



STRIP CROPPING — Ken and Bob Birker use three different kinds of soil conservation methods. Among these, is strip cropping. Here, an example of this method can be seen in the alternating patches of corn and hay on the Birker

farm. The hay keeps the soil in place that blows or washes down from the corn. A similar method can be used with soybeans and hay.



CONTOUR FARMING — The Birker brothers also use contour farming on their operation. The corn is planted around these gently rolling hills, instead of up and down the hills. This prevents soil from washing down the hill. The Birkers have

been using contour and strip crop farming for about 25 years. The other soil conservation method they have just started using no-till.

Farming follows cycles, and the Birker brothers find no-till the vehicle

By RANDALL SCHROEDER
Times Staff Writer

TIMESNEWS — Farming, like the seasons, follows cycles. Ken and Bob Birker try to run their operation putting that knowledge to use on their farm about six miles north of Vinton, just off Iowa 101.

The brothers "really farm the same land together," and their operation is about 900-950 acres. This year they have about 400 acres in corn, 200 acres in soybeans and the rest in hay and oats.

To combat loss of soil due to wind and water erosion they use the no-till option in their corn. Bob said that the biggest problem they have is water erosion.

No-till may sound new, but it's not. It uses the same principle as the age-old practice of crop rotation with a few new wrinkles.

No-till follows a cycle. Corn is planted over the last year's bean stubble. There is no plowing in the spring or fall. Plowing in either season, according to the Birkers, can really contribute to erosion with bean stubble.

"It cuts down on the wind erosion and water erosion," Bob said. "Bean stubble just washes away, and there is no difference in our yield."

"In fact, it helps some," Ken added. "You don't have to wait for the field to dry, and you can plant earlier. There isn't any sacrifice by going to no-till."

The brothers are so sold on the concept, they used no-till as much as they could. Last year, they tried it on an experimental basis with 40-odd acres. This year the Birkers are using no-till on 175 acres.

"It's a myth that you have to use a lot of herbicides in no-till," Bob said. "The only difference is that we use a standard planter with trash whippers, bond our herbicides and use a post-emerge application of 3-4D-Banvel or atrazine oil."

Ken said that it costs them \$8-\$11 an acre for herbicide.

"It doesn't take \$30 an acre like some say, and our results are still very good."

Bob also stressed that a P and K fertilizer needs to be put on with the planter, and that it is critical to no-till to do that.

"The time and fuel saved more than pay for the no-till," Bob said, "and what's more, it saves the soil."

The Birkers estimated that their topsoil layer runs about 6 to 7 inches deep.

"Right now the soil in Benton County is good enough that farmers don't necessarily notice erosion, but if fertilizer goes out of sight, they will," Ken said.

The Birkers both agreed that soil is Iowa's number one resource, and the loss of it is hurting an already bad economy.

"It kind of goes in a circle," Bob said. "If the farmer starts hurting because of soil loss or whatever, he isn't buying anything in town and then everybody hurts."

The day that the loss of top soil will start to be noticed in Iowa may not be that far off.

"I was talking to a farmer in Cedar County," Bob said. "He said that they estimate they have only 50 years left in their topsoil. After that, it will be only subsoil farming, and that doesn't grow much."

Besides no-till, the Birker brothers also use contouring and strip cropping. Contouring the land it planting around the hill, not up and down them. "We want the rows as close to level as possible," Ken said.

Strip cropping is planting hay every hundred rows between corn and beans.

"That way when it rains, the soil that washes down from the corn and beans will be stopped by the hay," Ken said.

Another concept modified from the classic idea of crop rotation.

The Birkers said they have been using contouring and strip cropping for about 20 years.

"There really isn't enough farmers using soil conservation methods," Bob said. "It is a very low percentage here in Benton County."

"We have done better this year than some others because of our soil conservation use," Ken said. "This year we have had a lot of bad rain, but we didn't take much loss. It could have been a lot worse, and if it is a dry year next year, then you have the same problem with wind erosion."

Another cycle for the farmer to keep in mind.

1982 soil conservation title in county goes to Elmer Sheetz

TIMESNEWS— Winners in the 1982 Iowa Soil Conservation Achievement Award program were Elmer Sheetz, Belle Plaine, in the Owner-Operator division; Don Grovert, owner, and Keith Werning, tenant, both of Newhall, in the Owner-Tenant division; and Richard Noe of Garrison in the New Cooperator division.

The purpose of this award program is to recognize individuals for the establishment of windbreaks and to encourage the planting of more.

The Benton County Soil Conservation District's second annual Soil Conservation essay contest is rapidly coming to a close.

The contest is open to 6th through 12th graders in Benton County who

are writing essays on "How Soil and Water Conservation Affects Our Future."

Cash prizes are being offered by Eden Mutual Insurance Company of Vinton which is co-sponsoring the contest with the Soil Conservation District. Entries will be received no later than Sept. 30, 1982. Winners will be announced shortly after that.

The Sheetz farm was also chosen as the overall district winner to compete in the regional competition.

This award program is sponsored to encourage better land use programs and environmental control on farms. The farms are judged for land adequately treated against soil erosion, conservation practices accomplished on the farm, community services and general farm husbandry.

The above winners will be honored at the district's annual award luncheon in December.

District award winners for having the soil loss on their entire farms at 5 tons per acre per year or less include Stan Pauley — Birker Brothers, Don Knaack, and Clarence Kubichek.

These individuals have applied conservation practices so that their soil loss is at or below the five ton limit. This five ton limit is an amount per acre that a soil can lose and still maintain its present productivity.

If other farmers feel that they may qualify for this award, they are encouraged to stop by the district office and officers there will calculate the soil loss on those farms.

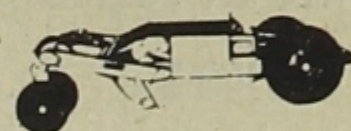
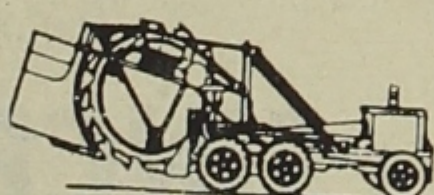
The winner of the 1982 Izaak Walton Windbreak Award is Henry Mantz of Keystone. Mantz will compete for an award at the state level later this year.

Farmstead and field windbreaks are excellent practices for helping to conserve soil and water and for providing important energy savings by protecting buildings and livestock from the winter winds.

SCHULTE & SEVIG DRAINAGE CONTRACTORS

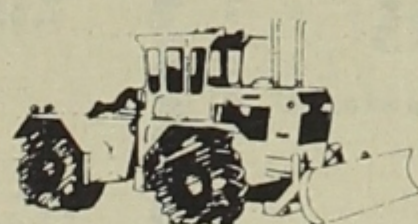
★ BACKHOE WORK ★

★ TILING ★



★ WATERWAYS ★

★ LASER BEAM ★



Lyle Schulte
Ph. 396-1954

Gordon Sevig
Ph. 846-2205

Tom Sippy
Ph. 846-2475

WE SELL CLAY & PLASTIC TILE

Box 88

Walford, Iowa 52351

DAVIS LEASING CO.

One of Iowa's Largest Leasing Companies of Farm Equipment

★ NO MONEY TO BORROW

★ BEAT THE HIGH COST OF INTEREST

★ YOU GET THE INVESTMENT CREDIT

★ 5 EQUAL PAYMENTS, 1 EACH YEAR AND YOU OWN THE EQUIPMENT

★ YOU CAN LEASE ANY NEW PIECE OF EQUIPMENT WE SELL

KILL BROS. & BRENT GRAVITY BOXES
KEWANEE AUGERS 8" & 10" ANY SIZE

KEWANEE HYD. FOLD WING DISC
WHITE TRACTORS

NEW HOLLAND TR85 COMBINES
NEW IDEA CORN PICKERS & COMBINES
SKID LOADERS-NEW HOLLAND, BOBCAT & ERIC

CHECK OUR LEASE PURCHASE PLAN

REMEMBER NO ONE HAS A LOW
COST LEASE PLAN LIKE WE HAVE

AVAILABLE.

DAVIS LEASING CO.

A DIVISION OF DAVIS IMP. CO.

PH. 472-4701

VINTON, IOWA

22 YEARS OF LEASING EXPERIENCE



BOTTOM OF THE TERRACE — Larry Nudd stands at the bottom of one of the terraces along the many acres of his farmland. He has put in over a mile of terraces in the

last few years, and although rains hurt cropland last spring, he said he would have hated to see what would have happened without the terraces.

Tilling a part of farming's past; save time, trips, and huge expense

By ANTHONY BOPP
Times Staff Writer

TIMESNEWS — Larry Nudd feels strongly about soil conservation, claiming that the time is long past when farmers can continue to till the land as if no one else is ever going to use it.

For several years now, Nudd has been actively involved in various soil conservation techniques, most notably terracing, contouring and constructing waterways.

Nudd has constructed, with the help of the Soil Conservation Service, about 400 rods of terrace, most of which is the "backslope" terrace. His reason for using this type of terrace is that it is the cheapest to construct, there being far less earth-moving involved than in other types of terraces, and the backslope makes very good pheasant cover.

Nudd farms north of Vinton, and says terracing has other advantages than soil conservation.

"By putting in terraces," he said, "you can get away from waterways, which are hard to maintain."

"I haven't plowed in the last 11-12 years or so," he said. "I have always tried to practice minimum tillage. The last two years I practiced no-till. I saw very, very little, if any, erosion.

But keeping that soil in place is the number one concern, and it is a concern that Nudd has taken seriously in some way for the last 10 years or so.

"I haven't plowed in the last 11-12 years or so," he said. "I have always tried to practice minimum tillage. The last two years I practiced no-till. I saw very, very little, if any, erosion.

"This year I had a super experience with no-till," he continued. "If I hadn't done that, I wouldn't have had nearly as good a corn crop."

With his no-till practices, Nudd was able to plant, apply dry fertilizer, and spray all in one operation. The only other trips across the field he had to make were to apply anhydrous ammonia and cultivate.

Obviously, one doesn't have to be a mathematical genius to see the savings being realized in fuel consumption alone.

"We're not only saving the soil for our grandchildren, but we're saving fuel and time," Nudd explained. "Time better spent by taking care of the livestock."

Nudd especially disagrees with tilling bean ground. "I feel it needs all the protection it can get," he said.

"The thing with no-till is you have to get out early and spray for weeds," he said, explaining the only disadvantage he could think of with the practice.

Nudd has also constructed several tile inlet terraces. "The purpose of a tile inlet terrace," he explained "is to catch water at the top of a slope where it will go down a tile. This will help prevent sheet and gully erosion."

Gully erosion had been a problem for Nudd in the past, when he only used minimum tillage. But then he put in his terraces and "found they worked very

well. Until this year. The water was just too high."

Last spring's downpour was bad news for many farmers in Iowa, especially those in Benton County, who were hurt the worst in the state. But even with the damage sustained by Nudd this year, he says he would have hated to see the effect of the rain without the terraces.

Not counting this year, Nudd feels that on farm land such as his with an approximate 6 percent slope, erosion

could be drastic without any soil conservation practices.

"With terraces I have a soil loss of 2 or 3 tons per acre," Nudd said. "If a guy went with regular farming you could lose 20 tons per acre on a six percent slope."

Nudd also mentioned that with his conservation techniques he is able to keep the top two inches of soil fertile.

"If anything, soil conservation means more money in the pocket if you get better fertilization and better yields.

"I think in a lot of fields with conventional tillage you can see bare spots where the topsoil is actually moving down the slope. I'm keeping that in place."

As Nudd looks around to neighboring farms in Benton County, he notes that "it is encouraging to see the number of farmers going to reduced tillage. We've got to be stewards of the soil. If this topsoil is going to feed the nation and the world, we can't farm like we're going to be the last ones using it."

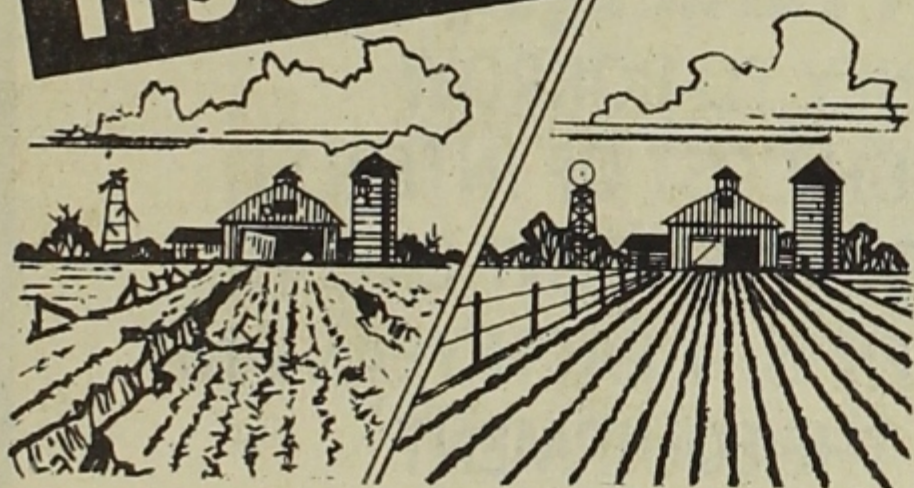


A LOT OF RESIDUE — Larry Nudd freely admits that he doesn't have the cleanest corn rows in the world, but the residue left from previous years will help to keep his

fertile topsoil in place. It will also provide excellent fertilizer for the ground.

The Future Of The Land

IT'S UP TO YOU!



CONSERVE SOIL-STOP EROSION!

When you have a problem whether it be soil erosion or soil build-up and need consultation contact the Department of Agriculture representative for your area, he will be happy to assist you. The longer erosion is left unchecked, the larger the problem becomes to return soil to productive condition.



PROTECTING THE Farmer's property...Means of production and profits...is our job. It's a job that is constantly changing to meet the needs of progressive agriculture. 110 years of service to Benton County Farmers.

FARMUTUAL
Insurance

EDEN MUTUAL INS. ASSOCIATION

908 W. 4th St. Vinton Ph. 472-2381

AGENTS:

Wilson-Hite Ins., Inc., Vinton
Bill Strong, Vinton
Henry Van Eschen, Vinton

Van Horne Ins. Agency, Van Horne
Park-Drahn Agency, Inc., Belle Plaine
Lutz Ins. Agency Van Horne
Bankers Ins. Agency, Tama

AFFILIATED WITH GRINNELL MUTUAL REINSURANCE CO., Grinnell, Iowa

NEW EQUIPMENT

- ✓ J.D. Mulch Tillers
 - ✓ J.D. Disks
 - ✓ Noble & Wilbeck Disk Chisels
 - ✓ Parker Gravity Boxes
- 350 TO 550 Bushels

INTEREST FREE ON NEW & USED J.D. TRACTORS TILL MARCH '83' PLUS BONUS BUCKS ON NEW TRACTORS

9.9% INTEREST ON NEW J.D. COMBINE LEASES

L & D, INC.



"YOUR JOHN DEERE DEALER"

Vinton, Iowa



SEPT. 20-25 IS SOIL CONSERVATION WEEK — SEE YOUR CONSERVATIONIST TODAY

HUMMEL & SONS
CONTRACTORS

VINTON, IOWA

SINCE 1957

Assisting area farmers in conserving soil and increasing production.

Using modern Laser equipped conservation equipment.

Let us help you design and install a complete conservation program.

Phone 472-3320 (SHOP) - 472-2107 (KYLE HUMMEL)
472-2473 (BRUCE ERICKSON)



A BIG HOLE — Larry Nudd stands in a large hole cut out of the side of one of his terraces last spring by the torrential rains Benton County experienced. Although the rains did damage some of his terraces, the damage was not nearly so great as if he did not have the terraces and allowed the rain to wash away all the soil on his land.



GRASSBACK TERRACE — Many of the terraces on Larry Nudd's farm are grassback terraces. Nudd said that some of them aren't seeded the way he wants them, though, as many are overrun with foxtall. He hopes that he will be able to correct the problem next spring.

Guest editorialist Time to analyze

By Paul Anderson, Chairman, Benton County Soil Conservation District

Once again, this year's heavy rains caused extensive damage to Iowa cropland by soil erosion. Across the state, soil losses were severe in county after county.

The rains kept coming, and the soil kept moving. This year, maybe more so than other years, those heavy rains pointed out two things. First, unprotected corn and soybean land resulted in very serious soil erosion, and second, many fields that were only partially protected also experienced severe soil erosion.

For instance, it was easy to see effects of erosion on fields that had light residue cover, fields that had been disced or chiseled plowed too many times and buried too much residue. Fields that had residue cover but were farmed up and down hill also showed erosion. So did terraced fields that were clean plowed.

We seem to be getting those 50-year and 100-year frequency rains every couple of years, and our topsoil needs all the protection it can get. On steeper lands in continuous corn and and soybeans, in particular, a combination of soil conservation practices is needed. The old standby practices like contouring, terracing, and grass waterways are needed more than ever. As good as no-till, no-till planting and other conservation tillage methods are in controlling erosion, these "newer" practices are only part of a complete soil protection system.

The Benton County Soil Conservation District Commissioners urge each landowner and renter in the county to analyze their erosion field by field and work toward a complete soil conservation system on the farm.



CONTOUR — Larry Nudd's farmland is mainly contoured. Here, two rows of corn actually merge into each other. A small creek runs through the Nudd farm, and he contours the crops along it to keep the soil from washing away.

No. 1 resource (soil) vanishing

By JAMES M. BROWN
District Conservationist

Benton County has some of the richest and most fertile soil in the country. We have a favorable climate and topography which allow us to produce record corn and soybean crops. To continue production at our present rate will depend on how we treat the soil.

This past spring we had some of the highest soil loss in eastern Iowa. We estimated that approximately 200,000 acres of cropland had a soil loss of 20 tons per acre per year or more. This would result in the removal of one-sixth of an inch of topsoil off an acre of cropland. We have already lost half of our original topsoil. Can we afford to lose any more?

In order to reduce erosion to a permissible level of 5 tons per acre per year, we would need to apply 750,000 feet of terraces per year for the next 40 years. We are currently applying 20,000-40,000 feet per year.

Conservation tillage will need to be applied at a rate of 33,000 acres per year to get the job done in ten years. Contouring would need to be applied at a rate of at least 8,000 acres a year for the next 20 years. Can we afford to wait?

By apply conservation tillage and contouring for a short period of time on the soils that need terracing, we could double the length of time the soil would retain its productive capability.

Soil conservation will have to begin at home. Erosion often is gradual and goes unnoticed. Few notice the loss of one-sixth of an inch of topsoil per acre unless it creates small gullies and makes field operations difficult, or unless it covers up seedling plants at base of a slope, or fills a drainage ditch.

If erosion can be controlled, topsoil can be retained and sedimentation can be reduced. Not only will it take a commitment from the landowner, but also the federal, state and local agencies.

COME ON OVER TO CARGILL.



924 is a two-time winner of the Indiana NCGA Contest. It is a Central Corn Belt powerhouse...plant it on your best corn acres and watch it take off. 924 produces long tapered ears on plants with moderate upright leaf type. This season, plant Cargill 924, the Hot One.

MARKLAND FARM & FEED, INC.

1510 West D Street - Vinton, Iowa

CREDIT TO GROW ON!

If your plans include tiling, terracing, ditch work or other conservation practices talk with the people at the Vinton PCA office.

PCA has a term loan that can enable you to do the work this fall and pay for the work over a period of up to seven years.

Stop by today to talk with Pat, John, Dan or Dale on how PCA can assist you with your conservation and other farming needs.



CENTRAL IOWA PRODUCTION CREDIT ASSOCIATION

HWY. 218 N.

VINTON, IOWA

PH. 472-4743



Soil conservation makes good sense - erosion worse than we realize today

By ANTHONY BOPP
Times Staff Writer

TIMESNEWS — There is a lot of sense in practicing soil conservation these days, according to one Bruce Township farmer.

Larry Fleshner farms 1,080 acres, 400 of which he owns personally, and the rest he rents.

He has built six broad-base terraces, three hump terraces and three grass-back terraces, practices contour farming and plans to start no-till within the next year or two.

But while he, like all farmers who use soil conservation practices, is concerned with preserving the fertile topsoil for America's future, he has another, seldom thought-of reason for using conservation measures.

"I can't see at this time ruining the ground to raise corn and beans which nobody wants or can pay for. Let's get the supply and demand back in balance," Fleshner said.

Of the three types of terraces Fleshner has developed, Fleshner says he prefers the hump terrace.

"It's the cheapest," he said. "You stretch the dollars the most. The hump terrace only costs about a third of the others. You don't have to move as much land. You're getting a lot more land protected with about a third of the cost."

Fleshner plans to build four more terraces yet this fall. He has been putting in 2-3 terraces a year, he says, for the last five years.

"In four more years I should have the entire 400 acres terraced," he said. "I try to spend so much a year on terraces."

Fleshner readily admits that he doesn't like terraces much — they are a "pain" to farm, he says. But on the other hand, he also admits that farming terraces is better than not having anything to farm.

"We've already lost so much topsoil, we just can't keep it up," he said. "This should have been started 10 years ago — including my own farm."

Fleshner mentioned that his landlords, Kenny and Evelyn Brockway of Brandon, are also practicing conservation.

"They're applying so much of the cash-rent each year to conservation. I think that's a neat deal," he said.

So far, Fleshner says he has been able to see a noticeable change from a few years ago before he started his

terracing. He said he has been "real impressed" with the lack of erosion noticed, although that did change somewhat with the freak rain storms of the past spring.

"The terraces just didn't hold," he said, adding that some of his terraces were completely ruined.

"This is the first year I've seen any erosion. They (the terraces) have been doing the job."

"I think the farms that have the terraces on them are the farms that are going to be worth something in the future."

Fleshner is concerned, however, that a lot of farmers are still skeptical about terracing. "People still don't want to accept them," he said.

Another conservation practice Fleshner employs is minimum tillage. He boasts of not having plowed in 10 years. Going to no-till had been the next step in his conservation plan, but that may be put off awhile.

Although he already has the equipment to begin no-till, he is afraid the land was damaged too much by the rain last spring.

"I was planning on going no-till in '83," he said. "But the land was torn up so much from the rain, it's been out off at least a year. But I am definitely going that way in '83 or '84."

Fleshner added that exactly when he decides to begin his no-till practice will depend on how bad the land is. It is still difficult to determine with the crops on the land.

He said his bean ground "doesn't get touched until I'm ready to plant, with the exception of anhydrous knifed in."

Another conservation practice that perhaps isn't the most talked about these days, but which still has its significance, is rotation planting. Fleshner also employs this method, in the past with a 50-50 rotation of corn and beans, but he says this spring that will change. He plans on going to more of a rotation with oats involved.

Fleshner is proud of the township in which he lives, proclaiming that Bruce Township is doing more toward conservation than any other he has noticed in the county.

"We've got to be, too," he said.

"I think erosion is worse than most people believe," Fleshner says. "I was guilty of it in the past, but I think we're all going to have to be more conscious of soil erosion."



LOOKING THINGS OVER — Larry Fleshner examines one of the terraces on his farm. Although it is still difficult to tell how badly terraces were damaged by last spring's rains, Fleshner is hoping it wasn't too great so that he can begin no-till next spring.



MINIMUM TILLAGE EVIDENCE — Anyone who looks down one of Larry Fleshner's corn rows can easily tell that he doesn't work his land a great deal. Fleshner, thanks to his practice of minimum tillage, has left a lot of residue in his fields, which will help to prevent the erosion of his land.

Guest editorialist Iowa committed

By Governor Robert D. Ray

Over the past 14 years I have served as Governor, I have had a particular interest in and commitment to our environment and especially to soil conservation. We have made substantial progress in our efforts to control soil erosion. We have more to do.

Iowa is a national leader in soil conservation and has demonstrated it by: —establishing the nation's first state soil conservation cost share program which has effectively put to work more than \$41 million in appropriations since its inception in 1973;

—passing model soil erosion control laws, including the Iowa Soil 2000 program;

—developing public education campaigns on the seriousness of soil erosion;

—inaugurating an innovative private sector soil stewardship program to develop soil conservation policies for agri-business; and

—offering the nation's first state soil conservation loan program.

These soil conservation investments have paid dividends. Over eight million acres of Iowa's cropland is now protected from excessive soil losses. The number of no-till acres in Iowa has doubled in the last year and promises to grow rapidly in the future. And Iowans are now recognizing soil erosion as our state's most serious natural resource problem.

Our conservation-minded farmers and soil conservation districts deserve to be saluted for this commendable record. Yet so much remains to be done.

Our heavy spring and summer rains dug deep ditches in Iowa's hillsides, sliced sheets of topsoil from our fields and saturated our streams with silt. This erosion has graphically illustrated our need to keep up the fight against soil erosion. In Iowa, we plan to do just that; our new soil conservation loan program and our land use plan are evidence of our increased commitment.

As chairman of the National Governor's Association Task Force on Soil Conservation, I have and will continue to work to see that the federal commitment on soil conservation is not just rhetoric.

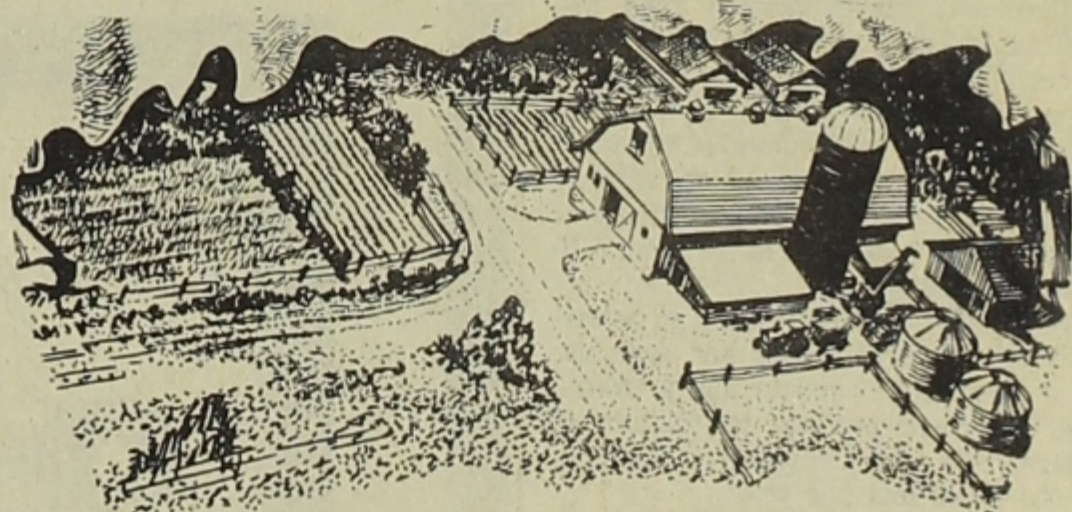
But it must be understood that we cannot rely on government alone. Private sector businesses, individual farm owners and operators, and all levels of government must work together to protect our soil for future generations.

Therefore, as we salute our conservation conscious farmers and soil conservation district programs during Soil and Water Conservation Week, Sept. 19-26, won't you join me in pledging your support and continued concern to the protection of the soil and water resources of this state.

Our future depends on it.

**DON'T WAIT ANOTHER DAY
FIND OUT WHAT SOIL
CONSERVATION PRACTICE
IS BEST FOR YOU**

**Plan Soil
Conservation Today!**



YOUR SOIL WON'T LAST FOREVER...

Over a period of years your land can be tapped of its nutritional value. It should be tested periodically and if necessary the deficiencies corrected. Check for erosion damage...It will pay you money in the long run with a higher yielding crop.

*Start Conserving
Now!!*

TERRA

**TERRA
CHEMICALS
INTERNATIONAL**

Hwy. 218 N. Vinton Ph. 472-2343

**SHEFFIELD
BRICK & TILE CO.**

The Standard of Quality &
Process for Over Half A Century
SHEFFIELD, IOWA 50475

Now celebrating our 75th year

**Call us for your corrugated
plastic tubing needs**

Contact:

Office Phone 515-892-4354

**SHEFFIELD
BRICK & TILE CO.**

ROGER PLATT, Chelsea
1-515-489-2030

ROGER ELLIS, Vinton
472-3352

**HAROLD CARR
PHONE 476-7583
DYSART**

**DRAINAGE
CONTRACTOR**

**Tile Drainage-Back Filling
With Track Type Machine**