the Practical Farmer

Practical Farmers of Iowa Newsletter

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Fall 1996

LAURA'S LEAN BEEF FOUNDER WILL KEYNOTE WINTER WORKSHOPS JAN. 4, IN AMES

When Laura Freeman returned to her family's seventh-generation Kentucky farm in 1982, she probably had no idea that 14 years later she would be president of an enterprise doing $30 million in sales annually. She went home to Winchester, Kentucky, to continue in the family cattle business after graduating from Yale University and working as a journalist. Things began to change for Freeman when she began paying more attention to her own food. "Like many dieters, I cut back on red meat," she said. "That didn't seem quite right, since I was raising beef cattle." Freeman's research into cattle breeds and feeding methods led to Laura's Lean Beef®.

Laura Freeman, President of Laura's Lean Beef®. (Photo by Lee Thomas.)

Laura Freeman will be the keynote speaker January 4, in Ames, at the Practical Farmers of Iowa annual meeting. Her message is entitled *Sustainable Family Farming*. Marketing is a theme that will run through Freeman's presentation and other sessions as well. This

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year's meeting will include workshops, producer posters, a Friday night dance, and even foods grown and marketed by Iowa farmers.

About 50 "lean and light" beef companies were founded in the 1980s. Laura's Lean Beef is one of the few of those to survive. Freeman credits the "all natural" approach. "Instead of artificially creating beef that was lower in fat by adding water and salt or even seaweed and other fillers, we experimented with 'gourmet' cattle breeds like Limousin, Simmental, and Charolais and looked at feeding practices to produce beef that was naturally leaner."

"We also became interested in the bigger issue of sustainable farming versus industrial cattle-raising methods. As a family farmer, it bothered me to see agriculture moving to bigger and bigger industrial-farm operations. I became concerned about the widespread use of antibiotics and growth hormones. And the more I studied the subject, the more convinced I became that natural farming methods, not chemicals, were the best way to farm."

In Freeman's home state of Kentucky, farmers are increasingly looking for economically viable alternatives to tobacco. Freeman believes lean beef offers opportunities for tobacco farmers to produce a health-positive product and operate profitably. She has been instrumental in the Kentucky-based Community Farm Alliance's efforts to replace tobacco with alternative crops ranging from cattle to organic cotton. She is also involved nationally in the natural foods consumer movement and is an active board member of the organization Mothers and Others for a Livable Planet. Laura's Lean Beef steaks and roasts were the first red meat products approved by the American Heart Association's Food Certification Program.

Today, the company has a staff of 45, including three regional cattle buyers working with a network of more than 100 farms in the Midwest and Southeast. Freeman maintains that the family farm is still at the heart of the company's operation. "We realize that it's more expensive for farmers to produce cattle to our specifications, so we pay a premium over market price," she said. "Quality, not quantity, is the key to economic survival for America's family farms." And although Laura's Lean Beef products are now in over 1,300 stores, the heart of the marketing remains direct communication with consumers. "We started our marketing list in 1985," said Freeman. "Today it contains over 75,000 names."

BILL BURROWS BRINGS HOLISTIC MANAGEMENT PERSPECTIVE

Bill Burrows teaches at Shasta College, in Redding California and, with his wife Kay, runs a 3,500-acre cattle and game ranch. He brings a holistic management outlook to both teaching and ranching. Burrows has made a student-run farm known as the Holistic Resource Laboratory into a working classroom for teaching principles of Holistic Resource Management.

But Burrows says a holistic approach can apply to more than grazing systems. Holistic management in its broadest sense is a planning tool that has applications in education, business, and other areas of life. It is a way for people to discover what they really want to accomplish and then develop ways to reach those goals.

Bill Burrows' visit to Ames will focus on the holistic management planning process. On Friday, Jan. 3, he will meet with a group of Iowa State students and teachers who are interested in developing a student farm to teach principles of sustain-

Bill Burrows is a Holistic Management educator and a livestock and game rancher from Redding, California.

able agriculture. Friday evening, Burrows will be at the Ames Starlite Best Western for informal discussions with PFI members about HRM. On Saturday, Jan. 4, at the PFI meeting, Bill Burrows will lead a workshop titled *Marketing your Quality of Life Goals*. The workshop will provide people an excellent opportunity to "walk through" ideas (like marketing) in terms of their core values and resources.

KANSAS FLINT HILLS RANCHERS CREATE A MARKET FOR GRASS-FED BEEF

A group of Kansas Flint Hills ranchers has taken the next step in marketing – they have formed the Tallgrass Prairie Producers Co-op to find strength in numbers. Their product is lean, tender, grass-finished beef, which the cooperative markets as Tallgrass Beef™. Representatives from the co-op will share lessons learned.

Earl Wright is the co-op's market coordinator. Annie Wilson is chairperson of the co-op and ranches with her husband. She is a former lawyer and teacher and now staffs the beef co-op office in her home. They have learned that as important as issues of quality, consistency, and supply are, the foundation is the people in the group and how they work together. Keeping the personal "chemistry" good and making the most of personality differences are key to success. Earl and Annie will discuss these topics with PFI members at the winter meeting.

The next step in marketing? The Tallgrass Prairie Producers Co-op is grass-finishing beef.

As important as issues of quality, consistency, and supply are, the foundation is the people in the group and how they work together.

FARMING SYSTEMS ALSO ON THE PROGRAM

The concept of "system" is heard more and more in agricultural circles, from Holistic Resource Management to the "whole-farm planning" of the Natural Resources Conservation Service (NRCS). Producers are interested in systems because the farm is the meeting place of all the components – livestock, crops, environment, family, and economy – that make it a system. Yet systems are the most difficult things to evaluate. The PFI winter meeting will present two outstanding examples of projects in the Midwest that are attempting to do just that.

Meeting information on next page. This article continues on page 10.

WINTER MEETING AGENDA

Place: Ames, Starlite Village Best Western, 13th & Dayton Rd. (Just west of I-35.) Adults: members free + cost of lunch; non-members $20 (membership fee) + cost of lunch ($9)

Friday (January 3)

Evening: (Check-in)

7:30 –	Informal Discussion with Bill Burrows
8:00 – 10:00	Community Dance, *the Pretty Good Band*, Lonna Nachtigal calling

Saturday (January 4)

7:30 –	Registration Opens
8:30 – 8:45:	Welcome by PFI President Dave Lubben
8:45 –10:00:	*Sustainable Family Farming*, Laura Freeman
10:00 –10:20:	Sustainable Ag Achievement Award
10:20 –10:30:	Break
10:30 –11:30:	Workshops I (select one)
11:30 – 1:00:	Lunch
1:00 – 1:20:	PFI business meeting
1:20 – 1:45:	PFI District Meetings
1:45 – 3:00:	Workshops II (select one)
3:00 – 4:15:	Posters & Displays (refreshments)
4:15 – 5:15:	Workshops III (select one)

Pre-Register for Youth Activities

Youth activities are being coordinated by Robert (Barney) Bahrenfuse. Parents planning to bring children must pre-register their children by contacting Barney ahead of time at 515-236-4566 or returning the form below. There will be a $5-per-child charge payable to Barney at the meeting to cover activity expenses.

Bring a Poster!

Producer posters were one of the most popular parts of the annual meeting last year. Again the call goes out to any and all, young and old. Bring a poster and join the PFI cooperators and *Sustainable Projects* participants on the walls! Pre-register your poster by calling the PFI coordinators at 515-294-1923 or returning the form below by Dec. 25. You will receive a simple guide sheet for designing and constructing your poster.

Friday Night Community Dance!

In some parts of the Midwest, the Friday night dance is still a tradition. *The Pretty Good Band* will bring back those two-steps, waltzes, contras and schottisches with gusto. Come with your family! Come unattached! Caller Lonna Nachtigal will teach every dance. (informal)

Winter Workshops

Kansas Flint Hills Ranchers Create a Market for Grass-Fed Beef: *Earl Wright and Annie Wilson of the Tallgrass Prairie Producers Co-op, Ron Rosmann moderator*

You have taken the first steps – you produce a good product, you have begun some direct sales. But certain doors seem closed because you don't have the volume, consistent supply, or facilities to reach more consumers. Is cooperation with other producers the answer? What does it take to keep people working together? Producers in Kansas formed the Tallgrass Prairie Producers Co-op to market grass-finished beef in 1995. Market coordinator Earl Wright and farmer Annie Wilson will tell what they have learned.

Monitoring Sustainable Agriculture with Conventional Financial Data: *Dick Levins, Mike Rupprecht, Doug Alert moderator*

A farmer-scientist project known as the Biomonitoring Team is studying how to measure sustainability in southeast Minnesota. Team member and agricultural economist Dick Levins has summarized his work with the project in *Monitoring Sustainable Agriculture with Conventional Financial Data*, which lays out four simple indicators that, along with profits, provide

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Registration for Children's Activities and Posters **(Return by Dec. 25, please print)**

Name _____ Address _____

City _____ State _____ Zip _____ Phone _____

***Children's Activities*:** _____ no. children X $5.00 per child .. (Bring along with your kids.) .. = $_____

name(s) and ages of children: _____

***Posters*:** _____ yes, I will bring a poster. Topic: _____

Return this form to: PFI, 2104 Agronomy, Iowa State University, Ames, IA 50011.
For more information call: Rick Exner or Gary Huber (515) 294-1923.

a reading on an operation's sustainability. Levins will describe his approach and Mike Rupprecht, a beef producer and team member from near Lewiston, will provide examples from his own farm.

Marketing Your Quality of Life Goals: *Bill Burrows, Steve Weis & Tom Frantzen moderators*

Confused by all this talk about what farmers must do or must not do as we enter the 21st Century? How do you find the path that's right for you? Bill Burrows, a teacher and Holistic Management educator from Redding California, helps people choose actions that realize their fundamental values. What's the market value of *your* quality of life?

New Co-ops, New Possibilities: *Larry Kallem*

Iowa law recently authorized cooperatives organized in new ways. The change is expected to stimulate value-added processing and other cooperative ventures. What does this mean to PFI members? Larry Kallem is executive director of the Iowa Institute for Cooperatives and is involved with producers around the state who are considering the new options. Larry will describe what has been done in states that have had the law longer than Iowa, and he will lead discussion of its potential here.

CSAs and Direct Marketing:

CSA stands for *Community Supported Agriculture*. CSAs are a great way to make community-based connections *between* farmers and consumers. Representatives of several Iowa CSAs and a new effort to assist CSAs in Iowa will share lessons and offer tips to anyone who might want to start a CSA for their community.

Systems Research – What Is It, and How Do You Do It?: *Michelle Wander and Allen Williams (Illinois Soil Quality Initiative), Mike Rupprecht and Jay Dorsey (Biomonitoring Team), Don Davidson moderator*

OK, you know how to run a replicated, on-farm trial evaluating specific farming practices. How do you get answers to questions on a higher level of complexity? Farmers and scientists from two systems research projects in the Midwest will talk about the challenges and rewards and discuss with PFI members why systems approaches are needed.

Fools Rush In – Running a Value-Added, Farm-Based Business: *Laura Freeman, Laura Krouse, Jane Woodhouse, Susan Zacharakis-Jutz, MarkTjelmeland moderator*

Are you looking around your farm and wondering about ways to add value to what you produce? How does someone decide what's the right product based on their resources, location, skills, and personality? These rural entrepreneurs will share their experiences, tell what keeps them going, and describe the effects on families and friends.

What's Ahead for Practical Farmers of Iowa? *PFI Executive Vice President Richard Thompson, PFI Shared Visions Director Gary Huber*

PFI is in its twelfth year. Its history of steady growth and evolution includes eleven years of the newsletter, ten years of on-farm research, three years of community-based groups, national awards and recognition for the organization's collaboration with Iowa State University. PFI is now at a crossroads, with present sources of funding expiring. Learn what the PFI Board, staff, and individual members are doing to address the situation, how you will be affected, and how you may help.

Alternative Hog Production Systems: *Colin Wilson, Homer Showman, Vic Madsen moderator*

In 1996, Iowa farmers were reminded that there's more than one way to raise a pig! In February, ISU hosted a very successful producer meeting on alternative hog production systems. All year, low-investment hoophouse finishing units have been springing up around the state. In August, Colin and Dan Wilson and their families inaugurated the first unit in Iowa designed for Swedish-style hog production. *Homer Showman* finishes about 3,000 hogs per year in six hoophouse structures. He also raises hogs in total confinement and in Cargill units. Homer keeps close track of feed use, and he has figures comparing feed efficiency in the deep-bedded hoop system and his other structures.

SHARED VISIONS

farming for better communities

ANNUAL GROUP NETWORKING MEETING SET FOR JAN. 3RD

The agenda for the Jan. 3rd networking meeting of groups involved in Shared Visions is set (see below) and invitations have been sent. All group members are welcome to attend.

This meeting will be an opportunity for groups to learn from each other and two people we've lined up to help. One of these is Peter Reese of Elko, MN. Reese was employed in marketing and advertising in the Twin Cities before he began farming. He has since been involved in various entrepreneurial activities, including the creation of a lean pork product called ChopShop Premium Pork. He consults widely with various organizations and is a highly recommended speaker. He has also written several books, including "The Agri-Preneur's Prosperity Manual: How to Survive and Profit in the New Economy and Rediscover the Joy of Rural Living."

This meeting will be an opportunity for groups to learn from each other and two people we've lined up to help.

The other person is Clair Hein, a community development consultant from Waterloo with over twenty-five years experience helping groups achieve their goals. Clair helped design a method to help groups be productive that is based on something known as the Human Action Model. This model can help groups identify areas needing attention as they work to set goals and carry out actions to achieve their hopes and dreams.

Group members are encouraged to return the registration forms they received in the mail if they plan to attend. Members should also plan to stay over for the PFI winter conference and workshops the next day.

Agenda

Shared Visions Group Networking Meeting

January 3, 1997

Starlite Best Western - Ames, Iowa

9:00 -10:00 am	Registration/Poster Set-up
10:00-10:30 am	Welcome, Introduction of Group Members, Overview of Day

Continued on next page.

10:30 -11:30 am	Keynote: *Sustaining Action for Ag-Based Entrepreneurship* - Peter Reese
11:30 -12:30 pm	*Sustaining Impact: Building on Your Effectiveness, Renewing Your Vision* - Peter Reese
12:30 -1:15 pm	Lunch
1:15 -1:45 pm	Introductions of Group Posters - *Celebrating Success*
1:45 -2:30 pm	Group Poster Session - *Celebrating Success*
2:30 -5:00 pm	*Sustaining Leadership for Community Groups* - Clair Hein
5:00 -7:30 pm	Break/Dinner on Your Own
7:30 -10:30 pm	Entertainment and Community Dance - Pretty Good Band (Traditional American Music)

COMMUNITY GROUPS TIMELINE

Given that with current funding, Shared Visions as it now exists will end in 1997, groups involved need to be aware of some dates. These are:

February 15, 1997 -Project Reports and Final Project Applications Due

March 1, 1997 - Decisions on Final Project Applications

June 30, 1997 - End of Full Staff Support from Shared Visions

Summer 1997 - Group-to-Group Networking Possibilities

November 30, 1997 - Final Project Reports Due

December 31, 1997 - Scheduled End of Shared Visions

TWO NEW GROUP PROJECTS APPROVED

The Cattle-Feeders Community Alliance from Pocahontas County and Total Resource Management Services from Carroll County had new projects approved for funding this fall, bringing the total number of approved projects to twenty-one. The total amount of funding received so far by all groups for projects is $41,851.

The Cattle-Feeders received $2,775 to develop a model cattle-feeding program. The basic concept of the project is to create a network among cow-calf producers, cattle-feeders, lenders, packers, and investors to produce superior quality beef and share the benefits of this quality among the participants.

Total Resource Management Services received $3,750 to examine whether manure brokering is a feasible, cost-effective, and environmentally-sound system for using this source of nutrients for local crop production.

As a condition for approval, the group will also design and conduct an education program on alternative hog production systems such as hoop house structures, Swedish-style farrowing facilities, and pasture-based systems for rearing and raising hogs. Funds for this educational effort will come from project funds the group has yet to access.

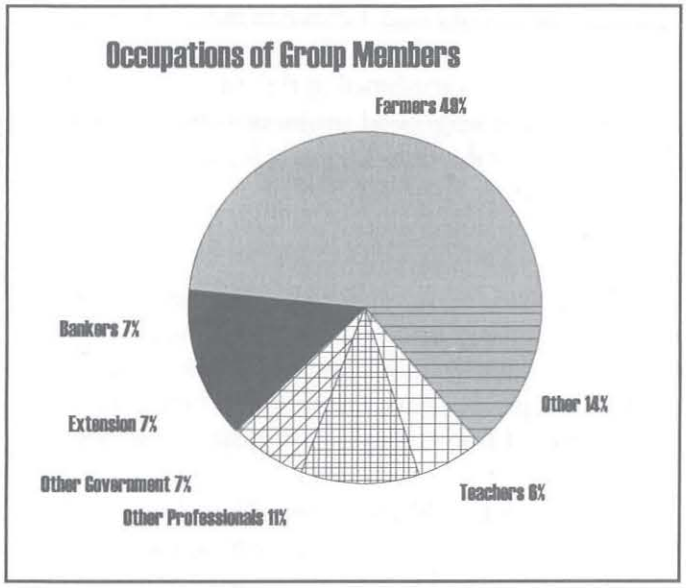
SOME OBSERVATIONS ABOUT GROUPS INVOLVED IN SHARED VISIONS

- Sixteen groups have been involved. Five existed prior to Shared Visions and eleven formed as a result of Shared Visions.

- All five pre-existing groups and seven of the eleven new groups had focuses before becoming involved. Only four groups did not have focuses when they became involved.

Continued on next page.

• Of the 192 members of the fourteen groups currently involved, 49% are farmers and 51% are non-farmers.



Roland Kroos with members of CHARM during the group's wealth generating course.

SHARED VISIONS - CHARM GROUP

by Irene Frantzen

Our CHARM group appreciated the opportunity of meeting and working with Roland Kroos from Montana, who is an educated trainer in Holistic Management.

For two days in September, we gained useful information in a wealth-generating course.

Our first session night we listed our objectives of the group. Concerns included:

- comfortable use of testing guidelines
- understanding better how we can help each other
- how to integrate planning with whole corporations
- how to use financial planning sheets
- how to get to holistic goal
- how much profit is reasonable? accomplishable?
- how do we balance, integrate planning for profit with landscape part of goal?
- develop a mutual understanding of financial planning process & acceptance
- we don't plan or like to, how do we do it?
- get comfortable with work load
- how do we plan for profit with new enterprise?
- positive ways to assist each other

We also discussed testing guidelines.

Our second day, we hit it hard and worked on financial planning.

Roland helped our group get on track, and after a 2-day session with him, it helped us realize we need to address some other concerns within our group. We need to work on personal development, communication skills, and time management. This will help us face other challenges, and be more useful to one another.

Individually we need to keep working on our financial records, while as a team, we need to work on ideas, principles, and strategies.

FARMS FOREVER'S COUNTY BOUNTY

by Kathy Dice

At a December 1995 meeting of Farms Forever, member Shawn Dettmann made a suggestion that we publish a brochure listing where people could get a side of beef, fresh eggs or vegetables locally. This suggestion turned into the County Bounty Directory.

The directory was meant to connect local gardeners, farmers, ranchers, and craft people with possible customers. The brochure fit neatly into the group's long term goal of setting of a brokerage to help local people sell their products and the short term goal of publicizing the group and increasing its membership.

We received constant comments such as "What a great idea!," "How helpful," and "I didn't know we had so many different products in this area."

The Shared Visions Program granted up to $915 for the project, and by February we were sending out news releases to the public. The news media did a few follow up stories, commenting that it sounded like a neat project, but response from people wishing to place a free ad was dismal.

We delayed deadlines for placing ads to April 30, and by early May we had 17 producers/crafters listed (5 of whom were group members). We encountered more delays as we tried to get the layout "bi-color photo ready" for the printer and choose an appropriate paper.

But at long last the directory, the beautiful, very professional looking directory, was ready for distribution in early June. Members chipped in by distributing it to banks, libraries, beauty parlors, etc.

A guide to farm and home products of the Louisa county area.

as news releases were sent out informing the public where to look for it and what to expect.

We received constant comments such as "What a great idea!," "How helpful," and "I didn't know we had so many different products in this area." A map of the county showing producers' locations and an index listing what items were available all added to its appeal.

But it didn't seem to increase the customer base for our advertisers at all. An informal survey of people listed showed they believed they received two or less calls as a result of the brochure two months after it was first distributed. To say the least the group was disappointed about the response and plans for a '97 version are on hold.

The group will be reprinting the brochure in its entirety in a full page ad in a local paper that has county wide distribution. We hope this will generate a little more interest. We will also do a more formal phone survey to find the satisfaction and interest level of producers who participated this past year.

One thing for sure, this project has truly helped our group realized the scope of our goal for a brokerage service in this area. We are currently reevaluating that goal.

(Winter Meeting continued from page X)

Jay Dorsey, a soil scientist on the Biomonitoring Team, told visitors to the Art and Jean Thicke farm about the soil quality research.

Biomonitoring Project

The Biological, Social, and Financial Monitoring Team consists of southeast Minnesota farmers and scientists from the University of Minnesota, the Minnesota Department of Natural Resources, the Minnesota Department of Agriculture, and other agencies. The project was initiated by producers through the Land Stewardship Project with the goal of discovering the indicators – biological, social and financial – of sustainability. In other words, they wanted to answer the question, "How do we know if we're sustainable?"

The team is studying everything from soil to stream quality and bird counts. The first published findings come from agricultural economist Richard Levins, with *Monitoring Sustainable Agriculture with Conventional Financial Data*. Levins proposes four easily calculated indicators that, in addition to farm profits, give a good reading of a farm's sustainability. He will describe this approach, and team member Mike Rupprecht will provide examples from his own farm. Mike operates a 250-acre diversified farm near Lewiston, Minnesota. He grazes a cow-calf beef herd, while most other producers in the project are dairy farming.

Soil Quality, Systems Research

Studying farming systems is a real challenge. There are so many factors, so many interactions to consider. And to do research on systems, you have to get out of the laboratory and work with the producers who know those systems from the inside. The Midwest has at least two ambitious "systems research" projects going on: the Biomonitoring Project (described above) and the Illinois Soil Quality Initiative (see PFI spring, 1996 newsletter). Representatives from these two efforts will sit down together in a workshop to describe how they are approaching systems research and to discuss related topics with PFI members.

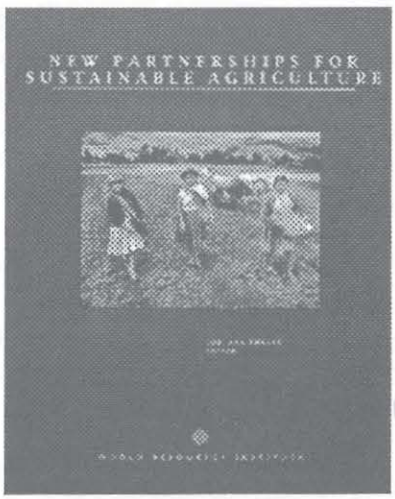
NEW PARTNERSHIPS FOR SUSTAINABLE AGRICULTURE

Rick Exner

If you are find yourself suffering from cabin fever this winter, check out this little book from the PFI library. *New Partnerships for Sustainable Agriculture*, just published by the World Resources Institute, will give you the equivalent of a four-continent sustainable agriculture study tour – without the mosquitos. A little bit of the territory may look familiar, because Practical Farmers of Iowa is one of the book's nine case studies. PFI member Jeff Olson, Mt. Pleasant, traveled to Washington, D.C. in September for ceremonies marking the book's publication. (For more on PFI's work with the project, see the Fall, 1995 newsletter.)

Editor Ann Thrupp has pulled together the essentials of successful sustainable agriculture around the world. These are, in a nutshell:

- Agro-ecological principles applied to pest, soil, and crop management;
- People-centered approach, with hands-on participation of farmers and communities, not passive reception of information and services;



"Participatory approaches and collaborative teamwork have been fundamental to implementing sustainable changes."

- Partnerships among institutions (e.g., PFI and ISU);

- Policy and political support for alternative practices.

As the book states, "Participatory approaches and collaborative teamwork have been fundamental to implementing sustainable changes."

The nine case studies form the greater part of this book. You can read how communities have organized in the African country of Kenya to trap the tsetse fly, which transmits sleeping sickness to people and livestock. You can learn how sustainable agriculture fits in an overall program of grassroots, community-based empowerment in the Philippines, both in church-based and government programs. You can read how farmers and scientists are working together in California and Iowa to develop profitable farming alternatives. These case studies are not all sugar coated, either. They lay out the obstacles and shortcomings as well as the strengths. A critical reader will appreciate the "reality check."

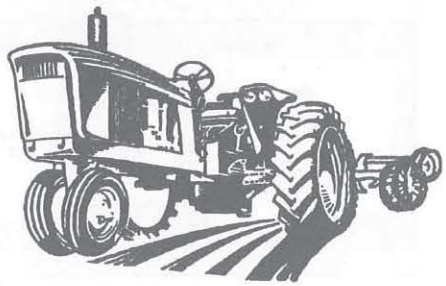
New Partnerships for a Sustainable Agriculture, Lori Ann Thrupp (editor), World Resources Institute, 1996, 136 pp.

"CUT 'EM, CHAR 'EM, OR COVER 'EM"

Mark Runquist, Melbourne

(Editor's note: Mark is the bold volunteer who stepped forward when we needed somebody to keep track of the PFI libraries around the state. If you would like to see what's in the PFI libraries, see last spring's newsletter or contact Mark at 515-482-3185, 2860 Knapp Ave., Melbourne, IA, 50162.)

VEGETABLE FARMERS and their WEED-CONTROL MACHINES



If you like to tinker and experiment and like to see what others have come up with, the PFI Library has a new video that shows nine farmers and their weed control machines. Some machines cut the weeds off, others bury the weeds, some burn the weeds, and others use a combination of these methods.

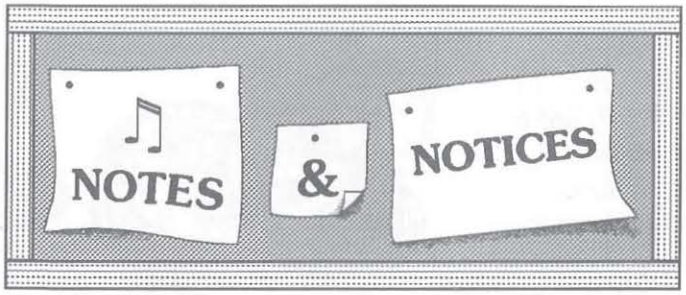
Vegetable Farmers and Their Weed-Control Machines shows nine New England vegetable farmers demonstrating their cultivation set ups. Most of the farmers raise from 20-60 acres of vegetables, some certified organic, others not organic, but still wanting to reduce the amount of herbicides they use.

The video shows on-farm talks with the farmers about their operation, soil types, and kinds of equipment, and a demonstration as well. There's footage on traditional sweeps and basket weeders along with custom built flame weeders and other cultivators designed for special uses like weeding near the edges of plantings done in black plastic.

It's a great survey of cultivation techniques and an example of the variations of equipment needed for different crops, soil types and weather that make each farm unique in its weed-destroying needs and solutions. Even though all outdoor vegetation is long gone and dead, you know all those weed seeds are nestled comfortably in the soil, just waiting for the warm springtime rains and

There's footage on traditional sweeps and basket weeders along with custom built flame weeders and other cultivators designed for special uses...

sunshine. It's a good time of year to start thinking about making emergence as uncomfortable as possible for them next spring.



Your Skills Needed at the Winter Workshops

If you are good working with kids, or you own a camcorder and would be willing to videotape a workshop or two at the winter meeting, then you are needed! Members are also needed to help with registration, arranging for local food at the meeting, the producer poster session, and other events. If you would like to lend a hand, please contact Cindy Madsen, at 712-563-3044.

Date Changed for PFI Women's Gathering

The date for the next winter women's gathering has been changed to the weekend of March 1-2, 1997. More information will be announced at the PFI annual meeting, Jan. 3-4.

Mississippi River Named Most Polluted

(Editors' note: The following article appeared in the fall, 1996 newsletter of the Mississippi River Basin Alliance.)

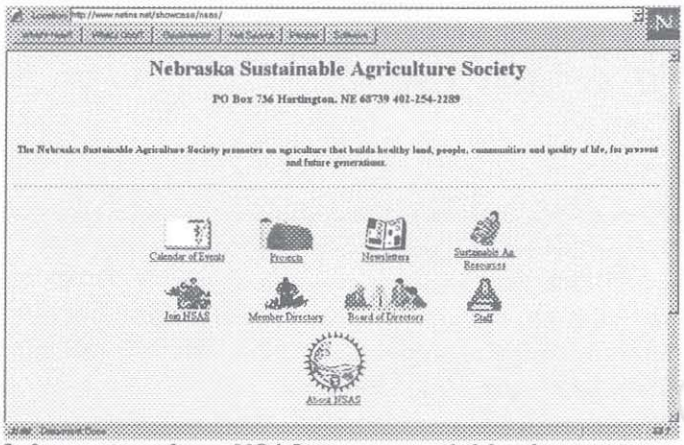
In a report released in September, the Mississippi River ranks first in the nation as the most polluted river. Of the 1.5 billion pounds of toxics reported discharged directly to all U.S. waters between 1990 and 1994, close to half (702 hundred million pounds) went directly into the Mississippi. The report, *Dishonorable Discharge*, also used U.S. Environmental Protection Agency (EPA) data to estimate, for the first time, untreated toxic discharges through sewage treatment plants (STPs). It assigned an additional 79 million pounds [1] of toxics entering the Mississippi River after going through STPs.

[1] This figure is based on an EPA estimate that 25% of all toxic discharges to STPs pass through untreated.

The report is the first waterway-by-waterway and toxin-by-toxin analysis of data from the federal Toxic Release Inventory (TRI). The TRI is an industry-generated estimate of facility discharges and only requires reporting for 5% of all chemicals (340 out of over 73,000 used commercially in the U.S.) The report was authored by the Environmental Working Group and the U.S. Public Interest Research Group, two Washington-based environmental advocacy groups. Despite the high levels of toxic pollution recorded by the TRI, over 90% of dischargers are exempt from reporting. Exempt facilities include sewage treatment plants, mines, utilities and municipal incinerators.

NSAS on the Web

The Nebraska Sustainable Agriculture Society now has a site on the Worldwide Web. You can find the NSAS newsletter and calendar, descriptions of the groups participating in the IMPACT Project, listings of sustainable ag resources, and more. Turn your browser to *http://www.netins.net/showcase/nsas/* and you will see the welcoming screen below.



Information about NSAS is now available electronically on the Worldwide Web.

♫ Another Internet Resource – Hay Prices

ISU forages specialist Steve Barnhart passed along this information about hay prices. The Internet address *http://www.iol.ie/~jrd/hay* gives a state-by-state rundown of hay prices compiled my Morgan Research, in Kansas. You can even get hay prices in Australia. We found the Iowa information was limited to some Shelby County prices. Minnesota, Wisconsin, and Missouri were slim pickin's too, but the Nebraska page contained prices from all over that state. Morgan Research also makes available the weekly USDA and state hay market reports, which give a more comprehensive picture of hay prices and availability. If you have hay to sell or want to buy, you can also call the Hay Hotline of the Iowa Department of Agriculture and Land Stewardship, at 1-800-383-5079.

♫ Salatin in Audubon

Joel Salatin, grazing expert and direct marketing entrepreneur, will be in Audubon, Iowa, the evening of Thursday, Feb. 13, sponsored by the Audubon County Rural Action project. For more information, contact Donna Bauer, 712-563-2742.

♫ Leaf Sap Brix and Leafhoppers in Vineyards

The Organic Farming Research Foundation (OFRF) is a California-based organization that funds research on alternative and organic farming methods, including one project proposed by two PFI members. The fall, 1996 newsletter of the OFRF contains a report by a Dr. Mark Mayse on a California study that compared plant Brix levels to leafhopper populations on grapes. Brix refers to the scale used to measure the sugar content of plant tissue, typically the sap. Iowa is a long way from California, and grapes largely disappeared from this state in the 1950s, thanks to 2,4-D. But the idea of a connection between Brix and bugs is one that you occasionally hear in the Midwest. The theory is that sucking insects will avoid, or even be killed by, plants with high sap sugar content.

In the study, the first to systematically test this relationship, the theory did not stand up. In eight site-years (four vineyards over two years), there were two responses that, although erratic, were consistent with the expected relationship of low-Brix-high-leafhoppers and high-Brix-low-leafhoppers. In the other six cases the opposite trend was suggested or the relationship was neutral. The article concludes that the evidence did not support a relationship between plant sugar content and infestation levels of leafhoppers. The OFRF can be contacted at P.O. Box 440, Santa Cruz, CA, 95061 (408-426-6606). ❦

PFI "TAKE STOCK" – FUND-RAISING THAT'S DELICIOUS!

You may be aware that PFI is thinking about financial sustainability. There is now a functioning Finance Committee, and one of its first projects is called *Take Stock in PFI*. The committee is pursuing several projects and feel it is important that some of these give PFI members the opportunity to contribute to fund-raising in a way that is fun and meaningful. The brochure describing *Take Stock* was mailed along with this newsletter.

Take Stock gives both farming and nonfarming PFI members a way to help PFI while strengthening the connections between consumers and producers.

Take Stock gives both farming and nonfarming PFI members a way to help PFI while strengthening the connections between consumers and producers. The concept is simple and based on successful fund-raisers in Audubon County. If you are a consumer, you can sponsor, or "donate" the funds to buy a feeder pig or calf for another PFI member to raise. If you're a farming member, you can agree to raise one of these donated animals, contributing the feed and other costs, with the sale proceeds going to Practical Farmers of Iowa. The program also gives consumers a chance to know where their food comes from. In many cases, consumers can arrange with producers to "purchase back" the

packaged meat of their donated animal from a local locker. Even members living in town can put top-quality, Iowa-grown meat on the table and support PFI too!

Farmers who have no livestock at all can still take part by donating the value of a few bushels of grain to PFI. This concept was used by the Audubon County Hospital Foundation. The hospital's brochure pointed out that for farmers on accrual accounting, a significant tax saving could be realized if ownership of the grain were transferred directly to the hospital. PFI is not pursuing that approach for the moment, but will supply information if you would like to talk it over with your financial advisor.

Vic Madsen (712-563-3044) and Ted Bauer (712-563-4084), two PFI members from Audubon, have agreed to coordinate *Take Stock*. They will send follow-up letters to anyone who wishes to take part. Information is also available from the PFI coordinators (515-294-1923).

PFI SUSTAINABLE PROJECTS IS FOR YOU!

While you're dreaming by the fire this winter, remember PFI. *Sustainable Projects* is a program established by Practical Farmers of Iowa to help Iowans turn dreams into action. The program makes small grants to Iowans with ideas – ideas for projects, educational efforts, on-farm trials, and so on. About the only thing off limits in the program is major input and equipment purchases (see guidelines on the application form, opposite page).

Sustainable Projects will accept proposals until Feb. 1, 1997. (You won't get a reminder before then, so put this application form somewhere handy!) A committee of PFI members and ISU collaborators will review these proposals and determine by early March which ones will be accepted. Since 1990, *Sustainable Projects* has approved 41 project proposals from Iowans.

The program makes small grants to Iowans with ideas...

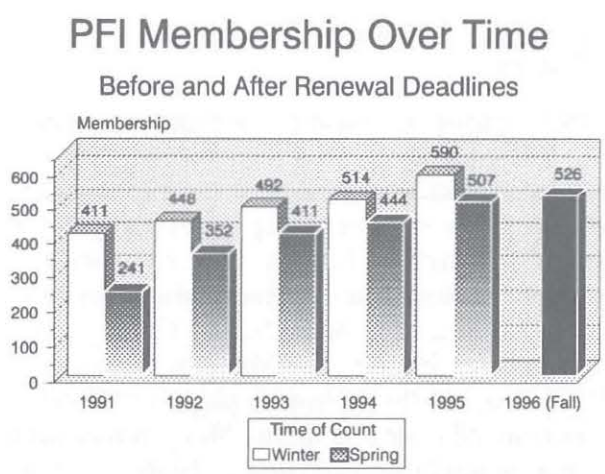


Figure 1. Current and historic membership.

MID-YEAR MEMBERSHIP UPDATE

Rick Exner

This is the day after Thanksgiving, and I and an ISU student employee are processing PFI membership renewals. It's too early to let you know how the fall membership drive is going, but I thought some readers might like to know where we stand at the beginning of winter. This is a "mid-year" report, because we are between our high and low membership seasons. You see, in March we always lose some people who did not respond to the membership renewal drive.

Figure 1 shows membership before and after that drop-off for the past several years. Right now there are 526 members of PFI. If we have a good winter meeting (and we will!), many members will renew when they attend, and quite a few new people will join by attending. We try to make it easy for you to renew, and your board member will even contact you if all else fails. I apologize for the confusion on the membership forms this fall. People who need to renew received forms that said "Please pay $0." If the accompanying letter (and follow-up card) said you need to renew, you do need to renew. The form should have said "$20," because that's the new cost of one year's membership. The PFI Board of Directors recently increased the membership to $20/year and $50/three years in order to cover the cost of printing and mailing your newsletter, field day guide, member directory, and other direct benefits.

(Membership continued on page 18.)

SUSTAINABLE PROJECTS 1997 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 1997 are due by Feb. 1. Committee decisions will be announced in early 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.

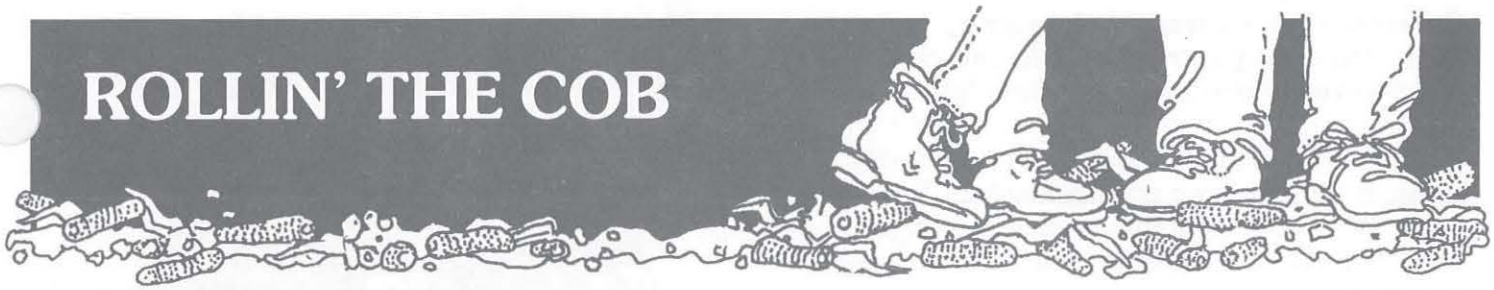
Please describe the problem that this project will address and why there is a need for the project.

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.

ROLLIN' THE COB



Our cob rollers met again by conference call to prepare for this newsletter. *Margaret Smith* farms near Hampton with her husband Doug Alert, and she's the Extension director for Hardin County. *Tom Frantzen* and his wife Irene farm near Alta Vista, in northeast Iowa. *Ron Rosmann* farms with his wife Maria near Harlan, in western Iowa, and *Roger Schlitter* works with Farm Credit Services in Osage.

Harvest was not completely over, and the weather was closing in. Nevertheless, they took the time to roll a few cobs with each other. Unfortunately, after our call, Roger Schlitter experienced a family event that prevented him from putting pen to paper for this issue.

They would like to remind you that their mailboxes are just waiting for your letter. In the mean time, they came up with these two items.

How are you approaching planning for 1997 and beyond?

Tom: Our family utilizes Holistic Management. Each year we create a plan for the farm that we hope will produce the quality of life that we desire. Attention is given to see that our activities don't conflict with our values.

Ron: Because we are such believers in diversity in our business, our farm plan has agendas on many different fronts for next year. First of all, we need to complete our farm shop that we started in September. As of Nov. 15th, it still needs lights, paint, heat, work benches, shelves, moving, deciding what to keep and what not to and many other little details. It will be a pleasure to work on that in a warm environment this winter. Getting the basketball hoop and the ping pong table in working order will be near the top of the list. On the livestock side, we are cooperatively looking at the feasibility of marketing beef organically through our Heartland Organic Marketing Coop. We recently bought four Berkshire boars and plan on participating in the black pork program that Farmland Industries offers. If that works, perhaps it is possible to market organic "black" pork in the future? Next year, we will be watching the Wilson brothers in N.W. Iowa and the Wallace Research Farm near Atlantic to see how the Swedish system of farrowing is working for them. Our farrowing facility is 17 years old and is need of some remodeling anyway.

Everyone in our family wants to farrow differently than we are now. Grazing continues to be the most fun and rewarding, I feel. We have 81 cows to calve next spring. We are seriously considering some "grazing corn" next year to help finish our steers on. I think we have enough to keep us going for another year. Never a dull moment!

Margaret: We are going to make time this winter to practice the planning tools we learned in a Holistic Resource Management (HRM) training course we took 3 years ago. We are continuing our plans to improve nutrient cycling on our farm (keeping more nutrients at home) and to increase net income. We will spend time re-analyzing our calve-to-finish beef enterprise, now that we have reached animal numbers that fit our land base and crop rotation. We are also planning to evaluate adding another enterprise. Nothing exotic – we will be weighing the pros and cons of finishing pigs, possibly in hoop houses. The 'cons' that immediately come to mind are the erratic availability of feeder pigs and the challenge of baling cornstalks on ridged ground. One thing leads to another – do we need to farrow pigs? – modify our tillage system? The HRM testing guidelines should help us sort out options and prioritize changes.

What the heck is "Rollin' the Cob?" Ron Rosmann says that's when someone comes into the yard and a discussion gets going. While you're talking, maybe you've got one foot up on the bumper of the pickup, or you're tossing sticks for the dog. If there are a few corncobs lying around, you may absentmindedly toe them about during the conversation. And that, says Ron, is "rollin' the cob."

Communicating within the family is important. How do you respond to the challenge of communicating in your family?

Tom: With 2 teens and an 8-year-old in the house, communication is really needed. The most important part of communication is learning to develop good listening skills. You can learn a lot by listening!

Ron: The need for good communication seems to be ever on the increase in our family. Our three boys are now 10, 13, and 15 and in three different schools. Maria works part-time off the farm. All of us have many duties and activities that we are involved with. Just knowing where everyone is going to be on any particular day is a challenge we don't always succeed at! One thing we insist on without question is to have everyone eating breakfast together. Supper is nearly always eaten together unless sometimes because of farming, meeting or school activities. Meals are important to us as time to talk about what is going to happen today and how things went that particular day. Sometimes we feel it is important to have a more detailed discussion about a particular situation. We often do this on Sunday evenings and we call them "family meetings". These have worked quite well in discussing and resolving conflicts.

One of my most valuable self-reminders is "don't assume he knows what I'm thinking."

Margaret: Doug and I have been married 2¾ years. It's clear that we haven't yet reached the ultimate in communication – when I can start a sentence and he can finish it. Actually, we don't aspire to mind-reading, but to clear and open exchanges of ideas and feelings. One of my most valuable self-reminders is "don't assume he knows what I'm thinking, or can figure out from several semi-related thoughts where my mind is going." After all, humans have the ability to speak; why not use it to our best advantage? This is a challenge for the strong, silent types. Right now, we need to concentrate more time and effort toward improving our communication. We have set aside one morning a week to sit down and do our farm and life planning. Do freshly baked popovers enhance communication? We'll let you know. ❦

(Membership continued from page 14.)

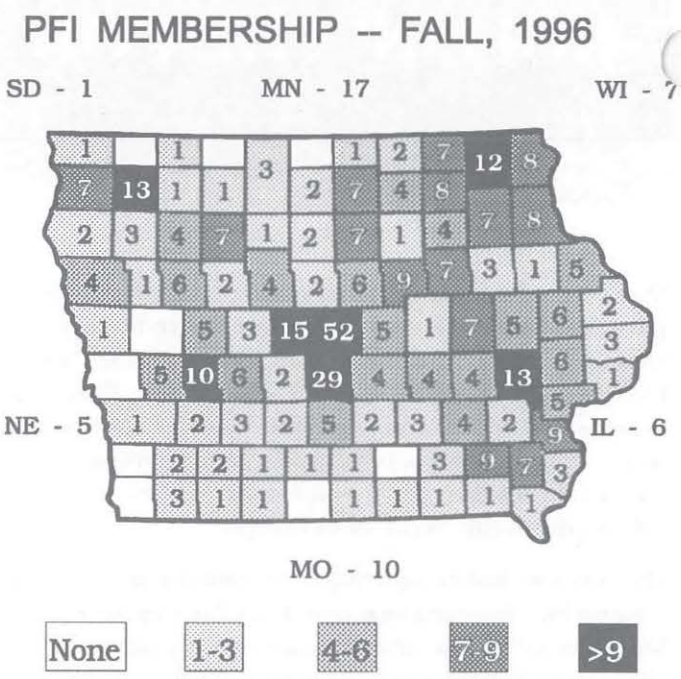


Figure 2. Map of PFI membership by county in Iowa.

We occasionally have requests for the county-by-county membership. Figure 2 is the PFI membership map as of today. Use this along with your 1996 PFI Directory to locate other members with particular skills and interests. If you are the only PFI member in your county, you may be feeling a little lonely. On the plus side, there are now only nine Iowa counties without a single person who is a member of Practical Farmers of Iowa. If you could use some extra newsletters to interest others in this organization, please contact us at 2104 Agronomy Hall, ISU, Ames, IA, 50011! ❦

USING STUDY CIRCLES FOR SUSTAINABLE AG TRAINING

Heidi Carter, Lincoln, NE

(Editors' note: This article about study groups appeared on SANET, the sustainable agriculture discussion group on the Internet, and we reprint it with permission. The Center for Sustainable Agricultural Systems (CSAS) in the Institute of Agriculture and Natural Resources (IANR) at the University of Nebraska-Lincoln (UNL) is an interdisciplinary center formed in 1991 for the purpose of bringing together people and resources to promote an agriculture that is efficient, competitive, profitable, environmentally and socially sustainable for the indefinite future. To be

added to the newsletter mailing list, or for questions or comments, contact the newsletter editor, Pam Murray, Coordinator, Center for Sustainable Agricultural Systems, PO Box 830949, University of Nebraska, Lincoln, NE 68583-0949, 402-472-2056, fax -4104, e-mail: csas001@unlvm.unl.edu.)

A dozen people are comfortably seated around a meeting room, one speaking, several leaning forward anxious to jump into the conversation, one skimming an article as if searching for a rebuttal, and others listening attentively. This scene is a study circle in action.

Deborah Cavanaugh-Grant, coordinator for the Sustainable Agriculture Professional Development Program with the University of Illinois Cooperative Extension Service, read about study circles several years ago. She and other members of the state planning team thought it would be a good model for interaction. Their goals for using the technique are to provide training for Extension educators and other agricultural specialists and to invigorate sustainable agriculture groups.

In December 1995, consultant Dr. Duane Dale conducted a two-day training session for farmers and representatives from federal and state agencies and nonprofit organizations. These facilitators left with initial plans for starting study circles in their own communities.

"Right now we have seven study circles," remarked Cavanaugh-Grant. "Each one decides on the schedule and what topics will be covered. Some groups view the study circle as a mechanism to talk and share ideas, and others use it as a platform for action."

This flexibility is one of the strengths of the study circle method. Since every group's situation is unique, organizers adapt the basic format to the needs and goals of their community. For Shannon Allen of the Christian County Soil and Water Conservation District in central Illinois, the purpose of their first meeting was to start a dialog between farmers and town dwellers on the definition of sustainable agriculture. For the next meeting, participants want to explore how agriculture affects the surrounding community. "In the future, we may narrow our focus. It all depends on who attends," considered Allen. "It is a good way to communicate without intimidation or trying to prove a point."

"Some groups view the study circle as a mechanism to talk and share ideas, and others use it as a platform for action."

In northern Illinois, the sustainable agriculture organization served as a base for the Advocates of Practical Farming. Mike Richolson, with the DeKalb County Natural Resources Conservation Service, and Joel Rissman, who operates an organic farm in the area, are co-facilitators. The study circle has met three times and discussed using cover crops after wheat, composting and fertilizer value from municipal lawn waste, and sustainable practices in conventional systems. "We have tried to widen the audience to include farm managers and conventional farmers," Richolson commented. "Several farmers will be using practices reviewed in the sessions."

Louis Reuschel, a member of the Western Illinois Sustainable Agriculture Society, worked with Extension to recruit people for two study circles. Topics have ranged from the present and future structure of agriculture to global positioning and zoning. One group invited area legislators to examine the impact of politics on agriculture. "Facilitators are the secret to successful study circles," explained Reuschel. "They must focus the group on the subject and at the same time be effective at letting individuals express themselves. Some people are shy, while others are outspoken. It is a challenge to the facilitator to balance it all."

ENVIRONMENTAL EFFECTS OF *FREEDOM TO FARM* PREDICTED

Rick Exner

The September issue of *Iowa Ag Review* contained an article by ISU economist Bruce Babcock reporting on a study predicting environmental outcomes of the Federal Agricultural Improvement and Reform Act ("Freedom to Farm") of 1996. *Iowa Ag Review* is a newsletter of the ISU Center for Agricultural and Rural Development (CARD). The study, entitled *Resource and Agricultural Policy Systems 1996: Agricultural and Environmental Outlook*, covered the Upper Midwest, from

Arkansas to North Dakota and east to Ohio. Using as a starting point the National Resources Inventory (NRI) of the USDA, it examined five environmental indicators: wind and water erosion, nitrate-nitrogen lost to surface water and leaching, and soil organic carbon (related to soil organic matter).

Babcock's article acknowledged that the outcomes are not obvious because of contradictory influences brought to bear by the regulatory changes. For example, the old legislation both restricted and encouraged production of program crops, so what will be the net effect of removing those rules? Like all of us, economists make assumptions about things like future cost of production, demand, etc. Unlike most of us, economists translate these assumptions into numbers they can feed into a computer program that will integrate all those factors and predict general trends. Prediction may really be too strong a term. This "linear programming" is at its best when used to discover what are the consequences of a set of assumptions – all other things being equal.

The key phrase is "on average," because in areas like western and southern Iowa, water erosion was predicted to jump by 10-40 percent.

Interestingly, some study predictions changed at different geographical scales. In the 12-state region as a whole, water erosion was forecast to increase about 4 percent, while in the Cornbelt states of Iowa, Illinois, Indiana and Missouri, water erosion was expected to increase less than 2 percent on average. The key phrase is "on average," because in areas like western and southern Iowa, water erosion was predicted to jump by 10-40 percent. Wind erosion was predicted to increase 2 percent in the Northern Plains due to increased use of summer fallow, but it was expected to decline elsewhere in the region. These conclusions were based in part on predictions about the adoption of no-till, use of crop rotations, and the retention of Conservation Reserve Program (CRP) acres.

While predicting an increase in acres of corn and soybeans, and winter wheat (mostly in the Northern Plains and the Lake States), the authors of the study also see more crops raised in rotation, especially the corn-soybean rotation (adoption of which they expect will further encourage growth of no-till). While they projected a 15 percent increase in nitrogen fertilizer use, these researchers were unwilling to predict an increase in nitrate nitrogen losses. Their models suggested that the fertilizer increase will come on those soils whose productive potential will allow crops to make use of the nutrient. The study predicts an actual increase in soil carbon, based on increased use of no-till and continuation of the Conservation Compliance requirements farmers must meet to receive their fixed government payments.

For additional information on the study *Raps 1996: Agricultural and Environmental Outlook*, contact Bruce Babcock at 515-294-5764, or visit *http://www.ag.iastate.edu/card/divisions/rep/RAPS/home.html* on the Worldwide Web.

MAKING THE MOST OF WARM-SEASON GRASS

Rick Exner

Many Iowa farmers have seeded warm-season grasses, either for grazing or for CRP acres. As acres begin to come out of CRP, producers face decisions on how to get income from those fields. PFI member Steve Reinart recently consulted on an ISU grazing study that showed warm season grasses are much more productive if they are managed right. The research, funded by the Leopold Center, was led by ISU agronomist Ron George and took place on the Castana Research Farm from 1993 through 1995.

But what is the "right" management? It is common knowledge that these native species are slow starters in the spring, and that they grow best in the kind of heat that puts bluegrass and brome to sleep. Think about the warm season grass pastures you have seen. Does the word "stemmy" come to mind? Selective grazing may mask the situation for awhile, but a warm-season grass pasture's aftermath appearance often reveals that the forage was not used to its full potential.

Many producers, especially those not using management-intensive grazing, wait until the cool season grasses quit in the summer before turning the livestock into warm season grass. This study

showed that isn't the way to get the most out of these native species. Using either switchgrass (Cave-in-Rock variety) or big bluestem (Roundtree variety), researchers grazed fall-born steers either "continuously" (early July into August) or "rotationally." Rotational grazing consisted of two weeks of (continuous) grazing in June followed by four weeks of rest and then a second grazing period extending into August.

Think about the warm season grass pastures you have seen. Does the word "stemmy" come to mind?

Figure 3 shows rate of gain and carrying capacity in steer-days per acre for the two grazing methods and the two kinds of grass. The so-called rotational grazing amounted to 18 percent greater rate of gain in big bluestem and 30 percent more gain when grazing switchgrass. This system was rotational in the sense that the steers only grazed the same area for a few weeks at a time rather than for two months straight. Ron George points out that producers using a true, paddock-based rotational grazing would likely experience performance beyond these levels. But even farmers who do not use intensive management would benefit from this timing sequence.

The brief, June grazing caught the warm season grasses at a highly palatable stage, and it set them back enough that they were again right for grazing when the stock returned in late July. The ISU researchers suspect that an even longer rest (5-6 weeks) would increase productivity and forage quality even further and that the resulting improvement in stand and growth would also minimize invasion by weeds and cool season grasses.

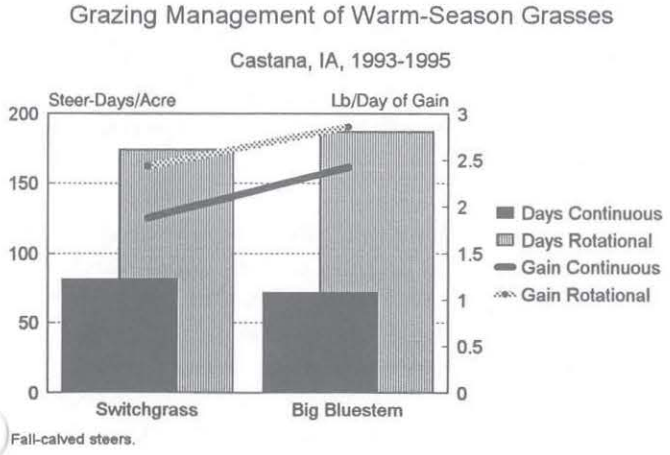


Figure 3. Grazing days and gain with two kinds of grazing management.

Steve Reinart says he understands why ISU studied just one grass species at a time, and he says the study was especially valuable to the producer who doesn't intensively manage grazing. On his own farm, however, he likes to see the warm season and cool season grasses mixed together. With paddock rotation Steve avoids the regrazing of new grass shoots that took place even in the "rotated grazing" of the Castana study. Reinart believes intensive rotation allows his stock to graze whatever is growing in a given season without weakening those plants.

If you would like to discuss this research with the authors, contact Ron George (515-294-2143) or Steve Reinart (712-656-2563).

IOWA FORAGE AND GRASSLANDS COUNCIL ANNUAL MEETING – A REPORT

Rick Exner

PFI member Steve Reinart phoned in this rundown on the IFGC annual meeting November 26. Attendance was a little over 100, and the meeting included a tasting session for grass-fed beef, pork and chicken. Steve, who runs a grass-based beef and seed stock operation near Carroll, had a few choice words for the Des Moines traffic as he arrived late at the Airport Holiday Inn conference. He joined the meeting in time for a breakout session with a four-person panel that included PFI member Connie Tjelmeland, from McCallsburg, who "grazes" chickens.

Another panel member was PFI member Dan Wilson, who is part of a family operation that pasture-farrows 200 litters. Dan said it is especially beneficial for the sows to have good grass during the period after farrowing when they don't come to the feeders. The Wilsons have also addressed problems of forage winter kill with an equal-parts mix of rape, sudangrass, ryegrass, and field peas.

Also on the panel was Fred Martz, from the University of Missouri Forage Systems Research Center, at Linneus. He reported a study comparing gain and kill data for different levels of grain supplementation to grazing beef. In this study raw gain was increased with grain supplementation. On the other hand, there was no yellowing of the fat with higher proportions of forage in the diet. (Steve is interested to hear what the Tallgrass Prairie Producers Co-op has to say about carcass quality of grass-finished beef at the PFI winter meeting.)

The speaker who made the greatest impression on Steve was Dave Pratt, of Ranching for Profit, an organization that holds training schools that Steve describes as "HRM with more economic emphasis." Pratt stated that management-intensive grazing isn't going to work unless you get in synch with nature. He threw out questions like "When is the grass best? When do you calve?" "If we opened the gates and everyone left the Midwest for 100 years, what would people find when they returned?" Pratt's point, said Reinart, was that not only would succession change the plant community, but the livestock that remained would probably be smaller animals, and the breeding season would be tighter and better synchronized with the growth of plants.

In the scale of things, that scenario may not be as far-fetched as it seems, said Pratt. Not that people will go away, but some of the economic conditions today are products of energy and other resources that are finite indeed. Steve Reinart says this talk really got him thinking. He is also reading *The Last Ranch*, by Sam Bingham, which raises similar questions about agriculture and ecology. Steve says he came away from Dave Pratt's talk with a positive feeling that he can make some changes in his own operation to work more closely with nature.

MIG FIELD DAY SHOWS PRAIRIE REBIRTH

David Zahrt, Turin

Thirty eight people attended a Field Day held at Reese Homestead, on September 10, 1996. Our Century Farm is located 1 mile north of Turin and straddles a boundary that separates the loess hills from the Little Sioux River bottomland. In March, 1995, I applied for a grant to set up management-intensive grazing (MIG) in the 150 acres of loess hills included in the Homestead. These hills have been under continuous grazing for the past 50 years. I proposed the project to the North Central Region of Sustainable Agriculture Research and Education (SARE). SARE granted us supplemental funds to share the cost of initiating the project.

The tour began on the bottomland. We planted reed canary grass on a portion of the crop land that is often subject to standing water. This year the field adjacent to it was planted to corn in late May, replanted to corn in early June, and lost to standing water in July. I turned to canary grass because it is a cool season grass that withstands wet conditions, and it performs better than cool season grasses during hot weather. I judged that we have ideal conditions for canary grass. If we can establish the grass we might be able to improve our crop harvest average. Currently I estimate that I can harvest a row crop from the bottomland 3 out of 5 years. With the land in grass I project that I could harvest a crop from the land 19 out of 20 years, and with management-intensive grazing, I would let the cattle do the harvesting of the canary grass.

Our field day participants observed and compared pictures of the farmstead taken in 1916, and 1993. The pictures were taken standing on the bottomland, facing east toward the hills. The first picture, taken in 1916, shows the hills virtually nude. There were no trees! The second picture taken in 1993 from the same location, reveals that trees have invaded the hills. The 150 acres of hills, since pastured, are now approximately 75% tree covered. That leaves approximately 40 acres that are agriculturally manageable. These 40 acres are meadow-like valleys. They have been seeded to brome and orchard grass. Continuous grazing has taken its toll on those species, and bluegrass now tends to dominate these meadows. Bluegrass produces less forage than brome and orchard grasses.

As the tour continued into the hills, I explained how we divided the pasture into paddocks and piped water over the hill to relieve the cattle of the necessity of walking (in some cases over a mile) to water. By providing water and restricting the distance the cattle have to walk, we accomplish several things. Because cattle are herd animals, the whole herd goes to water when the 'boss' cow decides to go. Once they migrate to the water tank,

The warm season grasses are native prairie grasses. They give the hills their characteristic reddish-brown color in the fall.

drinking becomes a social occasion. They all loaf around, trampling out the vegetation and leaving their manure at the water tank, rather than in the pasture where it will do some good. If the water is provided closer to their grazing they are inclined to come one by one to water while the rest of the herd, within eyesight, continues to graze. The overall effect of this is the cattle use more of the forage in the pasture. They use it more efficiently, and they distribute their waste in the pasture where it can fertilize new pasture.

The hill pasture is all classified by Farm Service Agency (FSA) as Highly Erodible Land (HEL). We have split it into 9 paddocks, and we confine the cattle to one paddock at a time. Thus restricted, they are forced to eat what's there. This prevents them from selectively grazing their favorite plants, and leaving the remainder to become stemmy and unpalatable. This management system also allows us to move the cattle immediately after they have grazed the paddock down. By moving them, we give the paddock a chance to recover fresh regrowth. The regrowth replenishes nourishment to the roots, and produces very tender, palatable forage.

With a system of 9 paddocks, and the rental of additional adjoining pasture, we are able to give every paddock a 25-30 day rest. A rotation schedule depends on a number of variables: the size of the paddock, the health and height of the forage, and the weather conditions (heat and moisture). I am using, as a rule of thumb, a 30 day rotation period. This year I have been able to maintain the herd without supplemental feed. By creating paddocks I have been able to exclude the cattle from some of the hillsides that appear to be less productive than the valleys.

Continuous and heavy grazing of the hills has left them vulnerable. Once grazed down, cool season grasses are unable to replenish their root system and do not provide ground cover. Mother Nature is quick to supply ground cover. She does it with hemp, jimpson weed, burdock, buffalo burr,

Big sky, big view – from Zahrt's loess hills pastures.

and more. With the initiation of management-intensive grazing, there has been a significant reduction of the invaders because the grass has a rest period that allows it to establish ground cover, producing strenuous competition for the weeds.

During the months of July and August, when the cool season grasses tend to go dormant, the warm season grasses flourish. In order to extend the cool season forage, we have over-seeded red clover. The clover not only extends the grazing of cool season grasses into July, but it also provides nitrogen to the soil.

The warm season grasses are native prairie grasses. They give the hills their characteristic reddish-brown color in the fall. When the hills were under continuous grazing it was common to observe the cattle grazing the meadows during May and June, and hillsides and tops in July and August. Even under the pressure of continuous grazing, these grasses have maintained a foothold on the slopes and crests of the hills. When the weather begins to cool in September the cool season grasses give another spurt of growth. Then the cattle move to the meadows again.

This year I have seen a recovery of the prairie grasses. Two things have contributed to their recovery. The first is some help from the Iowa Chapter of the Nature Conservancy. In mid-July the Nature Conservancy sent 7 interns to spend 3 days cutting cedars. They cleared approximately 5 acres of hill pasture of cedars. By establishing paddocks I was able to rest that section of the hills. Participants in the field day observed recovery of little blue stem, big blue stem, indian grass, and side oats grama. The recovery was evident because

these grasses were going to seed. This is something I have not observed in 50 years (although 50 years ago I may not have known what I was looking for).

Every day I am faced with the question of long-term sustainability. The road over the hill to the pasture is cut through a "pass." I note that over the past 50 years the road level through the pass has dropped 5 feet. Previously the cattle used this road continuously as their access to water. In doing so they kept it free of vegetation. Now that water is provided at the paddocks it may be possible to seed the roadway down to vegetation that will help curb the erosion.

As I was making preparation for the field day I realized that the tour would finish about supper time. So we cooked some supper ahead of time. When the participants completed the tour my wife and mother set the supper out on picnic tables. Conversation about the pros and cons of management-intensive grazing continued over the supper table. Rick Exner (PFI), with his guitar, and Keith Fletcher (Nature Conservancy), with his fiddle, provided a little music.

PS. I am going to do some research on the profitability of a business that would chip cedars. If I could sell everything I chip from my pastures and break even financially, I would be ahead by the reclaimed pasture. I am also going to do some research on the profitability of collecting and selling prairie seeds. Those two enterprises would dovetail. And the prairie pasture might be more profitable as seedbed than as pasture! If I could get my system working smoothly, maybe I could get my neighbors to pay me to chip the cedars in their hill pasture!

SMOKING THEN, PESTICIDES NOW

by Kamyar Enshayan

Thirty years ago, many of us were at ease with smoking. It was well accepted to smoke in buses, planes, public buildings, and almost everywhere else. When guests arrived, you smoked. But now, we have learned.

Similar to when smoking was the norm, we now live at a time when our culture is at ease with pesticides. Pesticide commercials assure us that all is safe if you "follow the label." And while tobacco companies have been taken to task, questioning the wisdom of pesticides is still taboo. I believe most journalists, especially in agricultural regions, do not dig into this topic because, at least in part, a critical look at pesticides might imply they are criticizing farmers (even though many farmers say they would reduce or eliminate their reliance on pesticides if they had the choice). And most of us ordinary people have no built-in intuition to assess the dangers pesticides pose to our health and our environment.

People who raise serious questions about the long term consequences to the biosphere are usually viewed as emotional and "alarmists." But we all know that alarms have a purpose – to wake us up, to caution us, and to remind us something is not right. Remember "alarmists" like Rachel Carson, who warned us about DDT?

In the process of encouraging our university to establish a pesticide-free landscape policy, I have learned a few things about pesticides that might interest other PFI members. Evidence and the history of pesticide use suggest that the current laws, rules and regulations are inadequate when it comes to protecting our health against pesticides. Here are a few reasons why EPA approval of a pesticide and following the label in applying it does not make the situation entirely safe:

- The Environmental Protection Agency (EPA) is responsible for safety of pesticides that are on the market. But *all health and safety data for each pesticide are provided through the manufacturer of that pesticide*, and the EPA does not have the resources for fully assessing the validity of much of those data [1].
- The Material Safety Data Sheets (MSDS) that I have seen for some commonly use lawn pesticides contain very little or no information on long-term human or environmental consequences. For example, the MSDS did not mention that Dicamba is a toxin for honey bees or that 2,4-D has been linked to non-Hodgkin's lymphoma. The MSDS mentions LD50 (lethal dosage of a pesticide that killed half of the rats), but it does not say anything about the long-term exposure to much less than LD50 levels of the pesticide.

In the process of encouraging our university to establish a pesticide-free landscape policy, I have learned a few things about pesticides that might interest other PFI members.

- When I compared EPA's fact sheets with the MSDS, I discovered many items for which EPA fact sheets state, "incomplete information," "existing data are inadequate," or "nonexistent." No such statements appear on the MSDS. What is the movement and final destination of the chemical in the environment? MSDS does not mention that.
- Many pesticides contain so called "inert ingredients" that are often trade secrets. That means they are exempt from worker's right-to-know laws. It turns out that the "inert" ingredients are not as inert as they are assumed to be, and some people react to them strongly.
- There is an expanding list of pesticides that were thought to be safe but are now banned or being banned. DDT, Chlordane, and cyanazine to name a few. And many previously "safe tolerance levels" are now known to be too high.
- All "tolerance levels" for pesticides are calculated for "average adults." But what are the "safe tolerance levels" for infants, children and pregnant women who are physiologically different from an average adult? The EPA is only now beginning to think about that question. Have there been studies of children's exposure to lawn chemicals and the consequences? Very few and very crude. One recent study linked the use of lawn pesticides with a fourfold increase in the risk of children developing cancer of the connective tissue (soft tissue sarcoma[2]. Another study found a two- to sixfold increase in childhood brain cancer in homes where pesticides were used (for example, lawn care chemicals, flea collars on pets, and insecticide "bombs"[3]).
- "Tolerance levels" have been calculated for each pesticide separately. What if we are exposed to a combination of 6 different pesticides, as is often the case? Is there a synergy among these chemicals that makes them more toxic to our bodies? No one knows the answer. A recent paper in *Science* reported that two pesticides, each with insignificant estrogen-like properties, were a thousand times more estrogenic once combined[4]. Some estrogenic chemicals in the environment have been linked to breast cancer and reproductive disorders[5,6].
- There is mounting evidence linking pesticides to certain kinds of cancers and to disruption of the immune, nervous and endocrine systems in humans and wildlife[7,8,9].

When so little is known about the environmental and human health consequences of pesticides (and what we do know is sobering), and when large quantities of these pesticides are spread everywhere, we are, by definition, experimental animals. (In 1994 alone, 48,500,000 pounds of some 30 pesticides were used in Iowa on corn and soybeans alone[10]. That does not include golf courses and lawns, which use more pesticides per acre than farms). So, how long will it take before we respond to the alarm?

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FOOTPRINTS OF A GRASS FARMER

VISION, VALUES AND GOALS: Little Things That Mean A Lot!

Tom Frantzen, Alta Vista

"He lives by his values." "They have no vision." "Do they discuss their goals?" Have you ever heard those phrases before? These terms can influence our lives.

Vision is defined by Webster as imaginative insight or foresight. Vision plays an important role in life. Parents need vision to see through a child's behavior. "If he doesn't develop better social skills, I can see that he will have trouble in school." Vision also plays an important role in farm management. "I could see how a shelterbelt row of trees would stop winter winds and improve our farmstead."

A fine line exists between seeing how something could work ("Our pigs will be content in a deeply bedded hoop building.") and trying to predict the future. ("The price of land will go to __.")

Mark Twain once said that prediction of the future is a subject matter for fools! Or even more bluntly: a friend told me recently, "There is a thin line between a vision and a hallucination!" Vision or foresight plays a key role in good management.

Values define the basis for managing our lives. Webster defined values as something you would hold in respect and admiration. Values have a major influence in daily actions. How you dress, what you do, even when you wake up in the morning, are value-based decisions. Clearly defined values should influence decision making. To be respected in public, you dress appropriately. Good relationships with the people around you are sustained by paying attention to what's important to those people.

Management actions that exemplify good land stewardship are practiced by people who value natural resources. Everyone can improve their lives with a periodic soul searching on what their personal values are. Living tends to become drudgery after personal values fall to second place.

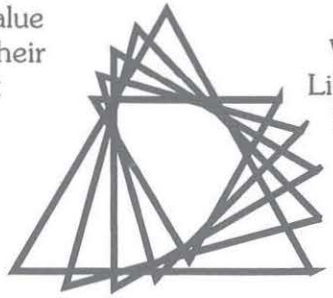
Vision assists us in decision making. Values define what is important to us. Goals are the essence of good management.

Vision assists us in decision making. Values define what is important to us. Goals are the essence of good management. All three of these exercises – visioning, defining values, and goal setting – are utilized in practicing Holistic Management.

This management philosophy utilizes a three part goal as its centerpiece. Our family has followed these principles since 1992. A holistic 3 part goal begins with listing all of the people involved in the operation. In our situation, this includes Irene and me and our three children, age range from 8-16. Yearly, we write down what is important to us. This is an exercise in defining values. It is not necessarily easy, but it can be fun. We merge the individual responses into an inclusive quality of life statement. Throughout the year, we can see if our actions conflict with our values. This is a good method of discovering and hopefully resolving brooding problems.

The second part is to list the means of production that will support our values. Here, visioning is utilized. We are basically a livestock operation that sells some cash grain. Attempts to diversify are important. We try to keep an open mind.

The three part goal is completed by describing the landscape needed to sustain the forms of production that will produce our quality of life. This exercise has resulted in many improvements on our farm. We dug a pond and planted shelterbelts and wildlife areas. A steady effort is made to improve both the appearance of our farm and its operation.



Vision, values, and goals are important. Life without attention to them tends to become structured monotony. To have a sustainable agriculture, we need sustainable life-styles. Our daily activities need to be compatible with our values.

FROM THE KITCHEN

Marj Stonecypher, 1321 March Ave.
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This has been quite a fall! My horses were not ready for the cold rainy weather, no winter coat yet. They say when they get their thick coat early, it is going to be a long, cold winter. Last year we were done October 26 with harvest. It is now November 5, and we have a couple of days of corn to harvest, along with some other field work and yards to clean.

Tried a new chicken dish. Of course, I changed it from what the recipe said, as I usually do.

MARINATED CHICKEN

1 envelope Lipton Secrets Savory Herb with Onion Soup Mix
½ cup water
1 tablespoon vegetable oil
2 to 3 teaspoon garlic
red wine vinegar
4 to 6 boneless, skinless chicken breast patties

In a large, shallow baking dish arrange chicken in one layer. Blend savory herb soup mix, water, oil and wine vinegar and pour over chicken to coat well. Marinate in refrigerator at least one hour or overnight... OR cover with aluminum foil, put in oven and bake at 325 degrees for 45 minutes, then let set 15 more minutes in the oven. (This way works when you are in the field) Can broil or grill, turning once. Baste with marinade.

CREAM CHEESE PEANUT BARS

(This recipe was in winter of 1993/94. There was a request to have it in again.)

CAKE:

1 yellow butter cake mix (chocolate is good too)
1 egg
½ stick margarine or butter

Mix cake mixture and divide. Press half into bottom of greased 9 x 13" pan. Set other half aside for the top.

FILLING:

1 box (2 cups) powdered sugar
2 eggs
8 oz. cream cheese
1 tsp. vanilla
½ cup peanut butter, creamy

Mix filling and spread in pan over half of pressed cake. Top with remaining half of cake.

TOPPING:

1 to 2 cups finely chopped raw peanuts

Sprinkle on top of cake and filling.

Bake at 350 degrees for 35 minutes (no longer).

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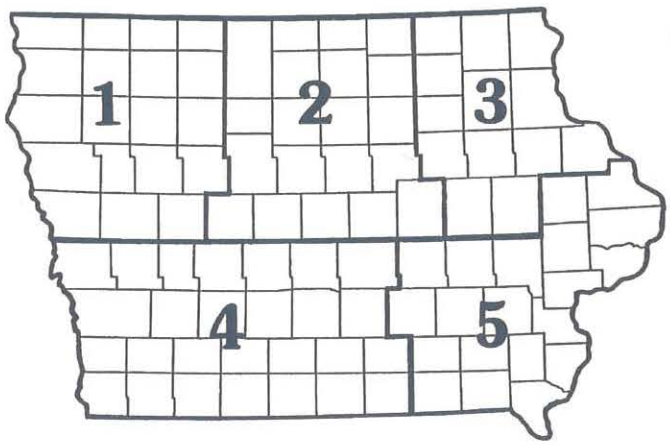

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