and consumers. We then looked for ways to work more broadly on local food systems, which led to a proposal to the USDA Community Food Projects Program. In September of 1997 we learned that PFI would receive a \$137,500 grant to pursue this broader agenda.

Since then our work has demonstrated genuine support for sustainable agriculture in the local church and social service community, as well as the general public. This support not only bodes well for the development of new local food system models; it points to new areas for research and demonstration that focus on building bridges between sustainable agriculture, community planning, economic development, and the social services.



**Scheman Center staff are eager to develop, with our help, a "Sustainable Iowa" menu.**

A key question is whether efforts to build these bridges and develop local food systems can generate tangible support for more than a few alternative agricultural producers in Iowa.

Given the current income situation for Iowa farmers, viable alternatives for farmers are desperately needed. Alternatives that appear most promising for sustainable agriculture involve integrating sustainable practices with marketing alternatives. Opportunities exist for farmers who add value to their products and move their point of first sale closer to the consumer. Field to Family is working at developing these kinds of opportunities through an effort to facilitate sales of sustainably-produced foods to institutional markets.

Over the last year we acted as an informal broker for eleven meals, serving over 1,000 individuals using foods purchased directly from twenty-six sustainable farms across Iowa. The success of these meals has led to the desire for a more concerted and organized effort. With additional support through a \$10,000 grant from the ISU Vision 2020 project, we will be building on our experiences by working primarily with the ISU Scheman Continuing Education Center to increase purchases of sustainable foods from local and Iowa farmers.

Scheman Center staff are eager to develop, with our help, a "Sustainable Iowa" menu that could be offered as an option for potential clients. As well, we have been asked by others, including the Gateway Holiday Inn in Ames, to help develop similar options. There appears to be great potential here given that the Scheman Center alone serves food to nearly 150,000 people a year!

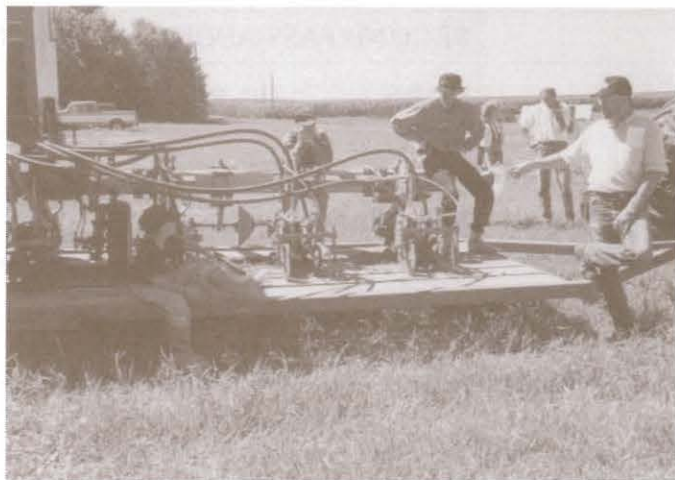
**Field to Family, continued on page 31.**

# PFI 1997 ON-FARM TRIAL RESULTS – III

(Editors' note: Results of PFI 1997 on-farm research are appearing in *The Practical Farmer* over the course of this year. We hope this will give readers a chance to absorb these cooperator reports. In this issue we report on some research on row spacing and with tillage and weed management. In 1997, we learned more about bugs in strip intercropping, including effects of Bt corn and migrating corn rootworm larvae. And Jeff Klinge and Deb Tidwell provide crop production budgets for organic and conventionally grown corn.)

## Row Spacing Trials

Row spacing has been controversial ever since equipment and crops no longer had to accommodate the width of a draft animal. Dave and Lisa Lubben, Monticello, normally drill soybeans and row-plant corn. In 1997 they compared drilled soybeans to soybeans they planted in 18-inch rows by making a second pass with the 36-inch-row planter. Not counting the expense of the second planter pass, the chief cost difference was due to the higher seeding rate for drilled soybeans (Table 1). Since there was no significant yield difference between the seeding methods, the greater cost of drilled soybeans tipped the balance in favor of 18-inch rows. The cost of the second planter pass would largely erase that advantage, however.



The home-made twin-row ridge-till planter, at the Wilson field day in 1997.

## 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.

**Table 1. A/B Row Spacing Trials**

COOPERATOR	CROP	TREATMENT A			TREATMENT B
		DESCRIPTION	YIELD (bu.)	TREATMENT COST	DESCRIPTION
LUBBEN	SOYBEANS	18" ROWS	61.9	\$30.70	8" DRILL
	SECOND PASS ADDITIONAL COST:			\$5.44	
NEELY-KINYON	CORN	30" ROWS	61.0	\$34.04	15" ROWS
WILSON	SOYBEANS	SINGLE-ROW	48.8	\$14.21	TWIN-ROW

At the other end of the state, the Neely-Kinyon Farm compared corn in 30-inch and 15-inch rows (Table 1). Late summer was very dry in this part of Iowa, and overall corn yields were half of normal. However, the 15-inch-row corn yielded better than corn in 30-inch rows by more than 11 bushels per acre. This result runs counter to most of the trials on row spacing conducted by ISU, and the very low yield environment may have played a role. If so, this trial helps to fill in a piece of a very large puzzle, as industry, producers, and university agronomists reexamine the issue of row spacing.

Think you've heard the last word on row spacing? How about twin rows? Some ridge-tillers and other producers who aren't ready to narrow their rows are looking at pairing two rows six or seven inches apart, retaining the customary row spacing between pairs. In

1997, Paullina cooperators Colin and Carla Wilson and Dan and Lorna Wilson tried out the twin-row ridge planter constructed by their cousins (and former PFI cooperators) Doyle and Lowell Wilson, Primghar. Seed cost was a little greater for the twin-row configuration, but no difference in yield appeared (Table 1). Colin reported somewhat earlier canopy shading for the twin rows, although weeds were not a problem in either system. He also saw more leaning plants in the twin rows at harvest time, although the combine was able to harvest the crop satisfactorily. Colin and Dan don't think they will try the twin rows again. Their cousins, however, believe they have seen a benefit on their own farms and will continue planting twin-row soybeans.

**Table 2. Tillage and Weed Management Trials**

COOPERATOR	LOW RATE TREATMENT					HIGH RATE TRT
	DESCRIPTION	TREATMENT COST	YIELD	BROADLEAF WEEDS/ACRE	OTHER WEED INFORMATION	DESCRIPTION
IN SOYBEANS						
ROSMANN, R.	DISKED	\$19.17	41.0	170	SOME VELVETLEAF AND FOXTAIL	RIDGE-TILL
THOMPSON	LOW RIDGE	\$0.00	59.2	130		HIGH RIDGE



A/B Row Spacing Trials

TRT B		DIFFERENCE				COMMENT
YIELD (bu.)	TREATMENT COST	YIELD DIFF.	YLD LSD (bu.)	YLD SIG.	\$ BENEFIT OF TRT A	
63.5	\$32.24	-1.6	2.3	N.S.	\$1.54	SECOND PLANTER PASS ACTUALLY COST ABOUT \$5.44 ADDITIONAL
72.3	\$34.04	-11.2	5.4	*	\$13.53	OVERALL YIELDS WERE LOW DUE TO MOISTURE STRESS
\$5.95 ADDITIONAL PLANTER PASS						
48.1	\$16.58	0.8	1.4	N.S.	\$2.37	EARLIER CANOPY BUT MORE PLANTS LEANING IN TWIN-ROWS

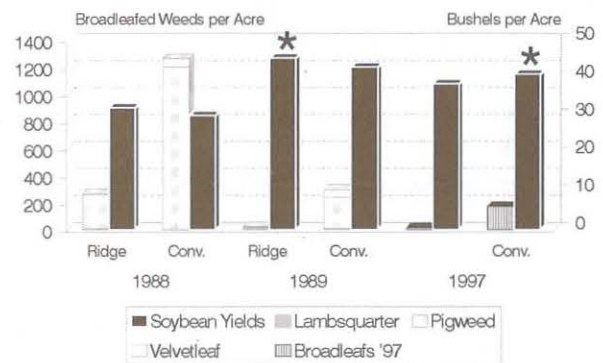
Tillage and Weeds

The connection between weeds and tillage is both obvious and subtle. Yes, tillage removes weeds. But tillage also stimulates weed seed germination. Ron and Maria Rosmann, Harlan, repeated a trial they carried out in the late 1980s, comparing soybeans in ridge tillage to soybeans grown after a primary tillage of disking (Table 2, Figure 1). Organic farmers like the Rosmanns sometimes take advantage of the fact that in ridge tillage there is no primary tillage to "wake up" the weed seeds. That, and the fact that the planter

**Yes, tillage removes weeds. But tillage also stimulates weed seed germination.**

Weeds Under Two Kinds of Tillage

1988, 1989, 1997 - Rosmann Farm, Harlan  
No Herbicides Applied



Weed differences significant every year. Yield differences significant 1989, 1997.

Figure 1. Ridge-till and disk tillage soybeans.

Tillage and Weed Management Trials

HIGH RATE TREATMENT				TREATMENT DIFFERENCES					COMMENTS
TREATMENT COST	YIELD	BROADLEAF WEEDS/ACRE	OTHER WEED INFORMATION	YIELD DIFF.	YLD. SIG.	YLD. LSD	BRDL. WEED SIG.	LOW RATE \$ BENEFIT	
\$17.92	38.5	15		2.5	*	2.2	*	\$41.92	YIELD DIFFERENCE VALUED AT \$17.50/BU
\$0.00	58.3	92		0.8	N.S.	1.1	N.S.	\$0.00	

## First Year Experience with Organic Corn

Jeff Klinge and Deb Tidwell, Farmersburg

Nineteen ninety-seven was our first year to grow certified organic corn. To be certified, you have to have records to prove no chemical use for three years.

We compared the returns from the organic corn and a field of our conventionally raised corn (Table 3). The conventional corn was planted April 28<sup>th</sup> on second year corn ground following alfalfa, with a manure N credit of 30 lbs and alfalfa credit of 50 lbs N. The organic corn was planted May 20<sup>th</sup> on first-year ground following alfalfa and manure. Weed control was good in both fields. Stalk rot was a problem in both fields.

I do not think fertility was limiting on the organic field. Corn following alfalfa without fertilizer or manure has been my best corn field for years. Organic corn is normally planted later to aid weed control. The later planting date plus lack of heat units in northeast Iowa were a factor this year. Ceiba 3475 has done well on sod ground in the past, but it is too late (108 days) for May 20<sup>th</sup> planting in northeast Iowa. Next year we will plant 100-day corn.

Of course, corn production doesn't tell the whole story of farm

profitability. We may net more money on organic corn, but we won't be growing it as often. My crop rotation will be a five-year one: small grains, alfalfa, corn, soybeans, corn. The crops that are less profitable than corn will still contribute to the overall operation of the farm.

**Organic corn is normally planted later to aid weed control.**

Table 3. Corn production budgets, organic and conventional, Klinge farm.

Item		Organic	Conventional
Pre-Harvest Machinery		\$27.50	\$20.25
Seed (Ceiba 3475)	29,000 plants/acre	\$31.90	\$31.90
Nitrogen (no P or K)	60 lbs	\$0.00	\$14.40
Herbicide	2.4 qt. Harness Extra, .78 oz Permit, additives	\$0.00	\$36.13
Insecticide	8 lbs Aztec	\$0.00	\$17.12
Crop Insurance		\$5.00	\$5.00
Interest	9.5% for 8 months	\$4.08	\$7.90
Pre-Harvest Total		\$68.48	\$132.70
Harvest Machinery	Combine	\$22.00	\$22.00
	Haul Grain	\$4.00	\$4.00
	Dry Grain (\$0.15/bu)	\$19.20	\$21.75
Harvest Total		\$45.20	\$47.25
Labor	\$8.00/hr	\$48.00	\$32.00
Land	cash rent equivalent	\$150.00	\$150.00
Total Cost per Acre		\$311.68	\$362.45
Crop Yield (bu/acre)		128	145
Cost per Bushel		\$2.44	\$2.50
Sale Price (per bu)		\$4.05	\$2.70
Gross Income per Acre		\$518.40	\$391.50
Net Profit per Acre		\$206.72	\$29.05

Organic: tandem disk 2x, chisel plow, harrow, plant, hoe 2x, cultivate 3x.

Conventional: tandem disk 2x, chisel plow, harrow, plant, hoe 1x, cultivate 1x.



**Ron Rosmann explains the art of setting a cultivator.**

sweep removes germinating plants and surface weed seeds from the row, explains the differences in broadleafed weeds shown in the table and the figure.

Whereas these weed numbers were consistently reduced in ridge-till, by a factor of 5-to-11, soybean yields have gone both ways. In 1988, there was a nonsignificant advantage to ridge tillage; in 1989 ridge-till enjoyed a statistically significant advantage; and in 1997 the disk-tillage system enjoyed a significant yield advantage (Table 2). However, Ron is not ready to return to conventional tillage for a 2½ bushel benefit. Although he believes a tilled seedbed can be more forgiving of seed placement errors, he values the weed management benefit ridge tillage gives his organic system. Ridge-till also fits his labor availability and his conservation goals.

Non-chemical weed management in ridge tillage was practically invented on the farm of Richard and Sharon Thompson, Boone. In 1997, Dick Thompson examined the weed control effects of throwing an extra high ridge at the last cultivation (Table 2). Ridging higher covers more weeds, and it makes it easier to shave the ridge-top at planting the following year. Overall broadleaf weed numbers were very low in this trial, and the 70 percent reduction in weeds was not statistically significant. There was no measurable effect on soybean yield.

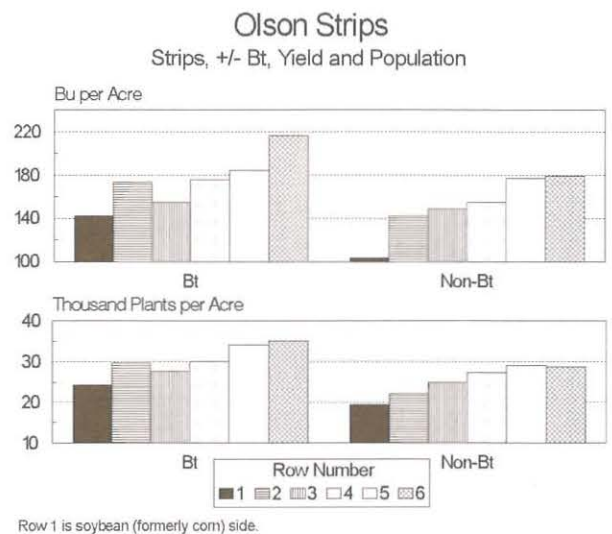
**Strip Intercropping: Life on the Edge**

In the early 1990s a dozen PFI cooperators tried their hand at strip intercropping, the practice of planting narrow strips of different crops side by side.

Some impressive corn yields were recorded, but various problems made it difficult to consistently take advantage of the added sunlight and diversity afforded by strips. PFI cooperators Jeff Olson and Gayle Olson, Mt. Pleasant, and Paul and Karen Mugge, Sutherland, are working with university and USDA scientists to identify those barriers. Research in 1997 focused on three groups of insects that seem to take advantage of the diversity and plentiful borders between crops: corn rootworms, grasshoppers, and the common stalkborer. Table 4 presents corn yields and stands by row in strip intercropping on the Olson and Mugge farms.

When the outer rows of corn in strips does not yield better than strip interiors, insects, weeds, or pathogens may be responsible. On the Olson farm stalkborer has been identified as a problem. The grass waterways around these strips provide ample wintering sites for the eggs of these insects. There is also some indication that the young larvae are using the strips as a superhighway into the field. PFI and ISU staff examined several ways to disrupt the insect. One of these was the use of Bt-enhanced corn. Jeff Olson planted a Bt corn in some strips, and in others he planted the non-Bt sister hybrid.

Bt corn is not advertized as effective against common stalkborer, but Bt tends to be active against lepidopterous (moth and butterfly) larvae in general. As Table 4 and Figure 2 show, Bt had a significant effect on stands, yields, and the frequency of stalkborer damage. In fact, corn yields were closely tied to



**Figure 2. Bt effect on strip corn yields and stands by row.**

***Bt had a significant effect on stands, yields, and the frequency of stalkborer damage.***

plant population. As stand varied across the strips, so did yield. Stand in Bt strips was far from uniform, but it was consistently higher than in non-Bt strips. Does this mean strip intercropping requires Bt corn? No, but the Bt corn is providing insight into the agroecosystem. It might be that the most effective use of this biotechnology is in the border rows of strips. That conservative level of use should slow the development of resistant insects.

Where Jeff Olson's corn yields suffered on the west borders of strips, Paul Mugge's corn yielded 15-20 bushel more on either border than in the strip centers (Table 4). Grasshoppers have bothered the soybeans in Mugge's strips, but corn yields have been little affected by the hoppers. You might not guess to look at the corn yields, but there is evidence that corn rootworm larvae are at work on the strip edges neighboring previous-year corn strips. USDA-ARS entomologist Mike Ellsbury has tracked the underground migration of rootworm larvae from last year's corn row #6 to this year's row #1, a distance of one row-width. His research on the Mugge farm has been

reported in *The Practical Farmer*, Winter 1996/1997. Ellsbury, the ISU agronomists and entomologists, and PFI farmers are gradually developing a fuller understanding of crop-pest interactions in strip intercropping. 🌱

## PHOSPHORUS AND POTASSIUM FOR NO-TILL AND RIDGE-TILL SOYBEANS

Rick Exner

It was one year ago that the companion to this article appeared in the *Practical Farmer*. That piece focused on corn, instead of soybeans, and reported results of research carried out by ISU agronomist Antonio Mallarino – some of it on the farms of PFI members. PFI cooperators had been eager to collaborate with Antonio because many shared his questions about the utility of starter fertilizer and the best placement for other P and K fertilizers in reduced-till situations. Antonio described his research methods as follows:

We established ten long-term trials (five with P and five with K) with no-till corn-soybean rotations at five research farms. Several short-term trials (with P and K

**TABLE 4. Strip Intercropping, Row Yields and Stands**

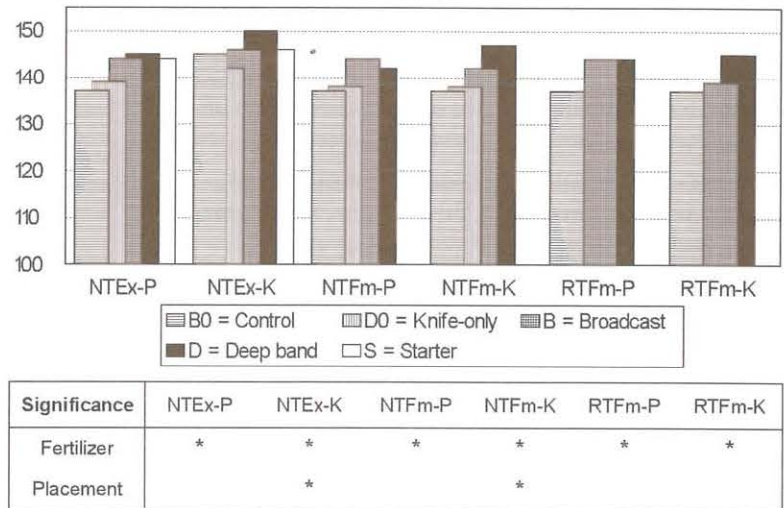
NORTH-SOUTH STRIPS	OLSON						WEST STRIPS	MUGGE	
	NK 6800 Bt			NK 6800				PI 3563	
	ROW	YIELD	STAND	STALK-BORER	YIELD	STAND		STALK-BORER	ROW
	BU/ACRE	PLANTS-/ACRE	% PLANTS	BU/ACRE	PLANTS-/ACRE	% PLANTS		BU/ACRE	PLANTS/ACRE
(W)	(SOY)						(S)	(SOY)	
1	142.1	24,358	7.9%	103.1	19,308	22.6%	1	180.0	31,339
2	173.4	29,705		141.9	21,982		2	157.2	32,081
3	154.5	27,626	3.6%	148.9	24,952	15.5%	3	152.3	32,824
4	175.4	30,002		154.9	27,329		4	147.6	32,081
5	183.8	34,161		177.0	29,110		5	164.6	33,715
6	216.1	35,052	2.9%	179.2	28,814	17.5%	6	181.4	31,487
(E)	(OATS)						(N)	(OATS)	
STRIP AVG.:	174.2	30,151	4.8%	150.8	25,249	18.6%	STRIP AVG.:	163.9	32,255
BLOCK:	143.5	29,953		128.7	26,735		BLOCK:	146.2	29,656

combinations) with no-till corn (11 trials), ridge-till corn (13 trials), no-till soybeans (11 trials), and ridge-till soybeans (14 trials) were established from 1994 to 1996 in producers' fields with their cooperation. Five PFI members were among these cooperating farmers. Treatments were placements and rates of P and K granulated fertilizers. At the research farms, fertilizers were 1) applied broadcast, 2) banded with the planter approximately 2 inches beside and below the seeds, or 3) deep-banded to a depth of 5 to 6 inches. At the farmers' fields, the fertilizers were applied broadcast or deep-banded. Fertilizer rates were 0, 28, 56, and 112 lb P<sub>2</sub>O<sub>5</sub>/acre and 0, 35, 70, and 140 lb K<sub>2</sub>O/acre. The broadcast and deep-banded treatments for the 1994 growing season were applied in spring three to five weeks before planting and thereafter were applied always in the previous fall. Nitrogen fertilizer was applied at rates 25 to 50% higher than local recommendations.

The figure of corn yields that appeared in the earlier article are reproduced in Figure 3. The main findings from analysis of the corn response were:

- Enhancements of early growth can be achieved by banding P fertilizer with planters or deep-banders but will seldom increase yields compared with broadcast fertilization. The deep banding of K, however, will seldom increase early growth but will often increase grain yields.
- Broadcasting K or banding it with the planter often (but not always) is inefficient for no-till corn. Similarly, broadcast K for ridge-till corn often (but not always) is an inefficient practice.
- The K placements differed statistically over all ridge-till sites, the deep-band placement produced on average 6 more bu/acre than the broadcast.
- Contrary to expectations, responses to deep-banded K (both ridge-till and no-till) were poorly related to soil-test K or stratification.
- Planting on the fall-applied coultter-knife-only track often increased early growth of no-till corn but did not increase early growth of ridge-till corn.

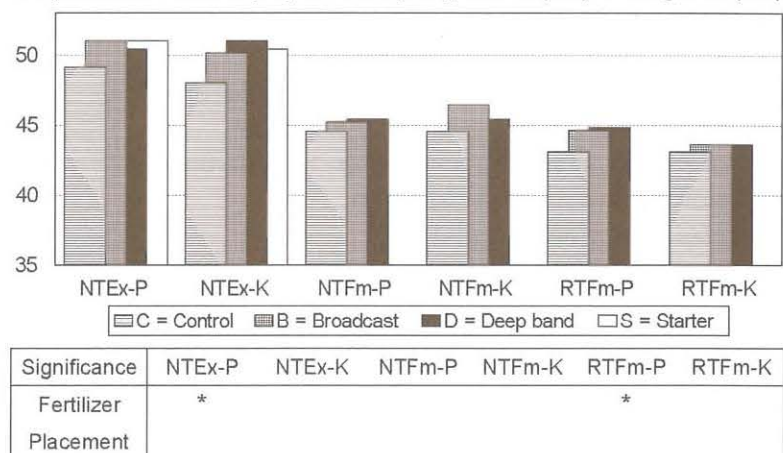
Fig. 3. Corn – Banded, Deep-banded, and Starter P and K Experiment Station (Ex) & Farm (Fm), No-till (NT) & Ridge-till (RT)



- Soil sampling depth, soil-test interpretations, and fertilizer recommendations for P based on chisel-plow tillage also apply for no-till systems. In ridge-till, soil sampling of ridges seems more appropriate.

Soybeans, the other crop in the study, took much longer to write up. For one thing, explains Antonio, the data were not as clear as in corn. So what did the agronomists find? Figure 4 summarizes the yield results.

Fig. 4. Soybeans – Banded, Deep-banded, and Starter P and K Experiment Station (Ex) & Farm (Fm), No-till (NT) & Ridge-till (RT)



Knife-only and Zero-disturbance controls combined. Two levels of P fertilizer combined. Two levels of K fertilizer combined.

### No-till, P

In eight of the 20 site-years on experiment stations, soybeans (30" row spacing) exhibited a response to phosphorus fertilization. The soil at all these sites tested low or very low in P, but not all sites testing low responded to fertilizer. Neither was stratification of available phosphorus associated with a yield response in soybeans. The significant placement effects at three sites were inconsistent. In one site, there was response only to broadcast P, in another site the broadcast was better than the two banded placements, and in the other the two banded placements were better than broadcast.

On the other hand, two of 11 on-farm site-years (with soybeans grown in narrow rows) showed a small advantage to deep banding. However, there was not a significant placement effect overall for these on-farm trials. Mallarino's team concludes that fertilizer placement and stratification of available P are not major issues for no-till soybeans in Iowa. The lack of large yield response to P in several of the low-testing soils causes them to wonder if recommendations for no-till soybeans might require a separate calibration.

### No-till, K

In five of the experiment farm site-years showed yield responses to potassium fertilizer even though the soils already tested adequate in K. Mallarino thinks these responses were related to dry soil conditions in spring, not stratification of K in the soil profile. Analysis over all site-years showed a small but significant response to both K fertilizer and placement.

### Ridge-till, P

Phosphorus fertilizer increased soybean yields on FOUR of the 14 farm site-years, and there was a significant P fertilizer effect over all trials. Several sites testing below optimum did not respond to P fertilizer. Most likely this is explained by responsive trends that were too small to become statistically significant, because there was a highly significant response over all sites. It is also possible, however, that other factors limited yield and that a soil test of just



**Deep-banding fertilizer into the sides of ridges.**

the ridge could more accurately predict soybean response.

### Ridge-till, K

Potassium increased yield only at two sites, and the placements differed only at one (deep band was better). Analyses over all 14 trials showed no significant response to either potassium fertilizer or placement. Most soils tested high and very high in potassium anyway, and the ridges tested even higher.

### Soybeans in Reduced-till

In no-till and ridge-till, when soil test phosphorus was below optimum, soybeans sometimes responded to fertilizer, but placement method was not critical. The degree of P stratification in the soil profile was less useful in predicting whether that response would occur than was the number of consecutive dry days during the spring. Soybeans sometimes responded to potassium fertilizer even when soil test K was optimum or higher. Again, the method of placement was not critical, and weather was a greater factor than was stratification in predicting a response.

Planter-banded and deep-banded fertilizer more often affected early soybean growth than it did grain yield. This is consistent with the observations of many producers who use in-row fertilizers and see a response early in the season. Mallarino's work in ridge tillage showed that early nutrient uptake was even more sensitive to fertilization than was early growth, and deep banding was the

superior placement. However, there was no correlation between yield response and either uptake or early growth in this study. Deep banding can produce luxury consumption of P and K in soybeans, but under ordinary circumstances this is not translated into yield. If deep-banded P or K ever provided a yield advantage, it might be when prolonged dry conditions prevented normal root development or nutrient uptake from topsoil.

So what is the big picture for fertilizer placement in no-till and ridge tillage?

- If you deep-band, do it to provide potassium to the corn. Corn was insensitive to placement of phosphorus, and soybeans usually did not respond to placement of either P or K. Results not shown here suggest that the deep-band K effects persist up to two years after the application.
- Problems remain correlating soil tests to crop needs in no-till and ridge-till. Corn and soybeans sometimes responded to K even when soil levels were optimum or above. No-till soybeans sometimes failed to respond to P even when soil tests were below optimum.

Nutrient stratification, sometimes considered the culprit, was not a yield factor in this study. Soil test values are (usually) higher in the ridges than the inter-row valleys. More research is needed to know if different soil sampling methods are called for, or if recommendations need to be calibrated especially for combinations of crop and tillage system.

### Field to Family, continued from page 22.

Though there appears to be great potential for sustainable farmers in these types of opportunities, there are great challenges to overcome and questions to be answered. Farm profit potentials are unclear. Limits exist on what can be grown year-round in Iowa. Facilitating sales from multiple producers is complex, and transporting products from farmers to users can be difficult. There are also issues related to the likelihood that chefs will be getting products that are different from what they typically receive.

These kinds of issues need to be addressed with planning aimed at creating an efficient, workable system that links these new markets with farmers' products while sufficiently rewarding all participants. Furthermore, planning needs to be combined with organizing participant involvement, developing communication channels, and establishing documentation protocols so the learning is clear and transferable.

These are the elements of the work that we hope to be able to support over the next year as part of the Field to Family project. We know what we will be learning through this effort will be extremely relevant for PFI members, and we will keep you abreast of our progress on a regular basis. Also, please see the boxed information below for ideas on how you might already participate in these efforts.

#### Producers Needed for Scheman Project

Some PFI farmers are using direct marketing to help insure adequate profits. Field to Family has been working with some of these members to get their foods used by ISU's Scheman Center. In order to increase demand, we will be helping Scheman staff develop new menu options for use with their clients.

If you have products you think would work well as part of this menu, please call 515-232-7162 or send a copy of your product list and/or brochure to: PFI Field to Family Office, 917 Burnett # 3, Ames, IA 50010. We will get back in touch with you as we proceed with this initiative.

## FOOTPRINTS OF A GRASS FARMER

### Looking for Footprints?

We know that many readers will miss Tom Frantzen's regular commentary. Tom's father passed away in October and Tom just had to let this newsletter go by. We hope to see the grass farmer in print again in '99.



## BITS OF SUSTENANCE

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

income for the family, the opportunity to stay with my children, and it kept my fingers in the soil.

Eight years ago we had the opportunity to move to a small thirty acre farm which had been used to produce dried flowers. All the facilities were very basic and a lot of work needed to be done. We finished remodeling the house (1875 one-room school house) and added a simple fiberglass-covered greenhouse onto the back of the single-car garage that became my workshop. Because the farm is located at the edge of a small creek, Murphy Creek Farm became the new company and homestead name. During this time trends continued to favor dried flower arrangements with the “country” theme being predominant. Home-grown herbs and flowers along with wildcrafted weeds and vines kept me well supplied. Most of my sales were to mall and small gift stores, profits were good and I could do most of the work myself.

This business has always been somewhat seasonal, with the majority of sales during the fall and winter months, leaving plenty of time for growing flowers. When we moved to the farm my garden grew to ¼ acre with plenty of room for vegetables for the family in addition to the flowers.

As the years passed the decorating trends changed and customers asked for more dyed and preserved flowers. Colors became darker and richer, with choices different than what could be grown in the home garden. As I found myself buying more of my materials I also found myself thinking about how to fill the extra garden space. One family can only consume so many vegetables.

Sunday January 25, 1998, The Des Moines Register featured Practical Farmers of Iowa in the Farm & Country section of the paper. The article introduced a food-system approach to agriculture, described sustainable agriculture and Community Supported Agriculture (CSA). Gary Guthrie and his wife Nancy of Nevada, Iowa were featured as first year farmers who had started a CSA business and were successful with just a couple of acres and about eight families as customers. Also listed were The Magic Beanstalk as part of the Field to Family project, and other people involved in either their own CSAs or PFI.

This article started the wheels turning. After a week or so of thinking, I called the people featured in the article for more information. As it turns out an

## Evolution of a Small Business

Connie Lawrance, Madrid

Fourteen years ago, when my son was just a year old and my daughter was three, my first small business began. A small patch of garden with herbs and flowers grown just for fun turned into a home based potpourri company. Discarded flowers purchased from wholesale florists and scented oils augmented what I grew in my backyard. I hired a sales company and I soon had a small but profitable business running.

A basket class I took just for fun turned into an idea for a set of tiny fabric baskets and soon the potpourri moved aside for the manufacture of many tiny baskets. This proved to be successful for a few years, but trends changed and it became readily apparent that something new was needed. Making the baskets was also hard on my hands, and responsible help was getting harder to find.

We were living in the middle of a small town with a large lot and sizable garden considering the location. Gardening has always been a passion and stress reliever for me. I decided to increase my gardening and pursue growing dried flowers for wholesale. I learned all the fundamentals of growing, packaging and again talked to sales people. At this time interest in the flowers was very limited, I kept hearing the phrase “we don’t need flowers, we need finished floral designs.”

This led to experimentation with the flowers and with the help of a few encouraging store owners, another new business was born. This led to several years of employment from my home, a second



INCA, (Iowa Network For Community Agriculture) meeting was scheduled for the next week and I decided to attend. This was the start of a whole new project. After consulting with everyone there, I realized this would be a perfect fit into what I was already doing. I could continue the flower business, make better use of the garden, provide a service for people who lack the time and space to grow for themselves, and hopefully make a little profit as well.

With the existing facilities, garden, greenhouse, and large tiller I started a CSA with six customers. (If six doesn't sound like much, think about cleaning seventy-two green onions, a bunch for each family.) This was a manageable number to begin with and it worked out well. We did also purchase twenty-five egg producing chicks to add to my son's existing 4-H flock. This allowed me to include a dozen eggs with the vegetables each week. All of the people I approached were friends or acquaintances that I knew would appreciate fresh organically grown produce and eggs and were limited in time or resources to grow their own.

This was a challenging year to begin, with the wet spring and hot summer. I made mistakes, some crops failed, as they will in Iowa, some produced a lot more than anyone needed. It was a good learning experience. This year I charged a monthly fee and delivered a basket of food, whatever was mature and in season, weekly. This year I did not charge extra for delivery. Next year I will offer delivery for an extra fee. Response has been favorable, I feel this was a service

***Our options are only limited by our imagination and fear of trying something different.***

appreciated. I hope to increase my customer base to ten next year and increase the garden size.

This first year did produce a profit. While not large, it allows me to reinvest in more equipment to make the job easier next year. By using what was available to begin with, expenses were kept to a minimum and profits were possible.

Murphy Creek Farm Florals continue to be designed and produced, especially in the fall with Christmas approaching. Look for them at The Added Touch in Valley West Mall when in West Des Moines..

This summer after attending the Turtle Farm field day and meeting several people, I joined Practical Farmers of Iowa. I especially relate to the word Practical! Everyone has been helpful and supportive to this new venture and I'm sure this trend will continue. If you have any questions or comments you may call me at 5 15-795 2215. I appreciate the input.

My reason for writing this article was to illustrate the need and possibility for change. Our options are only limited by our imagination and fear of trying something different. This is an exciting and frightening time to be involved in agriculture. The time is right to consider the possibilities.

**PFI Membership Application and Renewal Form**

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_  
 County \_\_\_\_\_  
 State \_\_\_\_\_  
 Zip Code \_\_\_\_\_  
 Phone # ( \_\_\_\_\_ ) \_\_\_\_\_

This is a \_\_\_\_\_ new membership  
 \_\_\_\_\_ renewal

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

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

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

**Practical Farmers of Iowa  
 2035 190<sup>th</sup> St.  
 Boone, IA 50036-7423**

**CORRESPONDENCE**

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

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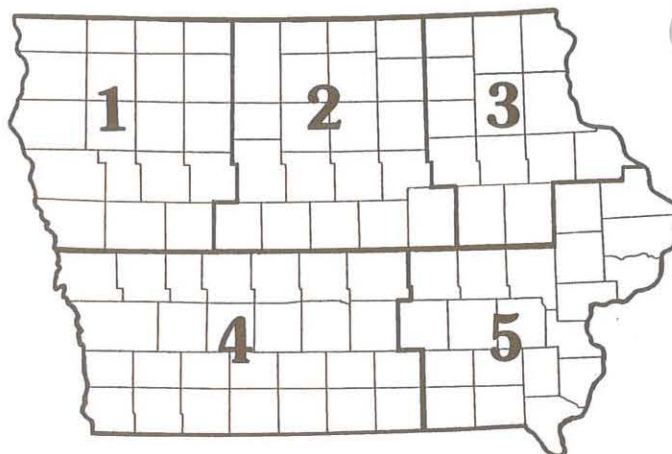
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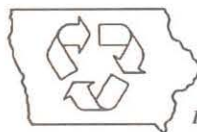
Coordinators: Rick Exner, Gary Huber, Nan Bonfils, Room 2104, Agronomy Hall, ISU, Ames, Iowa, 50011. (515) 294-1923.  
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**PRACTICAL FARMERS OF IOWA  
MEMBERSHIP DISTRICTS**



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**Practical Farmers of Iowa**

**2035 190<sup>th</sup> St., Boone, Iowa 50036-7423**

**Address Service Requested**