

# the Practical Farmer

Practical Farmers of Iowa Newsletter

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## THINKING ABOUT SUCCESS

Vic Madsen, Jr., Audubon

This is the time of the year when the youngsters head back to school. They usually have a pretty good idea of what to expect, and the challenge of the new year is exciting.

Now is also a good time for the rest of us to start looking ahead to 1994. Yes, I know that many PFI members have been hammered by the weather this year. Perhaps those farmers who have, even more than the rest of us, need to try to leave the stress of spring and summer 1993 behind and look ahead.

It is interesting that the newspapers like to tell horror stories. For some reason, success stories aren't as appealing. We are starting to hear some 1993 success stories from different parts of the state. For example:

1. One farmer added 100 feeder lambs to utilize some extra forage. The lambs are growing and the market is going up.

**“The first farm is working on diversity, the second is frugal, and the third is flexible. A farm that is able to combine these three traits should be able to increase its stability and the ability to handle difficult weather and markets.”**

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2. Two brothers ridge-till planted a good sized acreage of soybeans with cash-flow expenses of just over \$12.00 per acres plus fuel. Home raised seed beans and banded herbicides made it possible.
3. Management intensive grazing is giving another PFI member excellent gains with stocker cattle. Later this year the cattle may graze oat stubble or eat corn silage depending on the fall.

These three farms are examples of what I feel are the three basics of a sustainable farm. The first farm is working on diversity, the second is frugal, and the third is flexible. A farm that is able to combine these three traits should be able to increase its stability and the ability to handle difficult weather and markets.

There are many more success stories. If you know of one, no matter what size, we would appreciate you dropping a note to Rick or Gary at 2104 Agronomy. We don't know what we'll do with them yet, but it will be fun as we all think ahead to 1994 and beyond. ♡

## DEALING WITH STRESS

Jerry DeWitt, Director, ISU Extension to Agriculture

I would like to tell you I hope we've seen it all already this year. I'm afraid, however, that in spite of the wet spring, delayed planting, replantings, flooding, hail and tornadoes we still have to face the fall and the likelihood of frost damage on the delayed crop.

Things like this tend to cause stress among all of us in agriculture. As we approach the fall harvest and we see the quality and quantity of our crops, plus attempt to dodge any early frost, I'm sure the stress levels will be rising. Let's keep this in mind as we work on our farm, share with our spouses, and talk to our children. Everyone in the family – not just you – will be facing some increased stresses. Stress is like the common cold. It's fairly evenly distributed across the population, easy to catch, and pretty contagious. Be prepared to deal with it.

What can you do about it? The new Iowa State University Iowa Concerns Hotline is available to help

you. Iowa Concerns is a hotline staffed by farmers and others who are really good listeners. They'll talk with you about your financial pinches, or problems in your daily life or family. Although our staff won't have all the answers, we'll be able to do a lot of listening and possibly make some referrals.

The hotline is a toll free (no cost to you) service at 1-800-447-1985. It runs from 8:00 in the morning until 8:00 in the evening Monday through Friday and also has been expanded from 9:00 a.m. to 4:00 p.m. on Saturday.

No matter what type of problem you are facing, Iowa Concerns Hotline may be a first step in starting to talk through it. This hotline is not only for you but is also for your spouse, any of your children, and your neighbors. Spread the word. We'll listen. ♡

## NEW COLLABORATIVE EFFORT ON FARMING AND COMMUNITIES

Practical Farmers of Iowa recently received a grant from the W.K. Kellogg Foundation of Battle Creek, Michigan, to undertake a new project in community-based agriculture. Supported by a four-year \$729,074 grant, the effort will be a collaborative one involving PFI, ISU Extension, and the Leopold Center for Sustainable Agriculture. The project's purpose is to form local groups that will encourage farming systems that are productive, profitable, environmentally-sound, and supportive of rural communities.

"This project will create an environment where sustainable agriculture is encouraged," said Vic Madsen, Jr., PFI's current president, at the June board meeting. "We will continue to focus on developing skills with farming practices that are profitable and environmentally-sound, which means we will work with most members as we have in the past. But at the same time we will begin to explore ways to work more from within our home communities."

The project began from concerns of the PFI board about the changes happening in the countryside around them and in their rural communities. The difficult part was finding a way to try to address these

changes. As former board member Allyn Hagensick noted, "People realize that problems exist in rural Iowa, but the real problem is figuring out what to do."

Subsequent discussions by the Board shaped the project. Vic Madsen, Jr., commented, "The most progress toward change can be made with others one has personal relationships with," and Tom Frantzen noted the importance of involving members of the local community. Comments like these and a desire for local support groups for people wanting to farm differently led to the focus on local groups as a key element of the project.

Other project elements came from similar ideas. For example, the desire to emphasize people working together was expressed in Ron Rosmann saying, "PFI is about more than practices; PFI is about values and people," and Vic Madsen, Jr., noting that "What sustainable agriculture has going for it is that it puts people into agriculture."

Input from leaders in ISU Extension and the Leopold Center helped to work these basic elements into a project that has the potential to make a difference in many rural communities. While an implementation team is working to clarify roles and responsibilities of the collaborating organizations, some basic elements of the project are established.

**1. Emphasis will be placed on working with people at the community or neighborhood level on topics they identify as important.**

This emphasis came from the strong conviction of the PFI board that top down approaches to problems seldom work. Solutions need to come from the inside

out. They need to originate from people living in rural communities.

**2. Both farmers and town people will be sought as members of local groups.**

*The project began from concerns of the PFI board about the changes happening in the countryside around them and in their rural communities.*

Tom Frantzen, PFI's board president during the proposal's development, captured the importance of involving both farmers and town people by saying, "We need to learn to need each other." While this element is an important

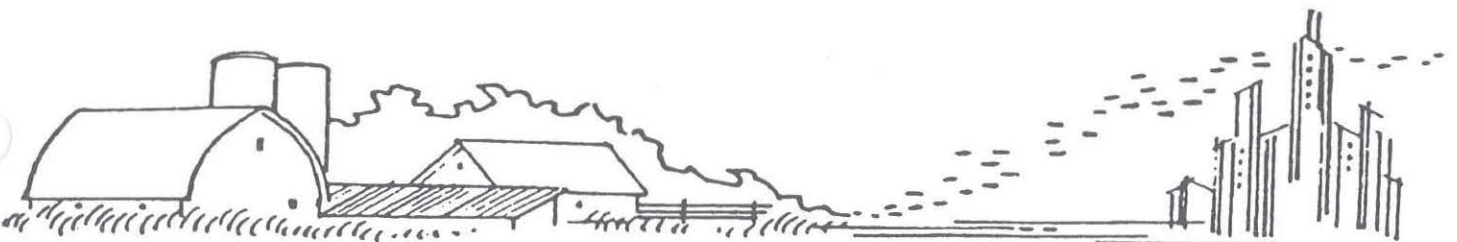
one, it is also the most intimidating aspect of the new effort. People generally understand that the futures of farm families and town people are linked, but there is not much experience in working together.

**3. Group activities will be directed toward specific projects developed by each group based on their needs.**

Some projects will likely test ideas that will put money into farmers' pockets while protecting the environment. However, diversity in the projects is desired, and they may focus on things like adding value locally to items produced on area farms or substituting local inputs for those coming from outside the community. The key is that the projects will reflect the needs identified by group members.

**4. The experiences of individual groups will be multiplied by networking these groups with each other.**

Much can be learned by people from different community groups sharing experiences. Annual lateral visits where members of one group visit the community of another are one planned networking activity. An annual conference is another, and a special newsletter section is a third.



**5. An on-farm research network will be included as an important component of the project.**

Maintaining an on-farm research network will assure a continued focus on helping farmers generate and share relevant and reliable information on sustainable agriculture practices. Fifteen cooperators will be included in this on-farm research network.

**6. Developing leadership skills in members of rural communities will be a focus of the project.**

Dick Thompson has said about PFI, "We can grow people as well as crops." By this he means that farmers involved in PFI learn skills that make them good leaders. This on-the-job leadership training is another key element of the project.

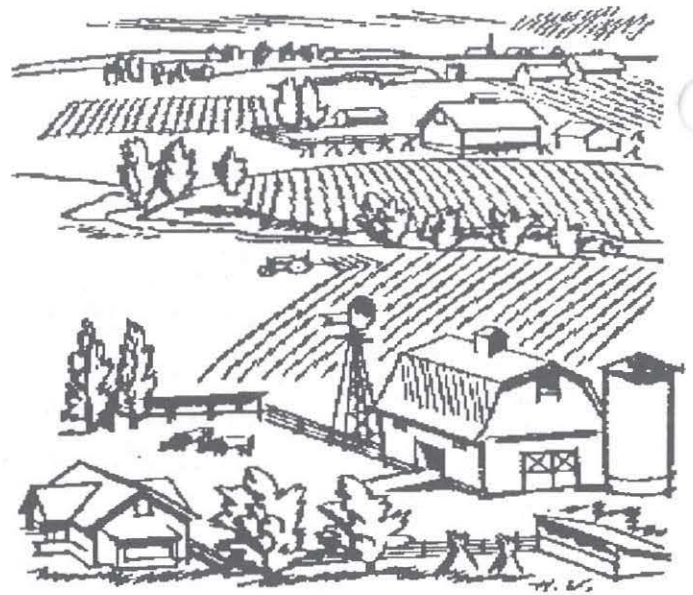
The project is an exciting development for PFI, ISU Extension, and the Leopold Center. While the effort will involve some risks because it will likely push participants beyond what they are familiar with doing, the Board and collaborating organizations feel risks are needed to make a difference.

The project is one of seven that were funded in the first phase of the Kellogg Foundation's new Integrated Farming Systems Initiative. Initially, nearly 300 applicants sought support. The W.K. Kellogg Foundation was established in 1930 "to help people help themselves." As a private grantmaking foundation, it provides seed money to organizations and institutions that have identified problems and have designed constructive action programs aimed at solutions. 🍀

## **SOME THOUGHTS ON SUSTAINABLE AGRICULTURE AND COMMUNITIES**

Ken Taylor, Minnesota Food Association

**(Editor's note: Ken Taylor is Executive Director of the Minnesota Food Association, a non-profit, membership organization whose mission is "to form an urban-rural coalition of informed, connected, activated citizens committed to the development of a sustainable food and agriculture system in Minnesota." The following is from**



an article titled "Some Thoughts on Minnesota's Rural Development Future" that was published in the August issue of the *MFA Digest*. These excerpts are reprinted here with Ken's permission. Contact the Minnesota Food Association at 2395 University Avenue, Room 309, Saint Paul, MN 55114, 612-644-2038.)

The transition over the last half-century from smaller diversified farms to the larger, more specialized operations – particularly those producing commodity feed grains for export – has severely eroded the local, value-capturing infrastructure – mills, creameries, meat and vegetable processors that were once a part of the rural economic landscape. This erosion of infrastructure, when coupled with the rapid centralization of these processing entities, has narrowed production options for farmers. Growers are at a significant disadvantage in responding to a developing market opportunity when the local or regional processing link to the new market is inaccessible or missing altogether.

Organic milk production is probably the best example of this phenomenon. The highly centralized and regulated nature of the bulk milk system virtually eliminates marketing of milk as organic. The same truck that picks up the neighbor's conventionally produced milk dumps it in with the organic milk, making it inaccessible to those who would be willing to pay a premium for this product if its identity could be preserved. Right now, it cannot.

The conventional response to this situation has been to encourage rural communities to move away

from farming as a major developmental component in rural community economies. Diversification of the local economy has become the convention; diversification in this context means non-farm development – a smokestack for every rural town. This mentality has led rural communities to compete with one another for toxic waste facilities, federal prisons and other equally distasteful and unproductive economic ventures in an effort to stave off total economic collapse.

**“Economic and social structures must be developed to encourage sustainability.”**

A wholesale adoption of this approach is shortsighted and wrongheaded. Just as the country must now begin to think in terms of converting from a conventional, military-dependent economic strategy, so too should agricultural states .... begin to think in terms of converting from a conventional, commodity-dependent agriculture. We should be studying the economic and community-building potential of a well-articulated local and regional *sustainable agriculture* economy. Failure to seriously consider this potential represents a missed opportunity with major implications in terms of its impact on the future of ...[the]... rural landscape and the people who occupy it.

What do we mean when we say “a well-articulated, local and regional sustainable agriculture economy,” and how would we propose to develop such an economy? We are talking about a system that is characterized by a few common elements including, but not limited to:

- local and regional ownership of production, processing and marketing;
- localized or regional marketing priority with a strong emphasis on direct marketing connections;
- on-farm or near-farm processing capabilities to capture and retain the full intrinsic value of local and regional production;
- ongoing research and technical support programs that are highly adaptable to changing conditions, markets, technologies, etc.;
- diversified production geared to what farming can do best and what people need and are likely to need on an ongoing basis – food and fiber;

- public-policy support of the system’s development – infrastructure, research and technical assistance.

Today, the imperative to develop a sustainable agriculture is clear. The greatest single threat to the achievement of that goal is to assume it can be met by changes in farming practices alone. Economic and social structures must be developed to encourage sustainability. They must support more people on the land; they must increase the relevance of what farms produce to the people in the regions in which those farms reside; they must encourage the elaboration and diversification of economic activities tied to the farm-sector operations, creating the fertile and dynamic matrix that sustains a healthy community. ♻

## SUSTAINABLE AGRICULTURE AND FARM SAFETY

Gayle Olson, Mt. Pleasant

Many sustainable agriculture organizations agree that sustainability of the farm family is as important as sustainability of the family farm. Sustainable farm families often highly value the opportunities to pass the culture and knowledge of farming to their children, as well as have them personally involved in the operation. Sustainable farm families often cite the health and safety of their own family as a goal of adopting sustainable methods. Are those two goals always compatible?

They certainly can be, but farm families must be aware of the potential hazards. 36 children age 19 or younger have died in farm related accidents in Iowa in the last three years. Another 1,647 were injured. Many of the injuries result in lifelong disabilities.

Tractors and machinery are typically the top two causes of fatalities. One of the most dangerous practices for children is extra riders on tractors. There are no safe places for extra riders to sit on tractors. Uneven terrain, unstable seating, and defective equipment can change a joy ride into a horror.

In the September 1990 edition of *Progressive Farmer*, a father tells his story of taking his children for a ride – just once, the last round of the day, while mowing weeds. The fender on the tractor broke off and his eight year old son fell face down under the tractor and under the rotary mower.

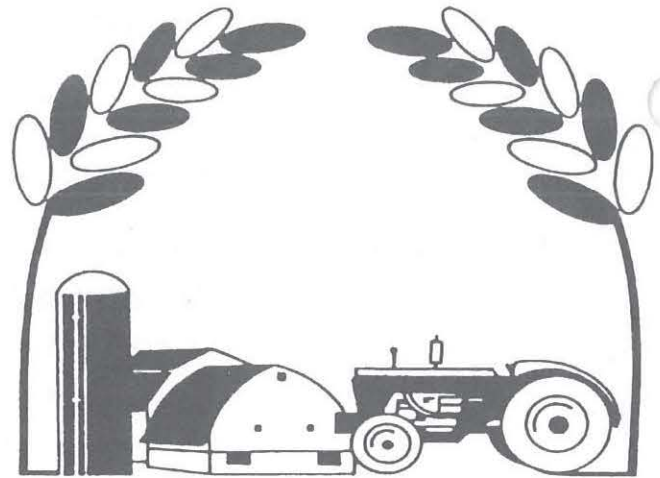
His letter tells of the anguish their family faced then and still today. He says, “The loss of a child is about the worst thing that can ever happen to a person. To others who might be tempted to give a child just one ride, my advice is to be firm and refuse. Remember my story the next time a child begs for just one ride on farm machinery. That one ride took my son to the gates of heaven. Don’t let it take yours.”

Causes of injuries are slightly different. While machinery is still a top causes, animal related injuries are a close second or even number one in some states. Children (and adults!) often forget how unpredictable livestock can be, particularly when they are cornered, injured, or startled. Slips and falls and being struck by or against something are other major causes.

Injuries to those we love most do not have to be an accepted cost of farming. It is as important for us to learn techniques for how to keep our family safe as it is to learn how to keep our earth sustainable. How can we give our children the benefits of growing up on a farm without exposing them to the tremendous hazards? Here are some things you can do:

- Make sure all your tractors and equipment are kept in good repair and that they are properly marked and guarded. All PTO’s, augers, moving chains or belts, etc. should be shielded.
- Don’t allow extra riders on tractors, wagons, or other equipment.
- Make sure your children are developmentally ready and well trained for tasks you expect them to do. We adults often forget how many complicated decisions go into performing a task, even one that children may be physically able to perform. Quick

***“That one ride took my son to the gates of heaven. Don’t let it take yours.”***



and prudent decision making skills are a requisite in any potentially dangerous situation.

- Take a tour of your farm together as a family to identify hazardous situations. Make an agreement with yourself to fix anything that is fixable. Declare certain areas off limits for all except those who are specifically designated. Teach kids acceptable and unacceptable behavior in certain areas or situations. Don’t forget to listen to the kids - we adults often could learn a great deal from them.
- Remember that young children are particularly fascinated with animals, large equipment, and sharp or moving parts - precisely the most dangerous situations for them. NEVER trust them to stay away without supervision.
- Recognize how quickly accidents happen. A child becomes helpless in flowing grain in less than 3 seconds. It is physically impossible to have quick enough reaction time to stop a tractor before it rolls over a fallen extra rider. The entire length of an adult’s body can be wrapped around a PTO shaft before he realizes what that tug on his pant leg was. Those are seconds we may relive often and that may change our lives forever.
- Injuries on the farm often result in more severe disability or death due to the distance from medical help. Know where to find your family members and how to communicate. Understand your local emergency medical services system and how to

most efficiently access it from any location you are likely to be. Learn what to do if you are the first one at the scene of an injury. Work with your community so neighbors help identify and prevent problems.

If you are interested in learning more about agricultural safety and health, or in featuring educational materials or displays at your field days or other events, contact Gayle Olson at 319-335-4204 (work) or 319-257-6967 (home). Her address is 2273 140<sup>th</sup> Street, Winfield, IA 52659. There are a wide variety of resources available on topics ranging from age appropriate tasks to skin cancer to tractor safety. ☺

## HRM PUBLIC POLICY SERIES

Jeff Olson, Mt. Pleasant

Last March four of your PFI leaders participated in a Holistic Resource Management (HRM) Public Policy course taught by Allan Savory. As a part of ongoing activities linked to this HRM course, I got the opportunity on July 26 & 27 to tour Northeast Iowa farms that are using the HRM decision making model.

We stopped at Our Lady of the Mississippi Abbey on the bluffs near Dubuque. The Sisters showed us their CRP land, visible improvements in their pastures and farm lands, angora goats that graze the steep slopes while eating multiflora rose, and their feeder calves on grass. Brother Placid from the New Mallory Monastery also spoke to us. His group is also using the HRM decision model for some of their large farming operation. Both groups of people stressed the need for the whole membership to be part of goal formation in order to feel ownership of the goals.

Then it was off to the Reicherts and Frantzen farms near Alta Vista. Feeder cattle, cow/calf, swine, and poultry grazing examples were viewed. Narrow strip-intercropping, grazing by utilizing different types of livestock, and agroforestry strips as examples of a sustainable landscape and system diversity were explained. Allan Savory reminded us all that we are not just rotating animals, we are managing the grass for optimum recovery time. One big herd would be better

than two herds because, in this example, recovery time for the farm's grass would double.

PFI was just one of the ag groups involved in the HRM Public Policy course. Other groups represented include the Minnesota Sustainable Farming Association, Iowa Cattlemen's Association, Iowa Sheep Producers, Farmers Home Administration, and the Soil Conservation Service. The public policy question of concern is "What will happen to the CRP land when the contracts expire starting in 1996?" The tour gave us all some background information and examples of options. ☺

## PROFITS OF NARROW-STRIP INTER-CROPPING

Don Davidson, Grundy Center

Narrow Strip-Intercropping (NSI) – the practice of planting corn, soybeans and oats in 4 or 6-row alternating strips – offered a lot of promise as a sustainable cropping system when it debuted on the Tom Frantzen farm in 1989. Planting oats between corn and soybean crops can break disease and insect cycles and enhance erosion control. Corn in narrow strips may have yield increases of 10 to 20 percent. Even soybean crops have demonstrated a mild yield response in the strips. NSI appeared to be a nearly ideal cropping system.

Still, lingering questions about this cropping system were asked. Is the system profitable? Can this system perform as well as the standard corn-soybean rotation? How can you economically compare these two cropping systems?

To help answer these questions, six PFI research cooperators kept crop records on their strip-intercropping demonstration fields in 1992 with help from a grant by the Leopold Center for Sustainable Agriculture. Input costs for corn, soybeans, and oats (in strips and in comparative whole-field blocks) were tabulated by the cooperators and then entered into Iowa State's Crop Enterprise Record Analysis program. Crop Enterprise Record Analysis takes information right out of a producer's actual farm records and summarizes it



ISU agronomist Rick Cruse helped with the discussion of the narrow strip-intercropping at the 1992 Thompson's field day.

into costs per acre for variable inputs, machinery, land, labor and other, miscellaneous costs. By analyzing the individual parts of the NSI system and the standard block-field system, we can finally put them all together and see how the system worked as a whole in 1992.

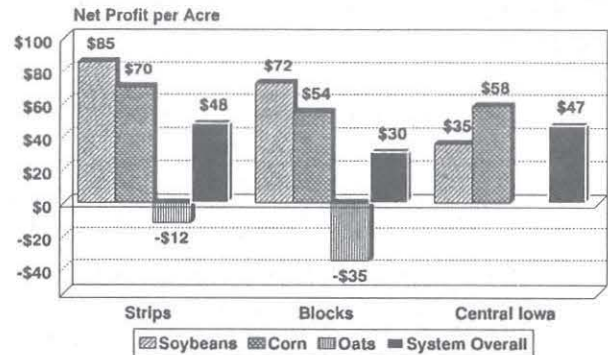
In February of this year, the six cooperators met with John Creswell, ISU Extension field specialist for crops located in central Iowa, who entered their information into a computer. The results from the six NSI demonstrations are summarized in Table 1 and Figure 1 along with a comparison to 32 central Iowa producers who also used the Crop Records program in 1992.

The results, you ask? In 1992, the NSI system of corn-beans-oats outperformed corn-beans-oats in block fields, with an average profit of \$47.59/acre for NSI versus an average profit of \$30.40 for the block-field rotation. However, when comparing profits of NSI (with corn-beans-oats) to just the corn-beans portion of the block fields, profits were *reduced* with the NSI system (\$47.59/acre versus \$63.13/acre). This was due to the negative profits of oats combined with the fact that oats make up  $\frac{1}{3}$  of the acreage in the typical NSI system.

***"I would like to add that the corn income in the Central Iowa records includes government income, whereas the income figures for the six NSI corn records do NOT include government income!"***

## Cropping System Profits

Narrow Strips, Field Blocks, and Central Ia. Average



Using Crop Enterprise Recordkeeping

Figure 1. Net profit of Cropping systems in 1992.

But average NSI profits equaled the average profits from corn-bean production in the central Iowa records summary (\$47.59/acre versus \$46.58/acre). While the 32 farms included in the central Iowa records summary represent a wide range in both size of operation and profitability, on average the six PFI cooperators had lower land and machinery costs in corn, and lower input, land and machinery costs, combined with higher yields, in soybeans. I would like

to add that the corn income in the Central Iowa records includes government income, whereas the income figures for the six NSI corn records do NOT include government income!

Some other observations were made in comparing these cropping systems. It looks like oats are NOT reducing costs in corn production as it was hypothesized. One of the reasons for developing NSI was to provide a time-frame (following oat harvest) to grow a leguminous cover crop to provide some N for the following corn crop. Records show that in 1992, cooperators used more N fertilizer in strips compared to the block fields. However, oats in strips (and blocks) may be contributing to higher soybean yields due to breakup of disease cycles. Witness the higher soybean



yield average of the six sites compared to the 32 sites in the Central Iowa record summary.

It appears that more work needs to be done to make oats profitable. If average oat profitability could be increased to \$40/acre, this would make profits of strips equivalent to corn-soybean profits in block fields. How can this be accomplished? According to records on field hours/acre, more time was spent on the oat crops compared to the corn-beans portion of the system. Higher field hours/acre makes for higher machinery and labor costs when the computer program is run. Perhaps we are not really spending as

much time on these oat crops as we think we are. Also, we need much higher oat yields than 74 bu/acre. At the Mugge site, oat yields were 100 to 105 bu/acre, and profits were \$40.72 and \$40.94/acre in strip and block fields, respectively.

What's happening in 1993? Many of the cooperators are working with Dr. Mohammed Ghaffarzadeh to look at alternative green manure crops such as berseem clover. Berseem clover is a summer annual clover that produces large amounts of biomass and then dies with the first hard frost, thus not competing with the succeeding corn crop. This could solve one of the production problems of the system - finding and using the ideal cover crop. And we'll keep records for another year. Stay tuned! 🐣

## A SOUTHERN IOWA GRAZING SYSTEM

Rick Exner

When Bob Reed "retired" from farming in Muscatine County two years ago, he looked around for a little cheap land he could develop for grazing. His search took him to Davis County, where he now operates 177 acres of \$600 farmland that presently includes 80 acres of pasture, 24 acres of hay, and 16 acres of new seeding. Bob assisted in the July 16 PFI field day with John and Pam Cowles by hosting a tour of his grazing operation.

The land is hilly, with creeks running through the wooded bottoms. Reed has been laying out paddocks and water lines and gradually removing brush from the 50 acres north of the farmstead (see diagram on next page). Only the 30 acres around the house is served by rural water, so he is running additional lines from ponds and building an additional one. Water has also been a problem this year where the stream tries to wash over the culvert set in the lane crossing.

***"Some grazers charge as much as \$10 per head per month. This won't make you rich, but it's good money for what would be wasted otherwise."***

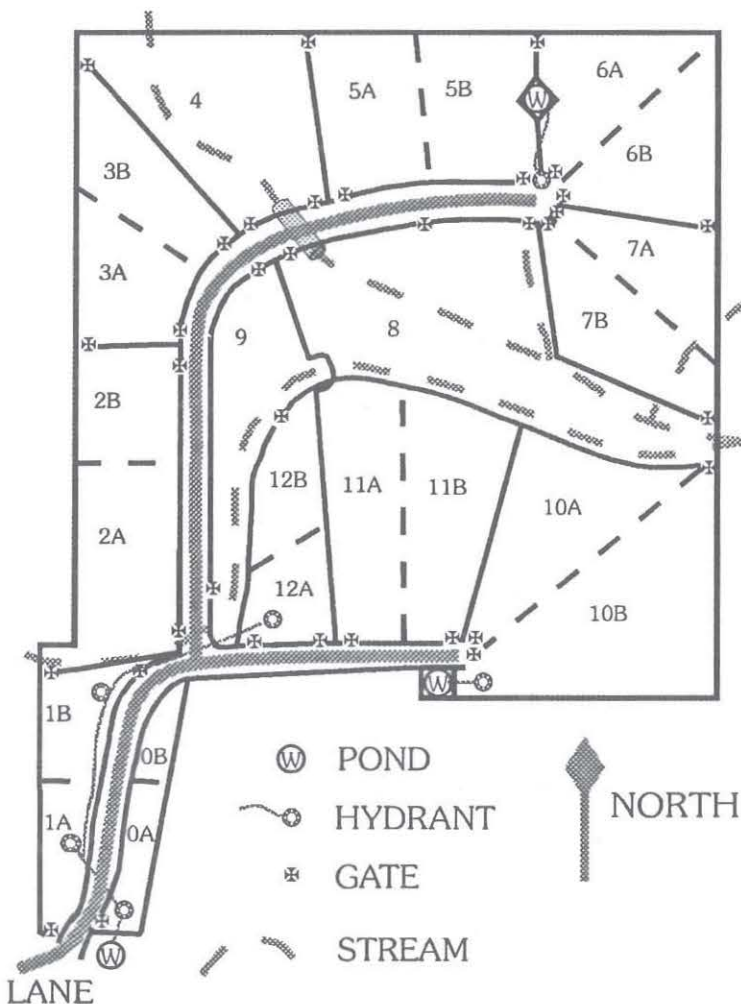
**Table 1. Narrow Strips vs. Field Blocks & Central Iowa Average, 1992**

	Strips (6)	Blocks (6)	Central Ia. (32)
<b>Corn</b>			
Yield (bu/acre)	161.4	154.7	163.0
Income	\$312.97	\$300.68	\$340.39*
Costs	\$243.43	\$245.48	\$282.30
Profit	\$69.53	\$54.40	\$58.09*
<b>Soybeans</b>			
Yield (bu/acre)	51.4	50.5	47.0
Income	\$277.76	\$273.38	\$267.51
Costs	\$192.40	\$201.52	\$232.45
Profit	\$85.36	\$71.86	\$35.06
<b>Oats</b>			
Yield (bu/acre)	73.8	72.5	--
Income	\$169.59	\$170.59	
Costs	\$181.71	\$215.88	
Profit	-\$12.12	-\$35.05	
<b>Average Profit</b>	\$47.59	\$30.40	--
<b>(without oats)</b>	\$77.45	\$63.13	\$46.58

\* Includes federal government payments.

Reed is grazing three groups of cattle, two of them with bulls that must be kept out of each other's way. In all there are 17 cows with calves, 26 heifers, and two bulls. One bull and 16 of the heifers belong to a neighbor. This is an example of a "leased grazing" arrangement that beginning farmers could use while they build up their own herd. "Some grazers charge as much as \$10 per head per month. This won't make you rich, but it's good money for what would be wasted otherwise." In Bob's case, the "lease" consists of favors with a brush cutter, post hole digger, and earthmoving equipment.

The forage is bromegrass, orchardgrass, bluegrass, reed canary, and fescue, with some big bluestem and Indiangrass. All paddocks have white clover and birdsfoot trefoil volunteering. "It takes one year of keeping the grass short to bring on the clover, year two the clover establishes and spreads, year three the clover pumps in about 90 pounds nitrogen, and year four the grass responds." Most of the paddocks have



**Bob Reed's field record shows the grazing dates for each paddock. Last year the stock grazed from April to December.**

been split because the herd size was not large enough to consume the forage in four days. After four days, Reed believes, the cattle start regrazing the most desirable plants, weakening them. Extra front gates and, in many of the paddocks, "back doors" keep cattle from following along the fence, reduce hoof traffic, and allow tractor access.

The 308 osage orange posts used represent only a small portion of the supply on the farm. These are supplemented by 100 steel posts. Ten thousand feet of high-tensile wire and 1/2 mile of 14-gauge wire went into the system, charged by a 9.1-joule energizer. All paddocks but two use just one strand at 43 inches in height. Bob Reed figures the total cost of the fencing and water materials at \$4,200, but much of it was purchased with the help of a 75% cost-share from the state. "You say my system cost a lot, and it did," he writes, "but it should pay for itself easily in ten years with increased production alone."

Last year the cattle grazed into early December, and in 1993 grazing began in mid-April. In the spring Reed rotates the stock quickly (half-day stays) to keep ahead of the grass. If necessary, he makes hay in paddocks. He clips seed heads in June to avoid eye injury to the cattle and encourage uniform grazing. In mid-summer he slows the rotation to at least 35 days rest, which gives the trefoil and clover time to make seed. Paddocks were grazed 6-9 times in 1992.

Bob lists as his goals for the future: "1) Try to save hay by extending the grazing in the fall and spring (if

possible, don't feed hay until February); 2) Try to raise the fertility in the poor paddocks by applying manure and feeding hay on the poor spots; 3) To have my whole farm seeded and 120 acres paddocked-off by 2000 AD." Those wishing the full handout from the field day can write: Bob Reed, Rt. 1, Box 174, Bloomfield, IA 52537, or call: (515) 664-1158 (evenings). This winter Bob plans to market a report on his 15 years' experience with intensive grazing. 🐾

## MEMBERSHIP REVIEW

Rick Exner

This summer we sent PFI hats to 44 people who renewed with \$25 for a three-year membership, and a few more of those nifty hats are still going out to others in that category who request them. In all, 44%, or 241 renewing members since last summer have chosen the three-year option (Figure 1).

### One-Year & Three-year Renewals

Fall, 1992 Through Summer, 1993

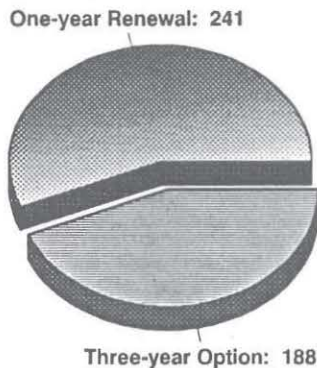


Figure 1.

It seems we just finish deciding who really did and didn't renew when it's once again time to think about the fall membership drive! At least that's something the three-year folks won't have to worry about for a while. As figure 2 shows, PFI membership continues to trend upwards, despite the annual spring purge of non-renewals. Thanks to all of you current members and to those who tell a chosen neighbor about Practical Farmers of Iowa!

### PFI Membership Over Time

Before and After Renewal Deadlines

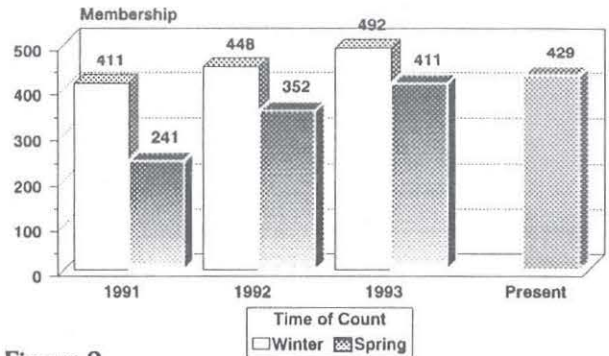


Figure 2.

Voting members (actively farming in Iowa) have always been in the majority. The proportion of voting members is now right at 50% (Figure 3). Thirteen percent of members haven't told us *what* they are. Of the 38% who are associate members, some are farming, but not in Iowa.

In the next year we hope to realize a long-held goal and publish a PFI membership directory with the information you send us. To encourage information sharing, it will have tables identifying people with experience in specific areas. Of course, your permission will be necessary for us to include you in the directory. And we will probably list just phone numbers to keep you out of the hands of the direct mail business. The Membership Agreement and Information Form you will receive in the fall will contain a space for if you wish to remain confidential. 🐾

### PFI Membership

July, 1993 -- 429 Members

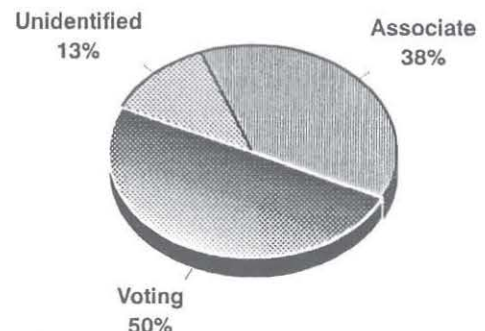


Figure 3.

## NETWORK NEWS ATTENDS FIELD DAY

PFI's first field day of the 1993 season was visited by ABC World News Tonight. On June 22, Ron and Maria Rosmann, Harlan, hosted a farm tour to show weed management options. They are conducting a replicated field trial on weed management with support from the producer grants portion of the SARE program. SARE stands for Sustainable Agriculture Research and Education, and is administered by the US Department of Agriculture.

ABC was there in connection with the scheduled release of a report on pesticide exposure in children by the National Academy of Sciences. The news feature focused on the different opinions about pesticides found in the farming community and on farmers who are finding ways to reduce or eliminate pesticides. The Rosmanns use ridge tillage, crop rotations, and banding to reduce herbicide rates, and in some years they use no herbicides at all.

Several of those attending the field day may also have seen themselves on TV. Among those interviewed was ISU Extension Director of Ag Programs Jerry DeWitt, who cited the desire of most Iowa farmers for information about ways to reduce pesticides. 🎵



**Wired for sound – Ron and Maria Rosmann faced the camera at their field day.**

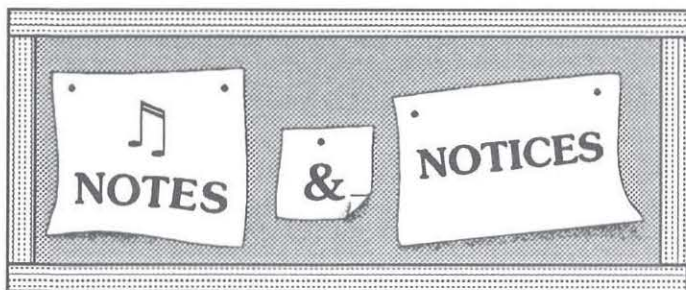
groups with each other by contributing to the PFI newsletter and coordinating an annual conference and cross-community visits, 3) coordinating the involvement of ISU Extension field specialists, county directors, and personnel from other resource groups with the community-based groups, and 4) teaching leadership skills to community group participants.

Individuals interested in this position should contact Gary Huber or Rick Exner (515-294-1923) and ask to be sent the job description when it becomes available.

## 🎵 Farming 2000 Expo November 29-30

Iowa farmers can learn about profitable crop and livestock production systems that protect the environment during a *Farming 2000 Expo* November 29-30, 1993. The expo is sponsored by the Iowa Association of Soil and Water Conservation District Commissioners.

“As we plan for the next century, the expo sets the stage for renewed efforts to promote environmentally-sound agriculture through the voluntary efforts of Iowa farmers,” said Kelly Tobin, association president. More than 150 exhibitors will display new technologies and equipment at the expo in Hilton Coliseum in Ames. The expo will also hold “show and tell” seminars with Iowa farmers relating their experiences in adopting crop and livestock systems that are both productive and environmentally sound.



## 🎵 New Collaborative Effort To Seek Staff

It is anticipated that the new collaborative project described starting on page two will be hiring a staff person. While a job description is currently being developed, this person will likely have several responsibilities, including 1) working with community-based groups at developing strategies and plans of action to further sustainable agriculture and integrated farming systems locally, 2) networking community-based

Practical Farmers of Iowa has been a part of the team that is helping the association plan the expo. For more information contact Eldon Weber (515-294-0893) or Karen Keninger (515-792-1661).

### ♪ **Marty Strange to Address PFI Winter Meeting Jan. 6**

Last winter's PFI annual meeting will be a hard act to follow, but plans are underway for the next one. Mark your calendar for Thursday, January 6. Marty Strange has agreed to speak at the event. He is co-director of the Center for Rural Affairs, in Walthill, Nebraska. The Center is involved in a beginning farmer program, *Land Link Realty*, policy research, and advocacy at the state and national level. This year the Center for Rural Affairs celebrated its 20th anniversary.

Ideas for other speakers and workshops are coming in. If you have ideas for the meeting, contact your PFI board representative or the Extension/PFI coordinators (515-194-1923).

### ♪ **Antonio Mallarino Accepts New Position**

Antonio Mallarino is familiar to many in PFI because of his involvement with PFI cooperators in doing on-farm trials while he was a post-doc assistant with Dr. Blackmer. This summer Antonio was offered and has accepted a position as Assistant Professor in the Iowa State University Agronomy Department. Antonio's position is 20 percent Extension and 80 percent research. His focus will be on P and K fertility.

Antonio notes that he is "looking forward to very close cooperation and working relationship with PFI," and he says he is especially interested in exploring ideas with the PFI cooperators related to P and K fertility. In this he says he is "open for suggestions." His phone number is 515-294-6200, and his address is Dr. Antonio Mallarino, Agronomy Department, Iowa State University, Ames, IA 50011. Give him a call and congratulate him.

## **NOT A VACATION: SHARE THE SKILLS OF YOUR VOCATION**

VOCA, Volunteers in Cooperative Assistance, is a private, nonprofit organization working to increase the opportunities and incomes of members of all types of cooperatives and other small- and medium-scale enterprises that are agriculturally based. VOCA volunteers work in developing countries in Africa, Asia and the Near East, Latin America and the Caribbean, in the emerging democracies of Central and Eastern Europe and newly independent states of the former Soviet Union.

Founded in 1970 as the international voluntary arm of the U.S. cooperative community, VOCA



conducts activities in three major areas: 1) *cooperative assistance* – organizational development and improvement of member services for all types of cooperatives, including credit unions; 2) *farmer-to-farmer* – technical assistance to small and medium-scale agricultural enterprises on production, post-harvest handling, processing, marketing, extension, and institutional development; 3) *emerging democracies* – private agribusiness development and support to private farming.

Overseas experience and foreign language ability are *not* required. Many midwestern farmers have just the kinds of practical skills VOCA seeks. PFI was recently contacted by VOCA because they are beginning several projects in sustainable agriculture, including one in Lithuania and one in Russia. They encourage PFI members to get their skills and preferences into the VOCA database so that as opportunities come up they can be informed. Typical assignments last 30 to 90 days. All work-related costs are covered, and on assignments of over one month spouses' expenses are also paid by VOCA.

If you are looking for a different kind of experience, and one that will benefit others, contact the VOCA Regional Office, University of Missouri, Room 230 Gentry Hall, Columbia, MO, 65211, or call them at (314) 882-2839. ♻️

## PFI PROFILES: RICH, LORI, AND AMANDA PIROG

Gary Huber

**(Editor's note: Associate members are important to PFI. These are members who do not farm, but they often have jobs in agriculture and support the work of PFI. Currently, 38 percent of PFI members are associate members. From time to time PFI Profiles will recognize the importance of associate members by highlighting some of these individuals.)**

Rich Pirog came to Iowa in 1990 to work as education coordinator for the Leopold Center for Sustainable Agriculture. Before arriving in Ames with his wife, Lori, and their daughter, Amanda, Rich had worked as a field crops specialist with the University of Missouri Extension Service with an emphasis on water quality. Lori also worked for the University of Missouri Extension Service as a nutrition specialist.

It was during an Extension internship that involved extensive travel in the midwest that Rich realized that Iowa was a clear leader in sustainable agriculture. Rich was also involved with laying the groundwork for the University of Missouri's sustainable agriculture farm in the northeast part of the state.



Rich, Lori, and Amanda Pirog

Rich is headquartered in the Soil Tilth Lab on ISU's campus. Rich noted that after starting work for the Center, "It became clear to me very quickly that PFI was one organization the Center needed to work closely with." Since that time he has worked in his capacity as the Center's education coordinator on a variety of joint educational efforts with PFI, such as the Soil, Water, and Wildlife Field Day at the 4-H Center near Madrid last September.

However, Rich has been more than just another player that on occasion has worked with PFI. He has become an important person in the often murky realm of relationships between organizations, and his support and involvement in PFI as an associate member is a clear indication of his desire to be a bridge between PFI and the Leopold Center.

Another important way Rich has been a bridge between PFI and the Leopold Center is his help in developing the new project that is being funded by the W.K. Kellogg Foundation that will focus on community-based agriculture. (see page 2) "Community is something everyone needs," Rich said recently, "because it is not only a positive experience, but it is a place where things can get done." "The floods of 1993 are a good example," he continued. "People from all walks of life worked together during the crisis. But it is more difficult to get diverse groups to continue to work together when the 'crisis' is over."

Rich's insights into community have been valuable. He recently said that at its core, sustainable agriculture embraces diversity in what is grown and raised on farms. He then drew a parallel with true communities, which he said also embrace diversity. "It is important for people within communities to understand and respect the strengths and weaknesses of each individual member," he said. "The same is true for organizations. Some organizations exploit the weaknesses and ignore the strengths of other organizations. What you end up with is groups beating each other over the head. Not much gets accomplished."

Rich then paraphrased a quote from Aldo Leopold's *Sand County Almanac* by saying, "Leopold said that a community has larger boundaries than just people. It includes soil, water, plants, and animals." "The same is true of many organizations,"

he continued. "Not much gets accomplished unless we step back from the specific agenda far enough to see the larger issues. We should recognize that we are all part of one community. We are all in the same boat, and we all have a common future."

Rich is on the Kellogg project's implementation team, which is a small group of people working to determine roles and responsibilities of the staff and organizations involved and develop a roadmap to guide the project during its implementation. Rich Pirog's perspectives on community make him a valuable person to the Kellogg project, to PFI, and to sustainable agriculture. 🌱

## SURVIVING IN 1993

Rick Exner

One of the best parts of coordinating on-farm trials is traveling around the state to visit with PFI cooperators and other members. This summer that pleasure has been tempered by the rain, but the experience has still been a valuable one. As you might expect, I'm seeing a lot of resourcefulness.

The management question has often become: "What is this crop worth?" Yellow corn that was a foot tall the last week of July wouldn't justify additional nitrogen. Much corn had good color in July but had not received sidedress N due to the weather. Assuming you could get in to sidedress before the corn was too tall, what yield potential did you fertilize for? Even if the crop escapes a killing frost, the late silking foretells reduced yields.

And then there's weed management. Many rotary hoes stayed in the shed, and cultivators waited for days and days in the farm yard. Preplant burndowns and preemergence bands didn't hold. One cooperator waiting to cultivate found no break in the weather – and weeds that had grown beyond the stage a postemergence spray would be effective.

Bright spots: 1) Corn after soybeans or after alfalfa and corn after manure showed much less nitrogen deficiency than corn following corn. 2) Soil erosion



Sidedressing but not cultivating. Ray Stonecypher applies late nitrogen. Most of the corn was taller and less weedy than these border rows.

was "almost zero" in narrow strip intercropping, according to Mike Reicherts, especially where strips ran across the slope. That has to be worth something in a region where soil loss is a big hidden cost of the disaster. 3) Grazing systems, while not immune to wetness problems, were dealing with a surplus of forage. 4) Creativity abounds. The field days and twilight tours are bringing this out.

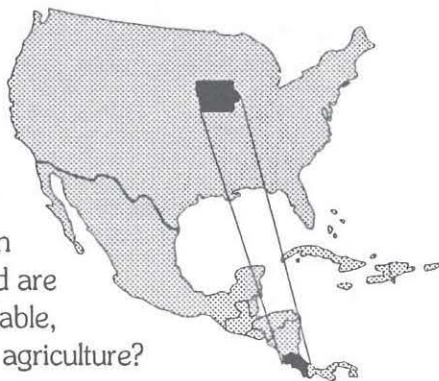
This has been the kind of year that causes a producer to take a long look at things. Flexibility counts for a lot in 1993. Not having too many eggs in any one basket is another timely virtue. Speaking of philosophies, I was involved in an interesting discussion with a couple of PFI members who helped out with the PFI display at the Hay Expo. The one pointed out that in a diversified, low-input system, you can be flexible because you don't have great out-of-pocket costs and because you can use a crop different ways. For example, you can turn the cows out in the corn – even if there's less corn than foxtail. This fellow relies on manure and the crop rotation to provide nitrogen for corn, and figures whatever N the system produces is the "right" amount.

The other PFI farmer asked what if the late spring soil nitrate test indicates additional nitrogen would increase yield. To him there was no question that you would buy nitrogen in that case. To me both these points of view are valid. In the real world, almost everybody has to spend some money in order to make money. But in a year like this, everyone also needs the flexibility to fall back on the farming system. 🌱

## ¡¡Vamos a La Finca!! (Let's go to the Farm!!): A Trip to Link Midwestern and Costa Rican Farmers

Shelly Gradwell

It's been said that farmers are the same all over the world. Our common interests and challenges as farmers have no political or geographical boundaries. Do you ever wonder what farmers in other parts of the world are doing to practice profitable, environmentally sound agriculture?



In the southeastern corner of Costa Rica, in the zone called Talamanca, farmers have been involved in sustainable agriculture projects for many years. Because of the need to find alternative cash crops and a desire to maintain and enhance the traditional diversity of tropical farms, several cooperative grassroots groups (like PFI!) have formed to practice and promote sustainable agriculture.

Low mountains of tropical rainforests, sunny Caribbean beaches, and a peaceful way of life characterize this region. And recently, ecotourism has become another way that the local people can supplement an income by educating visitors about their unique farms and natural areas. The farms and natural areas are often one and the same – and when you first



**Tropical rainforest meets the Caribbean Sea in Talamanca, Costa Rica.**



**Thatched roof guest accommodations at Chimuri.**

visit a farm it is difficult to see the farm for the forest! It is this non-intensive, highly diverse type of agriculture that shows what harmony between people and land is all about.

So let's go visit these farms! It'll be fun, educational, and we'll be supporting these farmers in their efforts to farm sustainably. If there is enough interest, a trip is being planned for mid-February, 1994, by some people at Iowa State who have worked with these projects in Costa Rica. Following is the tentative itinerary for the trip.

*Day 1* – Arrive in San Jose, the capital city and spend the night.

*Day 2* – Travel to Talamanca through Braulio Carillo National Park. Arrive in Talamanca at Chimuri, a farm/nature reserve owned by Mauricio, Colocha, and Maythemí Salazar. Mauricio is a farmer, nature guide, and president of the Talamanca Association for Ecotourism and Conservation. Stay in traditional thatched roof cabins built of materials from his own farm. (See photo above.)

*Day 3* – Join Mauricio for a guided tour of his farm. Mauricio and his family have 30 acres of rainforest which contains their farm of cacao, citrus fruits, black pepper, vanilla, ginger, bananas, plantains, and much more! *pm* – Free time to explore the trails in the forest, walk along the beach to the small fishing village of Puerto Viejo, or relax on the veranda of the cabins and watch birds and iguanas in the trees!



*Day 4* – Visit the Kekoldi Indian Reserve with Mauricio and other members of the BriBri Indian community. This trip will show you examples of traditional agriculture that has been around for hundreds of years. You'll also see the native tree reforestation nursery, the medicinal plant project, and the green iguana restoration project. Imagine – corrals full of iguanas instead of cattle! *pm* – More free time to go swimming, fishing, biking, hiking, boating, snorkeling, birdwatching, visiting the local national parks and refuges, and much more!

*Day 5* – Visit Harry, Irma, Harry Jr., Mark, and Jim Baker's coastal farm which features coconuts, yams, bananas, plantain, and much more! *pm*: More free time, but return to the Baker's home for a traditional Caribbean meal of fresh fish and vegetables and fruits from your visit to the farm that morning.

*Day 6* – Free day to explore or relax. Short trips are available with local guides.

*Day 7* – Visit the AAPTA Farmer's Cooperative, which provides supplies and marketing services for local farmers. *pm* – Travel into the Talamanca mountains to visit an Education Farm developed by the indigenous farmers. Spend the night near the farm at the guest lodge.

*Day 8* – Travel through corporate banana plantations to spend the morning working with ASACODES, an organization of farmers who do on-farm research and practice crop diversification, reforestation, and sustained yield forestry on their communal farm. *pm* – Jose Luis, the President of ASACODES will give of a tour of his own farm which grows a number of crops including the corn in the photo. We'll spend the night at the guest lodge recently built from local materials from the ASACODES farm.

*Day 9* – Visit the ANAI farm--another research farm specializing in research on crop diversification. *pm*: Spend the afternoon relaxing or visiting more farms of ASACODES cooperators. Enjoy a hike through primary tropical rainforest watching toucans, and listening to howler monkeys!

*Day 10* – Travel back to Puerto Viejo to stay in Cabinas Black Sands--right on the beach!  
*pm* – Free time

*Day 11* – Travel back to San Jose. *pm*: Time for shopping, etc.

*Day 12* – Leave for home!

Don't be afraid if you aren't a Spanish speaker! Most of the local guides speak English and there will be a bilingual guide with you throughout the trip.

People expressing an interest will be able to help design the specifics of the trip. Estimated cost of the trip including air fare is \$1,500–\$2,000 per person depending on options chosen, and includes donations to the projects visited. Ideal number of people would be from 6 to 12 couples – first come first served. So don't delay giving the PFI/Extension coordinators Rick or Gary a call at 515-294-1923. 🐾



Jose Luis from ASACODES shows off his tall corn.

## FOOTPRINTS OF A GRASS FARMER

### Training Livestock to Electric Fence

Tom Frantzen, Alta Vista

Last February ('93), I met a stocker cattle grazer who wanted to graze hogs. I was a hog grazer who wanted to graze stocker cattle. We shared apprehension about electric fences controlling the class of stock that we were unfamiliar with! He knew that hogs would root under electric wires. I feared stocker cattle crashing through electric barriers. By season's end, neither of us had encountered any serious difficulties controlling the stock.

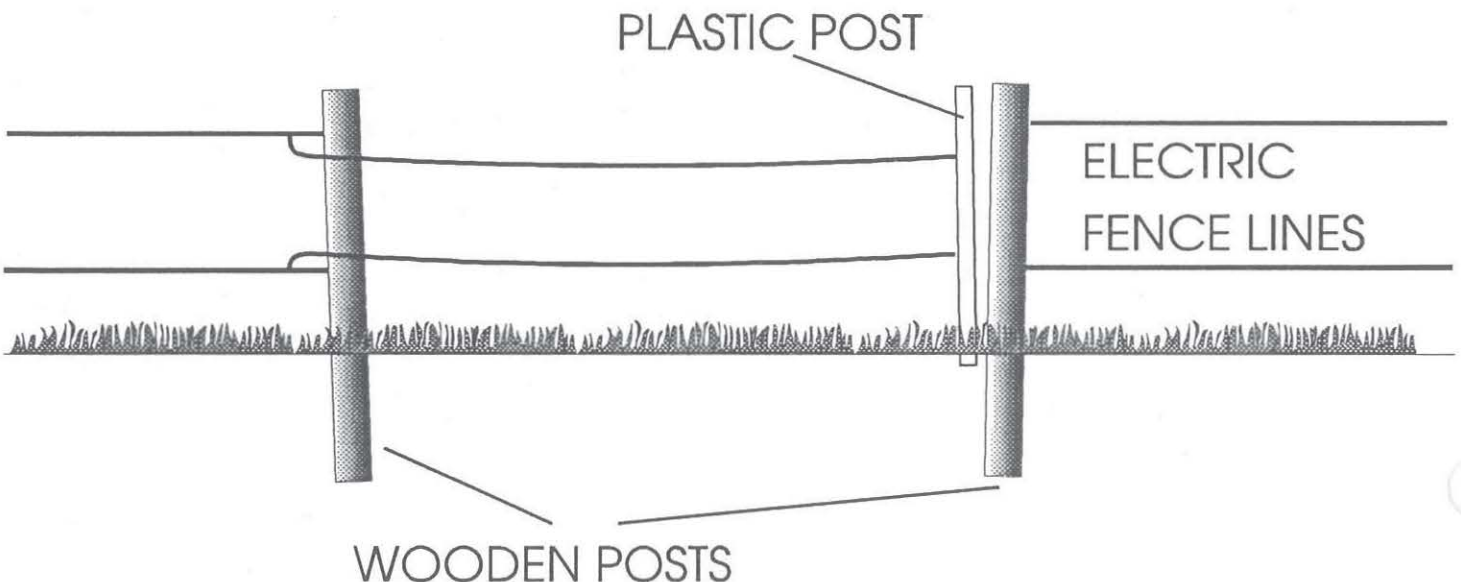
The fundamental rule in controlling stock with electric fence is to make sure that their first experience with a hot wire is a memorable one! If a sow touches a 3-wire high-tensile electric fence connected to a modern, well-grounded energizer, she will be *impressed*. The high-tensile wires are resilient and make an excellent training enclosure. After the initial experience, the sow will respect a single strand of portable wire. I always use electric gates in my paddock fencing systems. Farmers tell me that this will not work with swine, but I have never encountered any difficulties. I typically use this gate design for my grazing cells.

When I expose a new group of stocker cattle to pasture, I rely upon 5-wire, spring-loaded, high-tensile

electrified wire for control. This type of fence is my permanent barrier around a small pasture next to my cattle yard. When the new cattle are ready for training, I open the cattle yard gate, calmly telling them, "new grass, fresh pasture." They stampede past me. If all goes well, the high-tensile fence does its job and they stop. That evening I walk the pasture and patiently drive them into the yard and close the gate. Each morning, I repeat the procedure. I begin to subdivide the pasture after a few days. Within a week, the stockers know that I care for them and when I say "new grass, fresh pasture," that is what they receive. The key ingredient is control.

When a grazer describes the strong reluctance of his stock to cross opened electric gates, I ask how frequently the stock is moved. Most of the time, the grazer is not moving his stock around very often. Under these circumstances, the temporary electric gate becomes a permanent barrier to the stock. If the grazer works with the animals, they will observe him moving the gates and they will adapt to crossing through opened electric gates.

If you are interested in pasturing livestock but you have nagging doubts about fences, take heart! Both fencing equipment options and experienced graziers increase in numbers every year. I encourage you to attend a farm grazing tour and see how it is done. Grass farming is a great lifestyle. 🐾



**FROM THE KITCHEN**

Marj Stonecypher, Floyd

What a spring and summer!!!!!! I don't know about any of the rest of you PFI members, but we did not get our corn cultivated, which means, no ridges built for next year's beans. That only means a lot of work for next spring. We are trying to cultivate beans, but it is a little wet. I am sure that some of you are much wetter than we are, from listening to the weather reports around the state. Isn't it discouraging? Just keep your chin up, the Lord keeps an eye on us all the time. And keep praying that we have a good harvest. If we do get real busy during harvest, here are a couple of fast meals to fix:

**CHICKEN CASSEROLE**

- 1 can Chicken Noodle Soup
- 1 can Cream of Chicken Soup
- 1 cup evaporated milk or cream
- 1 can Swanson chicken or left-over chicken
- 2 cups Chow Mein Noodles



Mix all together and top with bread crumbs. Bake at 350 degrees for 20 minutes.

**ZUCCHINI CASSEROLE**

- 4-6 cups sliced or cubed zucchini
- 1 lb. ground Beef or Pork
- 1 medium onion
- 1 tsp. garlic salt
- 2 cups cottage cheese
- 1 can Cream of Mushroom Soup
- 1 cup Minute Rice (uncooked)
- 1 cup shredded cheddar cheese

Boil zucchini in salted water for 5 minutes. Brown meat and onion, add rice and garlic salt.

Put half zucchini in 13x10-inch pan. Cover with all of meat mixture, then cottage cheese, the rest of the zucchini and soup over top. Bake at 350 degrees for 40 minutes, then top with cheese and bake 10 more minutes.

Check out the Fall, 1993 PFI newsletter for "CHOCOLATE ZUCCHINI CAKE."

**PFI Membership Application and Renewal Form**

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

County \_\_\_\_\_

State \_\_\_\_\_

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

Phone # ( \_\_\_\_\_ ) \_\_\_\_\_

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

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

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

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

**CORRESPONDENCE**

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

District 1 (Northwest): Paul Mugge, 6190 470<sup>th</sup> St., Sutherland, 51058. (712) 446-2414.

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

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

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

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

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

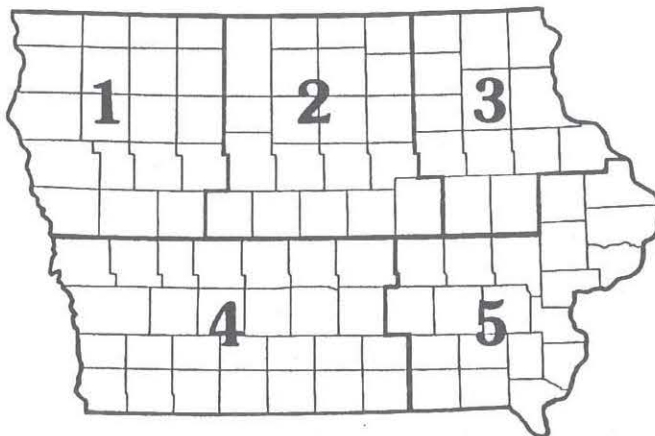
PFI Treasurer: Dick Thompson, 2035 190<sup>th</sup> St., Boone, 50036. (515) 432-1560.

Coordinators: Rick Exner, Gary Huber, Room 2104, Agronomy Hall, ISU, Ames, Iowa, 50011. (515) 294-1923.

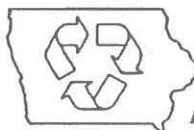
Public Relations Coordinator: Maria Vakulskas Rosmann, 1222 Ironwood Rd., Harlan, 51537. (712) 627-4653.



PRACTICAL FARMERS OF IOWA  
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