

the Practical Farmer

Practical Farmers of Iowa Newsletter

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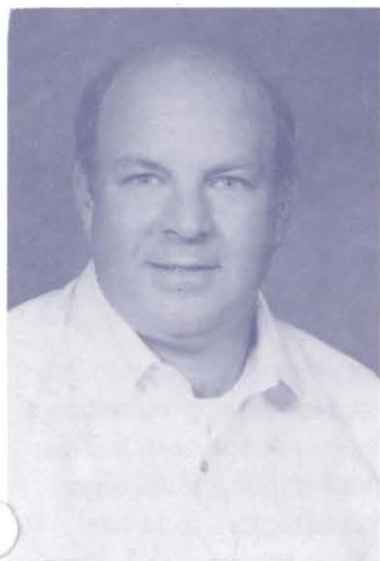
NEEDED CHANGES IN AGRICULTURE

Tom Frantzen, Alta Vista

As 1993 draws to a close, most Iowa farmers are swallowing a bitter pill. Disappointing prices and disaster level yields are common around the state. Lamenting their problems may ease farmers frustrations, but it will not lessen the financial pinch that most are experiencing.

What lessons can we learn? Can we change how we farm to help survive difficult years? This is truly a challenge for sustainable agriculture.

Environmental conditions affected different cropping systems in a dramatically different fashions. Corn following corn yielded far less than corn grown following other crops. We need crop rotations.



Marty Strange will keynote the PFI annual meeting on Jan. 6 (see page 2).

Corn fields suffering total disaster were less of an economic (and environmental) loss if low input techniques reduced chemical and fertilizer use. Low cost methods of soybean production helped sustainable farming manage risk. With unpredictable weather and markets, this is essential.

What about alternative crops? Grain amaranth produced acceptable yields on our farm alongside corn, beans, and oats

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Beanfield commentary: impromptu displays like this one appeared around the state last summer.

that were near total losses. What would happen if this crop could share some of the billions of research and development dollars spent on corn and soybeans? The lesson here is that we need diversity.

Cropping systems that utilized forages performed well this year. PFI cooperators around the state are reporting excellent yields of berseem clover. Some cooperators have green-chopped this annual and produced about 600 pounds of beef per acre when fed to stocker cattle. This is an example of adding value to a low input alternative crop.

In Minnesota, a farm couple report a profit of \$1,057 per acre after variable expenses with sheep. Management-intensive grazing sharply reduced costs while direct marketing of grass-finished lambs boosted income. The Nov./Dec. issue of *Countryside and Small Stock Journal* details their operation.

All of these examples of profitable production amidst difficult situations should give us hope. Agriculture needs to change. Diverse, low input strategies that reduce risk should be expanded. Our actions need to produce profitable, diverse operations that will sustain our local communities. 🌱

MARTY STRANGE AT JAN. 6 MEETING

The featured speaker at the PFI annual meeting Jan. 6 will be Marty Strange, program director for the Center for Rural Affairs, in Walthill, Nebraska. His talk is titled *Plateglass or Plywood: Alternative Futures for Small Town Main Streets*. Marty will also participate in a workshop focusing on rural communities.

Strange founded the Center for Rural Affairs with Don Ralston in 1973. Since then the Center has been involved in a wide variety of issues, including sustainable agriculture, rural economic development, federal farm programs, tax policy, and the environmental impacts of contemporary farming practices. Marty has written widely on these and other issues affecting rural communities. He is the author of *Family Farming: A New Economic Vision*, a book that examines the history of and the prospects for community-based agriculture. He is the recipient of a 1992 Public Achievement Award from Common Cause.

Strange will bring with him some success stories. The Center is organizing revolving-loan credit groups for small businesses and farmers, and the demand for the program is outstripping their capacity. The Center's Land Link Realty, which is an effort to link landowners and those desiring to farm, has been the model for other programs in the Midwest. The Center for Rural Affairs also helped to organize the Nebraska Sustainable Agriculture Society.

When, Where and What

It all takes place Thursday, January 6, at the Starlite Village Best Western Motel in Ames, on 13th Street, just off I-35. There is no preregistration. Registration begins at 8:00 am and is free to current PFI members (cost of renewal to others). The lunch at the Starlite is extra (\$7).

The annual meeting format will be similar to last years. After the keynote will come the presentation of the sustainable agriculture achievement award. Then starting at ten the concurrent workshops will begin, with these covering a range of topics – from hard information to the enjoyable – with time for everyone to ask questions and share their views. The workshops

are described starting on page 4, and the schedule for the entire meeting is on page 5.

Sustainable Agriculture Achievement Award

Richard ("Rick") Cruse is a professor of soil management at Iowa State University. His face is familiar to many PFI members through appearances at field days and meetings over the years. Cruse first began working with PFI cooperators on the practice known as narrow strip intercropping. After researching this technique with mixed results on experiment stations, Cruse made contact with PFI members who were managing the system successfully. Collaboration with these producers has continued, and now Cruse is working with PFI and other farmers on a "new" annual forage legume – berseem clover.

Cruse was raised on a farm near Plainfield, Iowa. After acquiring degrees from Iowa State University and the University of Minnesota and working a year at North Carolina State University, he joined the ISU faculty in 1979. Cruse and his wife Linda have two daughters, Karena and Tamara, who attend Ames Senior High School and ISU, respectively. Anyone who has heard Rick speak knows he is passionate about fishing and ISU basketball. These topics often creep into talks about agriculture, adding an element of humor.

As head of the interdisciplinary Cropping Systems Issue Team of the Leopold Center for Sustainable Agriculture, Cruse's efforts have set an example of what can be accomplished when farmers and researchers work together. His enthusiasm and his appreciation for the complexity of farming systems have made him a popular resource sought by producers statewide who want to farm profitably and sustainably.



R.M. "Rick" Cruse, ISU professor of soil management, will receive the PFI Sustainable Agriculture Achievement Award.

A Reading: Mary Swander

Mary Swander is an Iowan, a literature professor at Iowa State, and a published author of books and poetry. She captures a feeling for the land in personal accounts and in the pictures she creates of farmers and farm families she has known. Mary will share some of her works with us just before the PFI business meeting. (See pages 18 and 19 for a poem from Swander's book, *Driving the Body Back*.)

PFI Business Meeting

An important part of the PFI annual meeting is the business meeting. The business meeting provides members the opportunity to hear about and discuss the PFI organization - where PFI has been and where PFI is going. Included as part of the business meeting are the district caucuses. In these smaller groups, members can find out what is going on within their districts and locally, as well as offer their thoughts and ideas on district projects and activities.

Bring Something to Share!

Something new this year will be displays of grazing cell layouts and photographs from the farms of members. Please consider helping to add to the annual meeting by bringing your grazing cell layout or some photographs from your farm or community. (See the *Call for Posters!* box on the next page.)

Workshops

Getting Started in Farming: John Gilbert (PFI), John Baker (FarmOn).

John Gilbert and some neighbors are forming a club to make equipment and consultation available to young people who desire to get started in farming. John Baker is a counsellor and attorney for FarmOn, the

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Call For Posters!

To help give people a chance to visit, the PFI board is asking members and cooperators to bring two kinds of "posters" to the annual meeting:

- 1) grazing cell designs (on any size paper)**
- 2) photographs of equipment modifications, scenic views from your farm, etc.**

Display space will be provided.

ISU Extension project to match landowners and young farmers. They will share their perspectives on the strategies to get new people started in farming, and they will invite your comments.

Structuring Your Farm for Stability: Roger Schlitter (Farm Credit Services), Vic Madsen (PFI). Many Iowa producers are needing to reassess their financial position after 1993. Roger Schlitter, a loan officer at Farm Credit Services in Osage, will discuss the importance of short, intermediate, long term debt-to-asset ratios in the context of a year like 1993. Schlitter and PFI President Vic Madsen will also lead a discussion about ways producers can increase their financial stability.

Spirituality in Agriculture - Sharing Experiences from 1993: Fr. Richard Ament, Carmen Lampe.

This session was well received last year, with participants sharing their views on the social and spiritual values that energize rural communities and guide daily life on the farm. People who make their living from the land have had their endurance and good will severely tested in 1993. Maybe it's time to take stock, share your story, and try to find some high ground together.

Woody Agriculture - the Hazelnut Story: Phil Rutters (Badgersett Research Farm), Rick Faltonson (ISU Forestry Dept.), Tom Frantzen (PFI).

Trees are finding their way onto the farm in a variety of roles these days. You might someday grow a hedgerow that produces more oil and as much protein per acre as soybean. Phil and Mary Rutters have been developing the hazelnut as a cash crop from their homestead near Canton, Minnesota. Is there a place for this nut on your farm?

Sick Communities, Healthy Communities: Paul Lasley (ISU Extension), Marty Strange (Center for Rural Affairs).

Paul Lasley takes the pulse of the state with the Iowa Farm and Rural Life Poll and with travels to community development efforts of all kinds. Marty Strange works with Nebraska communities through the Center for Rural Affairs. This promises to be a lively discussion of the keys to community success and failure - and your participation is encouraged.

Narrow Strip Intercropping: PFI Cooperators, Dr. Richard Cruse (ISU Agronomy Dept.).

Narrow strip intercropping has the potential to increase both yields and conservation - without additional capital investment. PFI cooperators have spent two years evaluating narrow strips using the Crop Enterprise Recordkeeping System. Where are the strong and the weak points of this practice. What are



A scene from the Spirituality and Agriculture workshop at last year's annual meeting.

people doing to fix the "weak sister" crop, and how did it work in 1993?

Nitrogen and Manure: *PFI Cooperators, Dr. Fred Blackmer (ISU Agronomy Dept.).*

Looking back on 1993, what was the lesson for nitrogen management? Did the late spring soil nitrate test work? What did the late season stalk test tell us?

Starters, Potassium and Phosphorus: *PFI Cooperators, Dr. Antonio Mallarino (ISU Agronomy Dept.).*

In a year when planting-time fertilizer may have been the *only* fertilizer, was there a demonstrable effect to starters? Two cooperators used an experimental deep bander on the planter shoe. Was there an advantage? What worked for you?

Management-Intensive Grazing: *PFI Cooperators, Mike Brasche (ISU Animal Science Dept.).*
How did graziers deal with the wet year? What kind of performance did rotational grazing give? In 1993, PFI members tried new forage species and different grazing combinations. Find out what they learned and offer your own experiences.

Weed Management and Cover Crops: *PFI Cooperators, Rick Exner.*

Did 1993 leave you with a lifetime supply of weed seeds? In a year when weed management was an exercise in damage control, what solutions were practical and most effective? What were the surprises? Cooperators will report, and you are invited to share your experiences.

Marketing Crops Grown Organically and Without Applications of Pesticides: *Greg Welsh (ISU Extension Organic Crops Specialist), Ken Rosmann (Heartland Organic Coop), Tim Jensen (Pioneer Better Life).*

Specialty marketing of organic grains and grains grown without pesticides can bring a premium that may mean the difference between profit and loss. Is one of these approaches right for you?

Proposal Writing for FARMERS: *Ron Rosmann (PFI), Linda Rogers (ISU Extension).*

JANUARY 6 MEETING SCHEDULE

8:00 to 8:30 am Registration. (Come early and see the displays.)

8:30 Welcome and Introductions: Vic Madsen, PFI president.

8:45 Marty Strange: *Plateglass or Plywood: Alternative Futures for Small Town Main Streets.*

9:30 Sustainable Agriculture Achievement Award presentation — Richard Thompson.

9:45 Refreshment Break.

10:00 Workshop Session 1.

11:00 Workshop Session 2.

12:00 Noon Buffet.

1:30 Workshop Session 3.

2:30 Workshop Session 4.

3:30 Refreshment Break.

3:40 Mary Swander: A Reading

4:00 PFI Business Meeting (everyone welcome).

Farmers are getting grants on their own these days to do special projects. Ron and Maria Rosmann and three other PFI members have had proposals funded by the Low Input Sustainable Agriculture (LISA) program. Other PFI members are submitting proposals to *PFI Sustainable Projects*. There are some basic requirements for successful proposals, and Ron and Linda Rogers will provide training on these requirements. Ron has reviewed proposals for LISA, and Linda coaches proposal writers as part of her job for the Contracts and Grants office of ISU.

Costa Rica, A Visit on Slides: *Shelly Gradwell, Dan Brouse.*

The summer PFI newsletter laid out plans for a ten day farmer-to-farmer visit to the Central American country of Costa Rica. Producers there are facing some of the same issues family farms confront here: reducing costs, niche marketing, alternative crops, and sustaining the

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land. It's not too late to join the February trip, but even if you are just curious, stop by and visit. Shelly and Dan will show slides of the places they have worked and the farmers they've come to know in that tropical country.

Shared Visions: Farming for Better Communities: Gary Huber, Mary Foley (ISU Extension Leadership Development Specialist).

This new project was described in the last PFI newsletter, and there is a short article on the project below. Gary Huber and Mary Foley will be joined by the person who is being hired for the project, and they will provide an overview of the effort and encourage your comments and suggestions.

SHARED VISIONS: FARMING FOR BETTER COMMUNITIES IS NAME FOR NEW PROJECT

The new project PFI received Kellogg Foundation funding to undertake with ISU Extension and the Leopold Center for Sustainable Agriculture has a new name. After considering over 25 names, *Shared Visions: Farming for Better Communities* was chosen.

The name seemed to be the best of those suggested at conveying the project's purpose. That purpose is to form community-based groups that will provide the support needed to encourage farming systems that are productive, profitable, environmentally-sound, and supportive of rural communities.

Shared Visions is in the process of getting up and running. A brochure will be available soon. An advisory council, whose members are named in the adjacent column, has been formed. This group will be a sounding-board for ideas and provide input on selecting groups to be involved in the project and group projects to receive funding for implementation. The process of hiring a new person for the project will

soon be completed, and shortly after the first of the new year work will begin with the first set of community groups.

Members wanting to learn more about Shared Visions can attend a workshop on the project at the annual meeting or call Rick Exner or Gary Huber. Below are the names of the people who have agreed to be on the advisory council. 🐦

Mike Hermanson, farmer
Story City

David Ostendorf, former Director of Prairiefire
Des Moines

Loren Kruse, editor
Successful Farming magazine
Des Moines

Jim Penney, Agronomist
Heart of Iowa Coop
Roland

Maria Rosmann, farmer
Harlan

Margareet Ryan, Presbyterian Minister
Lenox

Duane Sand, Director of Planning and Research
Iowa Natural Heritage Foundation
Des Moines

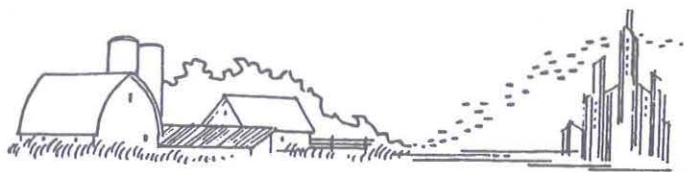
Gene Smith, banker
Sloan

Dave Williams, farmer
Villisca

Sally Falb, Executive Director
Fayette County Economic Development Commission
West Union

Pat Boddy, Co-Owner
Selzer-Boddy Inc.
Des Moines

Denise O'Brien, farmer
Atlantic



FIELD DAYS, 1993



The PFI display at the Hay Expo: members Phil Specht, Bill Furlong, Dave Lubben, and Wayne Bott.



At the Aug. 30 field day, Doug Alert shows an experimental planter shoe that deep-places liquid fertilizer.



Support from Mike Natvig's parents Godfrey and Theodora made the Aug. 12 field day especially enjoyable.



Chris Goedhart, Dordt College instructor, explains narrow strip intercropping at the Ag Stewardship Center field day.



ISU graduate student Emily Hunter, left, assists Jeff Olson with the demonstration of sweet sorghum for ethanol energy.



With a Shelby County landscape in the background, people line up for chow after the Rosmann field day. Maria's parents helped with preparation and serving.

PFI PROFILES: DOUG ALERT

Gary Huber

Doug Alert is a PFI member from near Hampton. His start in farming was not a typical one. His parents quit farming in 1966 when he was four, and so he did not have access to the machinery, buildings, and grain handling facilities that are available to most people who begin farming.

But he remembers his early years on the farm, and they are good memories. They are also memories that prompted Doug to want to farm himself.

Doug got a chance to farm when he was in junior high and his parents moved to a place near Mason City that had 30 acres of cropland. Shortly after the move Doug started going to farm sales with his dad, looking for machinery he could use to farm.

Doug was 14 when he purchased his first piece of equipment – a John Deere B he bought for \$400. He then equipped this tractor with a two-bottom plow, a single-wing disk, a ten-foot field cultivator, and a two-row planter and corn cultivator. The only item he bought new was a sprayer, and he traded his labor for the use of a combine.

After farming the 30 acres for several years, Doug and a high school classmate rented a nearby 80 acres, which brought the total to 110 acres. He used the income to buy a John Deere 720 diesel, a four-row planter and cultivator, a three-bottom plow, and a tandem disk. He continued to farm this land while attending ISU in the early 1980s.

After finishing in 1984 he worked for two years for an excavating business before he began farming 200 acres of rented land near Sheffield. The 200 acres were well-fenced and included a set of buildings, and so Doug began diversifying into livestock by buying six beef cows and some bred gilts.



Doug Alert stands next to some of his equipment during an in-service training session held on his farm for a group of high school ag education teachers.

He eventually built his sow numbers to 45 and his beef cow herd to 25 head. Most of the 200 acres was planted to corn and soybeans, but he included as much oats as was needed to establish hay for his beef cows.

Doug noted that diversifying into livestock was one of the main reasons he was able to survive through the drought years of 1988 and 1989. Thus, one of his strategies for success is diversification.

Doug went from renting 200 acres to 320 in 1987, and then added another 80 in 1988, bringing the total to 400. When the original 200 and the 80 he added in 1988 were sold in 1991, Doug relocated to a 320-acre farm southwest of Hampton. He now operates this farm and a 120 just down the road where his dad was raised, bringing the total to 440 acres.

Doug was 14 when he purchased his first piece of equipment – a John Deere B he bought for \$400.

With the relocation, Doug sold his livestock because the new place had no fences for the cattle or facilities for raising hogs. However, in keeping with the strategy of diversification, he started a farm equipment business, called Conservation Tillage Systems, as a substitute for his hogs. His plan is to get

back into cattle over time as he builds fences, eventually expanding to about 40 cows.

In the mid-1980s Doug deviated from a second strategy for success, which is containing costs. Until then nearly all of Doug's equipment "was older than I was," but the farm economy in the mid-1980s brought down new equipment prices to the point that he decided to purchase a new 160 horsepower tractor.

He has since sold this tractor because it was no longer needed with another move Doug made to contain costs, which is a change in his tillage system. He had decided in the early 1980s that ridge tillage provided the best opportunity to reduce costs. However, he could not change completely to ridge tillage until recently because of landlords who wanted him to use a moldboard plow or a chisel plow.

As he changed farms or convinced landlords that ridge tillage was a good system, he was able to make the switch. This enabled Doug to downsize his equipment – 100 horsepower tractor is now his biggest. He also eliminated some equipment altogether, and now his machinery investment is about 40 percent of what it was several years ago.

Doug has also contained costs by reducing his use of nitrogen and herbicides. He typically puts on 50 pounds of nitrogen with the planter and then sidedresses more if needed based on results from late spring soil nitrate tests. Also, though he sometimes uses a burndown on soybeans, he applies his herbicides in a band with the planter. And this last year about 10 percent of his rowcrop acres had no herbicides applied.

He now operates this farm and a 120 just down the road where his dad was raised, bringing the total to 440 acres.

"being a cooperator is a good opportunity because it gives me a framework to attempt to document whether my practices are working or not."

Doug has been doing on-farm research as a PFI cooperator since 1991. He noted, "being a cooperator is a good opportunity because it gives me a framework to attempt to document whether my practices

are working or not."

Most recently he has been a part of the PFI research effort on narrow-strip intercropping that is being funded by the Leopold Center for Sustainable

Agriculture. This production system has corn, soybeans, and oats grown in planter-wide strips.

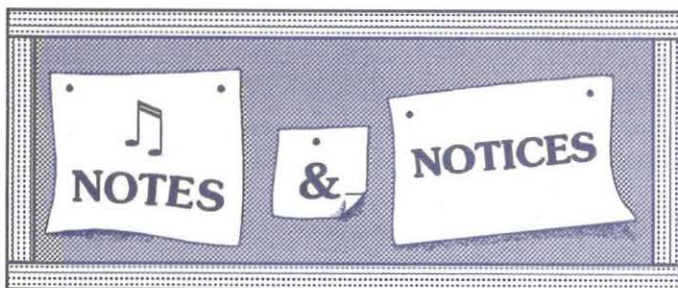
Doug's involvement in the narrow-strip intercropping research has had an added benefit – a trip to Poland last September with Dr. Rick Cruse of Iowa State University. The trip was organized to help provide input on introducing certain legumes as a source of nitrogen to farming operations. The project will involve research using narrow-strip intercropping on a series of private farms.

The trip was an eye-opener for Doug, who made the comment, "I didn't talk to a single farmer who thought their farm was diverse enough." It seems that Doug found himself among farmers who thought like him and many other PFI members.

Doug is not just a farmer. He is a member of the Hampton Jaycees, and recently he has taken responsibility for organizing the annual 4th of July fireworks

show in Hampton. He has also proven to be a capable educator. He has been a workshop presenter at PFI's annual meeting for the last two years, and in the summer of 1992, a group of twenty-five high school agricultural education

teachers toured his farm and research plots as part of PFI's education program. 🌱



♪ Joel Salatin to Speak in Iowa City

Joel Salatin is a grazer and operator of a diversified farm in the Shenandoah Valley of Virginia. Readers of *The Stockman Grass Farmer* may be familiar with his articles on rotational grazing and inventions like the rolling cattle shed and the "eggmobile" rolling poultry pen.

The Northeast and Southeast Districts of Practical Farmers of Iowa will host Salatin in Iowa City on Thursday, January 27. The program will begin at 1:00 pm at Montgomery Hall, on the Johnson County Fairgrounds, in Iowa City. In addition to Joel Salatin, there will be exhibits and displays and plenty of time for talking and information exchange.

"It will be a good opportunity for both inexperienced and experienced graziers to talk to other people who are doing the same thing," says Laura Krouse, Northeast District director. PFI members in eastern Iowa will receive a flyer with more details as the date approaches.

♪ Ikerd at NSAS Annual Meeting Feb. 26

The Nebraska Sustainable Agriculture Society (NSAS) will hold its annual meeting Saturday, February 26, at the New World Inn in Columbus. The keynote speaker will be John Ikerd, an agricultural economist and researcher of sustainable systems who is stationed at the University of Missouri. Ikerd's theme will be the quality of life in sustainable agriculture. Workshops will cover a variety of topics, including community supported agriculture.

The cost includes a noon meal featuring foods grown and raised by NSAS members. Preregistration is \$25, and the walk-in price will be \$30. Call the NSAS phone in Hartington to make arrangements: (402) 254-6893.

♪ IFGC Grazing Management Seminars

The Iowa Forage and Grasslands Council will hold a series of grazing management seminars this winter according to Alan Teel, a forage consultant and past executive secretary of the organization. These will be 4-6 hour sessions that will cover everything from how grass grows to animal nutritional requirements to management-intensive grazing. Teel sees the sessions providing the start for a number of regional graziers' groups.

The cost will be in the \$25-\$30 range, said Teel, and will include a notebook with informational material. Times and places will be announced, and PFI members will receive notice of seminars in their area. Information may also be obtained by calling Joan O'Brian, IFGC executive secretary, at 1-800-383-1682.

♪ Efficient Agriculture Award to Blackmer

ISU soil scientist Alfred "Fred" Blackmer has received a national award, the Robert E. Wagner Award for Efficient Agriculture. The honor "recognizes leadership and accomplishments toward efficient, competitive agriculture based on sound science and in harmony with environmental and human values." The award, sponsored by the Potash and Phosphate Institute and administered by the American Society of Agronomy (ASA), was presented at the annual ASA national meeting in November.

Blackmer has researched the movement and transformations of nitrogen in the soil. This work has provided Iowa farmers new tools for optimizing nitrogen use, including the late spring soil nitrate test for corn, a kit for on-farm nitrate nitrogen testing, the late season cornstalk test, and a system for visually rating corn nitrogen status. Practical Farmers of Iowa

has been privileged to assist Blackmer in the development of these tools through on-farm research and other kinds of collaboration. Congratulations, Fred!

PRODUCERS RECEIVE SARE GRANTS

The USDA Sustainable Agriculture Research and Education program (SARE) for the North Central Region has announced its 1993 Producer Grants awards, and three Iowa farmers are recipients. In all, 31 of 92 applications were funded for a total of \$98,847. The North Central region of SARE was the first in the nation to include producer grants along with the traditional research grants to educational and research institutions.

The three Iowa winners all happen to be PFI members. They may have gained encouragement from Ron and Maria Rosmann, Harlan, who received a SARE grant in 1992 to carry out a replicated weed management experiment. This year's recipients, as announced, are:

- Tom and Irene Frantzen, New Hampton – *Improving On-farm Evaluation with a Portable Scale.* Evaluating the performance of a variety of sustainable agriculture products will be made easier and more efficient with a portable drive-on farm scale. It can be used to weigh forages, field crops, hazelnuts, and livestock on this diversified farm, providing valuable information essential to good management decisions.
- Mike Natvig, Cresco – *Establishing Hazelnut Windbreaks.* Hazelnut hedgerows and windbreaks will be planted to perform multiple functions on this 240-acre diversified farm. The hybrid hazel trees will shelter nearby crops and livestock, reduce wind erosion and water evaporation, provide a wildlife habitat, and serve as a cash

crop in four to five years to make the farm more sustainable.

- Dick and Sharon Thompson, Boone – *Replicated Manure Use Trial.*

A series of replicated trials will address manure use and its effectiveness on this diversified grain and livestock farm. The Thompsons use a sealed, cement bunker to store manure from a 75 cow-calf finish operation, an 80-sow farrow-to-finish swine operation, and sludge from a city of 12,000 people. The trials will address the need for starter fertilizer at different times in the rotation, potassium uptake, the need for additional potassium when plowing under hay and manure, and the best time for manure applications. In addition, fall-applied manure plowed under will be compared to spring-applied manure broadcast on ridges.

The 1994 SARE producer grant program will likely have a late winter or early spring application deadline. You can ask to be sent the guidelines when they become available by contacting:

Dr. Steven Waller
SARE Regional Program Coordinator
107 Agricultural Hall, UNL
Lincoln, NE, 68583-0704
phone (402) 472-7081

In the mean time, you can pick up some winners' tips at the winter meeting workshop *Proposal Writing for FARMERS*. It will be led by PFI cooperator Ron Rosmann and Linda Rogers, who is with the ISU Office of Contracts and Grants. 🐾





Sustainable Project recipients Steve Hopkins and Sarah Andreasen held a field day to show their intensive grazing dairy operation.

SUSTAINABLE PROJECTS 1994 NOW ACCEPTING PROPOSALS

Iowans have another opportunity to make something happen. In 1994, PFI *Sustainable Projects* enters its fifth year of supporting good ideas related to agriculture and the environment. The PFI board of directors has added a new twist, too. To increase recognition of projects, 1994 participants will do a "show and tell" display at the PFI annual meeting. These displays won't be anything fancy, but they will show off the good ideas and hard work that go into these efforts.

The application deadline for *Sustainable Projects 1994* is February 1, 1994. That may seem like a long way off, but don't let the date sneak up on you. You can get some extra help in how to "frame" your idea by attending the workshop *Proposal Writing for FARMERS* at the Jan. 6 PFI meeting.

Nine projects were accepted for support in 1993, for an average amount of \$378. *Sustainable Projects* funding does not go to major equipment purchases (see guidelines on application). Here are the recipients and projects supported in 1993.

- Riceville FFA (Jim Green, instructor) – replicated trial of three field populations for corn.
- John and Rosie Wurpts, Ogden – third year of a comparison of conventional and biological fertilizer program (with assistance from John Creswell, Central Iowa Area Extension).
- Steven Hopkins and Sarah Andreasen, Decorah – intensive rotational grazing dairy demonstration that includes weekly forage sampling and analysis.
- Michael Rosmann, Harlan – effectiveness of a walk-through fly trap in reducing numbers of flies on cows.
- Mark Bruns, George – interseeding annual medic and berseem clover into corn and grazing these legumes with lambs.
- West Hancock FFA (Paul Hauge, instructor) – replicated on-farm trial of nitrogen rates for corn using the late spring soil nitrate test and the late season stalk nitrate test.
- Tom and Irene Frantzen, New Hampton – measure productivity of oats/berseem clover as greenchop in narrow strip intercropping.
- Larry and Joyce Conrad, Delta – replicated trial of flexing cultivator vs. fixed-shovel cultivator for weed control in corn.
- Richard and Sharon Thompson, Boone – replicated on-farm trials of a cover crop for weed control in corn and soybeans using two rows of rye drilled on the ridgetop after harvest.



SUSTAINABLE PROJECTS 1994

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 1994 are due by Feb. 1. Committee decisions will be announced by March 1. 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.

FARMING SYSTEMS MEETING DRAWS U.S. AND CANADIAN FARMERS

Rick Exner

"I'd like you all to get up and stand on one foot with me," said sociologist Cornelia Flora. She was the opening speaker at the annual conference of the Association for Farming Systems Research and Extension, an event I have attended a few times before. PFI board member Jeff Olson and I travelled to the meeting, which took place in Gainesville, Florida, to talk about PFI on-farm research. In the process, I think we both "expanded our horizons." No, we didn't sit around out in the sun, but we did take time to smell the flowers. And stand on one foot.

"Now, this is a little like sustainable agriculture, isn't it?" said Cornelia. "We're all up here balancing on one leg, and we are paying close attention to what we're doing so that we don't fall over. Sustainable agriculture requires alertness to achieve a dynamic balance, too." This little exercise woke us up and started us participating. People in these farming systems conferences were talking about on-farm research and "putting the farmer first" a decade ago, before there was a PFI or something called sustainable agriculture. But many of them were unaware of the movement they helped shape. The entire week was a balancing act, as we all tried to reach an understanding.

Shortly before this meeting was to take place, organizers received foundation support to bring farmers to the conference. Previous meetings have been attended mostly by people who work *with* farmers. This time producers arrived from California, Oregon, Montana, Kansas, Pennsylvania, Massachusetts, Iowa (Jeff), Canada, and Florida.

As you might expect, these farmers found a lot to share with each other over the week. But as too often



University of Florida agronomist Tito French showed off his favorite forage – perennial peanut – at the farming systems field day.

happens, the farmers were not adequately briefed as to why they were invited to the meeting. It took about half the week to get these questions out on the table, after which things went much better.

Conference organizers were looking to the farmers for an assessment of what farmers need from non-farming ag professionals and how they can work together. "Farming systems" has been a term usually

applied to agriculture overseas. So farmers at the meeting were being asked to help bring the focus onto farming systems here at home.

Several people at the conference expressed interest in

having PFI members visit them to explain farmer-managed, on-farm research to other producers. The meeting might eventually result in other interstate activities as well. One thing was agreed – any future meeting should include some sessions organized by farmers *for* farmers. 🐾

Conference organizers were looking to the farmers for an assessment of what farmers need from non-farming ag professionals and how they can work together.

A "DEVELOPMENTAL" APPROACH TO ADOPTION OF SUSTAINABLE PRACTICES

Rick Exner

The Leopold Center for Sustainable Agriculture recently released results of a study that sought to explain why and how different farms take on their distinctive characteristics. In *A Developmental Approach to the Adoption of Low-input Farming Practices*, published in Volume Two of the 1993 Leopold Center Progress Report, Rebecca S. Roberts of the University of Iowa, and David Lighthall of Colgate University, create a model that helps understand the factors affecting the adoption of low-input production systems.

Their work is based on what they describe as an "intensive, qualitative" study of 40 Iowa farmers in Franklin, Grundy, and Hardin counties. Twenty-five farms were chosen at random from county ASCS lists, and 15 farms, termed "low-input," were selected with the cooperation of Practical Farmers of Iowa and local agency personnel.

Farm history interviews were conducted around four key aspects of the farm operation: "1) the historical evolution of production practices including rotations, livestock, tillage, fertilization, and pest control; 2) profitability and marketing strategies; 3) attitudes toward and participation in USDA programs; and 4) agro-environmental issues including views on low-input agriculture and its relevance to the operation." Farmers were also asked why they adopted particular practices.

Using this information, Roberts and Lighthall formulate what they call a "structural model of decision-making" (Figure 1). This model starts with three sets of structural conditions that influence practices:

1) *Market and policy imperatives* – farmers' operations must make enough profit to meet household

needs and be competitive in local land markets, and they must do so while considering USDA policy requirements. For instance, thirty-seven of the operations complied with USDA feed grain program regulations as part of their profit strategy.

2) *Production and accumulation system (PAS)* – farmers' operations are shaped by their histories of capital investments, skills and knowledge accumulation, and "social relations governing farm management and land tenure." For example, two smaller, diversified farms (80 and 250 acres) made the transition to organic crop production principles, and their transitions were helped because these operations had livestock and a high ratio of labor to land. On the other hand, farmers with similar levels of commitment to sustainable agriculture, but with 500-800 acres, often utilized ridge tillage and the corn-soybeans rotation as part of a less labor intensive approach to farming. Thus, the ability of each of these two kinds of farms to use particular production alternatives was influenced by factors such as the scale of the operations and prior capital investments.

3) *Agro-ecological environment* – farmers' operations must overcome risks posed by environmental factors, such as topography or timing of rainfall events, and low-input practices that may be more profitable also may not be sustained if they result in unacceptable levels of risk. For example, the researchers note that while per-acre production costs of ridge-till were low

(due to less tillage and lower chemical use), ridge tillage "does necessitate greater timeliness and

precision in field operations as the tradeoff for greater input efficiency." Those liabilities are offset by advantages like improved infiltration and reduced planting risk in wet conditions. The authors see in these relationships "a fundamental characteristic of low-input systems:" a growing integration of technology with these cycles of crop and pest growth and weather.

In total, the model helps provide an understanding of the factors affecting the adoption and use of low-input production systems.

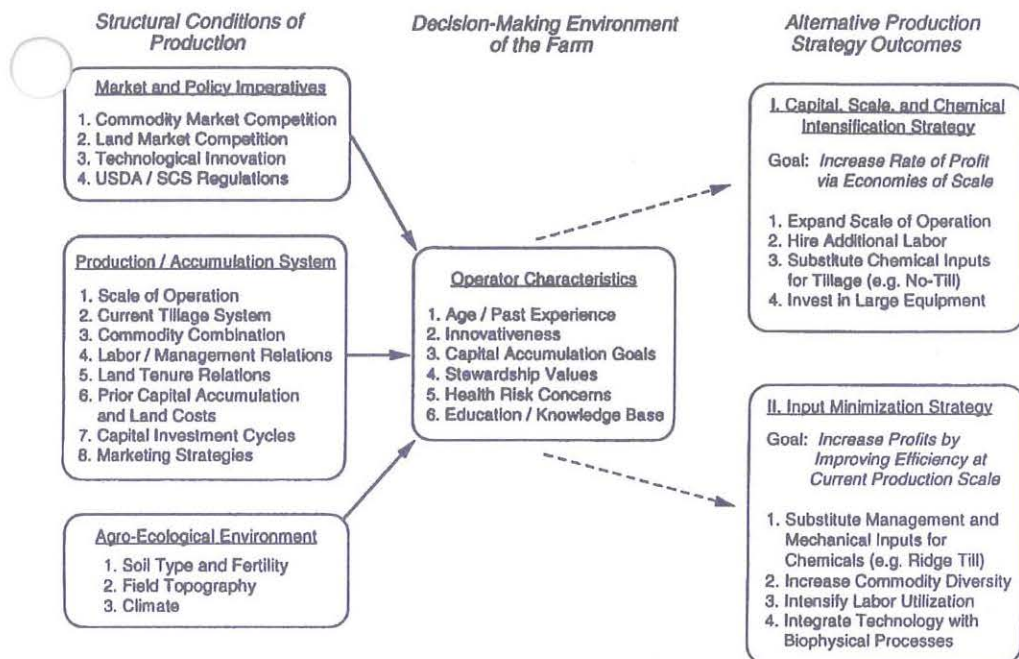


Figure 1. A Structural Model of Evolution in Production Strategies and Practices (from Volume Two of the 1993 Leopold Center Progress Report)

The model then shows these three structural conditions being moderated by operator characteristics (such as stewardship values and innovativeness) and leading to two alternative strategies of production. One strategy has a goal of an increased rate of profit through economies of scale. The other has a goal of increased profits by improving efficiency at current production scale. In total, the model created from information the researchers collected from the 40 farmers helps provide an understanding of the factors affecting the adoption and use of low-input production systems.

Ridge tillage appeared to be a good solution for reducing inputs for moderate-sized farms whether they were identified as low input or not. Seven of 18 conventional family farms indicated an interest in this form of tillage. On the other hand, the five larger farms (1,240 to 2,100 acres) had no interest in ridge tillage. These operations use practices that reduce risk while permitting large scale farming. No-till or minimum tillage, preplant anhydrous ammonia, and broadcast herbicides are used to reduce the need for operations in the rainy month of June, when it is sometimes impossible to enter the field.

Higher input costs are compensated for by economies of scale on these large operations. However, the researchers note that in the process the larger farms tend to elevate local cash-rent rates. This inhibits, in particular, young, would-be farmers, who are likely to adopt low-investment, low-input production strategies if given the opportunity to farm.

The two researchers note intergenerational differences as well. Forty-six percent of the operations involved shared machinery, management or labor, and in 28 percent of these, low-input innovations suggested by the junior member of the partnership had been opposed by the older member.

Individual goals also had a strong relationship to the character of farms. Family farm participants, both low-input and conventional, described goals relating to "stewardship, quality of family life and health, and intergenerational continuity in the operation." Forty-six percent of conventional farmers viewed low-input farming as threatening and at odds with their own farming system. However, 54 percent regarded low-input farming as just one end of a continuum. Roberts and Lighthall think these are the people most receptive to methods used by low-input farmers.

The two researchers see a potential for many low-input practices to move into the mainstream. But they see a need for research on low-input systems targeted to different categories of farmers in their model, and they see a need for "extension efforts that transfer knowledge from low-input operations to their conventional counterparts." They conclude that small and medium-sized operations are successfully implementing environmentally sustainable systems, and they suggest that public policy should support – and not discourage – this kind of farming. 🌱

PHIL

Mary Swander

(Editors note: This poem is reprinted from Mary Swander's book of poems, *Driving the Body Back*, published by Alfred A. Knopf, New York.)

We pull off Highway 30,
step in the Pine Grove Cafe,
pie case empty, chrome polished,
shiny as the capped teeth
of the woman behind the counter.
Her hands flutter to her face,
light falling through the window,
through the neon sign EAT,
light surrounding the loose
curls of her thin brown hair.

Overhead, the fan stirs
and our stools creak
as we study the menu
above the malt machine.
The prices are cheap.
"Eat up," you say, you'll treat,
and the woman stands ready
with pencil and pad.

I order the special and
her hands twitter from
nose to mouth to nose.

"None today," she says.

You order a hamburger then.

She looks at you and smiles.

"Sorry."

"Tenderloin?" I ask.

She shakes her head.

"Grilled cheese?"

"Sorry, sorry, we don't
sell food here anymore."

She explains that ever since
her husband died ten years back
she's opened every morning
for coffee but never again
fixed a single bite. Yet,

boots scrape under tables
and seed caps nod over heavy
steaming mugs and in the corner
two men talk about the corn,
how it stood up through all
this summer's horrible heat –
105 for five days straight –
and now we have a bumper crop
with grain piled in mounds
on the ground because the
trains don't run anymore
and a dime won't buy anything
much but a cup of coffee here.

You drink yours black and
talk about trains, how they
whizzed through town when
corn was a dime a bushel
and the weather so hot
and dry the hogs sat
in the sun all day like
old wooden tubs and
their skin cracked.
You talk about trains,
how Uncle Phil hoisted
one foot up, then hung
from the rod beneath
a boxcar and whistled down
the line through Amarillo,
Clovis, Roswell, Tucson,
Yuma, Los Angeles,
to drag a spoon across
a tin plate in the Sunshine
Mission and offer his flesh
to a pack of fleas in a flophouse.
Once, in Fresno he was thrown
in jail for stealing wine
from a nun, the swelling
on his head from the cop's stick
throbbing for ten days
as he lay on the floor
listening to his own ramblings
until Aunt Nell stood over him
with bail and Uncle George
with a bottle of rye.
Then the two men drank
their way to Reno and Colorado,
where they drifted into jobs
as hired hands and, *Crimers*,
you can still hear Phil say,
*Colorado was the state where
I learned to housebreak hogs.*

Phil:

We were there in the hog house
so's we could keep the sows from
rolling on their litters and, crimers,
after a while the smell got to you.
So, George told me I could train them hogs
same way I trained my dogs. Said I needed
to get up every morning at three
and walk them—one by one—down to
the old willow and back. So, I yanked
myself out, stumbling through the pasture,
shooing them hogs along in the dark,
calling *soo-ee, soo-ee*, until they did their duty.
But after a few weeks of this my eyelids
were slits by noon. So I put them critters
on their own. I tied a piece of steak
to the willow, then set a big banging
old alarm right down next to a sow's ear.
That night at three wham-bam the clock rang,
the sow woke and threw back her snout
charging toward the willow with the others
hightailing after. My plan worked 'cept
for one thing. I forgot to open the door,
and them critters busted right through,
pulling the whole house down, board by
board, until it was nothing but kindling.
Them hogs broke the house instead of
me housebreaking them.

After that Phil drove a
milk truck in Des Moines and
ran rum for Al Capone.
Had shotguns fit beneath his
running boards and sometimes
on trips across the state,
he'd stop for Sunday dinner.
Napkin tucked under chin,
he pushed his hand into his
pocket, tinkling with change.
He pressed a coin into your palm,
Buy yourself an ice cream cone.
Or sometimes, he spent the night
on the cot in the front room,
the mourning doves' song melting
into the hum of the fan,
windows open, trying to catch
any stir of leaves until the
old Milwaukee rumbled through
and Phil roared, "Crimers,

pick up your feet." The whole
house shook and then his litany
began, each huffing breath,
a piece of track:

"Hail Mary, full of grace,
the Lord is with thee.
Blessed art thou amongst
women and blessed is ...

Holy Mary, mother of God,
pray for us sinners now
and at the hour of our death. "

You were never certain
what happened at the hour
of Phil's death and Grandma
said never ask. One hot July day
the agent sent a message home:
Come to depot soon as possible.
You and Grandma hurried down,
a huge wooden crate
waiting on the platform.
With a crowbar,
Grandma pried open the lid
and pushed you into
the folds of her skirt.
But you saw enough.
You saw her reach in with
two shiny pennies for the eyelids.
You saw her place her
handkerchief over the face.
You saw the flies,
the bullet holes,
the bold lettering on the box:
PURE LARD.

The fan stirs and the woman
behind the counter swipes
a cloth across the burners
as if they were splattered
with grease. Her eyes flutter
open, shut, like the neon sign
hanging outside over our station wagon,
the body in back wrapped in
a grey blanket, strapped to a cot.
You stand to leave, pay the check,
a toothpick in your mouth.
I slip a few coins under
the saucer of my cup.

FOOTPRINTS OF A GRASS FARMER

Surviving The Storm

Tom Frantzen, Alta Vista

The weather in the spring and summer of 1993 provided some real challenges for farmers in Iowa. In the northeast part of the state, May 1st came with no fieldwork started and very little grass growth. Then it rained for 2 more weeks. Planting began around here after that, and continued "off and on" until a severe hailstorm with three inches of rain occurred on June 17th. Everyone knows about the record flooding that hit the state during the rest of the summer. Our June, July, and August total rainfall on our farm was 37 inches.

How did this weather affect different aspects of agriculture? Annual crops took a beating! Yields were cut by 100% for oats, 80 to 90% for soybeans, 50 to 75% for corn (with a big quality factor not included). Perennial crops performed better with the exception of pure stands of alfalfa. Monocropped alfalfa suffered severe stand loss during the winter in much of the Midwest.



Frantzen's stocker cattle don't touch Canadian thistle, but the hogs relish it.

In April, I purchased 480-pound stocker cattle. They began co-mingled grazing with my gestating sow herd on May 1st. The cattle were weighed and separated into two groups on July 7th. (My next article will explain this). On the 15th of September, the cattle were scaled again. Average daily gains varied from 2.3 to 2.5 pounds.

A good measure of grazing productivity is pounds of beef per acre. While the annual row crops suffered, my perennial pasture plants turned an acre of forage into 753 pounds of beef. I estimate the cattle consumed two thirds of the total pasture and the sows one third. Free choice minerals and 2 pounds of corn maintained good body condition on my pastured sows. Savings on corn and protein in the sow feed totaled over \$300 per acre. This is consistently one of the best profit-per-acre strategies on our farm.

Daily paddock shifts (at times, 12 hour shifts) prevented pugging damage even in the extreme wet conditions. Immediately following heavy rains, I would lock the gestating sows in their concrete yard. A regular diet would be fed on that day. This flexing policy reduces stock density by 50% until soil conditions improve. I planned for 24 day recovery periods during May and June. As the season progressed, I lengthened rest to 35-45 days.

This is my second year of co-mingled cattle and sow grazing. Several advantages exist with this strategy. Stock density can be flexed without upsetting ruminant performance. Sows and cattle compliment each other nicely in forage composition consumption. Ringing the sows reduces the risk of pseudorabies transmission to the cattle. Cattle enjoy grazing under the electric fences, which sows refuse to go near.

The performance of the pasture and the stock was excellent in this difficult year. USDA deficiency and disaster payments will lessen the economic hardship that row crop farmers experienced this year. Nothing will lessen the incredible loss of priceless topsoil that occurred throughout the Midwest. Grass farming stood proud in 1993! It produced good profits, prevented erosion, and will not require government assistance to stay alive for another year. 🐷

FROM THE KITCHEN

Marj Stonecypher, Floyd

Hi! I just came in from the cold (burr) outside. I've been doing a little horseback riding here and along the river near Osage. It is so pretty out and relaxing to ride in the fall weather. Even Ray has been doing a little riding.

Here are a couple of my fast, delicious recipes that seem to make a hit around here.

CHEESE HASHBROWN CASSEROLE

- 2 pounds frozen hashbrowns,
slightly thawed
- 1 pound sour cream (16 oz.)
- 1 small onion chopped
- 1 can cream of chicken soup
salt & pepper
- 1/2 pound cheddar cheese,
grated
- 1 cup corn flakes



Mix soup, sour cream and fold into potatoes and onions, cheese, salt and pepper. Put in 9 x 13 pan. Bake 30 minutes uncovered. Remove and top with 1 cup crushed corn flakes with two pats melted butter. Return to oven and bake 15

minutes longer or until knife comes clean. For added flavor, add chopped ham, cooked chicken or browned bacon. (When I fix this dish, the recipe is always asked for.)

FRESH APPLE CAKE

- 2 or 3 cups raw chopped apples
- 1/2 cup brown sugar
- Mix and let stand while mixing –
- 1/2 cup shortening
- 1 cup sugar
- 2 eggs
- 1 cup sour milk
- 2 1/2 cups flour
- 1 tsp. cinnamon
- 2 tsp. soda
- 1/2 tsp. salt

Mix in order given, then add chopped apples. Put in greased and floured 9 x 10 inch cake pan. Mix and sprinkle on top –

- 1/4 cup brown sugar
- 1/4 cup white sugar
- 1/4 tsp. cinnamon
- 1/2 cup chopped nuts

Bake in 350 degree oven 35 to 40 minutes.

Hope you have a happy holidays.

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

Please enclose check or money order (\$10 for one
year, \$25 for three years) payable to "Practical
Farmers of Iowa" and mail to:

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

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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District 2 (North Central): Raymond Stonecypher, 1321 March Ave., Floyd, IA, 50435-8058. (515) 398-2417.

District 3 (Northeast): Laura Krouse, 1346 Springville Rd., Mt. Vernon, IA 52314. (319) 895-6924.

District 4 (Southwest): Vic Madsen, PFI President, 2186 Goldfinch Ave., Audubon, 50025. (712) 563-3044.

District 5 (Southeast): Jeff Olson, PFI Vice President, 2273 140th St., Winfield, 52659. (319) 257-6967.

Associate board member for District 5: David Lubben, RR 3, Box 128, Monticello, IA 52310. (319) 465-4717.

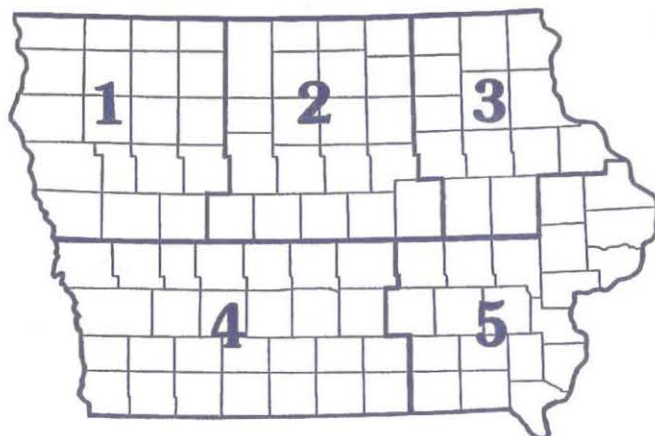
PFI Executive Vice President & Treasurer: Dick Thompson, 2035 190th St., Boone, 50036. (515) 432-1560.

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Public Relations Coordinator: Maria Vakulskas Rosmann, 1222 Ironwood Rd., Harlan, 51537. (712) 627-4653.

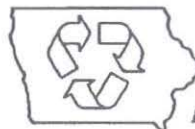


PRACTICAL FARMERS OF IOWA MEMBERSHIP DISTRICTS



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