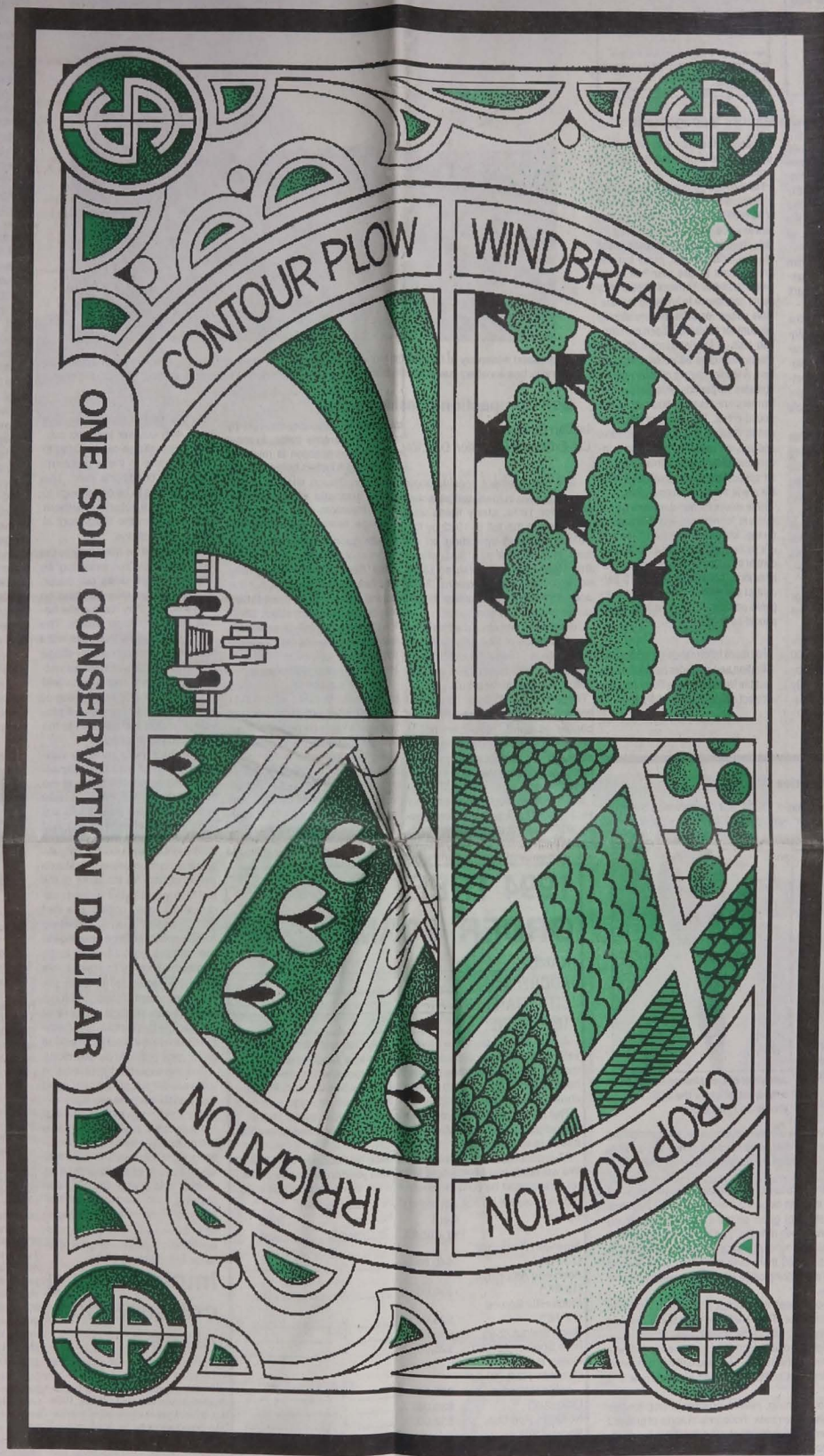


**PUBLISHED ANNUALLY FOR THE
FAYETTE COUNTY SOIL AND WATER CONSERVATION DISTRICT**



**CONSERVATION DOLLARS
NET HIGH YIELDS**

FOR THE FUTURE

**48 YEARS OF CONSERVATION RESOURCE MANAGEMENT
FOR FAYETTE COUNTY'S FUTURE**

**SPECIAL EDITION TO THE
Daily Register**

Soil Conservation Annual Report

Outstanding Conservation Farmer Recognized

Nutrient credit for pig manure per 1000 gallon				
	N	P ₂ O ₅	K ₂ O	
Swine & dairy manure	45	20	30	
Swine finishing	25	10	25	
Swine farrowing	30	30	30	
Reduce N by 30-50% if broadcast on top and not incorporated by rain or tillage within 4 days	30	10	10	

Average N, P ₂ O ₅ , and K ₂ O contents of solid manure in northeast Iowa				
Kind of manure	lb N/ton	lb P ₂ O ₅ /ton	lb K ₂ O/ton	
Cattle manure	5	5	10	
Swine manure	10	20	10	
Manure credit account for field losses if not incorporated				

Increase Farm Profits with Manure Management

After harvest and prior to spring planting many livestock producers turn their attention to spreading manure on open crop ground. These same producers often do not take manure nutrient credits due to the uncertainty of application rate and availability of nutrients.

There are three things farmers can do to become more confident in taking nutrient credits for next years crop:

Determine the nutrient value of the manure. If manure is handled as a liquid, a lab nutrient value of their manure. If manure is handled as a liquid, a lab nutrient analysis is recommended. Producers handling barnyard or other solid manure can use table values.

Determine the application rate. This information is obtained by calibrating your spreader and can be as easy as the following: First determine the number of tons of gallons in an average load. Next count the number of loads applied to a field of a known size. Divide the total tons or gallons applied by the acres covered to determine the tons or gallons applied per acre.

Keep the manure application or spread pattern uniform throughout the field.

After manure is applied, the application rate (in tons per acre or 1,000 gallons per acre) can be multiplied by the nutrient content of the manure. By keeping records on manure applica-

tion and nutrient credits, we can reduce off farm inputs and increase net profits.

The average spreading rate for calibrated manure spreaders in northeast Iowa is 20 tons per acre. This is equivalent to a 100 pound nitrogen credit for dairy feedlot manure. Although these are significant credits, many farmers are reluctant to take even half of the credit available. Farmers should gain some confidence in knowing that the table values for solid manure already account for at least a 50 percent nitrogen loss. A feedlot sample of dairy manure contains 50 percent nitrogen loss. A feedlot sample of dairy manure contains 15 pounds nitrogen per ton. Farmers are asked to take only a five pound credit. Two thirds of the nitrogen in manure is in the organic form and will not volatilize. If manure is incorporated by tillage immediately after application, farmers can take twice the credit the table recommends.

Table values for liquid manure do not account for nitrogen loss if broadcast on top. Manure broadcast on top and not incorporated can lose 30-50 percent of its nitrogen value through volatilization. This still leaves 50-70 percent of the applied nitrogen in the organic portion of their manure which should be credited.

For more information on manure fertilization and spreader calibration contact the Northeast Iowa Demonstration Project office. Phone: 864-3999.



The grassed waterway at the Kathryn Hinsenbrock farm North of West Union is properly maintained. The waterway has an adequate width which helps it convey runoff during heavy rainstorms. (SWCD file photo)

Soil Compaction Considerations

by Dan Burkhardt
Co. Extension Education Director

Soil management considerations for many soils in Iowa will be a challenge for 1994. Many fields were damaged in the fall of 1992 by harvest equipment operating on wet soils. In addition, most parts of Iowa the 1993 crop was planted under adverse, wet soil conditions. Many soils also have had manure applied under compacted conditions. Soils stayed wet almost all summer, and lost much of their structure near the surface. These "puddled" soils are dense and compacted as a result of this structural breakdown.

Tillage to break up these compacted soil zones is often the first option that comes to mind. However, tillage needs to be done under proper conditions to be beneficial. Don't automatically assume that any tillage is better than none.

If soil compaction symptoms such as diagonal track patterns are showing in fields, poor growth of end rows and uneven growth patterns in the row are evident next summer the

damage was probably caused by tractor or combine traffic. In most cases, this compaction is relatively shallow, 6 to 8 inches below the surface. Even though shallow, it can have a dramatic effect on crop growth. However, even without tillage, assuming a normal winter with good freezing and thawing, most of this effect will be eliminated. Some shallow tillage may help remove the problem, but the natural forces of overwintering may be the dominant effect. Shallow tillage in the fall on soils with low erosion potential may improve the puddles surface condition of many poorly drained soils.

Deep compaction problems may predominate in fields where ruts were left after either harvesting last year's crop or perhaps from manure hauling on areas last spring and summer. When axle loads exceed 10 tons, soil deformations below 10 to 12 inches from the surface can be detected especially in moist soil conditions. Soils with fine textured subsoils (higher clay content) are more susceptible to long term damage

from this type of compaction that those with coarser textured subsoils. Deep tillage can be used to remedy some of these problems if the right conditions exist. The subsoil needs to be dry enough to obtain soil fracturing without smearing from the tillage tool at the depth of tillage.

Soils should be tilled only to the depth to which "soil smearing" by the implement does not occur. Shallow tillage may be done on these soils if they remain wet below desired tillage depth. The deep damage to the soils will have to be recovered with tillage late. Natural causes such as wetting and drying, root growth and decay, and perhaps burrowing of worms and other animals will provide drainage and aeration to the impacted depth of soil.

Soils that were recently converted to no-till may have experienced some consolidation at the surface during the year, especially in poorly drained soils. If this soil shows signs of slow drying and poor air transfer this fall, some relatively shallow, non-inverting tillage may be considered. It takes a period of time for the biota of the soil to respond to the surface residue and to build populations that will assist in creating "macropores" or large openings in the surface soil. Since a large number of acres in Iowa have been converted to no-till in the past two years, these problems are common. A tillage system that will fracture this surface layer without destroying the surface residue cover may prove to be beneficial.

Soil management problems in Iowa are difficult after a prolonged wet period such as we have experienced. However, remedial measures will probably not solve the problem unless proper conditions exist for those measures to work. Natural processes such as wetting and drying, freezing and thawing, and soil biological systems will tend to bring damaged soils back to normal if the practices that created the original problems are discontinued.

Implementing conservation plans

By LaVonne Koch, Soil Conservation Technician

Get those conservation plans implemented now, don't wait till fall. 1994 is a critical year because all conservation practices must be implemented on your conservation plan by Dec. 31, 1994 mandated by 1985 Food and Security Act.

The wet conditions in 1993, will not delay the deadline on your conservation plan except for construction practices.

In order to receive any government benefits, your conservation plan must be implemented.

The SCS field office is working hard to complete a field follow-up on all practices that have highly erodible land. During our visits, we will go over the needs of crop rotation, residue, waterways or critical area seedlings, and field borders. We will also offer some options to improve the land and save your soil from erosion. We are willing to work with you through a field follow-up to get to know your operation, help you understand your conservation plan and update the conservation plan.

Don't wait till tomorrow to get an appointment.

Kathryn Hinsenbrock was recognized as an outstanding conservation farmer for 1993 by the Fayette Soil and Water Conservation District. The purpose of the award is to recognize individuals for their outstanding progress in applying a soil conservation plan on land they own or operate. Duane Mork has been the operator on this tract for the past several years. The award is based on conservation work on a 257 acre farm in Dover Township North of West Union, Corn, Oats, and Hay are rotated on the majority of highly erodible land. A Conservation tillage system, leaving 30% residue cover after planting, protects 208 acres of cropland. 187.6 acres of contour strip cropping and contouring are used on the farm.

Critical areas on Hinsenbrock's farm have been treated with 3380 ft. of the outlet terraces. These terraces reduce long erosive slopes into shorter ones and transport surface water safely off the fields to reduce gully erosion. Low cost practices such as 3.3 acres of grassed waterways, 2700 ft. of field borders, and 2.8 acres of critical area planting add to the Hinsenbrock conservation program.

In addition, 5 acres of trees have been planted on the farm.

It is Kathryn's philosophy that we are God's stewards and caretakers of their land. She believes it is the farmers duty to take better care of the land than they would if it were theirs.

The Fayette Soil and Water Conservation district salutes Mrs. Hinsenbrock for her fine conservation efforts. The example she provides promotes the stewardship of our soil and water resources.

Plant Trees, Extend CRP

by Gary Beyer, District Forester Charles City

What is going to happen to CRP? Will the government extend the program, or will million of acres go back into crop production within the next few years as CRP contracts expire? Much of the land in the Conservation Reserve Program is highly erodible and may require expensive erosion control measures to meet SCS farm plan requirements.

No one knows what the future of CRP is. But there is one way to guarantee an additional five years of CRP payments. For land that was enrolled under a grass contract prior to 1991, you can receive an additional five years of CRP payments by planting trees. The program is designed to promote hardwood tree planting, but up to 50% conifers are allowed to help train the hardwoods to grow straight.

Average costs of tree planting are \$350-\$400 per acre for establishment. Five years of weed control are required at an average cost of \$60-\$70 per acre. The CRP program will cost-share 50% of the first year's costs, not to exceed \$210 per acre, minus the cost-share that was originally paid to establish the grass cover. 50% cost-share is also available for the second year of weed control.

Planting trees on highly erodible portions of your field, may ease the restrictions for framing on the remainder of the field. By planting the steep areas, the field will no longer be classified as highly erodible and requirements for meeting SCS erosion guidelines will be more lenient. Often, the steeper area is not profitable to farm anyway. The land that was returning no profit from farming could provide erosion control, wildlife habitat, and an investment that can return 6-8% over a 60-80 period. The increase in value of the trees is not taxed until the trees are harvested. Area 2 acres or more in size will qualify for the Forest Reserve Law. After the CRP contract expires, the land will be exempt from property taxes.

You can get started now. Contact a forester to look at your farm and write a plan for planting trees. You can then apply for the CRP extension at the ASCS office. Plan now so that you have time to properly prepare the site, order seedlings an line up a contractor to do the work. Plan now to start a legacy that your children can enjoy and profit from.

Changing the Face of America

by Jeffrey Vonk, State Conservationist, USDA Soil Conservation Service

If the job is completed as envisioned, it will be something done in five years that couldn't be done in the last 50. Lester Brown called it one of three major environmental accomplishments worldwide. It's serving as a model for other countries.

It's a story not yet complete, but the recent progress in soil and water conservation in Iowa and the United States is promising.

This recent progress is fueled by the conservation provisions of the 1985 and 1990 farm bills. One, called the Conservation Reserve Program, has helped farmers temporarily retire millions of acres of the most erodible cropland in exchange for participating in federal farm programs. A majority of farmers have supported this concept in recent farm polls, and about a third of the conservation work called for is complete.

You can see results by driving across the state. Almost two million acres of steep lowa hillsides are now in grass as part of the Conservation Reserve.

There are also soil-saving strips of grass on the edges of fields, along drainageways, and on contours across hillsides. The increase in these field borders, grass waterways and contour buffer strips is readily apparent to conservationists who have advocated them over the years. In addition to saving soil, these grass strips are helping clean up surface waters and give cover to many types of wildlife.

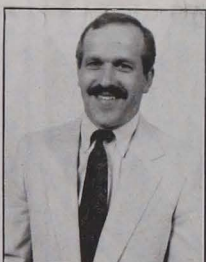
Wildlife specialists have documented the highest pheasant numbers in Iowa in 1991 since 1970, for instance. They credit the increase to the new grass habitat provided by farmers as part of the conservation programs.

Each Iowa producer with highly erodible land is being asked to follow a conservation plan developed late in the 1980's. The plan outlines conservation systems for each field, and lists completion date between now and Dec. 31, 1994.

Thousands of acres of contour farming, millions of acres of crop residue management, thousands of miles of terraces, thousands of acres of grassed waterways, and many other conservation practices are called for in the plans.

Without question, these practices help the farmer. But they also benefit society in general. Financial benefits are often long-term for the farmer, while up-front costs can be a significant part of an annual farming budget.

Knowing there are costs involved in caring for the land, soil conservationists have developed a deep appreciation for conservation farmers. They are changing the face of America, literally, and they deserve a friendly pat on the back from time to time. A conservation farmer is everyone's friend.



Jeff Vonk of Des Moines is a state conservationist for the SCS. (Photo by Lynn Betts)

A thank you note

We, the Fayette Soil and Water Conservation District Commissioners would like to say "Thank You" to our assistant commissioners for all their work this past year and to all the state and federal staff for there fine work this year. Last but not least, we would like to say "thank you" to all the others we worked with this year. It takes the team work you all have given to have a winning year and "you" made it happen. "Thank you."

1994 TREE ORDER FORM



NAME: _____
ADDRESS: _____
CITY, STATE, ZIP: _____
TELEPHONE: _____

As done in the past, the Fayette County Soil and Water Conservation District is once again sponsoring a tree seedling and transplant sale. The trees are hardy, bare root seedlings with healthy root systems from Cascade Forestry Service, Inc. Prices shown are per bundle of 25, except the nut tree package.

The sale is open to anyone interested in planting trees. There are no guidelines as to who can purchase the trees and where the trees are to be planted.

All orders must be received in our office by February 25, 1994. We will notify you in mid-April as to when your order can be picked up. Trees must be paid for when ordered. We do encourage early ordering, as we do sell out of the more popular species.

Species	Cost Per Bundle	Number To Order	Total Cost
American Arborvitae (12-18")	\$40.00 x	x	
American Arborvitae (18-24")	\$50.00 x	x	
Black Hills Spruce (12-18")	\$25.00 x	x	
Black Walnut (2-3")	\$30.00 x	x	
Blue Spruce (12-18")	\$25.00 x	x	
Honey suckle (Arnold's Red) (18-24" - aphid resistant)	\$35.00 x	x	
Lilac (2-3")	\$30.00 x	x	
Northern Red Oak	\$30.00 x	x	
Norway Spruce (18-24")	\$30.00 x	x	
Scotch Pine (18-24")	\$30.00 x	x	
Sugar Maple (2-3")	\$55.00 x	x	
White Pine (12-18")	\$25.00 x	x	
White Spruce (12-18")	\$25.00 x	x	

Special Native Nut-Tree Package:	\$40.00 x	x	
3 Butternut, 2-3"			
3 American Hazelnut, 6-12"			
3 Black Walnut, 6-12"			
2 Northern Pecan, 6-12"			

These American nut trees offer shade, delicious nuts, and valuable veneer logs. They also help to enhance wildlife habitat. The trees have a total value of \$52.80 if purchased individually. We offer the package for \$40.00.

Total of Above _____
Add 5% Sales Tax _____
TOTAL AMOUNT DUE _____

Please make checks payable to Fayette SWCD (Soil & Water Conservation District) and return with your order to 612 Highway 150 South #1, West Union, IA 52175-1508. Thank you for your order!

Soil Conservation Annual Report

Why field borders?

by LaVonne Koch,
soil technician

A field border is a strip of perennial vegetation (grass) established next to cropland on the outside of a field. The field border provides a turning area for farm equipment, prevents rill and gully erosion, and prevents trows up and down the hill.

To clarify where a field border is required; 1) where the field is contoured and we have give credit for contouring, 2) where the field is farmed across the slope and we have given credit and the field border would erode at a greater level than planned for the rest of the field, 3) where concentrated flow erosion is a problem in afield edge condition.

Even now with 0 percent set aside, we still require a minimum of sixteen feet wide. But the field border must be wide enough to allow you to run your farm equipment on without end rows of crops along the side of the field border. We still encourage you to leave the recommended ASCS guidelines of thirty three or sixty six feet wide.

When establishing field borders follow these guidelines: 1) Prepare a firm seedbed, 2) apply lime and fertilizer before seeding, 3) seed the area with appropriate and good seed, 4) use oats as a nurse crop at a rate of 1 to 1 1/2 bushels per acre during the spring and mow the oats before they head out or harvest for grain, 5) drill across the slope not up and down the hill if possible to help control erosion, and 6) seed the field border during spring seeding period of March 1 to May 15 or during late summer seeding of August 1 to September 15.

It is very important to maintain the field border after it is established. Guidelines on maintaining the field border are: 1) mow to control weed or shrubs from developing, 2) maintain the necessary nutrient level by top dressing with fertilizer, 3) reseed as necessary to maintain desired plant species, 4) on adjacent sloping cropland, till soil on the contour, at right angles to the field border. This prevents water from forming gullies along the field border, and 5) shut off farm chemical sprayers when turning on a field border.

Field borders that are required must be implemented by Dec. 31, 1994, mandated by the 1985 Food and Security Act.



SWCD employees

The Fayette County Soil and Water Conservation District employees are front row left to right, LaVonne Koch, soil conservation technician, Lori Kohlmeier, state secretary, and Julie McCready, WAE. Back row left to right, Jerry Muff, district soil conservationist, and Alan Crowe, state soil conservation technician. (Photo by Dennis Schrum)



SWCD

The 1994 Fayette County Soil and Water Conservation District are frontrow left to right, Richard Jensen, William Bennett, and Dawn DeVore. Back row left to right, Paul Nus, Larry Reiling, and Carl Nus. (Photo by Dennis Schrum)

Winning year for Fayette Soil and Water

by William Bennett, Chair, Fayette SWCD

The way the weather was in 1993, that may seem like an incorrect statement, but in many ways it was a winning year. We had great cooperation from most of the farmers of Fayette County in the implementation of their conservation plans. Nearly all are right on schedule with their plans and most of the others are working to be on schedule. Even with the weather of '93, these farmers are making a difference in the world. Not only are they producing the best and most plentiful food supply in the world, but they're also working to improve our most basic resources, our soil and water. I use the term "our" because in many ways the soil and water does belong to everyone -- without them none of us would exist.

Another way that 1993 was a winning year was that with the cooperation of the Fayette County ASCS, we were able to put out a newsletter to our cooperators in Fayette County. Hopefully this was of value to each of them, helping them become aware of such things as USDA rules and programs, as well as who the soil and water district commissioners are and what they do. We are hoping to improve on these newsletters as time goes by and we learn

how to better produce them.

1993 was a winning year in that we were able to have the third graders from three school systems (North Fayette, Turkey Valley and Valley) at our conservation field day for third graders. The Fayette County Cattlemen's Association cooked burgers for those that attended. We have high hopes that 1994 will be the year that every third grader living in Fayette County and many from adjoining counties will attend this annual event. We are looking forward to the continued cooperation of Fayette County farm groups and other organizations in the education of our young people. I know of nothing that is more important than teaching our young people about our world, the place where we all live.

Other winnings on 1993, were that we had a state winner in the conservation poster contest. A state winner in the tree farmer of the year contest. To top things off, we had the outstanding elementary conservation teacher of the year for the state of Iowa.

Even though the crop yields were not winners, 1993 was a winning year for all the people of Fayette County. With the "cooperation" of all the fine people of the county, "and the weather man," I look forward to 1994 as a year when each of us will go on to achieve even more than 1993. One of the ways that you can help in this, is for you to become more involved in the activities of the Fayette Soil and Water Conservation District. If you call or stop at the office, we will try our best to help get you involved in making this a better place for each of us to work and live.

District Activities July 1992 - June 1993

July -- Soil and Water Resource Conservation Plan was recorded.
August -- IM Budget and Spending Plan was developed. Fayette SWCD received \$38,389.00 for cost-share projects. Forest Bonjour was nominated for Woodland Owner of the Year and Dan Burkhardt was nominated for the Izaak Walton Windbreak Award. Eugene Franzen was selected as the Fayette SWCD Outstanding Conservation Farmer. Contractor policy on practice checkout was approved by the Fayette SWCD.

September -- Conservation Education Field Day was held at the Richard Jensen farm for North Fayette third graders. Fall Regional meeting for SWCD Commissioners was held near Elkader. Mark Nelson was nominated for Woodland Owner of the Year.

November -- Richard Jensen and Paul Nus were re-elected for six-year terms to the Fayette SWCD Board. The 46th Annual Conference for SWCD Commissioners was held in Des Moines.

December -- Fayette SWCD's first newsletter was published. Fayette SWCD policy on channel tile was adopted. Soil and Water Resource Conservation Plan and Annual Work Plan were reviewed.

January -- Election of Officers meeting was held.

February -- IASWCDC and NACD dues were paid. Information on the IASWCDC Auxiliary Scholarship Awards was sent to schools within Fayette County.

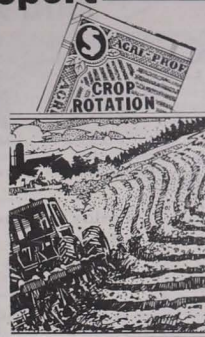
March -- Shelley Dolf was nominated for the IASWCDC Auxiliary Scholarship Award. Spring Regional meeting for SWCD Commissioners was held in Cedar Falls.



Stanley is new technician



Bill Stanley transferred from the Bremer County Soil Conservation office in April 1993. He has worked for SCS for 11 years prior to transferring to the West Union office. He will be seeing a larger variety of conservation practices and is looking forward to the challenges created by the more varied topography.



SOWJOY
AAA
DEL-AIR
Fane

Lumite Curtin • Chore Time Systems • Ritchie Waters • Tribar Floor • AAA Fan • Hired Hand • Lester Buildings • Free Stalls • Nursery Decks • Farrowing Crates • 3 Gauge & 5'16 Wire Tenderfoot • ADA Floors • Del-Air Fan • Complete Line of Hog Equipment
800-782-0026

IRA It's Still A Good Idea!

If you qualify, an IRA can give you important tax advantages today and build tax-free for retirement. Let's talk about an IRA. One of the

MODERN WOODMEN SOLUTIONS



TIM J. O'LOUGHLIN, FIC
231 South Frederick
Oelwein, IA 50662
(319) 283-2541
Independence Office
(319) 334-2083

Wrapping Families Together
MODERN WOODMEN
OF AMERICA
A NATIONAL LIFE INSURANCE SOCIETY
HOME OFFICE • ROCK ISLAND, ILLINOIS

LIFE • ANNUITIES • IRA'S
FRATERNAL PROGRAMS



YOUR LOCAL FARMUTUAL BELONGS TO YOU

In the best American tradition of neighborly cooperation, your FarmMutual belongs to you and the other members it serves. It provides benefits and protection you won't find anywhere else.

Let us tell you about it.
We Make It Work For YOU

FARMUTUAL
INSURANCE
AND GRINNELL MUTUAL REINSURANCE CO.
FARMERS MUTUAL
INSURANCE ASSOC.
135 S. Main, Fayette
425-4176

WOLVERINE BOOTS & SHOES



Brown's
SHOE FIT COMPANY

Downtown, Oelwein
283-3711

CALL
319-283-5578

For Complete Home & Commercial LANDSCAPING SERVICE

LET AN EXPERT PLAN & PLANT

- Windbreak material
- Place Your Order Now.
- Large Variety and Sizes of shade & fruit trees and shrubs suited for our area.



HOURS:
M-F 9-5
Sat. 9-3
Closed Sunday

**Oelwein
Landscaping**

Greenhouse — Garden Center

Soil Conservation Annual Report

1993. It was a year most of us in farming were glad to see go. We'd like to forget the cool spring, delayed planting, and especially the record rainfall and devastating floods. We'd like to forget the plunge in corn yields from the record 147 bushels an acre average in 1992 to just 85 in 1993, and a disappointing 31 bushels per acre soybean average in 1993.

We're relieved 1993 is behind us, but that doesn't mean we can't learn from it. The MAX program can help us do that.

I like to call the MAX a bottom-line program. In 1993, maybe more than in the two previous years, that's what it proved to be.



Jim Graham, Iowa's state MAX coordinator, raises 850 acres of corn and soybeans in Fayette County.

"Fields with heavy residues outperformed those with little or no residues in 1993"

Jim Graham

For instance, there was a lot of talk through the summer that no-till and other heavy residue fields didn't look good. We heard that 1993 wasn't a good year for first-time no-tillers. And, you would expect a cool, wet spring to be tougher on crops in fields with heavy residues because soils would

take longer to warm up and dry out. But the 1993 MAX results—the records from 585 fields in 70 counties across Iowa—tell us not to judge the bottom line by looking at fields in June. The records showed that neither yields nor profits were cut by farming with heavy residues. In fact, just the opposite was true.

The bottom line from the Iowa MAX in 1993 was that fields with heavy crop residues economically outperformed those with little or no residue. Net profits were highest on ridge till and no-till fields, followed by mulch till, reduced till and then plowed fields. (Note: A few zone-till or strip-till fields entered had favorable results, but because of the low number of entries, these fields were combined with no-till fields.)

As was the case in 1992, average yields were fairly constant despite type of tillage system. The cost savings from fewer trips, lower

machinery costs and other reduced inputs associated with crop residue management made the difference.

The mushrooming use of residues also made an environmental difference in Iowa in 1993. Despite rainfalls that were more than 1.6 times the rainfall in 1984, the 2.4 million acres of severe soil erosion in 1993 compares to more than 4 million acres of severe erosion in 1984.

While 1993 might not have been a good year for first-time no-tillers, the MAX shows fields that were no-tilled for the first time in 1992 or 1993 fared better economically than most. Newly no-tilled corn fields were outpaced only by ridge till fields, and new no-till soybean fields produced the highest profits of any system.

I saw a lot of tillage last fall. But what I see in the MAX results leads me to believe there's no need for all that tillage.

I thank the farmers who contributed their records to the MAX in a year with such poor crops. Others who played a part in compiling MAX information include national sponsors Successful Farming magazine, the Conservation Technology Information Center, and Ciba.

Those helping with planning and distribution at the state level

Effect of tillage on profitability

Corn									
Till	fields	fert	pest	oper	total	yield	cost/bu	prft	
no till	144	32.77	24.50	46.94	271.49	110.3	2.57	20.71	
ridge till	58	32.89	15.20	55.34	276.05	112.8	2.54	22.95	
mulch till	38	33.48	25.31	53.43	278.54	108.2	2.66	10.21	
plow	13	29.28	34.85	69.04	318.46	110.4	2.94	-25.90	
reduce till	87	32.09	24.96	55.07	275.84	106.4	2.74	6.24	
Averages	340 fields	32.56	23.52	52.02	275.74	109.5	2.63	14.43	

Soybeans									
Till	fields	fert	pest	oper	total	yield	cost/bu	prft	
no till	117	15.66	28.39	45.48	226.40	44.3	5.27	61.47	
ridge till	35	14.82	17.83	49.07	218.26	42.5	5.28	58.17	
mulch till	52	15.28	20.80	54.46	222.53	42.4	5.48	53.30	
plow	6	14.32	16.14	59.96	237.00	42.1	5.97	36.76	
reduce till	35	14.82	21.60	59.92	233.74	42.7	5.70	43.98	
Averages	245 fields	15.31	24.00	50.32	225.72	43.4	5.39	56.16	

include the Iowa Association of Soil and Water Conservation District Commissioners, the USDA Soil Conservation Service, the Iowa Corn Growers Association, the Iowa Soybean Association, Iowa Farm Bureau, Iowa State University Extension, the Iowa Department of Agriculture and Land Stewardship, Division of Soil Conservation, and agri-businesses.

This year's report offers side-by-side field comparisons, a comparison of profits of systems for two years, and results from controlled tillage demonstration fields.

We invite you to look closely at the results of the third year of the MAX (Farming for Maximum Efficiency) and compare these farmers' records to your own.

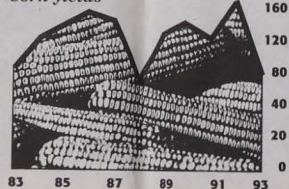
By Jim Graham
Fayette County Farmer and
Iowa MAX Coordinator

1993 may be the year many farmers have to do some careful comparisons of production costs and profits. The graphs on this page show average yields and selling prices for the last 10 years.

The 10 year comparisons show that 1993 yields were not that much different from 1983, 1984 or 1988. They show prices fluctuate too.

The MAX data for 1992 and 1993 is also shown here to let you analyze tillage systems yield and profit.

Corn yields



Soybean yields



Market price per bushel

10 year average		
corn	beans	
1984	2.51	5.67
1985	2.02	4.99
1986	1.41	4.73
1987	1.89	5.97
1988	2.45	7.33

1989	2.29	5.62
1990	2.21	5.63
1991	2.30	5.51
1992	2.00	5.40
1993	2.38*	6.20*

* 1993 market —year to date

Note: market year from 10/1 to 9/30.

Two years of MAX data —comparing 1992 and 1993

Corn								
system	1992			1993			92 & 93	
	total fields	avg yield	avg profit	total fields	avg yield	avg profit	total fields	avg yield
no till	182	171.4	49.36	144	110.3	20.71	326	140.9
ridge till	74	168.9	47.16	58	112.8	22.95	132	140.9
mulch till	48	160.7	4.74	38	108.2	10.16	86	134.5
reduce till	138	171.6	35.48	87	106.4	6.24	225	139.0
plow	8	178.7	36.96	13	110.4	-25.90	21	144.5

Soybeans

system	1992			1993			92 & 93	
	total fields	avg yield	avg profit	total fields	avg yield	avg profit	total fields	avg yield
no till	149	50.6	35.48	117	44.3	61.60	266	47.5
ridge till	53	49.7	40.78	35	42.5	58.17	88	46.1
mulch till	118	50.4	31.76	52	42.4	53.30	170	46.4
reduce till	39	51.8	39.02	35	42.7	43.97	74	47.3
plow	12	47.0	7.81	6	42.1	36.76	18	44.6

Historical yield data provided by Mike Duffy, ISU Extension.

New plots planned in 1994 include *manure plots comparing fall-versus-winter-versus-spring manure applications with treatments of 0, 50, and 100 pounds of nitrogen added. *corn will be planted into CPR land using various herbicide programs, nitrogen rates and planting methods *seven chemical companies each featuring new herbicide programs that claim to reduce herbicide persistence and toxicity in the environment will be set up side-by-side in a Winneshiek county plot east of Castalia on U.S. Highway 52.

Louis Christen is Fayette Co. Woodland Owner of the Year

Christen farms north of Wadena and owns 58 acres of woodland, putting a great amount of effort into improving and protecting it.

Those efforts include timber stand improvement, fencing for livestock exclusion, tree planting including water planting 15 acres to walnut and oak.

Gary Beyer, district forester with DNR says he is very impressed with Christen's devotion and accomplishments. Beyer noted in 1991 "Louis hosted one of the best ever forestry field days in Fayette County. Seventy-five people attended a day-long session to view the work that he accomplished.

Jim Graham, the state-wide and Fayette County MAX coordinator gives a presentation to the Fayette County participants make the effort to determine their net-returns in crop production, they are all winners.

Demonstration Plots Aid Understanding of New Practices

By Kevin Kuhn, Northeast Iowa Demonstration SCS coordinator
Field demonstration of new and refined farm-management practices is a major activity of the Northeast Iowa Demonstration Project, a USDA water quality project serving 460 farms in a 150,000 acre area of four northeast Iowa counties. The demonstration project office is located in Postville and serves farms in Bloomfield and the east half of Military Township in Winneshiek County. Field demonstrations in 1993 included manure, nitrogen, tillage, planting and weed control.

Manure Management. Multi-year swine and dairy manure plots on continuous corn showed an advantage to moderate manure application rate. All of the N, P and K requirements for corn production can be met with an annual application of 3,500 gallons of liquid swine finishing manure.

Dairy manure spread at a 20-ton rate, with an additional 25 pounds per acre of nitrogen, topped out corn yields in the dairy manure plot, indicating the significant value of dairy manure in continuous corn production.

Nitrogen Management. There was no corn yield-advantage from plots receiving 0 to 150 pounds of nitrogen on corn following a fair stand of alfalfa. 1993 yield results were consistent with plots from previous years indicating no corn yield-response to nitrogen following alfalfa. Corn yields and profitability peaked at the 90-pound nitrogen fertilization rate on corn following-soybeans. The six



The 92 MAX Banquet held at the Townhouse in February was also a success. Jim Graham and Tom Hayes were winners with the highest net return per acre. Jim Graham utilizes the ridge-till system and Tom Hayes no-tilled his 92 MAX field.



J.D. Bricker, CIBA rep. has been an ongoing supporter of the MAX program.

CONSERVATION
• CREATES PROFIT DOLLARS •

Soil Conservation Annual Report

Glovers Creek watershed: 5 years progress

by Alan Crowe, State Soil Conservation Technician

What began as just an idea a few years ago, has now become a reality today. During the 1980's, the Iowa Department of Natural Resources conducted a study of several watersheds in northeast Iowa in an effort to determine causes of stream deterioration and identify watersheds that warranted special attention. Their findings showed that sediment from erosion of agricultural land, coupled with livestock waste run-off, have the highest negative impact on the water quality of cold water trout streams. Furthermore, the top 25 trout streams in northeast Iowa were identified and Glovers Creek was ranked number eight.

From that point forwards, many organizations, people, long hours, and dollars have been invested in protecting this watershed. The SCS, ASCS, Iowa Department of Agriculture and Land Stewardship, University of Iowa, Iowa State University Extension Service, Fayette County Extension Service, Fayette County Conservation Board, Fayette County Soil and Water Conservation District, and most importantly, the landowners and operators in the watershed have all contributed to the success of this project. Of the 24 landowners in the watershed, 20 have participated in this project.

As of today, approximately 65,000 feet (12.3 miles) of terraces have been constructed in the watershed. Without a doubt, these terrace systems have greatly reduced the amount of sediment entering Glovers Creek.

Two large animal waste storage facilities have been built. These structures not only reduce the amount of feed old runoff that could enter the stream, but also allow for a timely application of fertilizer to the fields. Three cooperators in the watershed have worked with the ISU on farm services team to develop and utilize nutrient management plans. All too often, a producer is purchasing and applying more N, P, and K than is actually needed. A nutrient management plan can save the farmer money, and at the same time help prevent nutrient runoff from contaminating Glovers Creek.

The University of Iowa is allocated \$23,000 per year from the State Water Protection Fund, to be used for water quality studies. For the past four years, water samples have been collected from different locations along the creek. These samples are analyzed to determine the amounts of potentially harmful chemicals contained in the water. Also, a graduate student at U of I wrote his thesis paper about the relationship between water quality and the types and numbers of aquatic invertebrates present in the watershed. It is our hope that this information can show an improvement in the water quality of Glovers Creek. Findings of the study will be published later this year.

During the four and one-half years I have been project coordinator for the Glovers Creek watershed project, I have witnessed a tremendous effort by many individuals in protecting this beautiful trout stream. To all of you -- thanks so very much!

June 30, 1994 is the end of Iowa's fiscal year. It also marks the end of financing by the

state's Water Protection Fund. After this date, no more cost share money can be allocated for this project. However, there is currently about \$26,000 of unallocated money remaining in the budget. If anyone in this watershed wants to take advantage of the special cost share programs available, please notify me.



Glovers Creek, a cold water trout stream east of West Union.

Cost share incentive available in Glovers Creek watershed

The Glovers Creek Watershed Project has recently been approved for a "new" costshare program available to landowners and operators in the Glovers Creek watershed. The states' water protection fund has allocated \$25,000 towards the implementation of an integrated crop management program. I.C.M. encompasses many agricultural concepts which are sometimes overlooked but none the less important in achieving a financially successful farming operation.

The program utilizes a crop consultant who analyzes producer inputs such as nutrient, herbicide, pesticide, etc. as well as applications in relation to realistic field goals. Soil tests are an integral part of the process in determining what is and isn't needed. Field scouting during critical stages of the growing season will be performed to evaluate crop establishment, nutrient conditions, weed and insect populations, disease problems and growth stages. Technical assistance is provided in calibrating sprayer equipment.

A crop consultant's objective is to provide a constant monitoring and information service to the producer designed to increase the efficiency of the operation. With increased efficiency, net profits are also increased.

Our budget will allow us to enroll 2,000 acres in the ICM program. There are currently 1,364 acres involved, so if you wish to become a part of our ICM project, contact the Soil Conservation Service.



Conservation awards

Pictured are the 1993 award winners of the Fayette County Soil and Conservation District, left to right, Duane Mork, farm of the year, Kathryn Hinsenbrock, outstanding soil conservation farm, Louis and Cheryl Christen, woodland owner of the Year. Not pictured are Robert and JoAnn Shaffer, outstanding conservation farm Owner-Operator.



MAX contest

Winners of the 1993 Fayette County MAX Contest are Ray Forsyth, corn on beans, net profit per acre \$51.47, and 126.9 bushels per acre. Steve Goldenstein, corn on corn, net profit per acre \$48.69, 112.4 bushels per acre, and soybeans, \$149.91 net profit per acre, 57.6 bushels per acre, fourth in the state, and Bill Malvern, corn on soy, net profit per acre \$88.01, 122.6 bushels per acre. (Photo by Dennis Schrum)

to provide a constant monitoring and information service to the producer designed to increase the efficiency of the operation. With increased efficiency, net profits are also increased.

Our budget will allow us to enroll 2,000 acres in the ICM program. There are currently 1,364 acres involved, so if you wish to become a part of our ICM project, contact the Soil Conservation Service.

become a part of our ICM project, contact the Soil Conservation Service.



Contour strip cropping is shown in this photo on the Kathryn Hinsenbrock farm north of West Union. Row crops alternate with hay strips which reduce soil erosion significantly and filter the runoff. Monty Kuhn won the outstanding windbreak award.



A Fayette Co. Outstanding Conservation farm for 1993 in the Owner-Tenant Division was the Kathryn Hinsenbrock farm west of West Union. The operator is Duane Mork. Conservation practices include contour strips (shown), tile outlet terraces, grassed waterways, one grade stabilization structure conservation tillage and farmstead windbreak.



The Izaak Walton Windbreak Award Winner for Fayette Co. in 1993 was Monty Kuhn and family, shown on their acreage east of West Union. This well-manicured 9-row wildlife/windbreak area has a variety of shrub and tree species.

CONSERVATION

• CREATES PROFIT DOLLARS •



Winner in the Owner-Operator Division, the Robert and JoAnn Shaffer farm. Conservation practices include contour stripcropping, tile outlet terraces, conservation tillage, grassed waterways, one manure storage structure, and proper waste utilization.



Certificate of achievement

Meera Mahoney won first prize in the 1993 Soil Conservation Poster Contest. The award was presented to Mahoney at the 1994 Fayette County Soil and Water Conservation District annual meeting in West Union. (Photo by Dennis Schrum)

Soil Conservation Annual Report

Fayette County

Soil and Water Conservation District

FINANCIAL STATEMENT

July 1, 1992 to June 30, 1993

IM BUDGET

1992-1993 Allocation.....\$2,500.00
Supplemental.....100.00
Total Allocation.....2,600.00
Commissioner Expenses.....1,015.43
Office Supplies and Expenses.....

Spent.....93,337.50
Returned To State.....1,026.31
Obligated.....502.50
Unobligated.....\$ 1,966.54

REAP PRACTICES - 1993

1993 Allocation.....\$5,220.00
Spent.....3,573.26
Unobligated.....\$1,646.74

REAP FORESTRY/NATIVE

GRASSES - 1993

1993 Allocation.....\$1,345.00
Spent.....870.56
Unobligated.....\$474.44

GLOVERS CREEK WATERSHED -

75%

1993 Allocation.....\$44,200.00
Spent.....20,652.95
Returned To State.....4,297.12
Unobligated.....\$19,249.93

GLOVERS CREEK WATER QUALITY

EVALUATION PLAN (U OF I)

1993 Allocation.....\$22,950.00
Spent.....

III BUDGET COST-SHARE

PROGRAM

1992-1993 Allocation.....\$38,389.00
Supplemental.....32,002.00
Total Allocation.....70,391.00
Spent.....19,778.09
Obligated.....33,619.60
Unobligated Balance.....\$16,793.31
1991-1992 Allocation.....\$38,456.00
Spent.....28,654.88
Returned To State.....5.26
Obligated.....6,494.83
Unobligated.....\$3,301.03
1990-1991 Allocation.....\$56,534.00
Supplemental.....40,298.85
Total Allocation.....96,832.85



Deb Dessel, Judy Bennett and Dawn DeVore (not pictured) are assistant commissioners of the Fayette County Soil and Water Conservation District. (Photo by The Union)



Gully erosion north of Arlington on the Sam Ridenour farm is now controlled by grade stabilization structure. (Photo by The Union)



Contractors laying plastic pipe used as principal spillway on the Ridenour farm.



After construction, a gully is controlled by grade stabilization structure. Water impoundment will control the erosion and provide recreation. Photos by LaVonne Koch, SCT.



This is a view of a field on the Mark Rhea farm near Sumner. Rhea has been no-till farming on his 600 acres since 1984.

Rhea no-till farming since 1984

by William Stanley, Soil Conservation Technician

Mark Rhea farms approximately 600 acres in the Sumner area. The land is both in Fayette and Bremer County. Mark first became interested in no-till after attending no-till meetings, watching SCS videos and receiving plenty of encouragement from his dad, Gene Rhea.

He began no-tilling only corn into soybeans with a corn-corn-soybean rotation. He later changed his rotation to corn and soybean and then changed to complete no-till in 1987.

Mark sees the primary benefits of no-till farming to be:

Soil and water conservation to control sheet erosion and maintain productivity of the soil.

Economics by cutting fuel cost approximately 25 to 50 percent and less machinery cost.

Labor time saving during the busy time of the year.

The only two major changes that he made to his equipment was to put good row cleaners on his planter, and a good chaff spreader on his combine.

Fertilization program

Mark soil tests every three to four years and adjusts his maintenance plan accordingly.

His present maintenance plan is:

Corn: 150 lb. nitrogen side dress anhydrous ammonia, 150 lb. 18-46-0 starter, 200 lb. 0-6-60 spread on bean stubble spring or fall.

Herbicide program

Extrazine and 2,4-D burn-down covering the whole field after planting the corn; 1 pint of Butrlol Broadcast June 1-15, field check and spot spray for any specific problem.

He very rarely spot sprays for cutworms.

Soybeans

Burn down the whole field with Round-up and 2,4-D prior to planting soybeans. Postemergence of Pursuit, field check and spot spray for any additional problems.

	1993 Yields		Moisture
	Planting Date	Harvest Date	
Corn			
Well drained farm	5-11-93	10-15-93	117 25
Well drained farm	5-10-93	10-14-93	112 25
Poorly drained farm	5-18-93	11-3-93	105 17.5
Soybeans			
Well drained farm	5-22-93	10-10-93	45
Poorly drained farm	6-12-93	10-22-93	28

Considering the reduced yields we had this year because of the cool and wet weather, Mark's yields are very respectable.

I have been on Mark's farm many times and am impressed with his no-till management. He is an excellent example of a successful no-till farmer.

Eco system planning

by Richard Sims, Area Conservationist, West Union

I recently attended a satellite meeting with Assistant Secretary Jim Lyons. He is assistant to the Secretary of Agriculture. He set five goals for USDA - Soil Conservation Service and the USDA Forestry Service in 1995. They are empowering employees, reorganization, eco system planning and management, America's waters, and partnerships.

I would like to concentrate my thoughts on the eco system planning. For the last nine years we have been concentrating on highly erodible fields and conservation compliance plans. Compliance plans will always be a workload for the Soil Conservation Service but not to the extent of the last nine years. Eco system planning will allow SCS to do whole farm planning again. We will be able to look at all the resources, (cropland, pasture, forest, wildlife, and recreation), and provide environmentally sound assistance to our customers. One item that will be emphasized in Northeast Iowa is to improve water quality. This will be accomplished through partnerships with SWCD's, other private non-profit groups, and State agencies.



Fayette County approved two projects for the 1993 sinkhole cleanup program; one on the Linda Gjere farm north of West Union, the other on the Herb Vagts farm also north of West Union. All trash posing a threat to ground water contamination was hauled away. Some inert materials were buried on-site near sinkhole.



The sinkhole after clean out.

It's Time To Look to Oelwein State For Your Agricultural Loan Needs.

Friendly experienced lending staff with farm backgrounds. 104 yrs. combined bank experience.

Dedicated to the family farm with progressive-ness in mind.

Flexible loan terms relating to size and interest rates. Prompt loan decisions.

Involvement of staff with local agricultural organizations.

Strong desire to provide any Ag lending or other financial services our customers may require.

Open til 6:00 p.m. every Friday and after hours by appointment.

Oelwein State Bank

25 N. Frederick, Oelwein, Iowa 283-3361
Offices in Arlington and Aurora
Subsidiary of Iowa National Bankshares Corp.

JOHN DEERE

CONSERVATION PLANTER: HEAVY-DUTY FOR HEAVY-DUTY FIELDS

- John Deere 7200 Planters... built tough for reduced tillage conditions.
- 7x7-in. mainframes. New row cleaners, frame and unit-mounted counters, plentiful under frame clearance.
- MaxEmerge® 2 planter vacuum meter accuracy.

7200
AERA

GOOD DEALS...AND A GOOD DEAL MORE

HUB CITY IMPLEMENT CO., INC.

Highway 150 S., Oelwein, Ia. 283-4371
1-800-498-4371

Only time will tell: one no-tiller's story

Tuesday, February 15, 1994-The Daily Register, Oelwein, Iowa-7A

Mark Moser has been no-tilling at least part of his crop since he started farming in 1986. In 1994 he will be 100 percent no-till. How did he decide on that path? Here is his story:

My contact with no-till began while attending college at Iowa State University in Ames, Iowa in the late '70s. There were several "No Tillers Meetings" held at Iowa State during that time. My major was Ag Business and I was aware of most of the ag-related meetings that occurred. The no-till meetings had a very low attendance in those days compared to today. Most of the ag students thought it was like a cult--all talk of earthworm and such.

It was not the in thing--after all agriculture was in its "hay day" then and farming with big expensive machinery and working the ground many times to make a "garden-like" seed bed was the norm. Many of those that were trying no-till were having terrible problems with weed control, handling of residue, toxicity and other challenges. Little did we know at the time they would be the pioneers for some huge changes that would take place over the next two decades.

In 1980, I graduated from Iowa State University and accepted a job managing the Farm Progress Show. This was the nation's premier outdoor farm show for companies to show off their new products and services. One addition we made to the show was an in-field demonstration for no-till planters and other no-till equipment. The no-till field demonstrations did not get many visitors at first. The plowing demonstrations probably drew the largest crowds, as people loved to see the ground turned over and watch the big tractors at work. However, by 1984, with the urging of the Soil Conservation Service and others, the no-till demonstrations began to attract more attention. I had been given a first-hand opportunity to learn more about no-till and how it would work.



The '93 Fayette County conservation tillage Association provided a meeting last winter featuring Rawson zone-till and fertilizer management in conservation tillage systems. Over 80 farmers attended. ManyAg reps set up stations at the Fayette County Fairgrounds Stephens building.

When I started farming in 1986, it was on a part-time or hobby basis. My full-time job was in the Amana Colonies as the Executive Director of the 1988 World Ag Expo, an international event which was being build around, of all things, the World Plowing Matches.

The plowing matches are a big attraction in themselves in other countries. It was the feeling of the steering committee of the World Ag Expo that a wide variety of agricultural exhibits, displays and unique events would add to the appeal of the plowing matches and act as a nice complement to the international appeal of the matches.

I worked for the 1988 World Ag Expo from 1986-88 in preparation for the colossal event. Again, there was an area for demonstrating no-till equipment, but by now there was more interest in no-tilling and the plow had lost a lot of its popularity with farms. Conservation

tillage was catching on, but even by 1988 there were still less than one percent of the farmers using no-till to any extent.

My experience with the 1988 World Ag Expo gave me additional exposure to no-tilling. I was beginning to see more and more improvements in the practice of no-tilling in both chemicals and equipment. I was also intrigued by the great cost savings and lower break-even costs, as well as the reduction in soil loss.

From 1986-1988, while I was still working on the 1988 World Ag Expo, my farming operation was made up of a 120-acre farm which I rented near my family's home farming operation around the West Union area. I no-tilled about 20-40 acres each year in order to make comparisons with ground I tilled. At that time, a major factor in my decision was because the ASCS was paying \$10 per acre for up to

40 acres to encourage farmers to try no-till.

I was hiring my planting done and saw this as a way to pay for the planting as well as get a look at no-till. Each year we did a variety of yield tests in the fall and I saw no significant difference between the conventional and no-till methods. However, all of my no-tilling was planting corn into soybean ground.

After the 1988 World Ag Expo in November of 1988, I decided to move back to the West Union area and farm, along with some planned off farm employment. I spent the next three months researching both no-till and ridge-till. I gathered information on many side-by-side comparisons that had been done by several universities, the closest experiment to our farm being at the ISU Nashua Research Center about 50 miles west of our farm. The results all reflected little or no dif-

ference between no-till or ridge-till and conventional till on corn planted on bean ground or beans planted or drilled on corn ground. There was, however, some significant loss showing up on corn no-tilled or corn ground as compared to conventional tillage in the same rotation. After asking, I was given several explanations for this including toxicity from the previous residue, compaction of the soil, to a variety of other possibilities. I knew several good farmers that were moving toward no-till or ridge-till, but finally "chickened out" and went the safe route into a conventional tillage system.

To this day, I wish I could have made the decision to go directly into no-till when beginning to farm. I ended up having to sell many pieces of conventional equipment, adapt some of my equipment to no-till and purchase other no-till equipment over the next three years.

My decision to make the move towards a completely no-till operation occurred in 1990 after learning of several friends who were very good farmers and were making the no-till system work to their advantage. I figured if they could do it, so could I.

My equipment line consists of a

John Deere 4230 tractor, two small tractors for hauling, chores and to run augers, a White 5100 planter with trash whippers and Yeller deep placement dry fertilizer placement, half interest in a 750 John Deere no-till drill, a four-wheeler with a pull-type 100-gallon sprayer for spot spraying and a Gleaner L combine along with a variety of other equipment.

My operation is about 500 acres of crop ground with a corn-soybean rotation. I do have a little bit of corn on corn each year, but to this point I have no-tilled only a little corn on corn. I am still leery of corn on corn, although others seem to feel more comfortable with it. I also know of some that are no-tilling with surface manure application, but this is a bit more tricky.

No-till is not for everyone. But it is a very good alternative for some. With the soils and slopes on the farms I operate, my crop rotation and the time and expense savings since I work off-farm 10 months out of the year as an ag loan officer at the local bank, no-till has worked well for me. And believe it or not, I am thinking there is more earthworm activity and a better texture to the soil. Only time will tell if no-till survives and grows in the future.

Conservation is important to Fayette County

Crop residue-disappearing Act of 94

by Jerry Muff, SCS

For many years I have appreciated the effectiveness of crop residue in reducing soil erosion in this area. Working with farmers to reduce tillage, leaving more crop residue for the soils protection has always been considered a priority. I have also been paying close attention to former viewers and have been tracking conservation tillage progress over the years.

It will be a safe bet that the amount of crop residue remaining on the soils surface in the Spring of '94 will be much less than normal for a variety of reasons. Reduced crop yield in less residue produced, increased use of crop residue for livestock feed and bedding, including baling and cutting corn for silage, increased tillage completed this past fall.

It is not hard to accept the fact that we'll have less residue next year due to the poor growing conditions we had in '93. We also can understand an increased use of stalk for livestock producers who have found themselves short of forage on hand, especially alfalfa hay, and bedding because of the lousy oat crop which are all weather related effects.

However there is one troubling aspect of this situation; that after two years of unprecedented growth in no-till farming, farmers were in their fields chiseling, subsoiling or disking like there will be no tomorrow. I wonder if we should coin this as the great "Tillage Rush of 93". Much of this tillage occurred after stalks were baled and removed. I know that the ground was hard. Many farmers expressed their concern. One called in on a mobile phone from his combine saying that his combine wasn't leaving any tracks in the field. Our SCS technicians said they had a hard time pushing flags in the ground while they were staking conservation practices. I am convinced that the compaction is real but that it is very shallow and that a normal freeze-thaw cycle will take care of it. The only encouraging thing we can glean from all this is that at least fall tillage isn't being done because of farmer concern of the heavy residue.

Many producers farming highly erodible land (HEL) are wondering what the consequences of having less than their required amount of residue stated in their conservation

compliance plan. This is a good question. SCS, the Fayette SWCD Commissioners, Fayette Co. Extension, and the Fayette Co. ASCS office have all signed a letter to the SCS State Conservationist requesting a variance which, if approved, would make allowance for reduced residue. This variance has not been approved at this time, therefore officially there is no allowance in effect.

I would like to encourage all producers to consider the point that tillage has been the cause of compaction rather than the solution to it. Our experienced ridge-tillers and no-tillers have maintained that after several years of not tilling, their soil's till improves markedly, compaction disappears (except in traffic rows of ridge-tilled fields), therefore water infiltration increases and soil erosion is also reduced. Incidentally, according to our MAX results we've found that less tillage has resulted in a substantial increase in net return we've found that less tillage has resulted in a substantial increase in net return per acre on the average for the past two years. Please refer to Jim Graham's article "A Look at MAX in 1993" in this publication.

1500 West Airline Hwy, Waterloo

We Buy and Sell Steel

BUY • Steel • Copper • Cast • Batteries, Etc. • Aluminum

SELL • Round Tubing • Angle Iron • Sheet Steel • Square and Rectangular Tubing

WEISSMAN IRON & METAL INC.

1-800-473-7541

SUPER BUY FEBRUARY

2.97

Wells Lamont Split Cowhide Gloves

Adjustable fastener. Gurn cut. Unlined. Available in medium or large size. (A064-633, -641)

GREENLEY 16 2nd St. S.E. Oelwein 283-2321

OWN HARDWARE



Pheasants Forever

Habitat Improvement Projects

-Make Fayette County a better place to live... for wildlife and people

9th Annual Pheasants Forever Banquet Saturday, April 9th at Upper Iowa University

APRIL

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

FOR TICKETS CALL

283-3839

425-3331

422-3236

CONSERVATION

Protects Our Future

LORAS DRILLING & SON

Tilling • Bull dozing • Backhoe Work

WAUCOMA 776-4693

MSB Maynard Savings Bank

Maynard 637-2289 Member FDIC Hazleton 636-2431

Petsche Construction

Earth Contractor

All Types of Dirt Work • Excavating-Grading-Moving

Phone 422-5466

412 South Vine West Union

the First National Bank Member FDIC

Oelwein 283-2524

Oran 638-6521

Westgate 578-3286

We have a responsibility to keep the land thriving, and to preserve it for the future.

Let's work together ... TODAY!

CONSERVATION IS EVERYONES' CONCERN

Whirlpool Electric Range Model RF396PXXB

- CleanTop™ with SPILLGUARD™
- Self-Cleaning Oven
- Black Glass Oven Door with Window
- Full-Width Storage Drawer

Whirlpool Microwave Hood Combination Model MH7100XYB

- Microcomputer Touch Controls
- Auto-Set • 750 Watts
- Vented or Non-Vented
- Hood features 2-Speed Touch Control

Whirlpool No-Frost Refrigerator Model ED22DQ

- Through-the-Door Ice and Water Dispenser with Crushed Ice Feature
- Adjustable Slide-out SPILLGUARD™ Glass Shelves
- Adjustable Button Mount Gallon Door Storage Bins
- Deep Vegetable Crispers with Seals and Humidity Controls

Whirlpool Chest Freezer Model EH150FXA

- 14.8 cu. ft. Frozen Food Storage Capacity
- Key Eject Lid Lock
- No-fingerprint Textured Steel Lid and Cabinet
- 518 Pound Storage Capacity

Whirlpool

Quality you can count on... today.

M&W APPLIANCE, INC.

534 W. CHARLES, OELWEIN PHONE 283-4661

"WE SERVICE WHAT WE SELL"

Soil Conservation Annual Report

Award Winner . . .



Deb Dessell (left) is presented the NACD-ZENCA Ag Products Award by Bernie Bolton for her outstanding achievement at North Fayette Elementary School for her contribution to initiating the Fayette County Conservation Field Day. This was presented to Dessell at the IASWDC Annual Conference in Ames, Ia. Dessell was also appointed assistant commissioner to the Fayette SWCD.



The 1993 Conservation Education Field Day was held at the Richard Jensen farm. It was the second year a conservation education field day was held for third graders. This year again included North Fayette School and expanded to Valley at Elgin and Turkey Valley at Jackson Junction. Approximately 200 students attended. Shown by the banner, provided by Bill and Judy Bennett, are commissioners and SCS staff.



Five stations were placed on various parts of the farm to show the students soil, how erosion occurs, soil conservation practices, a pond and life within it, and wildlife. Richard Jensen is shown demonstrating a soil erosion model.

Farm Drainage doesn't cost ...IT PAYS!



Whatever the crop...wherever the field, **HANCOR** offers quality tubing & pipe for effective and profitable drainage.

Benefits of Agricultural Drainage

- ✓ Increased crop yields
- ✓ Improved land use and efficiency
- ✓ Better spring and fall trafficability
- ✓ Reduction in soil erosion
- ✓ Deeper/heartier root development
- ✓ Longer growing seasons
- ✓ Improved plant quality

We carry a complete line of Hancor fittings for all diameters of tubing and pipe. Whatever your drainage application, there is a Hancor product to make your system more efficient.

Norby's Farm Fleet
Great Values For You and a Whole Lot More

City Park Road, Oelwein, IA.



Dan Burkhart, Fayette County Extension Education Director is one of the counties primary leaders in residue management. He is shown directing at the MAX banquet.

CONSERVATION ACCOMPLISHMENTS 1993 Fiscal Year

PRACTICE	NUMBER	AMOUNT
Conservation District Cooperators	56	
Individuals and Groups Assisted	895	
Follow-up on HEL Plans #	474	
Individuals and Groups Applying Practices	301	
Resource Management System Planned Ac		1,157
Tracts/No Highly Erodible Land	114	
Tracts/Highly Erodible Land #, Ac	31	1,599
Farms with Approved Conservation Compliance Plan #, Ac	103	9,800
Tracts with an Approved Conservation Compliance Plan #, Ac	48	25,569
Waste Management System #	2	
Conservation Tillage Ac,		9,453
Contour Farming Ac		4,940
Grassed Waterway Ac	25	
Contour Stripcropping Ac		1,459
Terraces Ft.		44,186
Water and Sediment Control Basins #	3	
Cropland Acres Treated		15,629
Woodland Acres Treated		994
Wildlife Land Acres Treated		210
Conservation Reserve Program 12th Sign-Up	21	885.2
Conservation Reserve Program 1-12 Sign-Up	509	23,756.7

NEW FORD 70 SERIES



GENESIS
70 SERIES

New Ford 70 Series GENESIS™ tractors are designed for the way you want to work... designed to give you more performance, comfort and confidence.

- Breakthrough power... new GENESIS engines produce up to 50% PTO torque rise
 - Ultimate comfort... new cab, "Sidewinder" movable console, adjustable seat and steering wheel
 - Powershift efficiency... change speeds, directions with your fingertips... one lever does it all
 - Unmatched performance... new SuperSteer™ FWD axle offers U-turn maneuverability... MegaFlow™ hydraulics offer 55-gpm capacity
 - Simple service... nothing could be easier
- See the new 145- to 210-PTO-hp GENESIS tractors. And start working the way you want to work.

GOTTA DRIVE IT

BAUMLER IMPLEMENT

Hwy 150 S. West Union
Ph. 422-3833



Practice Farm Conservation

The Fayette County Soil Conservation Commissioners are proud of the District's accomplishments.

This work could not be possible without the work and cooperation of our Earthwork Construction and Drainage Tiling Contractors listed below.



DON RAUSCH & SONS

Terraces, Waterways, and All types of earth moving
Fort Atkinson 534-7356



LESLIE R. LAUER & SONS

Excavating-Bulldozing-Tiling-Trucking -
Terraces-Waterways-Ag Lime Spreading
ELDORADO 422-5430

SOIL CONSERVATION

If we don't plan for it today, there won't be anything to plan for tomorrow.



WE BELIEVE IN PRACTICING SOIL CONSERVATION

BEATRICE CHEESE INC.

"Manufacturer of Fine Quality Dairy Products"
Fredericksburg 237-5311

SOIL CONSERVATION

IS EVERYONE'S JOB!!!

The Valley Cooperative would like to take this opportunity to congratulate the... WELL DONE

1993 IA Conservation Elementary Teacher of the Year

(Paper says 1994, but our annual report is published after fiscal year closes)

Since The Union now has Oelwein Register they may be able to help get a better price.



PRACTICE FARM CONSERVATION

BREHME & SONS CONSTRUCTION

Land Improvement Contractor & Tiling
Wadena 633-6121 Elgin 426-5353



MEYERHOFF TILING & WELDING

DRAINAGE CONTRACTOR
READLYN 279-3673