

S441
•S855

PROFITABLE, ENVIRONMENTALLY- SOUND FARMING



SARE Project INC92-44

PRACTICAL FARMERS OF IOWA

1993 FARM FIELD DAYS



Profitable, Environmentally-Sound

There doesn't have to be a trade-off between profitable farming and farming that preserves the soil and water and protects the health of farm families! PFI farmers are finding ways to accomplish both these goals, and agricultural scientists are developing new tools to aid in the task.

Farmer-Managed Research

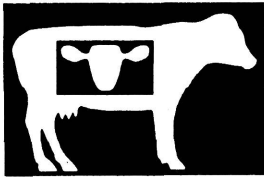
The 22 Practical Farmers of Iowa cooperators in this brochure determine what management practices they will evaluate on their own farms. They carry out 50-60 of these trials and collect the data themselves, and they analyze results with assistance from Iowa State University researchers. The field trial design is a simple one, yet it allows trial results to be evaluated statistically. These research trials usually compare the cooperator's customary practice side-by-side with a single alternative practice. This year, PFI cooperators are evaluating:

- nitrogen management trials using the late spring soil nitrate test;
- management-intensive rotational grazing;
- weed control with and without herbicides in ridge-till;
- P and K fertilizer rates and placement;
- no-till versus other tillage systems;
- trials of starter fertilizers;
- comparisons of manure and purchased fertilizer;
- berseem clover as summer forage or green chop;
- trials using cover crops for soil improvement and weed control;
- narrow strip intercropping for added yield and soil conservation;
- many other comparisons of interest to farmers.

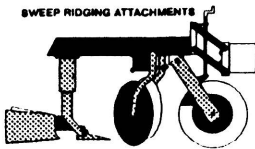
University, Industry Cooperation

Practical Farmers of Iowa is involved in a number of research projects and demonstrations in cooperation with universities and industry. The replicated, randomized comparisons of innovative farming methods provide a good field laboratory for scientific study. Here are some examples.

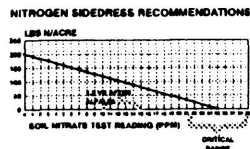
- In 1992 PFI began a two-year project of on-farm trials and demonstrations with the Leopold Center for Sustainable Agriculture. The effort focuses on intensive rotational grazing, narrow strip intercropping, and manure management and involves cooperation with scientists in several Leopold Center issues teams.



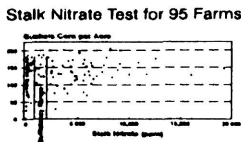
- With support from the Sustainable Agriculture Research and Education program (SARE) of the United States Department of Agriculture, cooperators are documenting methods of ridge-tillage that save energy and money, reduce soil erosion, and control weeds with reduced chemical rates.



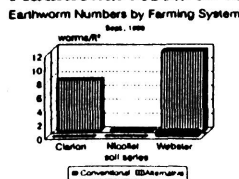
- PFI cooperators are continuing to evaluate the late spring soil nitrate test for corn, developed at Iowa State University by Alfred Blackmer. This test allows farmers to maximize corn profits by optimizing nitrogen rates, taking advantage of carry-over N and the other sources – including manure – that may be available on a year-by-year basis.



- Cooperators are also participating with ISU postdoctoral researcher Antonio Mallarino in the evaluation of a variety of tissue tests to detect nutrient excess in corn. The late season stalk nitrate test allows producers to double check N status.



- Additional research featuring PFI farmer-researcher cooperation is being carried out with scientists from the USDA National Soil Tilth Laboratory under support from the Leopold Center and other sources.



Community-Based Farming

PFI's strength is that its members live in and are part of rural communities and that their knowledge comes from personal experience. PFI members share their information informally, farmer-to-farmer. For example, this kind of communication could take place during a visit to the bank or co-op or in the socializing at a card club or church supper. Practical Farmers of Iowa also shares information by:

- The field days listed in this booklet;
- Informal "twilight tours" of farms, primarily for PFI members;
- An annual statewide meeting with workshops and featured speakers;
- Get-togethers in each of the five PFI membership districts;
- Presentations at workshops, seminars, and meetings of other organizations, and;
- *The Practical Farmer*, the quarterly newsletter of the organization (Comes with membership: \$10/year, \$25/3 years).

Youth Education

A new PFI initiative is the education of young people about sustainable agriculture practices and concepts. The initiative includes several elements, such as in-service training of high school agriculture teachers, on-farm trials by FFA chapters, sustainable agriculture demonstrations at the 4-H Center near Madrid, and youth tours on farms of PFI members. All of these activities draw on the knowledge and expertise of farmers who are developing and using practices that are profitable, environmentally sound, and good for people. As such, the education initiative links young people with PFI members in ways that make learning about sustainable agriculture a meaningful and enjoyable experience.

Acknowledgment:

The PFI on-farm demonstrations are supported, in part, by Iowa State University Cooperative Extension, the Leopold Center for Sustainable Agriculture, and the SARE (Sustainable Agriculture Research and Education) program of the United States Department of Agriculture.

Practical Farmers of Iowa

PFI is a nonprofit farmer-member organization that works to share information about profitable, environmentally-sound methods of farming and to encourage research in this area. Non-farmers are also welcome to join, as associate members. Since its formation in 1985, PFI has grown to over 400 members. An on-farm trials coordinator, who is an ISU Extension Associate, handles day-to-day activity, and a second Extension associate serves as PFI education coordinator. An elected board of directors determines policy for the organization. Below are the PFI officers.

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

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

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

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

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

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

PFI Treasurer & Grants Officer: Dick Thompson, 2035 190th St., RR 2, Box
132, Boone, 50036. (515) 432-1560.

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

On-farm Trials Coordinator: Rick Exner, Room 2104, Agronomy Hall, ISU,
Ames, Iowa, 50011. (515) 294-1923.

Education Coordinator: Gary Huber, Room 2104, Agronomy Hall, ISU, Ames,
Iowa, 50011. (515) 294-1923.

PFI Cooperators and Field Days

JUNE 22 SOUTHWEST IOWA

With support from the United States Department of Agriculture SARE (Sustainable Agriculture Research and Education) program.

Ronald and Maria Rosmann, 1222 Ironwood Rd., Harlan, IA 51537-4102 (712) 627-4653

The Rosmanns raise oats, corn, soybeans, rye, alfalfa and pasture on their 480-acre farm. In the past decade this farm has seen a 75% reduction in fertilizer and pesticide use. The Rosmanns farrow-to-finish 1,000 hogs annually and operate a cow-calf herd of 65 cows. They also raise broilers and operate a small nursery featuring container-grown and field-grown trees, all for local sales. They have obtained a special grant from the USDA SARE (Sustainable Agriculture Research and Education) program to carry out a replicated study of weed management systems in ridge tillage.

Demonstrations: first cultivation for soybeans, second (ridging) cultivation for corn. Weed management systems include: banded grass herbicide (Dual), banded broadleaf herbicide (Bladex), banded grass and broadleaf herbicides, and zero herbicide, all with one rotary hoeing and two cultivations, and zero herbicide with two hoeings and two cultivations.

7:00 P.M. From intersection of Hwys. 59 and 44 in Harlan, 2 miles W. on Hwy. 44, then N. 2¼ miles on gravel, W. side.

JULY 8 EAST-CENTRAL IOWA (Date changed from June 24.)

David and Lisa Lubben, RR 3, Monticello, 52310 (319) 465-4717

With assistance from Ron Ivans, Extension livestock field specialist, and Virgil Schmitt, Extension crops field specialist.

About half of the 1,200 acres the Lubbens farm is devoted to row crops. The remainder grows alfalfa hay or bromegrass for pasture. Intensive rotational grazing is used with the 100 stock cows, and the Lubbens run a 250-head feedlot for finishing.

Demonstrations: management-intensive rotational grazing, paddock layout, fencing, tree protectors, no-till soybeans vs. conventional tillage soybeans, ± ammonium thiosulfate on corn.

6:30 P.M. From Monticello, 3 miles N on Hwy. 38. 3rd house (look for PFI sign).

JULY 16 SOUTHEAST IOWA *(Date changed from July 22.)*

In cooperation with Davis Soil and Water Conservation District and Davis County Extension Service.

John and Pam Cowles, RR 2, Box 90, Bloomfield, 52537
(515) 675-3414

Of the 200 acres of permanent pasture on the farm, 75% is intensively grazed fescue/trefoil. The Cowles are learning to use switchgrass in a grazing program. They also farm 600 acres in a 4-5 year rotation of corn, soybeans, oats and hay.

Demonstrations: setting portable fence with a three-wheeler, moving cattle in a paddock system, new intensive grazing management setup using permanent fencing and a pond-fed tank, switchgrass for summer grazing
10:00 P.M. From Milton, 3 miles S. on Hwy 15, 2 miles W. on J-56, ¼ mile S. to grain bins.

LIGHT LUNCH SERVED

Robert Reed, RR 1, Box 174, Bloomfield, 52537
(515) 664-1158 *(assisting farm)*

The 177 acre Reed farm is on rolling ground, with only 44 acres in row crops. Robert Reed rotates three groups of cattle through two paddock grazing systems. His goal is to have a low-cost input system to produce maximum income potential for a small, southern Iowa farm that has limited row crop potential. He is lease-grazing to utilize excess forage until his own herd expands.

Demonstrations: paddock layout on rough terrain, gravity-fed watering system, flatbed trailer for stringing fence, lease-grazing
2:00 P.M. From Pulaski take Hwy. V-42 5 miles N., continue past Hwy. J-40 another 2 miles N. on V-42, ¾ mile W. on J-37, N. side, white house. From Bloomfield take Hwy. J-40 E. 7 miles, 2 miles N. on Hwy. V-42, ¾ mile W. on J-37, N. side, white house.

JULY 29 NORTHWEST IOWA

In cooperation with Outlying Research System, Iowa State University Agriculture and Home Economics Experiment Station.

Todd and Linda Hartsock, RR, Box 47, Rolfe, 50581
(712) 857-3426

The Hartsocks farm
150 acres of corn,
beans, oats and



¹ “±” indicates “with and without” the listed practice.

alfalfa, in addition to farming Todd's mother's farm. The home farm is now certified organic. The Hartsocks also raise greenhouse vegetables.

Demonstrations: economics of an organic farming system, ridge-till vs. disk-tillage soybeans.

1:00 P.M. E. from Pocahontas 3 miles on Hwy. 3. N. on Hwy N-57 to Plover. From Plover, 1 mile N. on pavement, 1¼ E. on gravel. S. side.

Bob and Diane Graaf, RR 1, Palmer, 50571

(712) 359-7787

The Graafs raise hothouse tomatoes and strawberries for local markets.

Demonstrations: commercial hothouse tomatoes and other vegetable crops.

3:00 P.M. 6 miles E. of Pocahontas on Hwy. 3, 3 miles S. on N-65, 1/8 mile W. on gravel, 1st house on S. side.

Harlan and Sharon Grau, RR 2, Newell, 50568

(712) 272-3692

The Graus farm 700 acres of corn and soybeans, with some small grains, and they sell feeder pigs.

Demonstrations: P & K fertilization in a ridge-till system – no fertilizer vs. surface broadcast vs. deep band, banding equipment, demonstration – drilling legume cover crop after oats.

5:00 P.M. 3 miles N. of Newell on M-54, NW corner field.

LIGHT SUPPER SERVED

Iowa State University Allee Experimental Farm, RR 2, Newell, 51568

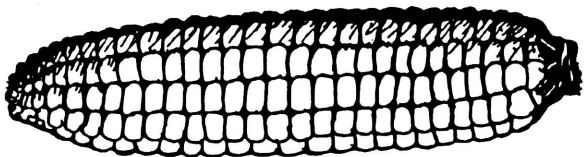
Roger McMillin, farm manager (*assisting farm*)

(712) 272-3512

The farm is in the seventh and last year of a cropping systems study that compares three systems: 1) high input, low management – chisel/disk, broadcast fertilizers and herbicide (both C-C and C-SB rotations); 2) intermediate system – ridge-till, crop scouting, soil testing, some manure, banded fertilizers and herbicides (both C-C and C-SB rotations); 3) high management, low input – ridge-till, scouting, soil testing, manure, some sidedressed N, pesticides only as rescue (O-M-C-SB-C rotation).

Demonstrations: yields, weed management, and economics in the transition to alternative systems.

8:00 P.M. From west edge of Newell, go 1 mile S. on gravel, ¼ mile E. South side.



AUG 3 NORTHEAST IOWA Cosponsored with the Leopold Center for Sustainable Agriculture, Winneshiek County Extension Service, and the Soil Conservation Service.

Steve Hopkins and Sara Andreasen, RR 2, Box 99, Decorah, 52101
(319) 382-9640 (*assisting farm*)

Recent entries into farming, Steve Hopkins and Sara Andreasen run a grass-based dairy operation of 25-30 Jerseys and Ayrshires on about 20 rolling acres of bluegrass, clover, and dandelions. Hay and grain are purchased according to the quality of forage on the farm. Steve and Sara obtained grants from the Leopold Center for Sustainable Agriculture and the *PFI Sustainable Projects* program to evaluate production and economics of grass-based dairying. They are tracking milk production and costs and testing forage weekly.

Demonstrations: management-intensive rotational grazing, paddock layout, permanent, semipermanent, and temporary electrical fencing, water placement in paddocks using surface pipes, production and economics.

1:00 P.M. From the Casey's on the northwest side of Decorah, take Hwy. W-38 ("Locust Rd.") N.E. 4 miles, turn right (E.) at Hwy. A-38 ("Canoe Ridge Rd.") and go 2 miles to the intersection with Landmeyer Rd. Yellow buildings on N. side.

AUG 6 NORTHEAST IOWA

Lynn and Linda Stock, 603 2nd St., NE, Waukon, 52172
(319) 568-2504.

With Lynn's brother and parents Robert and Irene, the Stocks operate roughly 1,100 acres, raising corn, soybeans, oats, and alfalfa. They have a 50-sow farrow-to-finish operation, a 40-cow beef herd from which they finish calves, 50 milking Holsteins, and they are starting to work with stocker cattle to finish.

Demonstrations: management-intensive rotational grazing, nitrogen management in corn using the late spring soil nitrate test, planting on ridges, 5-row and 10-row equipment, narrow strip intercropping (corn and soybeans)

Note: Alan Henning, a grazing consultant from Madison, Wisconsin, will also be on hand to take questions.

1:30 P.M. From the John Deere shop at the Waukon intersection of Hwys 9 and 76 go 4.8 miles S. on Hwy. 76 to 5th gravel road on left. From Rossville, N. on Hwy. 76, 1st gravel road on R. Barn with large pine grove, north of "Y," look for PFI sign.

REFRESHMENTS PROVIDED

Practical Farmers of Iowa On-Farm Demonstrations — 1993

JULY 29 NORTHWEST

economics of organic farming
ridge-till vs. disk-tillage soybeans
hothouse vegetable production
deep-banded P & K vs. broadcast
seeding cover crop demonstration
transition to alternative systems – yields, weed
management, and economics

AUG 27 NORTHWEST

narrow strip intercropping
economics of crop rotations
mechanical vs. chemical weed management in
ridge-till corn and soybeans
gram amaranth
specialty soybeans
nitrogen management in corn
wind generator economics
silage corn, waxy corn
medic cover crop
oats as a fall cover crop
wetlands restoration

JUNE 22 SOUTHWEST

cultivation demonstrations
chemical and mechanical weed management
systems in ridge tillage

SEPT 2 SOUTHWEST

herbicide vs. mechanical weed management in
ridge-till soybeans
manure for fertility in corn-soybean rotation
management-intensive rotational grazing
warm season grasses
fencing
chemical and mechanical weed management
systems in ridge tillage
nitrogen management in corn
field-planted tree nursery

(* Dates that have been changed.)

AUG 21* NORTHEAST

intensive rotational grazing
starter fertilizer for corn
ridge-till soybeans with and without herbicides
biological soil amendment in alternative system
polyacrylamide gel

AUG 30 NORTH CENTRAL

no-till drilled vs. ridge-till soybeans and corn
starter fertilizer for soybeans
narrow strip intercropping
P & K starter – band and band placement

SEPT 9 CENTRAL

spring and fall rye cover crops for weed control
with and without rotary hoe in soybeans
starter fertilizer rates with deep planter band
banded vs. broadcast potassium fertilizer
narrow strip intercropping system vs. conven-
tional system
management-intensive rotational grazing

AUG 12 NORTHEAST

management-intensive rotational grazing for
sows and for a cow-calf herd
livestock manure as a nitrogen resource
trout stream protection through exclusion
fencing, and designated livestock crossing
“nose pump” for cattle

JULY 16* SOUTHEAST

intensive rotational grazing
lease-grazing
setting fence
demonstrations
water systems
paddock layout
switchgrass
for warm
season grazing

AUG 23 SOUTHEAST

management-intensive
rotational grazing
sweet sorghum biomass energy
no-till vs. ridge-till corn
nitrogen management in corn
narrow strip intercropping
insecticide in second-year corn
banding P&K
precision bander, electronic
metering
ag safety and health

AUG 3 NORTHEAST

grass-based dairy using management-intensive
rotational grazing – productivity and
economics

AUG 6 NORTHEAST

management-intensive rotational grazing
nitrogen management for corn
planting on ridges, equipment
narrow strip intercropping

AUG 18 NORTHEAST

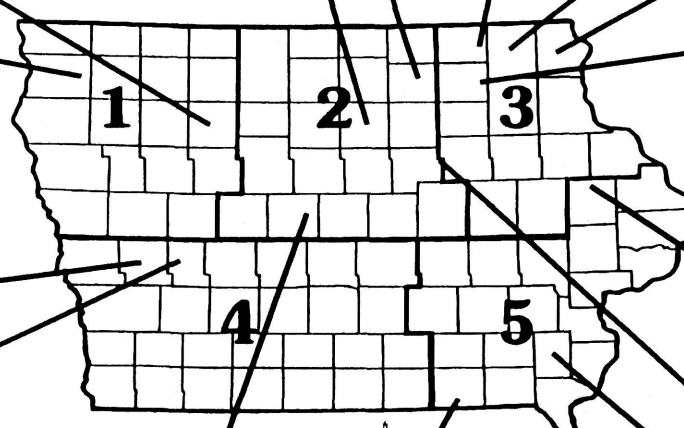
sidedressed manure vs. 28% N
narrow strip intercropping &
effect on wildlife
strip grazing of stocker cattle
paddock grazing cattle & hogs
fencing materials
portable chicken pen, pasture
poultry
berseem clover as greenchop
leader-follower grazing
multipurpose trees with livestock
underground grid water system
oats for forage vs. grain
amaranth in rotations and strips
mechanical weed management
recycling

JULY 8* EAST CENTRAL

management-intensive rotational grazing
paddock layout
fencing, tree protectors
no-till vs. disk-plant soybeans
ammonium thiosulfate

AUG 13 EAST CENTRAL

manure vs. purchased N as a
nitrogen resource for corn
roasted soybeans for hog ration
semi-confinement hog operation



(Map numbers show PFI membership districts.)

Practical Farmers of Iowa

2035 190th St., Boone, Iowa 50036

*Forwarding and Return
Postage Guaranteed
Address Correction Requested*



*Printed on
Recycled Paper*

