the Practical Farmer

Practical Farmers of Iowa Newsletter

Vol. 12, #2
Summer 1997

LEOPOLD CENTER AND PFI FORM NEW PARTNERSHIP

The Leopold Center for Sustainable Agriculture and Practical Farmers of Iowa have begun a new partnership to further the work of both organizations. This new partnership will provide PFI with $50,000 a year on a renewable basis to support its on-farm research and outreach programs.

Discussions of a partnership began earlier this year and led to a proposal presented to the Leopold Center Advisory Board in March. The Advisory Board approved funding support for one year, but left the future of the relationship between PFI and the Leopold Center open for discussion. Subsequent discussions led to a framework for the partnership that Leopold Center Director Dennis Keeney explored with the PFI Board at its July meeting.

Dr. Keeney noted that the Leopold Center and PFI "have traveled an interesting road in the past decade, sometimes together and sometimes apart, but always headed toward the same goal, a more sustainable future for Iowa's land and its people." He added, "It is time to work together as partners to further the goal of a more sustainable future for Iowa's land and people."

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"It is time to work together as partners to further the goal of a more sustainable future for Iowa's land and people."

Dennis Keeney

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Dr. Keeney proposed the partnership be "built on mutual trust," which struck a positive chord with the PFI Board. This foundation will allow a flexible partnership that is responsive to the needs of farm families. Other features of the partnership are:

- The organizations will collaborate to plan activities of PFI that will be supported by the Leopold Center.
- The Leopold Center will cooperate with PFI in its field days and other educational events as time and resources permit.
- There will be periodic updating of governing bodies and acknowledging the sharing of resources when appropriate.
- The organizations will encourage the active participation of Iowa State University researchers and educators in joint projects.

PFI President Dave Lubben said, "We share a mutual interest of sustainability, environmental stewardship and community development." He added, "We are very pleased to form a new partnership with the Leopold Center."

THE "PREMIER SUSTAINABLE AG ORGANIZATION"

PFI received a letter from the W.K. Kellogg Foundation following an April site visit by their staff. The visit looked at the progress of the Shared Visions program; the letter identified areas of strengths and opportunities for improvements in Shared Visions and the collaboration between PFI, Iowa State University, and the Leopold Center.

There were a number of comments and observations in the letter. Some of these were:

- PFI is the premier and pioneering farmer driven research organization in sustainable agriculture, having a strong and active membership, a credible vision and mission, and creating tangible models on-farm.
- The Leopold Center is a leader in researching and demonstrating sustainable systems and is involved in institutional change.

"PFI is the premier and pioneering farmer driven research organization in sustainable agriculture, having a strong and active membership, a credible vision and mission, and creating tangible models on-farm."

W.K. Kellogg Foundation

- Collaboration between PFI, the Leopold Center, and ISU has helped foster an emerging commitment to sustainable agriculture by ISU, demonstrated by its support for two new positions, a cropping systems specialist, and an organic farming scientist, as well as its interest in sharing the cost of an endowed chair position.
- Finding long-term institutional support is critical. Less than one year of funding remains to locate the means of incorporating the value which Shared Visions has created into existing institutions.

The support of the W.K. Kellogg Foundation for PFI's on-farm research efforts and the community groups of Shared Visions has been extremely valuable over the last several years. The Foundation made a substantial commitment to sustainable agriculture in not only Iowa, but with seventeen other projects across the country that were involved in the Integrated Farming Systems network.

This commitment of the W.K. Kellogg Foundation has been crucial to PFI's growth. And with the continuation of the partnerships the Foundation helped catalyze, the Foundation's investment will continue to pay dividends for years to come.

SHARED VISIONS

farming for better communities

Group Updates

Ag Connect

Bill Beamon, Ag Connect's Director, said the group's statewide expansion is progressing well. Earlier this year Scott McBroom became the Northwest Iowa coordinator. (Scott is based in Mapleton, 712-882-2766.) In June Tim Ennis was hired as the new Southwest Iowa coordinator. (Tim and Bill Beamon are based in Lenox, 515-333-4656.) Plans call for three more offices, the next serving Southeast Iowa.

The first Ag Connect project Shared Visions funded involved surveying landowners in eight Southwest Iowa counties. From these surveys a database was developed. Mr. Beamon noted they use the database every week to develop leads on retiring farmers.

The group's second Shared Visions project, funded last spring, had two parts. One provided partial support for a five-day mediation training session for Scott McBroom and Bill Beamon. They noted in a report that the training was very beneficial and necessary for the Ag Connect program.

The second part helped pay for a board retreat that focused on the group's statewide expansion. Three main goals emerged from the retreat: become better known statewide through successes; become self-sustaining financially; and develop the organizational structure for statewide work.

Ag Connect is drawing on PFI members to serve on their regional boards. John Cowles of Bloomfield is on the Southeast Iowa board and Tom German of Holstein is on the Northwest Iowa board. As well, Mr. Beamon said he would be glad to add any PFI member to their mailing list so they can receive Ag Connect's newsletter.

Audubon Graziers

This group's focus continues to be Management Intensive Grazing (MIG) systems. They also expanded their interests to include forages for other uses, such as hay production and pasture-based farrowing systems, with the project approved last spring. This project also will bring in speakers for presentations, continue the pasture walks and research on grazing, and expand their grazing library. (Donna Bauer offered to loan the resources of their library to PFI members. You can reach Donna at 712-563-4084.)

Group members are beginning to informally advise others on grazing systems. An example is earlier this year

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Jim Bradford talks at a pasture walk on his farm that was co-sponsored by the Audubon Graziers and the Racoon River Watershed project.

five members went to Jim Bradford's farm near Guthrie Center. They split into three groups that each drove around the pasture before separately drawing up nearly identical plans for a MIG grazing system. The Bradford farm was also the site of one of the group's pasture walks this summer, which was done in cooperation with the Racoon River Watershed Project.

Some Audubon Graziers are involved in new local effort to direct market various farm products, including meats. This group, which calls itself Audubon County Family Farms, received a grant from the Leopold Center to develop and distribute a directory of their products. The toll-free number for this group is 1-888-563-9958.

Cattle Feeders' Community Alliance

This group wants to diversify local farms by bringing cattle back to Pocahontas County. They want to raise beef of superior quality and develop arrangements to share the financial rewards among the people involved. A key to success is developing relationships and networks among local cattle feeders, cow-calf producers, lenders, agri-businesses, investors and others.

While there have been delays, the group is staying close to its original plans. These are developing guidelines, selecting participants, placing cattle in local feedlots, hosting tours of the facilities, collecting feedlot and carcass data, and reporting results through informational meetings.

Sixty-two cattle from three local herds were placed in a feedlot in February 1997. This timing was later than planned because the feedlot, which had set empty for years, took longer to recondition than planned. These animals were sent to slaughter at the end of July, when a second feedlot was ready for its first pen of cattle.

A Pocahontas County feedlot before being reconditioned by the Cattle Feeders' Community Alliance.

There have been several lessons so far. Ken Schultes, a veterinarian from Rolfe, reported, "Finding local investors, contrary to what you would think, is probably the easiest part of our project to accomplish. Finding a suitable feedlot with an adequate operator is the next easiest step. By far the largest stepping stone, and one of our main priorities, is the tying together of local feedlots and cow-calf producers."

He went on to note, "The whole idea of retained ownership to most cow-calf producers is very scary. They have to give up a lot of independence, disrupt their cash flow, and in many instances may not be able to afford to retain ownership." He notes difficulties in getting cow-calf producers to change their system of marketing and concludes, "The key to making this project work is to show it works economically, and then cover a large enough geographic

area to find enough interested producers to make it economically viable."

Coalition for Holistic Agricultural Resource Management (CHARM)

This Northeast Iowa group supports its members in their efforts to use Holistic Management (HM) to make decisions. The group includes three non-farming individuals and four farm families. They continue to rotate their monthly meetings between member homes, though they no longer meet during the busy spring and fall.

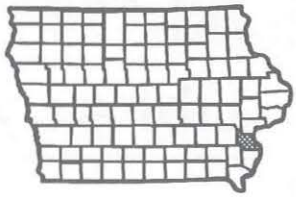
The group's first Shared Visions project was to host an HM educator for a September 1996 financial planning workshop. Their second project, approved last spring, helped cover the costs of an early September one-day bus tour to several Wisconsin farms. This tour is aimed at addressing the group's need to incorporate more outreach to others in their efforts. Additional outreach after the tour will include stories in newsletters and local papers and a poster presentation at the annual PFI winter workshops.

Farm Fresh CSA

This group used its initial project funds from Shared Visions to establish a new CSA in Benton County. This CSA started in 1995 and included four producers. During the CSA's first year these producers pooled and delivered their vegetables to CSA members. However, the producers lived too far from each other and many of their members, making this operating method inefficient.

Subsequently, the group changed its approach and used Farm Fresh CSA as an umbrella organization. The CSA helped with publicity and member recruitment and each producer had their own members. This operating method worked much better. As well, funds from Shared Visions were to be used to develop a common record-keeping system and undertake research on cold frames to extend the growing season.

The group's third project was to establish a new farmers' market in Blairstown that would serve local people and visitors to a popular state park nearby. The idea was to involve local youth in the market, with an alternative function being that the market would be a place to sell excess produce from the CSA producers. However, due to time constraints earlier this year the market was never developed.



Farms Forever

The vision developed by members of this group for its work was "provide quality opportunities for people to work, live, and play through support for owner-operated, diverse, prosperous farms and businesses and a healthy land that people value and support." The group used Shared Visions funding for three projects that were aimed at helping achieve this vision.

The first project was a series of farm tours in 1995 and 1996 that focused on alternative enterprises. About 180 people attended these tours. The second was the development and distribution of a guide to farm and home products of the Louisa County area. This guide included a map of seventeen local operations and descriptions of each. The group distributed the guide widely and had it published in the Wapello newspaper as full-page ad, with the paper giving the group a reduced rate.

The group's final Shared Visions project, which is now being implemented, is developing a collection of resources on alternative farming practices at the Wapello public library. The collection is called the F.A.R.M. Library, which is short for Farming Alternative Resource Materials Library. They are coordinating this project with the Prairie Talk group's organic farming collection at the Solon public library to avoid duplication.

Group members also decided last February that this project will be their last and the

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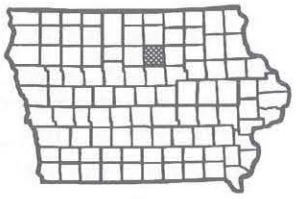
Farming Alternatives Resource Materials Library

group will disband. Members made this choice because they felt they had done some good things together, but their energy was needed elsewhere. A closing committee is overseeing the group's remaining resources during the collection's development. A plan to assure the collection is used was developed and is being implemented. Included in this plan is a celebratory event this coming winter in Wapello highlighting the collection. The Louisa County Soil and Water Conservation District Commissioners have agreed to support the library in the future. If anyone would like a title list for the F.A.R.M Library, call Kathy Dice at 319-729-5905.

Franklin County Rural Development Committee



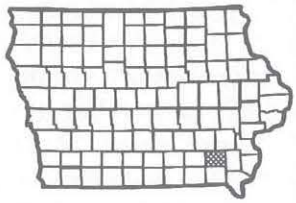
This group's goal is to investigate the feasibility of adding value to local crops and livestock. Their Shared Visions project included activities aimed at this goal. The project also sought to create awareness and demand for value-added products.

The main focus has been high-quality pork products from animals raised without antibiotics. Project activities in 1996 included gathering production information on a swine breed used for these pork products and developing display materials for a booth at the Franklin County fair where the products and other value-added opportunities were promoted.

Another 1996 project component included having the annual fall Hampton Farm-City Banquet focus on value-added production and marketing. The group helped bring Doug Honold, a farmer from Coon Rapids, to the event to be its keynote speaker. Mr. Honold described his experience developing a beef product and getting this product sold through restaurants and grocery stores to the 160 attendees.

Group members are well-connected to other local groups. Examples include the local FFA and Chamber of Commerce. These connections have been valuable, but members have had severe time limitations. This past spring when group leaders tried to get members to choose another project for their remaining Shared Visions funds, the response was low. Group leaders felt that a project was not possible at that point and they decided take a breather from meeting until this fall.

Growing the Future



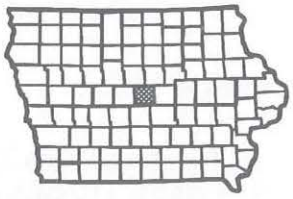
This Jefferson County group has been working with more people and expanding its activities, which is consistent with the group's goal. This goal is to develop cooperation and harmony among Jefferson County residents and collaboratively examine and test ideas, crops, and products that are suited to their county and can help farm families be prosperous economically, socially, and environmentally.

The group is using funds from Shared Visions in three areas: agroforestry; alternative crops; and transitioning land into organic production. The project also includes outreach activities. In 1996 and 1997 they had several field days that were very well attended. With Leopold Center support, Growing the Future and other local groups and agencies held a sustainable agriculture conference in March of 1997 that 250 people attended. These groups also cooperated to publish local newspaper supplements in 1996 and 1997 that described their efforts to develop a more sustainable agriculture in the area. Growing the Future has also brought in speakers for special presentations, the most recent being Bill Heffernan of the University of Missouri.

The group has worked with other local groups to secure additional funding. Last year these groups received a SARE producer grant and another from

the VISION 2020 program for an organic mentoring project. In early 1997 these groups were involved in applying to the Rural Action program, an ISU Extension/Iowa Department of Economic Development effort to stimulate ag-based development in rural Iowa. The application was accepted and the people involved are focusing on value-added opportunities, especially related to organic products.

Magic Beanstalk CSA



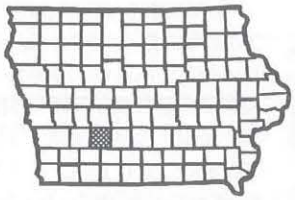
This Ames-area group continues its efforts to create a local food system, build community ties, and expand awareness of the relationships between food, land and people. The CSA in 1997 grew to have 93 households as members, which makes it one of the largest CSA in Iowa. While two farmers grow vegetables for these members, the CSA also links members to producers of pork, beef, chicken, eggs, fruits, turkey, fresh and dried flowers, honey, whole grains, and fiber products.

A July 1997 tour of four farms involved in the CSA drew about 50 people. As well, several educational events were held this summer that brought families to one of the farms to learn about farming and relationships between food, people, land, plants, and wildlife. Members are also volunteering their time to help grow and harvest vegetables.

The group has received two additional grants, one from the Leopold Center and the other from the VISION 2020 program, to expand its work. This expansion includes a new distribution site at a local church, nutrition education and cooking classes, and ties to local churches and social service agencies to involve lower income families in the group's efforts.

The group also recently learned it will be one of five groups from across Iowa to receive an Iowa Best Practices Award from the Stanley Foundation of Muscatine. This award recognizes local, grassroots organizations for work done in the field of sustainable community development.

Neely-Kinyon Farm Committee



This group formed after a 160-acre farm near Greenfield was donated to the Wallace Foundation for Rural Research and Development. This farm, called the Neely-Kinyon Research Farm, was donated for research uses on topics that would help area farms and communities. Since forming the Neely-Kinyon Farm Committee has helped plan this research.

The group's Shared Visions efforts have been with both the on-farm research and community groups network. Their involvement in the on-farm research network gives the group funds for research and their annual field day. This summer's field day drew 325 people. As well, the group's involvement in the on-farm research network helps develop connections with PFI cooperators across the state.

The Neely-Kinyon Farm Committee's involvement in the community groups network has focused on looking for ways the farm can directly benefit their community. Their first Shared Visions project explored value-added options that would support area farm families and communities. While the group identified and implemented strategies and techniques on the farm production side of the value-added picture, they were not as successful on the processing side.

In early 1997 a new group project focusing on increasing community involvement in the Neely-Kinyon farm received Shared Visions funding. Various methods are being used to increase community involvement. Evidence of success are local students and teachers who are using the farm for learning experiences. Topics have included earthworms, water quality, soils, grass and legume identification, and honey production. Staff from USDA-ARS, ISU Extension, USDA-NRCS, and the Iowa Department of Agriculture and Land Stewardship have worked with the students and their teachers on these topics on the farm.

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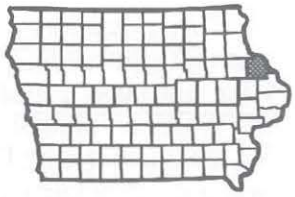
Tri-State Growers Alliance



This group is working to develop cooperation among local growers to expand production skills and local markets. Their interests are in providing their community with healthy food choices while helping producers be self-supporting.

The group's 1996 Shared Visions project had two components. One was starting a new market on the west end of Dubuque. The other was helping local residents learn production skills through field days on farms of group members.

The group's 1997 Shared Visions project also has two parts. One was to continue the west end market the group had started in 1996. Pete Henkels, the coordinator of this part of the project, said the market continues to operate at about the level it had last year. He noted there are seven regular vendors, which is less than 1996. He added that these vendors have more variety in their products and customer traffic continues to be steady.

The second part of their 1997 project involves providing learning experiences on growing vegetables for local residents at a new community garden in Dubuque. Rita Engelken, a group member with excellent gardening and teaching skills, is providing the instruction. The gardens are at Four Mounds, a city park overseen by a community foundation established by the family that donated the land to the city.

Ms. Engelken taught two classes prior to the growing season. She also goes to the gardens every Saturday to help participants, most of whom are over 65 and want a chance to work with the soil. Rita notes that each garden has its own compost bin and that they all look beautiful.

Participants are very enthusiastic about the project. They are surprised at the quantity of vegetables they are getting; many have been able to sell enough to pay for the rental fee and seed. Some are wanting two plots next year because they want to expand. Rita also notes that the experience of a group that learns together through hands-on activities has been wonderful for everyone involved.

The group has undertaken additional activities in 1997, like potlucks and farm/garden tours. Members are also discussing the group's future. Talk has been for members to continue with the open houses and farm/garden tours to maintain contact, but to stop meeting regularly unless a specific need or project idea comes forth.

Prairie Talk

The goal of this Solon area group is to educate their members and others about organic farming practices. Both their 1996 and 1997 Shared Visions projects supported the creation of a collection of videos, books, and audiotapes that are housed at the Solon Public Library and available throughout Iowa via interlibrary loan.

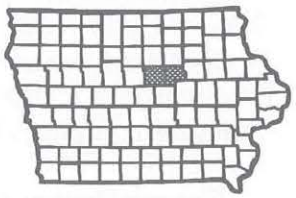
The group's collection includes over 100 titles. Topics include organic field crops, crop rotations and soil fertility, weed control, the transitional phase, insect and pest control, livestock and veterinary, pasture management, and organic practices for lawns, gardens and orchards. This summer the group reported that local use remains high but interlibrary loan usage was falling off. Members are considering options to evaluate the use of the collection as a first step to developing strategies to help increase usage.

The group has also been involved in various other activities. They held an open house in Solon in early March 1996 that around 200 people attended. They have been profiled in a publication titled *The Environmentalist's Guide to the Public Library*, which was published by Libraries for the Future, a non-profit group out of New York. Group members also were on a nationally syndicated radio show called Counter Spin, which originates out of New York and focuses on alternative media.

To request a book, video or audiotape via interlibrary loan from the Prairie Talk collection, contact your librarian. You will need the title and

author of the item you are requesting. People wanting a list of items in the collection are asked to send $2 for copying costs and a self-addressed stamped envelop to Prairie Talk, PO Box 733, Solon, IA 52333. The group also has a website under construction that will list the collection. This website should be ready by November (http://www.leepfrog.com.prairietalk/).

Promised Land Beginning Farmer Group



Members of this group from the Grundy and Hardin County are concerned about the lack of young farmers and the widespread perception that it is nearly impossible to begin farming. They feel helping beginners start has similar benefits to helping small businesses get started. They wanted to use this rationale to involve their communities in providing a broad range of supports for beginning farmers.

They initially spent much energy trying to involve community members in their efforts. However, while they found widespread support, their idea was not successfully implemented. One stumbling block was the lack of time, both of the organizers and members of their community. A lesson learned was that volunteer efforts are not sufficient to run a beginning farmer initiative.

Other challenges were that each member came to the project with different perceptions and skills. Combining these perceptions into a cohesive mission and melding these skills into a smooth working team were difficult challenges. However, group members learned much. They have a much deeper appreciation for the importance of group organization and dynamics. They learned it is important to have a common vision to visit periodically to measure actions against. They understand the difference between vision and mission and the importance of both to success.

Since the group's initial efforts, members have revised their project. They are now developing a guidebook for beginning farmers, which is how they are using their Shared Visions funds. A first draft has been written and reviewed. Revising, publishing, and distributing the guidebook are the group's remaining tasks.

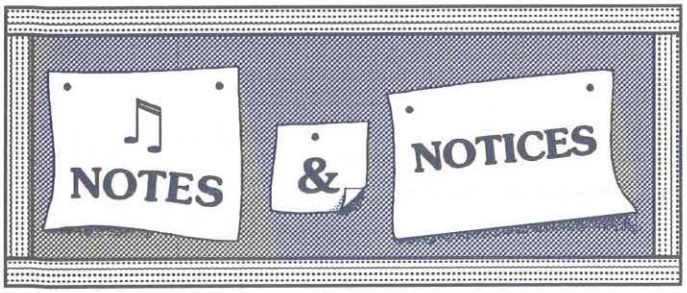
Total Resources Management Services

The group from Carroll County involved in Shared Visions had manure management as its focus. This focus is a result of high concentrations of livestock in their county, with their estimate of the fertility value of manure from this livestock being $5.7 million. They also estimate that 75% to 80% of this manure is mismanaged.

Their initial planning work looked at establishing a manure brokering system. They did a survey of landowners in their county and found an interest from producers looking for manure and potential manure exporters. This interest led to a project application to examine the feasibility of a manure brokering enterprise. The local chapter of Iowa Citizens for Community Improvement expressed concerns about this project because of its potential to help large-scale corporate hog farms. These concerns led the PFI board to require an educational effort aimed at alternative production systems. The group agreed to this requirement.

The manure brokering part of the project involves four farms across Carroll County being used this year as demonstration sites. The Coon Rapids-Bayard and Carroll FFA Chapters manage two sites. An agronomist from West Central Coop is managing a third and a local farmer who has worked with the Carroll County Soil and Water Conservation District on manure management projects is managing the fourth. Information on the economics of the brokering system are being collected, as are data on crop yields.

The education on alternative production systems part of the project included a conference on alternative pork production systems held last February in Carroll. The group also sponsored a trip in early August to ISU's Armstrong Research farm near Atlantic to see and learn about the alternative facilities being used there to produce hogs. These include a Swedish-style farrowing unit and hoop houses for finishing hogs.



Cedar Falls Hosts Wendell Berry, Wes Jackson

Two of America's most notable writers and thinkers on sustainability will appear in Cedar Falls in early October. On Oct. 1-2, the English Department at the University of Northern Iowa will host Kentucky farmer and author Wendell Berry for several talks and readings. Berry's books of essays and poetry include *Farming: A Handbook, The Unsettling of America*, and *Meeting the Expectations of the Land*, which he co-edited with Wes Jackson and Bruce Coleman. For more information about events, contact the English Department at 319-273-2821.

Wes Jackson will be in Cedar Falls Oct. 3-4 in connection with "Conserving and Renewing Community: A Conference on Religion and Environment in the Upper Midwest". Jackson is based at *The Land Institute*, a Salina, KS center for research and education, and he is author of books and essays, including *Rooted in the Land : Essays on Community and Place*, and *Altars of Unhewn Stone: Science and the Earth*. Registration for the entire conference is $25, but Jackson's and Berry's talks can be attended separately ($10 each). There will be no charge for a talk by Paul Gorman of the National Religious partnership for the Environment. For additional information contact St. Luke's Episcopal Church, at 319-277-8520.

Lubbens Earn Cattlemen's Award

PFI members Dave and Lisa Lubben, Monticello, have been recognized by the Iowa Cattlemen's Association for their leadership and good stewardship. Their entry also won the regional competition of the National Cattlemen's Association and will be included in competition for a national award. The Lubben operation includes a 120-unit cow-calf herd, which they maintain with intensive rotational grazing. Dave has documented how rotational grazing has stabilized and revegetated streambanks that were formerly grazed continuously.

Field days at the Lubben farm always include strong cooperation with Extension Service and other information providers. Dave has been an ex-officio member of the Leopold Center Board of Directors, and is currently serving as president of Practical Farmers of Iowa. In his own community, Dave started a marketing club, and he annually organizes an eastern Iowa "Ag Outlook" seminar.

Congratulations to Dave and Lisa on this well-deserved award!

PFI Winter Workshops in Altoona

That's right, the PFI annual Winter Workshops will take place at the Adventureland Inn, in Altoona, a suburb of Des Moines. The dates are Jan. 9 and 10, so mark your calendar and stay tuned for more.

ISU Hires Organic Faculty

Dr. Kathleen Delate is the new ISU Assistant Professor and Organic Specialist in Horticulture and Agronomy. Kathleen had been serving as the Sustainable Agriculture Training Coordinator at the Univerity of Hawaii. She received her training at the University of California, studying under Miguel Altieri, who wrote *Agroecology: The Scientific Basis of Alternative Agriculture.* Her position is a joint appointment in the Horticulture and Agronomy Departments. You can contact her at 515-294-7069 and kdelate@iastate.edu.

Amaranth Conference Marks Progress

On Aug. 8th, The ISU Plant Introduction Station and the Amaranth Institute hosted a one-day conference on grain amaranth. Attendance included people from Mexico, Africa, and across the U.S. A field tour of amaranth accessions at the P.I. Station showed both determinate and nonshattering lines. An amaranth production and marketing guide is

being developed (drafts are available through PFI). A producers' marketing co-operative has been organized and can be reached by calling Phil Sanders, at 308-377-2231 (mobile: 308-249-0350).

♫ For Sale: Pioneer Weigh Wagon

$750. Great tool for on-farm research. Call Ray Stonecypher, 515-398-2417.

♫ For Sale: Pasture Pigs

No subtherapeutic drugs or hormones.

Feeder pigs out of Hamp/Landrace boars. Vaccinated. Have never seen concrete.

Yearling females for great pork chops. Limit fed, so lean and tasty.

Butcher pigs available around Christmas.

Rose Grove Pig Preserve, 515-325-6349. Dave or Mary.

♫ Wanted: Tenant in Wayne Co.

80-100 acres of good crop ground in northern Wayne County. Need renter to crop it sustainably, preferably organically. Please contact Hazel Knolke, 515-285-6750.

♫ Wanted: Specialty Soybean Growers

Tim Daley, a PFI member with Dunn International, would like to talk to PFI members interested in growing specialty soybeans. The soybeans supplied by Dunn International are produced under contract with growers in several states, including Iowa, Illinois, Michigan, Minnesota, Missouri, and Ohio. They contract production for several Iowa State varieties and other proprietary varieties exclusive to Dunn International. They also have a growing need for organic and transitional soybeans. If interested, call Mr. Daley at 1-800-373-3866.

♫ Wanted: New Trees Forever Program Participants

A new statewide program promises to provide positive benefits to Iowa's landscape and water quality. The program, called Trees Forever Rural Initiative, was developed by Trees Forever, a statewide not-for-profit organization founded in 1989.

Trees Forever developed the Rural Initiative program to help control erosion and increase wildlife habitat while reducing non-point source pollution. Trees Forever is looking for individuals to help protect Iowa's water supply. Two ways you can get involved are to 1) host a demonstration site (such as a riparian buffer strip) and 2) help Trees Forever recognize people who are using trees in innovative ways to protect water quality by letting them know about these people.

To become involved or for more information about riparian management, contact: Trees Forever 770 7th Ave. Marion, IA 52302, phone: 319-373-0650 or 1-800-369-1269. When you call, let them know you are a PFI member.

♫ Iowa's Pursuit of Energy Efficiency Conference Oct. 14-15

The Iowa Association for Energy Efficiency will host this event at the Collins Plaza Hotel, in Cedar Rapids. In addition to three keynote speakers, three tracks, with over 35 nationally known presenters, have been scheduled for participants with different interests: residential and small commercial; industrial and large commercial; and renewable and alternative energy. Registration for those not members of the IAEE is $80 per day, or $145 for the two days. For information, call Roy Goettig, 319-388-9651.

♫ Nonprofit Workshop in Des Moines

A Nov. 1 seminar on Major Donor Fundraising and Planned Giving will take place at the Botanical Center in Des Moines. The seminar is the first of several to be held in Iowa by the Washington-based Leadership Toolbox, which is an offshoot of the Social Action and Leadership School for Activitists (SALSA). Funded in part by the W.K. Kellogg Foundation, the cost will be $100 with the Shared Visions program having ten slots available for PFI members, for members of collaborating organizations, and for community groups involved in Shared Visions. For more information on the Leadership

(Continued on next page.)

Toolbox, call Anja Speerforck at 202-234-9382, ext. 244.

♫ 1997 IFGC Annual Meeting Nov. 25

The Iowa Forage and Grasslands Council will hold its annual meeting Tuesday, Nov. 5, at the Airport Holiday Inn, in Des Moines. For conference information, call 800-383-1682.

♫ Request the PFI Member Directory!

Yes, request it. "But I did!" you say. It's true that only by agreeing to be in the Directory yourself do you become eligible to receive it, and over 300 members have done that. The new listing of PFI members is almost ready to go out, but as a cost-saving measure, the PFI board has decided to send the directory just to new members and to those "old" members who let us know they need a new copy. If you received the directory last year, you may not feel you need this year's update.

The Member Directory is 70+ pages of data about the abilities, interests and practices of PFI members. For easy location of information, the book is divided into tables by individual members, by geography, by interests/skills, crops, tillage, fertility, and livestock practices.

Use the form at the bottom of the page to request the Directory. PFI members joining since July, 1996, will receive it automatically if they have already indicated interest in the directory.

NEW SWEDISH SWINE SYSTEMS BULLETIN

Rick Exner

ISU Extension has released Bulletin SA-12, *Swedish Deep-Bedded Group Nursing Systems for Feeder Pig Production,* produced by Marlene Halverson, of the University of Minnesota, Mark Honeyman, Director of ISU Outlying Research Farms, and Mary Adams of the Leopold Center. The 12-page document focuses on what is known in Sweden as the Västgötamodellen approach, which features deep bedding and takes advantage of pigs' natural behavior patterns. Swedish hog producers developed these methods in response to public and governmental pressure on "intensive" systems that are more stressful on animals and require greater use of medications. Like the deep-bedded hoophouse finishing systems becoming popular in Iowa, odor is greatly reduced, and manure partially composts even before leaving the facility.


Sustainable Agriculture

Swine System Options for Iowa

The bulletin describes two principal versions of this alternative approach, the Ljungström version and the Thorstensson version. Ljungström farrows sows in individual pens in a farrowing room and transfers sows and litters to a group nursing room when piglets are 14-20 days old. In the Thorstensson variation, sows farrow within the group room in temporary boxes that are removed when pigs are 7-10 days old.

(Continued on page 18.)

Yes! Send me the PFI Member Directory. I am a PFI member and want to be part of the directory, too.

Name _____ State/Zip Code _____

Town _____ Phone _____

Return this form to: PFI, 2104 Agronomy Hall, ISU, Ames, 50011-1010, or phone your request to: Rick Exner, 515-294-5486 (dnexner@iastate.edu)

ROLLIN' THE COB

Editors' note: Risk management is never far from the minds of those involved in agriculture. If it's not the weather, it's new opportunities to spend money. Our Cob Rollers shared some risk management thoughts this time around. Comments, anyone?

Roger Schlitter – How big a parachute?

The concept of managing risk is certainly not new, but it is one that is getting more and more attention. We live in an increasingly volatile and fast moving world. The pace of change and the magnitude of the potential changes force us to take a more serious approach to managing risk. I will try to look at some of the basic tools in the next few paragraphs.

I work in the world of finance. One of the most basic ways to manage risk is to manage our financial position. Excessive leverage greatly increases the possibility of gain or loss. Many people manage their risk by being conservative about debt. If you

I believe most of risk management is a balancing act.

are comfortable with or fortunate enough to be in this position, many of the other risk management ideas become less necessary. However, in reality, most of us are forced to take on risk to run a business or improve our careers.

I believe most of risk management is a balancing act. We balance our risk by carrying insurance for our buildings and property, for our lives, for our health and for our crops. I think it is always important to remember why we are insuring ourselves or our assets. We are doing so to protect us from those things we cannot control and that could have such a negative impact on our finances that we put our business at risk. If we are properly insured we should always be better off never having to collect on the insurance. This is basic, but many times I see people trying to carry insurance so that if something bad happens, they will really be better off than if nothing happened. This is a waste of your resources and you are betting against insurance companies, not a good thing to be doing. Carry high deductible insurance with high total dollar coverage to lower cost and protect you in the cases where you really need protection.

Farmers can also protect themselves from price risk with futures contracts, options and forward pricing contracts. It is important that you understand what you are doing when you use this type of risk management. Do your own research and be able to clearly tell someone else what you are doing and why it is going to help you. If you cannot do this, stop and do some more learning. Many of the price protection options can actually increase your risk if not understood and used properly.

A basic way to manage risk on the farm is by spreading out your marketing time period to average out swings in prices. Another option is to diversify your crops and explore specialty markets which may come with price guarantees. Be sure you have done your homework and can produce what the market wants, and be able to deliver the quality and quantities specified. By using a variety of crops, you may lessen some production risks, since crop rotations are natural barriers to weed and insect pests. You may also balance out your workload and better utilize your labor and equipment.

We really manage risk every day of our lives. Even when we do nothing we are choosing a type of risk management. Risk management is not something that you have to be an expert to do. You just have to start thinking about it and using the most important tool a farmer has, common sense. The farm population still has more common sense than most other groups of people I come in contact with. Do not underestimate your skills and your ability to manage your business risks.

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." Your response to this column is welcome. Contact the contributors directly or the PFI/Extension coordinators (address on back of newsletter).

Margaret Smith – Risk management for our family

Managing risk requires us to look at some worst-case scenarios for our family and business. If we can envision the toughest situations that might arise, then we can deal with managing those situations. What would a catastrophic illness do to our savings? our business? What about a complete crop failure due to weather?

Our methods of managing risk are straightforward and similar to many farming these days. We carry hail and Federal crop insurance on our row crops. Small grains and pasture are not insured, but we feel that the rotation including these crops results in more consistent corn and soybean yields that follow. Risk is spread across three cash enterprises: corn, soybeans, and cattle. Our work on direct marketing our fed steers and heifers takes the unknown out of the price we will receive. Building a customer base is a slow process, especially for beef, which has become a smaller portion of many Iowans' diets. The addition of a farrow-to-finish hog operation will further spread our income risk.

Tom Frantzen – Watching the cycles

In the August issue of the *Stockman Grass Farmer*, "Al's Obs" covers some important aspects of risk management. He quotes Peter Bernstein's book, "Against The Gods." The two elements of risk management are to know there is a cycle and to have a pretty good idea of where you are in that cycle. Nothing else – no other strategy, no hedging program, no price insurance – comes close to those two simple elements in managing risk. Within the traditional, non-organic markets, this is a sound strategy by my standards.

Ron Rosmann – Risk management through contracting

We try to use a number of tools for risk management on our organic farm. Some of these, such as crop rotations and a wide diversity of crops, forages, and livestock, have been considered to some extent in previous features. This time I would like to consider the use of organic contracts as a risk management tool.

When we decided in 1983, to become organic farmers, organic markets much less contacts for organic crops, were shakey at best here in the Midwest. We had really no idea of how to sell our crops once they were harvested, nor did we know how to obtain some assurance that we could sell next year's crops. Ten years later, that has changed considerably with the organization of Heartland Organic Marketing Coop. Now we have a mechanism where marketing risks could be shared by a group of individuals. Now as a group we can look for markets, try to establish long-term relationships with buyers, work to grow a consistent, high quality product, obtain a fair price, and share in the profits.

If fair, organic contracts should be good for both the buyer and the seller. The highs and lows of the market place can be evened out so that both can obtain stability over time. The buyer is better assured of obtaining a steady supply of needed product. This can allow for quality and consistency issues to be addressed. The seller is better assured of being able to sell products on an on-going basis. Long-term commitment, integrity, and trust all become important "commodities" for both buyer and seller.

Contracts have become an invaluable tool for organic farmers to deal with the age-old problem in agriculture of having no control over prices received at the market place. To be successful, both the buyer and the seller have to be on good economic footing, with the required equity or even contracts can become meaningless.

PFI LIBRARY OPEN FOR BUSINESS

Mark Runquist, Melbourne

One of the most little known benefits of belonging to PFI is access to hundreds of books and videotapes in the virtual PFI library. Each district has its own library collection, but any member can request a resource from any district library. Here are some of the categories in the PFI libraries:

- Alternative Crops and Vegetables
- Agricultural Policy/ Culture
- Equipment

Forages, Grazing & Pasture
Livestock
Farm Management
Soil Tilth
Weed Control

This newsletter will highlight some of the resources in the agricultural policy category.

Agroecology: The Science of Sustainable Agriculture (NE District Library)

This new edition builds on the explosion of research on sustainable agriculture since the late 1980s. By separating myth from reality, Miguel Altieri extracts the key principles of sustainable agriculture and expounds on management systems that "really work." Providing case studies of sustainable rural development in developing countries, he goes beyond a mere description of practices to include data that reveal the socioeconomic and environmental impacts of alternative projects. New emphasis has been placed on such issues as the ecological economics of agriculture, policy changes needed for promoting sustainable agriculture, rural development in the Third World, the role of biodiversity in agriculture, and new research methodologies.

Reviewed by Mark Runquist, highhopes@marshallnet.com

Corral Design Book (NE District Library)

If sorting, handling, and loading stock is a persistent problem for you, you may be interested in this new addition to the PFI Library. It is written by Temple Grandin, assistant professor of animal science at Colorado State University, whose research and designs are increasingly used in stockyards and on farms to minimize animal stress and promote orderly movement of livestock. Additional diagrams and discussion can be found at the Temple Grandin homepage, at http://grandin.com/

Submitted by Tom Frantzen and Rick Exner

To request these or any other publications, contact the district directors. To obtain a printout of the library holdings, please write or call Mark Runquist, 2860 Knapp Avenue, Melbourne, IA 50162 (515) 482-3184 (highhopes@marshallnet.com).

Farmers for the Future (NE District Library)

This book has great practical examples of people who started with nothing but the desire to be a farmer, and made it. It is a good read for anyone who grew up on a farm or still has farm connections. It is especially valuable for those who think they are ready to launch a farming career, or those who are ready to retire from the farm and would like to find a younger successor (related or unrelated) to take over.

Reviewed by G. Johnston, gjohnsto@dsm.mdp.com

Chicken Little, Tomato Sauce and Agriculture: Who Will Produce Tomorrow's Food? (NE District Library)

This is an excellent text for understanding how the current food production system really operates and where it is heading. We have a system of agriculture based on diminishing returns. In other words, it takes more energy to produce our food than our food produces – almost 10 times more. If you think the endlessly increasing use of technology will solve our world's hunger problems, Joan Dye Gussow will open your eyes. She offers not only a chilling prospect for the future, but also the possibility that forewarned is forearmed.

Reviewed by Ilene Rosoff in the Woman Source Catalog & Review ❦

COST-SHARE OPPORTUNITIES

Katia Milius, Plainfield

The USDA's NRCS and Farm Service Agency have made available conservation funds under the new EQIP program. This can be a bonanza for graziers and others desiring to adopt sustainable practices. If you reside in one of the districts created in Iowa to administer EQIP, and the first sign-up has not used all the funds available, then you can submit a plan to your district conservationist. Each

(Continued on next page.)

district has different priorities, which may or may not include what you're interested in.

Depending on your district, here are items that EQIP may pick up 5-75 percent of the cost for: fencing and water pipelines for planned grazing systems, pasture and hayland management (in our case frost seeding, overseeding, brush management, and application of lime and rock phosphate),tree planting, windbreaks, contour strip cropping, conservation covers, grasses and legumes in rotation, and organic crop production and certification. If your contract is accepted by the big guys in Des Moines (the first review of all districts occurred in July), you create a timetable and conservation plan for your farm – the signed contract extends from 1997 to 2002.

In certain districts 50 percent of all funds are earmarked specifically for livestock operations. (This does not mean a confinement system for 10,000 head.) If you are contemplating changes or additions, especially in grazing and seeding, or you need help or funds to create a paddock water system, give this EQIP program a look. ❦

Editors' note: EQIP is one of several current USDA cost-share programs that may help some sustainable farmers. For example, Tom and Irene Frantzen, Alta Vista, used the CRP continuous signup this year to establish a wooded shelterbelt. But others have pointed out that it's not always possible to qualify for these programs. If you don't farm in an area where grazing is a program priority, for instance, EQIP will not help you with grazing. What do you think? Do you know of successes or nightmares with these programs? We'd like to hear.

PFI PROFILES: D&C Wilson Farms Colin and Carla Wilson Dan and Lorna Wilson

Jenny Kendall

Paullina, Northwest Iowa, PFI District 1

When you attend a PFI Field Day at the Wilsons, you immediately understand what is meant by 'family farm.' You are guided to park past neat outbuildings and a green alfalfa field where black and white sows carefully herd their piglets away from the you. Your guide or guides are some of the Wilson children, maybe Levi, or perhaps Becky, Caleb or Jacob, who belong to the Colin and Carla Wilson clan. Or, you may get directions to the porkburger lunch from one of their cousins – Robbin, April, Torray, Faye, or Jaron, who belong to Dan and Lorna Wilson.

Left to right: Caleb, Colin, Becky, Carla, Levi, and Jacob Wilson.

Left to right, front to back: Jaron, April, Torray, Dan, Faye, Lorna, and Robbin Wilson.

By having separate livestock operations and sharing cropping equipment, they will be able to bring in those kids who want to participate, and spread the high cost of machinery over more acres.

Background Colin has been farming in a successful cooperative partnership with his brother Dan for over 20 years. The brothers come by their innovative approaches to farming honestly. Their parents, Ernest and Beth, began pasture farrowing hogs 30 years ago when all of the interest was turning to confinement rearing.

Hogs are definitely the mainstay operation for the Wilsons. Much of their on-farm research has involved their continuing work with the Swedish deep-bedded farrowing and nursery system. They still pasture farrow, with the pastures functioning as part of a three-year crop rotation that includes pasture, corn, and barley. All their corn is marketed through their own hogs. In addition, they have grown seed beans for Pioneer for 6 years.

This is a time of change for the Wilsons, as they are in the process of deciding how best to manage their operations in order to make way for the next generations. Kids in both families have shown a strong interest in farming.

The brothers are looking at dividing up the livestock parts of the operation and diversifying more in the livestock area. By having separate livestock operations and sharing cropping equipment, they will be able to bring in those kids who want to participate, and spread the high cost of machinery over more acres.

Fortunately, Colin and Dan have a successful model to work from for this transition. Ernest started them out on a share of the farm livestock, their labor earning a share of the hogs, which then enabled them to buy into the cropping enterprise.

Summary of Wilson Enterprise Farm Data

Category	Description
Farm Size	800 acres, corn, soybeans, barley, hay, farrow 3000 hogs/year
Equipment	Two tractors for cropping and two for the livestock, 150 horse and 100 horse
Seed varieties and seeding rates	8-10 corn varieties and 3 bean varieties each year, grow seed beans for Pioneer
Labor & Mgmt. practices	Family-managed. Farm in a cooperative partnership with brother Dan and Lorna Wilson, work with a neighbor who custom finishes their hogs
Livestock mgmt. practices	Swedish-style, deep-bedded farrowing and nursery, hoophouse for breeding and gestating sows, pasture farrowing, custom finished by a neighbor who has similar facilities
Marketing	Corn and barley is marketed through the hogs, soybeans to Pioneer who determines premiums, hogs sold to IBP.
Agric. Organizations	Currently active in Practical Farmers of Iowa, has been a Soil Conservation commissioner and on Farm Bureau board
Weed Mgmt. practices	Ridge-tilling, crop rotation
Insect Mgmt practices	Crop rotation
Disease Mgmt practices	Deep-bedded farrowing, provide plastic boots to visitors to swine facilities, use antibiotics for finishing hogs, use antibiotics for sows or starters only when necessary
Soil Fertility Mgmt. practices	Soil test every 2 years, apply nitrogen to corn based on results, using their own determined levels, some N for oats and barley, manure.
Crop yields	135-155. 40-50 for beans, barley 60-70
Profitability indicators	As members of Iowa Farm Business Assn., do comparative analysis each year

The Wilsons became involved with on-farm research in order to answer questions they had about their operation. For example, "We picked our barley vs. corn feeding trial to find out the overall economic impact of feeding barley to growing/finishing pigs because we wanted to use barley in our rotation to replace oats, which hadn't been working very well economically. We knew that in order for barley to work it needed to be a good and economical feed for our hogs."

Integrated parts of Wilson Family Farm Sustainable farming is just one of several integrated parts of Wilson family life. Church, missions, evangelism and home schooling are other important aspects. "Our desire", says Carla, "is to have every area of our lives grow out of a love relationship with Jesus Christ".

"As I am learning to delight myself in the Lord", says Colin, "I am seeing my farm in a whole new light, appreciating its beauty and being thankful for its bounty instead of just worrying about making an adequate income. We want our farm to provide a good place for our family to grow and learn and to minister to others less fortunate than us".

All of Colin and Carla's children were adopted from foreign countries at an older age. Levi comments "Instead of being lonely, we have plenty of people to belong to and play with, who understand our past experiences and memories."

The Wilson children not only help with outdoor chores on the farm but are also learning how to do farm records on the computer. When asked why he wants to be a farmer, Caleb replies "Hogs, especially Tamworths, are such beautiful animals and fun to raise and seem to make good money."

Impact of Sustainable Farming. "We look at sustainable farming as an attitude of humility and cooperation with God, where we are willing to do more than just benefit ourselves. It is a system where we are able to work with God's creation instead of against it, where we try to look at God's long term picture and not just our short term gain. We have found that our sustainable practices have helped in the profitability and health of our farm, as well as providing an opportunity for future generations to farm."

"The single most important benefit in doing on-farm research with PFI is the sharing with other farmers and researchers."

Practical Farmers of Iowa Dan and Lorna have been active members of Practical Farmers of Iowa since 1989, while Colin and Carla joined in 1995. Colin is currently on the PFI board. Says Colin, "The single most important benefit in doing on-farm research with PFI is the sharing with other farmers and researchers. There is so much information out there it is impossible to take it all in, but by sharing with other people we have access to a lot of information. Being involved with PFI shows that as farmers, we can be profitable without being destructive. PFI is a group of people that really care about what is happening to our farms, our families, and our communities and how we will all survive in the future."

(Swedish Hogs, continued from page 12.)

The bulletin, which includes photos and a floor diagram, covers: facilities and equipment; genetics; veterinary needs in Sweden; feed; labor requirements; mating, insemination and conception; gestation; farrowing; lactation; weaning and growing; cleaning, straw-bed management, and manure handling; ventilation; tips for getting started; and additional reading. The SA-12 bulletin also credits several North American producers using variations of the Swedish system, notably PFI members Colin and Carla Wilson and Dan and Lorna Wilson, from Paullina.

This bulletin is a comprehensive introduction to the Swedish approach to swine production. It doesn't try to be exhaustive, how-to instructions, but it does present an outlook on pigs that will be new to many Iowa farmers. The bulletin SA-12 is available for $0.75. Call 515-294-5247, or write ISU Publications Distribution, 119 Kooser Dr., Ames, IA, 50011.

PFI 1996 ON-FARM TRIAL RESULTS - III

(Editors' note: Results of PFI 1996 on-farm research are appearing in *The Practical Farmer* over the course of this year instead of just the winter issue. We hope this gives readers more chance to absorb these cooperator reports. This issue focuses on grazing and weed management. Matt and Diana Stewart share their observations on dairying in 1996. Weed management trials are reported from Tom and Irene Frantzen and from Dick and Sharon Thompson.)

Learning How to Use Management-Intensive Grazing in Our Dairy Operation

Matt and Diana Stewart, Oelwein

We have completed our third year of transition from traditional, confinement dairy to a grass-based system. Our farm is located in Northeast Iowa on gently rolling Floyd-Kenyon loam soils. All of our pasture had been in corn-hay rotation for the past thirty years. Our challenges have been never-ending up until this point. We would like to outline some of our ideas that might help others interested in a similar undertaking.

Helping the Seedbank Conversion of cropland to productive pasture and pasture renovation are major stumbling blocks facing all graziers. We were in total shock in late April at the sparsity of plants in our third-year pastures. We had tremendous success establishing thick clover pastures in 1994 using 1 lb red clover, 1 lb ladino clover, 1 lb canarygrass and 5 lbs bromegrass. The grasses were present throughout but thin. This spring the clovers were gone and the grasses were still thin. By the first of May, new clover seedlings were growing, but they were months away from becoming feed.

Our only solution was to cover 10 acres a day with 80 cows, which reduced our rest period to 6-7 days. We were still supplementing with corn silage until May 20. This "hoof and tooth" treatment successfully thickened our grasses and encouraged new clover seedlings – at the expense of total tonnage produced. We were not able to harvest any pasture for winter feed until August 1. In fact, ten acres that was intended for haying in late June had to be grazed (even though it was waist high) to slow up our rotation. The week that the cows spent strip grazing that hayfield allowed our pastures to progress just enough that our feed needs went from 5 acres per day to less than 2 acres for 95 cows.

How could this pasture density problem have been avoided? I now believe, through my own experiences and after witnessing similar clover/grass imbalances in the efforts of others, that our problem probably stems from our method of establishment. Most new pastures are started in the same way that we have learned to establish hayfields; cover crop or direct seeding, a cutting in July, and cutting or grazing late in the summer. This works well for legumes but not grasses. In

This "hoof and tooth" treatment successfully thickened our grasses and encouraged new clover seedlings – at the expense of total tonnage produced.

contrast, if I were starting a new lawn, I would be mowing my new seedlings every week or two to increase the density of my grass stands. This could be accomplished with mowing or grazing or a combination of the two. If this method is too harsh on the legume seedlings, frost seeding can easily add legumes back into the pasture. It's a lot easier to successfully frost seed legumes than grasses. We lost at least a month of grass this year because of all the sunshine that was wasted on bare ground.

On the topic of frost seeding, we have seen many pastures that, in years 3-5, are suffering from lack of nitrogen caused by a lack of legumes. It appears that it might take 5-10 years to gain a sufficient seedbank to maintain an even clover stand in rotated pasture. By the time one realizes that

It is important that anyone involved in the financial analysis of a dairy in transition like ours realize that total net worth may not be a reliable indicator of financial health. In fact, we are trying to avoid replacing our amount of annual depreciation.

frost seeding was necessary, it is too late. One to two pounds of a mixture of red and ladino clover spun on top of the ground in March may be the best insurance a new grass farmer can buy.

Seedbanks created and stimulated through managed intensive grazing (MIG) provided increased profitability to our farm this year. Two twenty-acre fields, side by side, had been seeded to alfalfa and orchardgrass in 1993. When we started MIG in 1994, one field became pasture and the other was left a hayfield and always grazed off in the fall. The spring of 1996, we experienced total winterkill of orchardgrass. By May 2, it was obvious that the hayfield must be plowed. But the orchardgrass in the pasture had reseeded; hundreds of new seedlings had taken the place of each dead clump of orchardgrass. In August of this year, when grain and protein prices were at record levels, this pasture was producing enough feed to support 35,000 lbs of Holstein heifers and dry cows per acre per day. The yearling heifers were later weighed and had been gaining 1.86 lb/day (see below).

Mineral Nutrition on Grass Mineral supplementation to MIG heifers and lactating dairy cows is very much undetermined. Our heifers over 400 lbs receive no grain while on pasture. Every week or so they are in a paddock that contains a trace mineral salt block. Reproductive performance of this group has been satisfactory.

Nutritionists had advised us to balance the needs of lactating dairy cows on grass as if the cows were consuming this same feed as hay and using book values or testing the harvested pasture hay and using those figures. We decided to drop the quantity of supplemental mineral until we saw a problem.

To our surprise, through the heat of 1995 we had reasonably good conception with very little added mineral. The problem did show up in December, when we started breeding for fall, 1996 calving. Out of 40 breedings of milking cows, we achieved 3 pregnancies. The mineral level was increased in January, and conception rates improved immediately. This summer we again decreased the mineral in the grain mix and have a good pregnancy rate for spring 1997 calvings. Pasture clippings taken this fall seem to have pinpointed our problem.

Two separate samples taken from different types of pasture, both in the proper stage of maturity for grazing, showed phosphorus levels of 0.43% on a dry matter basis. This compares to 0.3% in high quality hay. This significant difference would easily have affected conception. Milk protein has also been linked to phosphorus levels in rations; longtime graziers had told me that milk protein was not depressed when cows went to pasture in spring. (Milk fat levels are usually depressed 0.2-0.3%.)

This experience led to our next learning experience. A New Zealand consultant once was quoted that the difference between a good and poor dairyman in his country is about two weeks. Our fall calving period this year was shifted backward 4 weeks by the problems we had in December last year. These cows were still ready to be dried up on August 1. Our "low milk" period was thus 10 weeks long instead of only six weeks. We calved almost all the cows in confinement, not just the tailenders as planned. These late calving cows do not start out as well or return to breeding condition as fast as those that calve on pasture. Most of these will probably have to slide back into the spring calving season or be culled. Many of the labor savings are not available when we are still calving the first week of December.

How Much Grass? There was a time when we envisioned converting to a farm that was 100% grass. Today we are satisfied that 380 acres of grass is not what is best for Matt and Diana Stewart and family. For starters, we would be required to maintain a larger herd, and that's more cattle than I want to care for in the winter. We instead are

moving toward converting the remaining 160 acres of farmland into a C-S-C-O-H and a C-O-H rotation. The row crops can be custom farmed for us and supply all our feed and bedding needs.

Our only shortfall this year was in forage needs, and improving pasture production should solve this problem. Dick Thompson has shown the benefit of a "fast" crop rotation that integrates hay and a variety of other crops. We have already appreciated the abundance of straw and oats versus feeding more corn and hoping to get cornstalks baled during a late fall. I question whether most Midwest dairymen, already locked into a confinement dairy, would have deep enough pockets to switch to a total grass operation. I also believe that we have the ability to be more efficient with our cycling of nutrients and use of all energy sources.

Finally, financially, the figures are not all in yet for 1996, but it appears that we will have good debt reduction for the third year in a row. It is important that anyone involved in the financial analysis of a dairy in transition like ours realize that total net worth may not be a reliable indicator of financial health. In fact, we are trying to avoid replacing our amount of annual depreciation. We would be more than happy to visit in greater detail with anyone concerning financial expectations of transitional dairy farms.

Gaining on Grass Our second trial was to conduct a rate of gain study using yearling Holstein heifers. A leading dairy nutritional consultant, reporting on a rotational grazing study that he was involved in two years ago, stated that sufficient gains should not be expected without concentrate supplementation. Other trials have been seriously flawed – inexperienced graziers, lack of sufficient pasture, etc. We attempted to demonstrate that knowledgeable graziers could experience acceptable gains under normal farm conditions.

We attempted to demonstrate that knowledgeable graziers could experience acceptable gains under normal farm conditions.

Six yearling heifers were "gate sorted" off a larger group on June 3. These heifers had been on pasture for a month. Their beginning weight was 586 lbs. Ninety-nine days later they weighed 770 lbs, which calculates to an average daily gain (ADG) of 1.86 lbs per day. An ADG of 1.75 lbs is considered very good. For the first half of the trial they were on the home farm and often used as a follower herd or to clean up an area the milking herd found difficult to graze. On July 30, they were moved to the other farm and co-mingled with a group of larger heifers. For most of the trial they were on less than ideal pastures or in a situation that we considered overstocked. We plan on repeating this trial in 1997.

Weed Management

The wet spring weather in 1996 confounded more than one weed management plan. Tom and Irene Frantzen, New Hampton, finally planted ridge-till soybeans June 14 after clearing the field of broadleafed weeds with an application of 2,4-D.

(Continued on next page.)

TABLE 4. SEQUENCE OF TREATMENTS IN THOMPSON WEED MGT. TRIAL

TREATMENT NO.	BASIC TILLAGE	RYE COVER CROP ON RIDGE	RYE SHREDDED	ROTARY HOE	NIGHT PLANTING	EXTRA BIG RIDGE AT LAYBY
1	DISK	–	–	–	–	–
3	RIDGE-TILL	–	–	–	–	–
2	"	+	–	–	–	–
4	"	+	+	–	–	–
5	"	+	+		–	–
6	"	+	+	+	+	–
7	"	+	+	+	–	+

Table 5. MULTIPLE-TREATMENT WEED MANAGEMENT TRIALS

				TREATMENT "A"				
COOPERATOR	CROP	PREVIOUS CROP	YIELD SIGNIFI-CANCE	DESCRIPTION	YIELD (bu. or T)	STAT.	TRT COSTS	$ BENEFIT
FRANTZEN	CORN	SOY-BEANS	*	FRONTIER AT PLANTING	153.0	a	$5.49	$9.95
FRANTZEN	SOYBEANS	CORN	N.S.	PLANTER HERBICIDE	51.1	a	$17.31	$0.00
THOMPSON	SOYBEANS	CORN	*	DISK	52.0	c	$11.71	$0.00
				BROADLEAFS:	373	a		
				SHRED RYE COVER + RIDGE TILLAGE	52.8	abc	$16.55	–$4.83
				BROADLEAFS:	134	b		

They compared planting with a band of Frontier® and without (Table 5). The whole field was later cultivated twice. Broadleafed weeds were only present at all at one end of the field, and there was no difference in soybean yields.

Following up on reports that some herbicides have resulted in crop damage, the Frantzens also carried out a three-way trial in ridge tillage comparing: 1) mechanical-only weed control; 2) Accent®/ atrazine applied at cultivation; and 3) Frontier® banded at planting (Table 5). In this trial, Tom observed no crop stunting. The two herbicide treatments had fewer broadleafed weeds and grasses than the mechanical control, and the Frontier treatment yielded significantly better than the no-herbicide control treatment, more than paying the cost of the herbicide.

Richard and Sharon Thompson, Boone, evaluated seven different weed management combinations in soybeans (Table 5). One treatment consisted of planting into disked ground. The others built upon the basic ridge-till planting with additions

MULTIPLE-TREATMENT WEED MANAGEMENT TRIALS

TREATMENT "B"					TREATMENT "C"					
DESCRIPTION	YIELD (bu. or T)	STAT.	TRT COSTS	$ BENEFIT	DESCRIPTION	YIELD (bu. or T)	STAT.	TRT COSTS	$ BENEFIT	OVERALL COMMENTS
ACCENT/ ATRAZINE/ 1 GAL 28% N AT CULTI-VATION	150.7	ab	$9.83	($9.83)	CONTROL	146.8	b	$0.00	$0.00	HERBICIDE TRTS HAD SIGNIFICANTLY FEWER BROADLEAFED WEEDS & GRASS
NO PLANTER HERBICIDE	51.9	a	$11.65	$5.66						BOTH TRTS RECEIVED PREPLANT 2,4-D AND 2 CULTIVATIONS. NEGLIGIBLE BROADLEAFS
RIDGE-TILL (UNRIDGED)	52.8	bc	$0.00	$11.71	RYE + R.T.	53.1	abc	$9.09	$2.62	
BROAD-LEAFS:	136	b			BROAD-LEAFS:	132	b			
HOE + R.T. + RYE + SHRED	54.1	ab	$22.03	–$5.04	R.T. + RIDGED AT 2ND CULTIVA-TION + RYE SHRED + HOE	54.2	a	$22.03	–$4.65	
BROAD-LEAFS:	59	c			BROAD-LEAFS:	51	c			
DARK + R.T. + RYE + SHRED + HOE	54.0	ab	$22.03	–$5.16						
BROAD-LEAFS:	71	bc								

of cover crop, rotary hoeing, extra ridging at last cultivation, and planting in the dark. Table 4 shows how the treatments added onto one another. The disk treatment did not yield as well as most others and it contained more broadleafed weeds than the other treatments. The most profitable system was "plain vanilla" ridge tillage, although adding the rotary hoe, rye cover crop, and vigorous ridging to basic ridge-till both increased soybean yield and reduced broadleafed weeds.

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FOOTPRINTS OF A GRASS FARMER

Experiences and Observations '97

Tom Frantzen, Alta Vista

One of baseball's famous players and coaches, Casey Stengel, once said, "You can observe a lot usually by just watching!" I have had some interesting observations this year that I want to share with any of you "watchers."

We removed a fence and joined a parcel of land that we recently purchased with our own property. Both fields had nearly identical cropping histories. Both had similar weed pressure. The history of tillage practices was very different, however. The purchased land was moldboard plowed at least every other year for 20 years. Our side of the fence was ridge tilled since 1984. Both sides grew corn last year and were ridged on second cultivation. This year the combined field was ridge-planted into soybeans. Although we are phasing out chemical use, this field had our usual burndown plus row banded herbicides applied.

While the beans look good on both sides of the old fence row, a dramatic difference is apparent in the weed control. Our side shows heavy foxtail pressure just held back with herbicides and three cultivations. The beans on the purchased land are almost weed free! What does this observation tell us crop watchers?

I see weeds responding to management practices. Thirteen years of corn/bean ridge-till entices weeds that can adapt to that type of cultural practice. Late emerging annual grasses, plants that miss the burndown treatment, or perennials that spread by rhizomes are examples of weeds that build population with this practice.

The utilization of diverse strategies can improve performance in our operations. Careful observations make for better management. Monitoring these strategies should make our operations more sustainable.

Thirteen years of corn/bean ridge-till entices weeds that can adapt to that type of cultural practice.

Why are so few weeds growing on the ridge-planted side that was plowed so often? Here, ridge planting disrupted the frequent plowing and effectively reduced weed pressure. Two passes with the heavy ridge-till cultivator was another "surprise" for the weeds. The planter and cultivator were effective cultural practices for weeds that expected to be plowed.

This observation reinforces my belief that rotation of cropping practices is as important as rotation of crops. Repeated application of single techniques encourages weeds to build populations that evade those techniques.

I see the same principles applying to pasture management. Any rigid rotation schedule will encourage the presence of plants that can accept that grazing schedule. If the goal is to have biological diversity in pastures, the management practices must be supportive.

For example, changing the rest periods from rather short (3 weeks) to full blown rest (8 weeks) will encourage or discourage certain species. Knowing the desired plants and planning the rest periods around their needs is a proven strategy. However, that practice requires a fair sum of plant knowledge and a specific grazing plan.

A more haphazard but more workable (who has enough time?) management plan would be to "rotate" the length of rest periods. Begin each spring in a different paddock. Allow different paddocks to have extended rest. Be willing, in riparian areas, to (if at all possible) rest some segments for a full year. This system requires less specific knowledge and less management time. It will encourage more diversity than a rigid grazing schedule.

The utilization of diverse strategies can improve performance in our operations. Careful observations make for better management. Monitoring these strategies should make our operations more sustainable.

FROM THE KITCHEN

Marj Stonecypher, 1321 March Ave.
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Crops are looking good. Hay needs cutting again. Ray is cleaning cattle yards and I've been chopping dock, mowing lawn, weeding my flower garden and putting in flowers. Haven't had much time to ride my horses this summer, trying to do that too. Where has the summer gone?????

Since the gardens are overflowing with zucchini, here's a good zucchini cake recipe, better than the one I included in 1992.

CHOCOLATE ZUCCHINI CAKE

1 cup margarine or butter, softened
½ cup sour milk *
1½ cups sugar
2½ cups all-purpose flour
2 eggs
1 tsp. baking soda
1 tsp. vanilla
½ tsp. baking powder
¼ cup unsweetened cocoa powder
2 cups finely shredded zucch
½ tsp. ground cinnamon
Almond Butter Frosting

Beat margarine or butter for 30 seconds, medium speed. Gradually beat in sugar. Add eggs and vanilla; beat well; add cocoa powder and cinnamon at low speed. Combine flour, baking soda and baking powder; add alternately with sour milk to mixture. Stir in zucchini. Turn into two 8 x 1½-inch or 9 x 1½-inch round baking pans, greased and lightly floured. Bake 30-35 minutes. Cool thoroughly in pans on cooling racks. Remove from pans. I used 9 x 13-inch pan and left in pan.

*Sour milk-1½ tsp. vinegar in glass cup; add milk to equal ½ cup.

ALMOND BUTTER FROSTING

1/3 cup butter
3½ cups powdered sugar
¼ tsp. almond extract
3 T. milk

Beat butter till fluffy. Gradually add 2 cups sifted powdered sugar, beating well. Slowly beat in milk and almond extract. Slowly beat in rest of powdered sugar. Add additional milk, if necessary to reach spreading consistency. Makes enough frosting for sides and top of 1 layer or pan cake.

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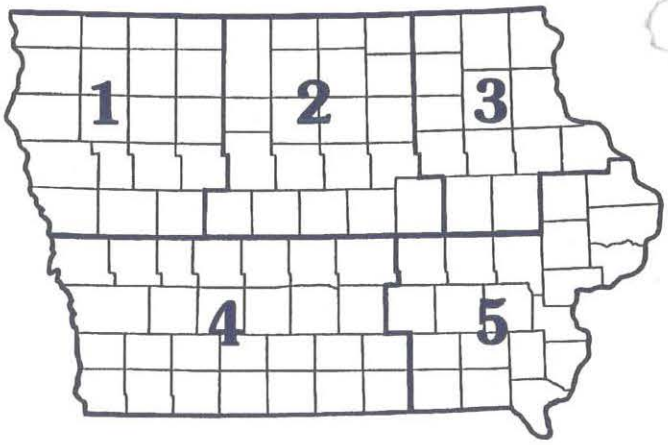

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