

AGRICULTURE & CONSERVATION TECHNOLOGY

The Tama News-Herald, Tama, Ia., Thurs., Sept. 27, 1984

Hinegardner Orchard is a fine conservation use of fragile land

Proof that all land in Tama county doesn't have to be planted in corn or soybeans has been established by Oris and Jean Hinegardner, who have turned the hills north of Montour into a garden and an orchard.

Apples
In seeking an alternative crop for 20 acres of rough, sandy land, they planted 650 apple trees in 1960 to start a business which is now well known throughout central Iowa. The Hinegardners Orchard now covers 40 acres with 2,400 trees, mostly of Red Delicious, Yellow Delicious, and Jonathan apples. This land erodes very easily, especially the sandy spots, so this type of use gives maximum conservation to the soil. The first orchard area was planted into the bluegrass and the second into a sod of alfalfa, timothy, and orchardgrass.

This second orchard has been pretty well taken over by bluegrass now, with some orchardgrass still remaining. The ground cover has always been complete, with the only bare ground being a small area

around each tree trunk to discourage mice which would cause damage to the trees.

Strawberries
The Hinegardners also grow strawberries, another crop which gives good control over erosion. The strawberry plants grow in rows on the contour and are heavily mulched at the rate of 10 corn-stalk stacks per acre, providing plenty of ground cover to hold soil in place.

Their raspberries are also planted in rows on the contour, and provide enough plant growth to break the velocity of rain drops. When asked why he got into the business of raising apples, Oris said that when his son, Dave, decided to farm, this seemed like a good way they could both remain on the farm, and this land was too fragile to be profitable farming it in a conventional way.

Hinegardner was no novice at handling those hills in Indian Village township in an unconventional way. He and his brother, Arlo, built a good sized lake on their property before it became fashionable for other farm ponds to be con-



JEAN HINEGARDNER, MONTOUR, holds her grandson, Jesse Hinegardner.

List contributors to SCD Booster Club

The Tama Soil Conservation District has had tremendous response to its request for contributions this year. Donations are used to fund educational programs conducted by the SCD.

Following is a complete list of the Tama SCD Booster Club. Thanks for your Support!
Paul Svoboda, Thelma B. Morsing, Elsie Duffus, R. Farms, Inc., Lewis Dvorak, Pioneer Hi-Bred International, Inc., Heck Farm, Inc., Train Farm, Federal Land Bank Association, Lincoln Cooperative Co., David Hach, Edna Paton, Todd Zeman, Ross Sharp, Twin Cities Ins., Mildred Anderson, Holub Land Farms, Pritchard Bros., William G. Podjasky, John Erickson, Clarence Sears, R & R Farm, Smits Farm, Calderwood Farms, Inc., D & E Dahms, Inc., William Tessa, Ernest Lein, Dorothy Sawyer, Wayne Downey, Roy Staker, Alice Hoppe, Dennis Haack, R. P. Young, Evelyn Mansfield, Charles Weiner, Sidney Whitsett, Marley Bacon, Wilbur Vest, Tri-County Farms Corp., Morris Bruene, L.A. Rasmussen, W.R. Farms, Kenneth Bruene, Gilbert Sonksen, Lauterbach Farm Partnership, Mrs. F.H. Moye.

(Continued on page 12)

Awards for soil conservation

The Tama County Soil Conservation District Commissioners held their annual awards banquet on Monday, January 23, at the King Tower restaurant in Tama. Several outstanding conservationists of Tama County were honored at the banquet.

Owner-Operator
Jerry Abbe of Garwin and Clarence Sears of Gilman were honored in the owner-operator division.

Abbe, being a cooper with the Tama Soil Conservation District since 1966, has grassed waterways, uses conservation tillage and has installed over two miles of grassed backslope terraces.

Sears was honored for his strip cropping, which has been his method of farming for years. He also includes the following conservation practices on his farm: contour farming, conservation tillage, pasture management, and grassed waterways.

Landlord-Tenant
Roy Williams, owner, and Marley Bacon, tenant, were honored in the landlord-tenant division.

in Carleton township, just west of Arwin is the location of the Williams farm. The whole farm is contoured, and grassed waterways and terraces have been installed.

The Goodyear Conservation Award was presented to Lloyd Chyma who lives south of Tama on the Tama-Poweshoke County line. Previously, Chyma had been honored in the owner-operator division and has been recognized by the Tama County Farm Bureau for his conservation efforts.

The Goodyear Tire and Rubber company honors him for several thousand feet of terraces, grassed waterways, windbreaks, and his conservation tillage which includes no-till.

Izaak Walton League
An outstanding farmstead windbreak in selected areas is to be presented annually by the Izaak Walton League. This year Ernest Herink of Clutier was honored with this award.

The Herink windbreak is composed of spruce, concolor fir, and honeysuckle.

Soil conservation movement to note 50th birthday

On April 27, 1935 the soil conservation movement was started. In the 1930's a national movement for conservation was noted in the dust bowls, overgrazed ranges, overcut forests and gully erosion.

We have come a long way in the Soil Conservation movement since then but we still have a long way to go. We now have more information on conservation than ever before. It's more reliable than ever before also, and we must use this information if we are to have programs that keep pace with changes on our farms and ranches. At USDA we rely on the professional competence and dedication of our conservation people in Washington, at the state level as well as the county level.

In good times and bad times most farmers seem to want to do what is best for their land. They are the ones who do the actual conservation on the land, but in many cases they need help, both technical and financial. For example, when a farmer constructs a waterway in his field, this land does not produce anything for his gain anymore. Yet he still pays taxes on it. If he were to plant crop straight through the waterway when it rains, it will cause severe erosion and pollution down stream, creating problems for many people besides himself.

USDA has many agencies under its natural conservation program and realizes that they all have conservation responsibilities. We realize that all the USDA programs would work better if they are consistent with conservation. There is still a lot of work to be done on the state of our soil and water resources. But at the same time there is no cause for pessimism. Above all, we have a higher state of awareness. Fifty years of hard work has brought this about.

Consider Our Commitment

What beauty abounds here on God's green Earth! And who can begin to measure its worth? What price a sunset, a blossomed spring! A moonlit lake, a butterfly wing? God gave us all these and so much more. There are beautiful harvests, too much to store. All this He meant for us here to treasure. How fortunate we are, enriched beyond measure! But there is the danger that we might forget. That for all this beauty we owe a debt. For, as He gave to us His world to share, He also committed it to our care. When God made the Earth, before it He stood. He looked His work over and said, "It is good." Do you wonder sometimes what God has to say when He looks down upon His world today? Man's obsessions have upset nature's balance. Today costly mistakes are taxing our talents. We mustn't forget: Earth's not ours alone. That we're only mortal and soon will be gone. We each have a duty to God our Creator To protect Earth's resources for those to come later. Yes, it's time our commitment went even deeper. If we are to be our brother's keeper. Consider our commitment; consider it well. Conservation: A Common Commitment

Offer no-interest loan program for soil conservation

Participating soil conservation districts are now taking applications for no-interest loans for the construction of permanent soil conservation practices.

Landowners can borrow up to \$10,000.00 at no interest for up to a ten-year period. Loan funds received may not be used in combination with any other public cost-sharing or incentive program for soil and water conservation practices.

To be eligible, a landowner must have a net worth less than \$300,000.00, be able to secure the loan, and be capable of repaying the loan in equal annual installments.

Legislation passed in the 1983 Session of the 70th Iowa General Assembly authorized the program and provided \$1 million for this year and next.

As announced, the program will allow each district a minimum of \$5,398.00 in available loan funds, with some receiving as much as \$20,000.00. Tama county has \$30,200 available at this time.

Application forms and procedures are available at local county soil conservation office in Toledo.



CONSERVATION BIOLOGIST BOB KURT, Tama, stands on the bank where the first dam in the Otter Creek Marsh is located, but cannot be seen - or used - because it is covered by over 2 to 3 feet of silt. Below is a picture of the third dam in the Marsh. If it wasn't for the siltation problem, the first dam would look just like this one. Already siltation is starting to fill up the area behind the third dam as the cattails in the background are growing in the silt.



Conservation measurers desperately needed in Otter Creek watershed

Over 10% of Marsh is lost to siltation

By Ron Slechts

Good soil conservation measures are desperately needed in the watershed above the Otter Creek Marsh, according to Bob Kurt, Tama, conservation biologist manager of the Marsh.

"We have lost over 10% of the Otter Creek Marsh to siltation," Kurt said, "and it is getting worse by the year." Kurt noted that this spring as particularly bad with heavy rains after fall and spring plowing. "We received big loads of silt from heavy rains in May and June," he pointed out.

Good Tama county top soil is filled in 110 acres of the marsh since it was opened in 1966. Some of the silt is two to three feet deep.

The first 500 foot wide dam in the Marsh is completely covered by several feet of silt.

And the silt is fast claiming the two lower dams.

While water still runs over the third dam, silt is filling in behind it. What was once an open water area, is now covered in cattails that are growing in the silt behind the dam.

"We're now getting to the point where we have serious management problems in getting water in the Marsh area," he stated.

There is now a need to do some channelization so water can be moved throughout the 1,040 acres in the main part of the Marsh. Kurt said he has submitted plans for channelization and expects that work to be done next summer.

He estimates it will cost \$5,000 to \$6,000 to get the water into the northwest segment of the Marsh. Currently it is impossible to get water into that area due to the siltation problem.

To completely dredge the Marsh to restore it to the condition it was at the start of 1966 it would take several million dollars. And that would be a waste if good soil conservation measures are not practiced in the watershed.

Conservation measures
"We must have soil erosion control in the watershed in order to stop the siltation problem before it gets into the Marsh," Kurt stated.

"There were a lot of hills plowed up last fall and spring that shouldn't have been," he stressed. This hilly land would be more suited for hay, pasture or no till farming. He pointed out that some of the ground is very steep and has fairly poor soil. It shouldn't be cropped at all.

Kurt expressed disappointment in the lack of interest in soil conservation in the Otter Creek watershed. A couple years ago there was about \$20,000 available to assist farmers who wanted to do some conservation measures in the 26,000 acre watershed.

"Hardly anyone took advantage of that program as there was little or no interest despite the program being widely publicized," Kurt stated. "Two farmers put in grass runways, but that was all. The rest of the money went unused."

Although that money is no longer available, there are costs share practice funds available through the county ASCS and Soil Conservation Service that are available to help farmers pay for soil erosion control projects.

Here's what you can learn from a soil survey

You have probably heard about soil surveys, but you may not be aware of how the information they contain can be put to work. For instance, your local survey can help you get yields to expect, soil suitability for various types of land operations, as well as specific limitations of every acre on your farm.

The soil survey of Tama county, when published will contain a complete set of soil maps for the entire county. Technical and popular descriptions of all the soils mapped, and interpretations for farm and non-farm users are also included in the report.

The soil survey is being made by the Soil Conservation Service (SCS) in cooperation with the County Extension Service and the Iowa Agriculture Experiment Station. They are usually paid for with county, state, and federal monies. The Tama county soil survey started in September 1983. During the first year about 87,000 acres have been completed. It is expected that it will take five years to complete.

There are about 55 different soil types in Tama County.

Each has certain limitations and should be managed according to these limitations for best results. Examples are Garwin and Colo soils. They are both poorly drained very wet soils. The survey locates them, tells us that they puddle when wet, and have a high water table. It also tells us that Garwin occurs on broad upland ridges and can be tiled so that the water table can be lowered and cultivation can be more timely. Colo soils occur on creek and river flood plains.

The survey tells us that Colo floods frequently during heavy rains, and that suitable tile outlets for tiling are difficult to find.

The survey tells us that Colo soils have a medium supply of phosphorus and that Garwin has a very low supply of phosphorus available to the crops. Therefore, when the same crop is grown, Colo needs less phosphorus added than Garwin.

Some soils respond to fertilizer better than others. For example Chelsea is a sandy textured soil that has a low available moisture hold-

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Mother Nature takes away grand champion Cottonwood

Fickle Mother Nature

She gave Tama County a national champion, and she took it away.

Corn is not the only thing which grows well in Tama County soils - trees also thrive here. A search conducted by the Iowa Conservation Commission and the American Forestry Association discovered that the largest Eastern Cottonwood was growing in Tama County about two and a half miles west of the Tama Airport, in Columbia Township.

A few years ago Irene Behounek's grandson noticed in the newspaper that the Conservation Commission was looking for big trees in Iowa, and so told his grandmother about it.

She entered her cottonwood, which not only proved to be the biggest tree of that species in Iowa, but also topped by seven feet three other trees which were located in Michigan, Illinois, and Kentucky.

The tree measured 72 feet in height, with a crown spread of 126 feet, and was 34 feet, one inch in diameter. (If you were using it for a corner post, it would take over two

rods of wire to go around it.)

Irene lived nearby as a girl, and walked past the tree as a schoolgirl attending Columbia #3, and later, after graduation from high school, passed the tree on her way to teach classes at that same school. Her father, Joe Homolar, purchased the 40 acres on which the tree was growing from Ray Crockrey, and later, after her marriage to Frank Behounek, moved onto that place where they lived until 1980. After Frank passed away that spring, Irene moved to Chelsea, where she yet hasn't found time to retire.

All of this has been good news about the tree.

The bad news is that it has been struck by lightning which set it on fire and pretty well destroyed the tree. It has lost its place as the biggest cottonwood in the United States and possibly the world, but it isn't finished yet. One branch is still high in the air, gathering sunlight for survival, and if Mother Nature gives it another 100 years to add to its already more than 100 years of life, that Eastern Cottonwood may once again challenge the world of supremacy.



NOT MUCH IS left of the Cottonwood tree which was once the largest American Cottonwood tree. The tree was set ablaze by a bolt of lightning last spring, but one branch continues to grow.



Earleys find peace, beauty in their Pine Tree Forest

A farm project, originally planned as producing income to finance their children's college education, has instead become a "love affair" for Craig and Sharon Earley who farm about six miles southwest of Tama in Perry Township.

In the spring of 1968, the Earleys planted 6,000 Scotch Pine and Red Pine on seven acres of ground with the idea of selling Christmas trees, but as the trees prospered, they so enjoyed watching them grow into a wildlife area that they dismissed all thoughts about cutting any for sale. The trees now average from 20 to 25 feet in height and form a dense cover, very attractive to birds and other wildlife.

The trees were purchased from the Decorah nursery of "Johnny Walnutseed" Daubendick who came with his crew and did the planting.

After the trees were in the ground, one of the crew went over each row with an applicator applying granular simazine to kill the native bluegrass and keep down weeds.

The Earleys had excellent survival of the young trees as about 75% of them are still growing. The last three years the Earleys have been filling the empty spots with Scotch Pine seedlings obtained from the state nursery.

This spring they added to their wildlife area by planting another two acres with 500 walnut trees. This spot is on well drained lowland, across the creek from the pines, so the two areas are adjacent to each other.

A border of Autumn Olive

was planted along a fence line for a hedge to protect the walnut trees. There has been a good survival rate for the trees planted this spring as the wet weather was ideal for them.

Blending right in with this wildlife area of the Earleys is an adjacent area owned by Ernie and Lawrence Podhajsky, which the Podhajskys have planted to a combination of Scotch Pine, Walnut, and Oak, so in a few years there will be several acres of forest nestled along Salt Creek, in the middle of row crop farmland.

Winter picnics

The Earleys spend a lot of time in their evergreen forest, and Sharon says that they have had quite a few winter picnics in the snow. No matter how blustery that day may be, it is calm and peaceful among the trees. Craig feels that every farm should have a similar wooded area, not only for wildlife, but just as a place to go relax and enjoy nature.

Craig and Sharon have two children, Allyson is a sophomore at Iowa State University, and Andrea is a junior at North Tama. They are also hosting a foreign student who is attending North Tama. He is Vinicius Pacheco Bandeira of Rio de Janeiro, Brazil.



SHARON AND CRAIG EARLEY enjoy their Scotch and Red Pine trees. They once had thought of selling them as Christmas trees, but now prefer to let them grow into a pine forest.

Iowa soil is in double trouble

Iowa soil is in double trouble, according to the latest inventory of natural resources that estimates average yearly losses due to erosion.

The 1982 Natural Resources Inventory (NRI) shows the average water-caused soil erosion in Iowa is 9.4 tons an acre each year. This is nearly double the 5 tons that conservationists say is tolerable and is more than double the national average of 4.4 tons an acre a year.

"To make matters worse, the 9.4 tons per acre of annual average soil loss only includes losses from sheet and rill erosion," Mike Nethery, state conservationist, USDA Soil Conservation Service (SCS), said. "When you include wind erosion, we have an average loss of 12 tons per acre per year on our cropland."

Nethery said Iowa's NRI average soil loss figures are based on information gathered by the USDA SCS from 6,000 primary sample units and nearly 20,000 specific points.

"We don't measure average yearly soil loss with rulers or anything like that," he said.

"We look at the conditions, soils and cropping patterns in selected Iowa locations. From these data, we predict Iowa's erosion rates using a soil loss formula called the universal soil loss equation."

In the 1982 survey, the USDA SCS found that about 26 million acres were in rowcrop in Iowa. At 9.4 tons per acre, Iowa cropland lost about 248 million tons of soil that year.

"There also is the misconception that we measure our soil loss each year," Nethery said. "Our estimates are for the erosion we expect for an average year, based on the conditions we find in the survey year."

The USDA also did a survey in 1977. The soil loss estimated at that time in Iowa was 9.9 tons an acre a year. Nethery says Iowa's 1982 loss represents some improvement in erosion control and reflects increased use of conservation tillage in the state.

But for the most part, there wasn't much change from 1977 to 1982," he said. "And the 1982 figure is certainly higher than we want it to be. It shows that we have a lot of work to do before we get our soil erosion problems under control."

Another inventory is scheduled for 1987. Nethery said the inventory helps government agencies keep abreast of the status of the nation's natural resources. It also helps them set priorities for targeting soil conservation funds and plan future conservation programs.

Strip cropping does excellent job of holding the soil

by Ferd Kvidera

As one travels south of Garwin on the T-47 blacktop heading for Montour, a very pretty sight greets the eye as one swings around the curve. The strip cropping on the Rosa Petermeier farm not only looks good, but it does an excellent job of holding the soil on the farm, according to Gerald Clausen, who is farming the land.

Clausen, who lives on the northern edge of Garwin, began farming the Petermeier land in 1983 when she wanted more of the land seeded down and the rest farmed in a soil conserving way. Last year part of the farm was laid out in strips and farmed that way, and this year the rest of the farm was put into strips.

The entire farm is now in a four year rotation, consisting of two years of corn, one year of oats seeded down, and one year of hay. The hay is made on a share basis, as Clausen has a stock cow herd and Mrs. Petermeier feeds calves during the summer.

Gerald said that he bounced over a lot of rows in converting the farm from straight rows to the contoured strips. There is still quite a bit of work to be done on the waterways as some need reshaping to eliminate the ditches alongside, which grew there prior to the strip farming.

"Since all of the corn rows end in a waterway, he figures that he's going to do some more bouncing at harvest time before those waterways are fixed."

80' side strips

The strips are 80 feet wide, accommodating 24 rows, with his planter set at 38 inches. Ray Drewelow, Soil Conservation Service technician laid out the "modified contour" and, and told Gerald to keep the outside rows straight along the counter lines. He therefore plants from both sides towards the middle, and any point rows which might occur will be in the middle of the strip.

Clausen is no stranger to conservation farming, as he has been farming terraces for four years on another piece of land he has been renting. He does like the strips, though, and has started strip cropping on his own farm this year. He started out with just one strip and plans to work the rest of the place into it.

The one drawback he finds with the four year rotation is the utilization of hay for only one year.

Tell how to offset losses in soil productivity

Potential loss of yields due to soil erosion is greater on some soils than on others. But, according to Gerald Miller, Iowa State University Extension agronomist, productivity losses in soils with favorable subsoils can sometimes be recovered through technology.

"Yields are a function of the kind of crop grown, the climate, the ability of the farmer to make the best decisions with the resources available, and the nature and the properties of the soil," Miller said. "A large percentage of Iowa's land has favorable subsoil."

Soils with favorable subsoils include those with a rooting depth of 40 inches or more and a clay content of 40 percent or less in the topsoil and subsoil. Miller says farmers can enhance the topsoil characteristics of these soils in the short run by using residue management on areas where the erosion rate is less than five tons per acre per year.

"Sloping soils with less than 1.5 percent organic matter in the surface layer should show increases of a percent or more of topsoil organic matter in eight to 10 years if the farmer also uses high-level management, such as using a soil-based crop rotation and adding lime and fertilizers," Miller said.

"But there is a limit to these technological increases," he added. "Sloping soils now containing 3 to 4 percent or more organic matter will have insignificant increases during the same, highly managed eight- to 10-year period."

In order to maintain long-term productivity in favorable soils, Miller says farmers must bring soil erosion down to less than five tons per acre per year. This means less tillage, building more terraces and instituting other conservation practices, such as rotating crops with soil-based grasses and legumes and contour farming.

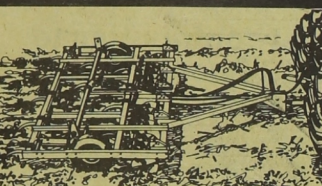
Other soils in Iowa have either unfavorable or fragile subsoils. Soils with unfavorable subsoils include those with a rooting depth of 40 inches or more and a clay content of more than 40 percent. Many of the soils in south-central Iowa are in this group.

Fragile soils are on slopes of 2 percent or more and have a rooting depth of less than 40 inches. Examples of fragile soils include those with rock, gravel, boulders, and coarse sands within 40 inches of the ground surface. In Iowa, most fragile soils are located in the northeastern counties.

"Any loss of productivity in soils with unfavorable subsoils is permanent," Miller said. "And continued loss of soil in areas with fragile soils could lead to a loss of nearly all productivity."

"When most soil material above rock or coarse sands is removed by erosion, there is little left for plant roots to grow in," he said. "Soil conservation on these soils is vital."

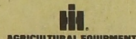
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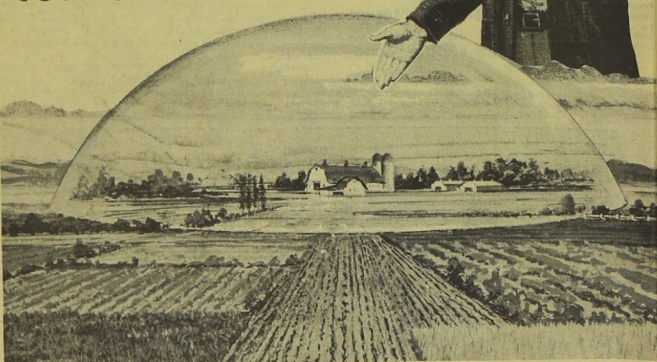
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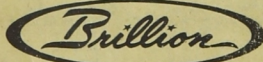
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300 County fifth graders enjoy outdoor classroom

Approximately 300 Tama County fifth graders spent May 8, 1984 at the Tama Environmental Education Committee's Outdoor Classroom. This annual event, held at Otter Creek Park, provides Tama County youngsters with an opportunity to learn more about wildlife and soil conservation and related topics.

This year's instructors taught the following classes: 1.) insects - Dave Quinlan, Tama County Extension Service; 2.) geology - Ed Hix, Tama County Conservation Board; 3.) wildlife - Bob Kurtz, Iowa Conservation Commission; 4.) Soil Conservation - Daun Rudis, Soil Conservation Service; 5.) boat safety - Bob Mullen, Iowa Conservation

Commission; 6.) edible plants - John Nicholson, Soil Conservation Service; and 7.) non-game wildlife - Bob Etzel, Tama County Conservation Board.

The litter barrel decorating contest included two classes, artistic quality and group participation. The artistic competition was won by Jim Little's class from Montour. The group participation award was given to Shirley Hall's class from South Tama.

Tama County's fifth graders from Dysart-Geneseo, Garwin, Gladbrook, North Tama and South Tama enjoyed this terrific, information-filled day.



DAUN RUDIS, Soil Conservationist - SCS, explains about erosion and types of soil conservation practices that can be used to help control erosion to Tama County 5th grade students at the annual outdoor classroom held at Otter Creek Park.

A MULTI-FLORA ROSE meeting was held at the Bob Malin farm south of Tama to get the program underway in Tama county.

Explain Multiflora Rose eradication program

More than 35 interested persons braved the threatening rain on Thursday morning, September 13, to attend a multiflora rose eradication meeting on the Bob Malin farm south of Tama.

That interest is high concerning multiflora rose was indicated in a questionnaire put out last spring by the ASCS and Extension services.

County Extension director Dave Quinlan stated that this program in Tama County is a pilot program, and how it works will determine future funding.

The state of Iowa has appropriated \$1,500 for multiflora eradication, the Supervisors have appropriated another \$1,500 from county funds, with this money to be used on a 50% cost share basis, to be distributed to the people who sign up for the program before Oct. 1, 1984, with work on the roses to be done before May 31, 1985. Since there isn't a lot of money available at this time, the cost shares will only be paid on chemicals.

Key Connelly, Waterloo Area Extension crops specialist, told the group that "Tama County is right on the northern edge of the problem because 30 miles north of Tama the rose tends to winter kill, and 50 miles north multiflora rose is unheard of - it won't survive even if one tries to grow it."

The problem is greater in other counties as Jackson County has 30,000 acres severely infested, while Tama

County has 3,000 problem acres, with about 200 acres severely infested with multiflora rose.

The Extension personnel discussed the various ways to kill the rose, which Connelly described as "a rather aggressive plant."

Timing is critical in applying chemicals, with the ideal time being when the plant is actively growing. One of the best times is in blossom time, or just ahead of that, but since they blossom in June, chemicals will have to be applied sooner in order to qualify for cost shares.

Tordon is one of the most effective chemicals, but it is just as deadly on trees as it is on the roses, so care must be used, especially with the granules.

Don't apply them under the drip line of a tree if you want to save the tree, and don't apply them where they can wash down to trees which you don't want destroyed. There is a Tordon product which can be safely used, called Tordon RTU (translated Ready To Use).

This comes in a gallon container, with a squirt bottle furnished as an applicator. This is to be applied to the stump when the rose has been cut off, and it is not labeled for foliage spraying. It can be used underneath a tree, as long as a person makes sure they don't get any of the spray on the foliage of the tree, or on green bark of a small tree.

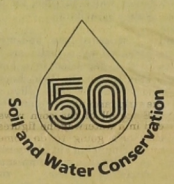
Roundup is effective if used at the proper time, as a

spraying of one-third of the foliage will kill the bush. The problem with Roundup is that it will also kill the grass around the bush if it falls on it, and it's difficult to spray a rose bush without any spray reaching the ground. This kills the grass, opening the way for weeds or erosion problems.

Esteron BK can be used as a foliar spray and it doesn't kill everything else as does Roundup, but it is not labeled for use on pastures. Banvel and 2,4D will kill small plants, and it takes a complete coverage to the point of runoff.

For the convenience of those attending the meeting, a sign-up was planned to be held in the Malin pasture where the demonstration of chemical use was given, but a rain shower abruptly ended the meeting, and the sign-up was moved to the Malin garage. In charge of this were Daun Rudis of the Soil Conservation Service, and Barbara Hempy of the ASCS.

The advisory board for the chemical reimbursement program are: Lester Lenhart, Chairman, Richard Cibula, Bob Malin, Bruce Bolen, Jr., William Lenhart, Mike Wentzen, Howard Clough, Dave Quinlan, Rodney Johannsen, and Daun Rudis.



ASCS assists Tama county farmers conserve soil

The Agricultural Conservation Program is designed to encourage farmers to voluntarily perform soil and water conservation measures and authorizes funds to help those who could not or would not perform such practices to the extent necessary without some federal assistance. Despite the millions of acres diverted to conservation practices under this year's acreage reduction programs, soil erosion remains a major problem.

In fiscal year 1984, 77 program applications were approved for cost share assistance to correct soil and water problems in Tama County. The number of applications and practices approved in fiscal year 1984 are:

7 SL1-Perm. Veg. Cover Est.; 4 SL3-Stripcropping; 34 SL4-Terrace Systems; 11 SL9-Windbreak; 1 WPI-Sediment Control Structure; 20 WP3-Sod Waterway & Tile.

Available practices included for fiscal year 1984 and the cost-share rates are listed below:

- SL1 - Permanent Vegetative cover Establishment 75% of cost.
- SL3 - Permanent Vegetative Cover Improvement 75% of cost.
- SL3 - Stripcropping \$6.00/acre.
- SL4 - Terrace Systems 50% of cost.
- SL5 - Diversions 50% of cost.
- SL9 - Farmstead and Feedlot Windbreak 50% of cost.
- SL11 - Permanent Vegetative Cover on Critical Areas 75% of cost.

WC1 - Water Impoundment Reservoirs 40% of cost.

WP3 - Sod Waterway 40% of cost.

FR1 - Forest Tree Plantation 75% of cost.

FR2 - Forest Tree Stand Improvement 75% of cost.

WL1 - Permanent Wildlife Habitat 50% of cost.

WL2 - Shallow Water Areas For Wildlife 50% of cost.

There were approximately 100 applications that were not approved due to lack of funds.

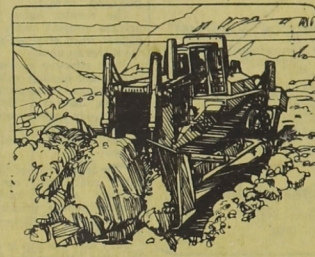
Farmers who were approved for the program are asked to report the completed conservation practice and submit the bills to our office as soon as possible so that payment may be issued promptly. If for some reason, an approved practice cannot be completed, farmers need to notify our office immediately.

If for future generations that we continue to make added improvements in our soil and water conservation practices.

Some conservation problems involving more than one farm may be solved more effectively under a pooling agreement. This is done by two or more farmers pooling their resources, efforts and finances to solve mutual conservation on their farms.

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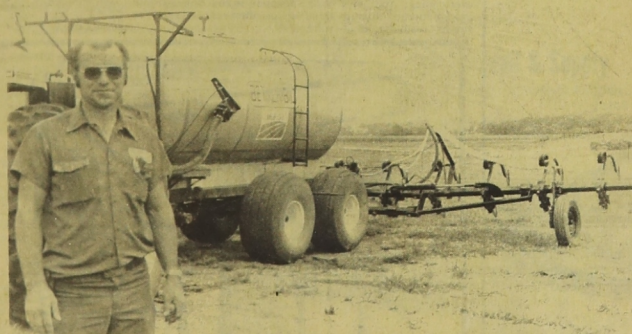
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Conservation practices cost higher income farmers less

Landowners can reduce the cost of installing expensive permanent soil conservation practices on their land in many ways. But, according to research conducted by Robert Jolly, Iowa State University Extension economist, higher-income farmers can generally reduce their project costs more than lower-income farmers.

The programs aimed at reducing a landowner's investment in conservation practices take two forms — tax-based incentives or direct transfer of funds to farmers, the economist said.

The tax-based incentives

include those that relate directly to conservation projects, such as the deduction of conservation expenses, and those that are more general, such as the deduction of interest and depreciation. Direct transfer payments include cost-sharing programs and Iowa's no-interest loan program.

"Cost-sharing programs are usually established to pay a fixed proportion of the initial investment costs of a conservation project," Jolly said. "In Iowa, cost-sharing of 50 percent to as high as 75 percent of the project cost may be available. Both federal and

state governments make cost-sharing funds available."

Iowa's no-interest loan program was established in August 1983. Jolly says this program created a revolving fund, from which loans can be made to farmers for conservation practices. These loans can be paid off in equal installments over a maximum 10-year period with no interest charge.

Eligibility for the no-interest loan program is restricted to farmers with net worths of less than \$300,000," he said. "It was the intent of this legislation to create a conservation funding instrument that would be attractive to lower-income farmers."

"The revolving fund also was expected to eventually reduce the demand for new state appropriations for direct cost-sharing."

To help farmers judge what conservation programs would provide them the most effective cost-share rate (ECSR) given their financial status, Jolly analyzed four funding options available to Iowa farmers: receiving tax-based incentives only, 50 percent cost-sharing, 75 percent cost-sharing and receiving a no-interest loan. He compared these options over three marginal tax rates — 10 percent, 30 percent and 50 percent.

"The ECSR measures the percent reduction in a project's cost when a specific set of funding options are employed," he said.

The results show that private project costs are highest when only tax-based incentives are used.

"The effective cost-share rate for this funding option is roughly equal to the marginal tax rate," Jolly said. "But the difference in project costs between the high- and low-income farmers is \$495 per \$1,000."

"The 50 percent and 75 percent cost-share options produce similar results. Higher-income producers have a greater effective cost-share rate."

Jolly says the gap in project costs between the high- and low-income farmer is \$228 per \$1,000 using the 50 percent cost-share option and \$94 per \$1,000 using the 75 percent cost-share option.

As expected, private costs are less when cost-sharing than when receiving tax incentives. But the costs to taxpayers are significantly higher when farmers cost-share than when they receive tax incentives.

"The costs to taxpayers of the no-interest loan are considerably lower than the 50 percent cost-sharing option," Jolly said.



OUTSTANDING SERVICE AWARD — Dick Pulse, Tama, former Extension director for Tama county, was presented the Outstanding Service to Agriculture Award at the Farm Bureau annual meeting. He is shown here with John Weber, right, Tama County Farm Bureau president.

"But the effective cost-share rate for the no-interest loan program is slightly biased in favor of higher-income producers. The difference in the private project costs between high- and low-income farmers is \$324 per \$1,000."

Jolly also found that first-

year cash outflows are largest for tax-incentive options and lowest for the no-interest loan program. After a few years, however, cost-sharing options have the smallest cash outflow. All options create lower cash outflows for higher-income producers.



TAMA COUNTIANS WERE honored for soil conservation efforts at the Tama Soil annual soil conservation awards banquet at King Tower Jan. 23. Those receiving awards (left to right) included: Front row — Clarence Sears, Gilman, Owner-Operator award; Lloyd Chas. rural Tama, Goodyear Conservation award; Roy Williams, Garwin, Landlord-Tenant award; Bob Hempy, Garwin, Friend of Conservation award. Back row — Dan Bruene, Gladbrook, Conservation Chairman; Jerry Abbe, Garwin, Owner-Operator award; Marley Bacon, L. Lord-Tenant award; Ernest Herink and his wife, Margaret, not pictured, Clutter, the L. Walton League award for outstanding county landward.

Iowa Farmers recognize benefits of conservation tillage

A pampered pasture is a good pasture, according to Steve Barnhart, Iowa State University Extension agronomist. Farmers who spare good pasture management practices spoil their chances for minimum soil erosion and maximum forage productivity.

Farmers can reduce soil erosion on their land in two basic ways — by cushioning the impact force of falling raindrops and by slowing water movement over the soil surface, Barnhart said.

"A pampered pasture intercepts raindrops more effectively because the grass grows taller under better management," he said. "The taller the grass, the more the soil is provided canopy protection from the pounding rain."

"A well-managed pasture also offers superior ground cover in comparison to a poor-

ly managed pasture. Living and dead plant matter found on the surface of a pampered pasture slows water movement across the soil and encourages water to soak into the soil."

Barnhart offers the following good management tips to help farmers pamper their pastures:

—Fertilize in early spring to increase pasture productivity and vigor.

—Delay grazing until pasture grasses have begun growing rapidly and have at least 3 to 5 inches of spring growth.

—Maintain thick stand with adequate weed control and summer fertilization if needed.

—Practice rotational grazing throughout the season to allow adequate time for growth.

By following the suggestions, Barnhart says pastures can be one of the lowest cost food sources available, and still conserve precious soil resources.

Soil conservation practices protect soil, save tax money

Good management of soil and water not only protects the soil resource within field boundaries, it also has many off-site benefits, according to Stewart Melvin, Iowa State University Extension agricultural engineer. These benefits include cost savings to taxpayers, and more and better water supplies for the state's inhabitants.

"Most of the sediment produced by a badly eroded field is deposited in a lower area within the field boundary," Melvin said. "But the small portion of sediment that does move out of the field often results in high off-site costs."

"This sediment is deposited in natural or man-made drainage systems — road ditches, culverts or drainage ditches — and slow-moving bodies of water such as ponds, lakes or small streams, before it is carried to a major river or stream."

How much off-site sediment deposits cost taxpayers each year isn't known, Melvin said. But most experts estimate the cost in millions of dollars in Iowa alone.

Major costs are incurred by transportation authorities in maintaining open road culverts, dredging rivers to maintain navigation channels, cleaning ditches and repairing roadbed damage resulting from saturated roadfills and overtopping. Additional costs are incurred during dust storms resulting from wind

erosion and after roadbed flooding, sediment deposition or scouring of roadbeds.

Water supplies, both public and private, also may be affected by soil erosion. Sediment-laden water often carries nutrients and pesticides into water bodies where natural cycling processes occur, Melvin said. This may result in excessive algae and other plant growth in summer.

The more organic growth there is in the water, the more ammonia there is, the more murky the water is, and the less oxygen there is," Melvin said. "These conditions can cause adverse effects in aquatic life."

For example, sediment loads in rock bottom streams can destroy game fish habitat and breeding areas.

"But there are many other impacts that result from excessive off-site erosion," Melvin said. "No longer can we only consider the effect of conservation practices on the land where they are installed because many downstream areas often are affected as well."



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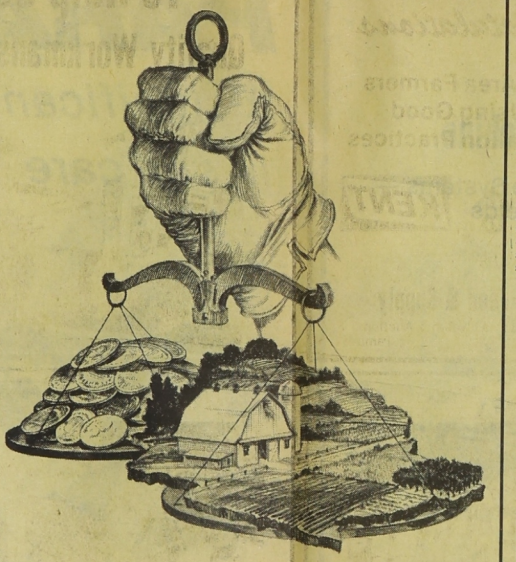
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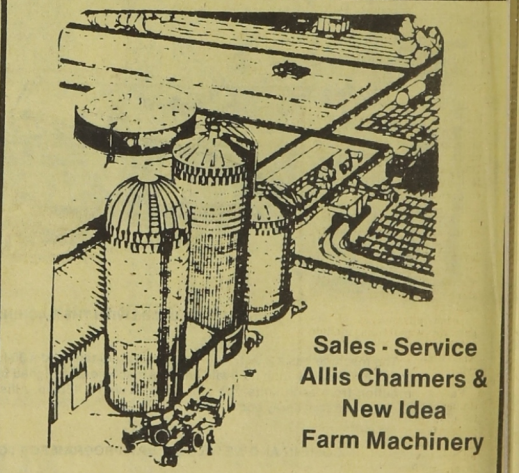
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Consider the soil...

by Governor Terry Branstad
In Iowa, agriculture means an abundance of crops ripe for harvest — twenty-six million acres or almost three-fourths of our state is planted yearly to row crops.

Our massive production of agriculture commodities is sustained by our soil resources. Combined with suitable climate and agricultural management, our rich topsoil makes Iowa a major source of food production for this country and the world. Moreover, three-fourths of all jobs can be traced to agriculture. Thus, it makes sense for Iowans, both on and off the farm, to recognize and share an interest in the important responsibility we have to protect our soil resources.

The riches of our soil are so great that they are seemingly limitless. However, the abundance of our food production could dramatically diminish in the next 20 years if steps are not taken to deal with serious soil erosion problems. I am pleased to say that in Iowa, we are considering the soil.

In this 1984 "State Year of the Soil," it seems appropriate to recap some of our successes. In 1980, the Iowa General Assembly enacted legislation known as the

"Iowa Soil 2000 Program." Iowa's 100 soil conservation districts have begun the process of delivering Iowa Soil 2000 folders to each landowner in the state. These folders will alert landowners to their soil conservation needs, suggest steps they can take to reduce their own erosion losses, and explain incentive and assistance programs available for the design and installation of conservation systems.

To further accelerate land treatment and to meet demand stimulated by Iowa Soil 2000, funding for the state's cost-sharing program for soil conservation was increased in 1983 from \$5.6 million to \$8.3 million. Funding for the current fiscal year was authorized at a level of \$8.6 million this past spring. These monies are used for cost-sharing with landowners who put an equal amount of their own dollars for the construction of permanent soil conservation practices. These practices—terraces, grass waterways, grade stabilization structures, and others—have off-site benefits of controlling runoff and siltation as well as their on-site purpose of holding soil in place to preserve its productivity.

During this past year, we were also able to make the first no-interest loan as part of a program initiated just a year ago. Used for the same types of permanent soil conservation practices as cost-share funds, this program offers an alternative approach for low net worth farmers who might not otherwise be able to finance needed conservation practices.

The record of participating by landowners in these programs during the past year is indicative of the agricultural community's commitment to protecting this all-important natural resource. While much still needs to be done, and we are far from finished, landowners' investment in soil conservation this past year is proof of their faith in the future.

I am also pleased to report that Iowa's farmers and landowners are rapidly adopting new reduced-tillage techniques that can substantially reduce erosion losses without additional capital investments.

Iowa's conservation farmers are to be commended for their pioneering efforts to protect our soil resource base and conservation work even during times when economic conditions are somewhat less than favorable. The support of the non-farm community for soil conservation programs and efforts is also key to continued success in the war we wage against soil erosion.

We are at a critical juncture in stemming the tide against soil erosion. We need to heighten awareness of the importance of our soil resource and the fact that there are limits to our ability to produce year after year without adequate protection and conservation.

Farmers voice concern about water quality. Ames, Iowa — Iowa farmers are beginning to get concerned about the quality of the state's water, according to the fall 1983 Iowa Farm and Rural Life poll.

Of 2,011 Iowa farmers randomly sampled in the poll, 47 percent felt water quality was a problem in Iowa. Thirty percent said their community had a severe or moderate water quality problem, and 20 percent felt they had a water

quality problem on their farm.

In general, respondents viewed the problem as being much worse the farther it was from home, Paul Lasley, Iowa State University Extension sociologist, said. But further analysis of survey responses showed that farmers' perceptions of water quality problems vary across the state.

For example, almost one-third of the farmers in the Creston and Ottumwa Extension areas felt they had a moderate or severe problem on their farms. Areas in north and eastern Iowa tended to report less water quality problems.

The amount of available drinking water was not as great a concern to the farmers as water quality, Lasley noted. About one-third of the respondents felt Iowa had a water quantity problem, but only 18 percent felt their community had a water availability problem. Fourteen percent said they had a problem with water available on their farm.

From these results, Lasley says neither water quality nor availability appear to be as

The Tama News-Herald, Tama, Ia., Thurs., Sept. 27, 1984 11



YOUNG FARM COUPLE — John Weber, left, presents a plaque to David and Karen Bredina, Clutter, to recognize their selection as the Outstanding Young Farm Couple for the Farm Bureau.

great a problem in Iowa as in some surrounding states, "But the concerns voiced by the farmers in this survey should be carefully monitored to prevent any further deterioration of the state's water resources," the specialist said.

Builds terraces to help restore Union Grove Lake

Adolph (Bud) Bruene

When Union Grove Lake was drained back in the early 1970s to reveal huge deposits of silt in the lake bed, it was decided that the only permanent restoration of the lake was dependent upon conservation practices in the watershed above the popular recreation spot.

The sight of all that mud in the lake caused Bud Bruene to realize that part of it was his topsoil and he resolved to do something about it.

He had just started farming on the place two miles north of the lake, so he started laying out contour lines, and the next year, in 1972, built the first of his terraces.

That first year, contractor Otis Hilmer built three long grassback terraces on one sidehill. These and some terraces of Harold Beichley were the first in the Union Grove watershed.

Bruene didn't stop after those first terraces were in place, but kept on building terraces until his entire half section was protected. The job was spread out over seven consecutive years with Otis Hilmer doing the earthwork the first five years and Gary Welton the last two years. Bud's interest in conservation didn't go unnoticed, as he was winner of the 1983 Goodyear Conservation Award.

He is well satisfied with the terraces, it does take some extra time to plant them, but he has very few short rows even with contour lines.

No waterways. By having the terraces, he has eliminated waterways and "solved a lot of headaches" due to the constant maintenance of waterways and the

potential herbicide damage to waterways. Yields have been as good as they would be with other types of farming, and he feels that yields may be better in a dry year, although he credits the contours for saving moisture more than the terraces.

Over a span of ten years, there hasn't been a lot of dirt accumulate behind the terraces, so they have been holding soil movement to a minimum.

Alternates crops
Bud's land is all in row crop, and he alternates soybeans and corn each year. The bean ground going into corn is hit once with a field cultivator to stir up the top inch to break any crust and allow it to dry out.

The cornstalk ground going into beans is disc'd twice, then planting is done with a sidehill tillage. One pass completes the planting as a sprayer is mounted on the front of the tractor, and the planter units are on the side. The side-winder leaves a considerable amount of residue on top, so this fits in with his overall conservation farming.

Bud and his wife, Jean, have three daughter. Gayle is a home economics teacher in the New Hampton high school. Kay is Mrs. Scott Boeckelman and lives in the Des Moines area, where she is employed by American Federal and her husband works for a printing company. Teri has just become Mrs. Steve Osborn. She is employed as a social worker at the Juvenile Home in Toledo, and her husband is engaged in farming with his father.

Well managed woodlands, soak up rain, conserve

The best way to limit soil erosion by water is to soak up falling raindrops when they fall, and a well-managed, fully stocked woodland does a better job of that than pasture or grazed woodlots, according to William Farris, assistant state forester with the Iowa Conservation Commission.

Rumoff water from sloping unprotected hills causes erosion, Farris said. In pastured woodlots, unprotected soil is bombarded by the impact energy of raindrops hitting the soil surface at full speed.

"The splash itself removes soil," the forester said. "And the steady pounding packs the soil surface, allowing little water infiltration. The resulting standing water runs down the slope, increasing in speed and removing more soil as it moves downhill."

In well-managed woodlands, the protective tree leaf canopy and the close growing understory cover act as an umbrella that protects nearly 100 percent of the soil surface from rain drop splash erosion, Farris said.

When landowners keep livestock out of their woodlots, the undisturbed, deep duff layer that gradually develops on the soil surface acts as a sponge. "One inch of duff can store up to a 3-inch rain," he said.

Other advantages of not grazing woodlands include better infiltration of rain water and increased productivity.

Farris said untrampled timber soils are loose enough to allow percolation of trapped surface water into the root zone at rapid rates. And the nutrient value of the duff layer provides the gradual development necessary to assure maximum woodland productivity.

Several studies support the use of ungrazed woodlots to reduce soil loss.

A six-year study at La-Crosse, Wis., on land with a 26% slope showed a dramatic difference in water runoff between grazed woodlands and woodland protected from grazing.

Grazed woodlands had an average water runoff of 2.31

inches per year (11.7% of annual rainfall), while protected woodlands had only 0.05 inches of water runoff (0.2% of annual rainfall). Open, managed pasture had an average water runoff of 0.79 inches per year or 4% of annual rainfall.

A nine-year study at Zanesville, Ohio, compared average annual soil loss for three different land uses on 14% slopes with 37 inches of annual rainfall.

Cropland (corn-oats-meadow rotation) lost 17.28 tons of soil per acre per year. Fertilized bluegrass lost 0.10 tons, and managed timber lost only 0.01 tons.

The water loss, measured by average percent of yearly rainfall, was also minimized by the timber cover. Cropland had runoff of 20.6% of the annual rainfall; pasture, 13.8%; and timber, 3.2%.

Pampered pastures produce more and save soil

Ames, Iowa — Iowa farmers listed a few complaints about conservation tillage when responding to the fall 1983 Iowa Farm and Rural Life poll. But, on the whole, Paul Lasley, Iowa State University Extension sociologist said the results show that producers feel positively about the system, and they recognize its ability to protect the state's soil and water resources.

The 2,011 Iowa farmers who participated in the survey were asked to evaluate 14 dimensions of conservation tillage on a six-point scale. The scale ranged from a "considerable advantage" to a "considerable disadvantage."

Conservation tillage was defined as a set of practices in which at least one-third of the previous crop residue was left on the surface.

Ninety-one percent of the poll's farmers viewed the prevention of soil loss as the most significant advantage of conservation tillage. Eighty-six percent felt fuel savings was a considerable or moderate

advantage when using the system.

About eight out of 10 producers listed time spent in the field, labor savings and moisture conservation as benefits of the system. Nearly 70 percent cited reduced soil compaction as an advantage. About one-half said equipment needs, investment in machinery and profitability made conservation tillage appeal to them.

And 64 percent of the respondents believed yields are about the same using conservation tillage as when using conventional tillage methods.

But the survey also identified some farmer concerns regarding conservation tillage, Lasley said.

Six out of 10 cited weed control as a considerable or moderate disadvantage. About one-half felt insect and disease control were problems with conservation tillage. And more than 30 percent said fertilizer placement and germination were disadvantages of conservation tillage systems.

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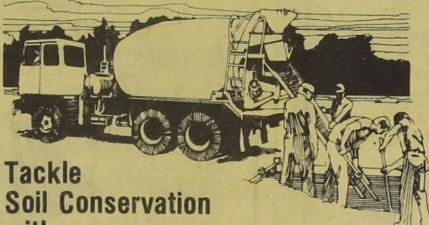
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How Iowa's land use law protects state agricultural land

Where town and country meet, conflicts over land use can and do occur. But, according to Iowa's current land use law, the Iowa farmland lost in the struggles must be accounted for.

The land use law protects Iowa's farmland in four specific ways:

- It creates county land preservation and use commissions;
- It requires county land use inventories;
- It gives counties the option of developing land use plans and policies;
- It gives farmers the right

to form agricultural areas.

"Each Iowa county has already created its own land preservation and use commission," Stuart Huntington, Iowa State University Extension planning and development specialist says. "This commission, composed of members representing the county, cities in the county, the Soil Conservation Commission and the Extension Council, was responsible for putting together the county's land use inventory."

Each county land use inventory includes information on the amount of land used for agriculture, public facilities, open space and other purposes in the county, Huntington says. County land that was converted from agricultural use to other uses since 1960 must be identified in the inventory.

After the mandatory land use inventories were completed, some Iowa county commission opted to develop a county land use plan or to list ways they would work to preserve their agricultural land, the specialist says.

"In Iowa, broad support exists for land use planning, particularly as it relates to the preservation of agricultural land. Studies done in 1980 and 1981 reveal that 77 percent of farmers and 87 percent of urbanites surveyed favor land use planning," according to Huntington.

A provision of the Iowa Land Preservation and Use law also enables an owner or

group of farmland owners to submit a proposal to the county board of supervisors for the creation of agricultural areas. A description of the proposed agricultural area and its boundaries needs to be included in the proposal.

"The proposed area cannot be located within the corporate limits of a city, and it must include at least 500 acres of farmland," Huntington says. "The territory should be as compact and as adjacent as feasible, and all landowners within the proposed area must consent to the area's formation."

Huntington said the use of land in agricultural areas is limited to farm operations, residences constructed for occupation by a person engaged in farming or in a family farm operation, nonconforming existing residences, and telephone company or utility properties.

In exchange for accepting these restrictions, the law offers landowners some protection from nuisance suits, special tax assessments and certain state regulations. Agricultural areas also are granted limited water priority by the new law.

According to Huntington, several agricultural areas have already been formed in Iowa. Some involve thousands of acres.

"The development of agricultural areas has been especially popular among farmers in certain areas of the state, such as southeast Iowa," he said. "In fact, the first agricultural area was formed in Muscatine County."

For more information about the Iowa Land Preservation and Use law, ask your county extension office for a copy of Pm-1079, "Iowa Land Use Law Explained."



MEMBERS OF THE Tama County Soil Conservation commission are Dan Scurr, Gilman Dan Bruene, Chairman, Gladbrook; Rick Hareran, Dyars; Franklin Bro, vice chairman Toledo. Not present were Robert Fontinel, Tama, and Ferd Kvidera, Dyars, assistants commissioner.

Contributors--- ISU sponsors Financial Counseling Workshop, Oct. 3

(Continued from page 7)

Harold Young, Gary Hineman, Gerald Eernisse, Harry Scurr, Leo Banda, Merle Clough, Cynthia Mitchell, Raymond Rinnan, Kenneth Kenner, George Dahms, The Levine Co., Inc., Bob Schwab, Tama Co. Mutual Ins. Assn., Farmers Savings Bank-Traer, Robert Malin, Rae Jean Bwoll, Iowa River F.S., Larry Henningsen, Wilmer Meek, Bert Pulkrabek, Duane Hoesek, Chris Harris.

Francis Scott, Norman Draper, Catherine VanDyke, Eldo Hagdorn, P.C. Earley Agency, Bernard Shaw, Joy Hayes, Ruth Starr, Lee Judge, Ester Lees, George Addison, John Murty, Twin Cities Insurance, Leonard Vorba, Roy Williams, Henry Sieh.

Wilbert Lamprecht, Loren Luethe, Adolph Bruene, First Community Bank, Trust, Traer, Bert Mitchell, Dr. H.D. Osborne Estate, Harry Burd, Clayton Sienknecht, Vernon Olsen, Emil Hansen, Otto Hansen, Bohemian Mutual Ins. Assn., Harold Beichley, Don Schmitt & Sons, Robert Kimm, Bill Lazar.

Estimates of up to 70% of the families in northeast Iowa who are encountering financial stress have prompted plans for an area workshop in Family Financial Counseling, sponsored by Iowa State University Cooperative Extension Service. The one day seminar, on Wednesday, Oct. 3, at the Waterloo Recreation Center, will be specifically for professionals and para-professionals who work with families in financial difficulty. The program will aim at developing more expertise in the process, tools, and techniques in managing money, but equally as important in building counseling skills. "Positive intrapersonal relationships that are achieved in the counseling process are crucial to whether the client 'owns' his own problem and is motivated to move toward learning to deal with effectively," according to Helen T. Sorensen, Extension Consumer and Manager Specialist.

"Financial problems are not associated with any one income level," Mrs. Sorensen added. "These concerns cross all income lines, are often caused by a complex set of personal as well as community situations. The economic environment in northeast Iowa has added the burden in many cases on these families need the counsel of well trained qualified agency and business advisors to help them through this period," she said.

The Oct. 3 workshop will be limited to 50 participants to facilitate personal interaction. Personnel of credit loan or collection departments of business, teachers, social workers; outreach personnel counselors of public or private agencies or volunteers who work with troubled families are examples of people who could benefit by sharpening their skills and updating techniques in this effort to provide a better resource base in this area of need.

More detailed information can be obtained by calling the Area Extension office 319-232-6664 or the Tama County Extension office, 515-484-2703.

Italian Luncheon, family violence meeting slated for October 17

Tama County Extension Service is sponsoring its first Ethnic Luncheon of the fall series in conjunction with a topic of great public interest today - family violence. The meeting will take place in the Extension Office meeting room on Oct. 17, with an Italian luncheon at 12 and the speaker to follow.

Linda Taylor from Domestic Violence Alternatives will discuss family violence from a local point of view as well as discussing problems that cause family violence.

Rosemary Brady, local specialist in Italian cookery, will enter the luncheon. If will be served at cost and reservations are required by Oct. 12 at the Tama County Extension Office in Toledo, 515-484-2703.

Programs and activities of Cooperative Extension Service are available to all potential clientele without regard to race, color, sex or national origin.

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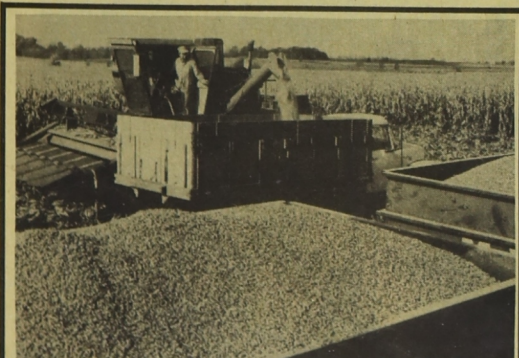
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Quinlan explains how a soil conservation lease works

By David Quinlan

County Extension Director When you own farm property as in a family farm there are generally two goals: income and maintaining your capital. When we own stock, we think of this as just good business sense and would sell any security where the capital was constantly deteriorating.

When it comes to farmland the capital is the soil. It seems very simple, but is often overlooked. If the soil is eroded, the capital is escaping and along with it the ability of the farmland to produce income.

Not many people would argue with the value of the rich black topsoil. Its ability to hold moisture and produce a crop is especially important in a crop year like the present one.

If you own farmland it's important that the soil is maintained. We now have a specific soil loss lease supplement at the Extension Office that specifies the amount of soil loss and what conservation practices need to be used to meet the goal.

This is a supplement form to any lease that can be used to detail practices, costs, and payments of soil practices. Any practice could be included such as strip cropping, reduced no-till, terraces, grass waterways, and rotation. These practices or a combination of these practices can be used to keep soil loss within acceptable limits. A limit which allows the soil enough time to regenerate itself and remain at its most productive level. Generally in Tama county, soil loss of 5 tons per acre should be the maximum loss.

These losses can easily be calculated by using slope, type, slope and present farming practice. The Soil Conservation Service can calculate the loss factors and give you a plan to reduce it if necessary. There are also cost share funds available.

It can also be specified in the lease how the cost share funds will be divided. If your tenant is financing with the Farmers Home Administration a soil conservation plan is mandatory.

This lease supplement can be used for a cash or crop share lease. If you do not wish

to use a supplement, any of these factors can be incorporated into your present lease. It's always a good idea to have your attorney review your lease if you are making changes.

One of the most important factors in maintaining your farmland is good communications and working relationship with your tenant. A good tenant will also realize the importance of maintaining the soil and be willing to cooperate.

Sometimes it is better to take a little less cash rent or be willing to finance improvements to secure that type of tenant. A little less income now, may mean a much more productive asset in the long run.

It is only good business to maintain your farmland. Both income and capital (soil) can be maintained with good management. Both the Extension Service and the Soil Conservation Service are very willing to help you reach this goal.

Ridge farming benefits outweigh burdens

Ridge farming requires more management than other conservation tillage methods but the benefits outweigh the disadvantages, according to an Iowa State University Extension agronomist. Benefits of ridge farming include less soil and water loss as well as less fuel, labor and time.

"The concept of farming on ridges is not new," Min Amemiya, ISU Extension agronomist, said. "But it is proving to be especially attractive to those who wish to use conservation tillage on poorly drained soils that remain cold and wet in the spring."

Amemiya said crops planted with no-tillage or strip tillage on unridged land are subject to wet and cold soil conditions because the seed is planted in a furrow into which water can accumulate. By planting on the ridge built when the previous crop is laid by, farmers can prevent water from standing over the rows.

Excess water drains from the higher ridge to the lower, row middles.

On sloping land, ridges that follow the contour of the land also act as mini-terraces, providing erosion control benefits, the agronomist said. "By using ridge farming, farmers can save time and money by instituting effective conservation tillage on even poorly drained soils, farmers can save time and money."

Amemiya said, "One-pass tillage and planting systems by definition reduce field operations by eliminating fall and early spring work. This means a reduction in time, fuel and labor needs, and in most instances, a reduction in equipment inventory."

Despite the system's many benefits, ridge farming has some drawbacks. Amemiya urged farmers to consider the following tradeoffs before implementing ridge farming on their land:

--When ridge farming, herbicide options are reduced, and there is no opportunity for pre-plant incorporation.

--Using this system, farmers must cultivate for weed control in the row middles as well as to rebuild ridges.

A rolling cultivator or sweep disk hiller-type cultivator should be used on dry soils instead of a regular shovel-type cultivator to avoid residue blockage. On wetter soils, disk hillers can cause slabby conditions and cause crop damage.

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Cibula: No-till farming a must for York township "Alps"

by Ferd Kvidera
Farm Editor

From an experimental field of no-till seven years ago, Richard Cibula has moved to 100% no-till corn at the present time.

Cibula, who lives one mile west of Vining in his hill country as one will find in York township, and farms in partnership with his brother Duane, and father Melvin, used a no-till planter which had been provided by Sienknecht Implement of Clutier that year as an introduction to that method of farming.

His first experience with no-till almost became a disaster, as he planted corn the first part of June into alfalfa from which he had taken a cutting of hay. The planter worked alright, but no rains came, and the alfalfa had drawn all the moisture from the upper part of the soil.

When the corn didn't emerge, eventually Richard figured that it was dead, and it was now too late to try anything else. He just forgot about it and went fishing for a week. The rains then came, the corn grew, and yielded about 70 bushels per acre.

After seeing the good results when everything seemed to go wrong, he decided to try it a second year to see what would happen when everything was done right.

This second year was a success, so the Cibulas purchased a John Deere Conservation planter and have been no-till on corn ever since. They are also mostly no-till on soybeans, although they are still experimenting on how best to handle them according to the weather and field conditions.

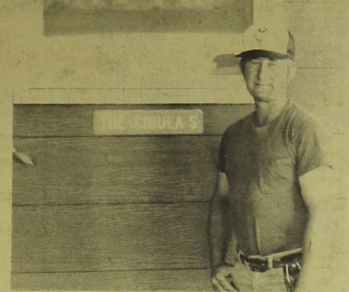
Rotating crops

The Cibulas use a rotation as "these hills just can't produce a corn crop year after year" and vary the rotation according to each field. On the hill fields they grow corn two years, then one year of oats seeded down, and then hay for a couple years. Again, the length of time in hay depends on the field and the hay crop. Ground that is fairly level will have one year of beans along with the corn crops, but beans are limited to the level ground as he doesn't like to see anybody plant beans on the steep hillsides. Their aim is to move off the crop and soil to get a field seeded down every three years.

The hayfields are almost 100% alfalfa as they are too pleased with orchard grass in the seeding. They prefer to cut their hay at a later date than when the orchard grass is at its optimum palatability, re-seeding in the cattle not eating the orchard grass part of the hay. Orchard grass is also hard to kill when no-till is used, and Richard says the easiest way to kill it is to not plant it in the first place.

Spraying

Spraying in conjunction with planting depends upon the weather and field



RICHARD CIBULA, VINING, has found no-till farming to be very successful in the hill country near Vining.

conditions. If Cibula can get into the field when the alfalfa is less than an inch and a half high, he can kill it with a spray of atrazine or blaxid. The neighbors in the York township "Alps" have been watching the crops raised by the Cibulas, and have done their own experimenting, as Richard says he has done quite a bit of custom planting around the neighborhood. Some have not been satisfied with the results and haven't done it again, while others are repeat customers. Cibula is very concerned about the loss of topsoil, and definitely feels that "no-till is a must for these hills."

Richard and his wife, Sheryl, have three children. Cindy is Mrs. Rusty Van Dee and lives in Elberon. Joe is a freshman at Iowa State University studying biology, culture, and Susan is a freshman at South Tama High School.

Their row crops normally rely on chemicals to keep down weeds, and 90% of the Cibulas' corn does not get cultivated. The only cultivation of either corn or soybeans is when a weed problem shows up in some field. The neighbors in the York township "Alps" have been watching the crops raised by the Cibulas, and have done their own experimenting, as Richard says he has done quite a bit of custom planting around the neighborhood. Some have not been satisfied with the results and haven't done it again, while others are repeat customers. Cibula is very concerned about the loss of topsoil, and definitely feels that "no-till is a must for these hills."

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Iowa's Soil 2000 Program is successful

Statewide implementation in 1984 of the Iowa Soil 2000 Program has been successful, according to James Gulliford, director of the Iowa Department of Soil Conservation.

The Iowa Soil 2000 Program was established in 1980 to provide educational, financial and technical assistance to landowners to reduce excessive soil erosion from all land in the state by the year 2000.

In 1983 two pilot areas — in the eastern Iowa districts of Dubuque, Jones and Winnebago, and the western Iowa districts of Cass, Page and East Pottawattamie — initiated program efforts. Based on positive feedback from these areas and because of increases of \$2.9 million in cost-sharing, \$1 million in no-interest conservation loans and the establishment of 21 new soil conservation technician positions, the program was initiated statewide in 1984.

In the first year of statewide implementation, Iowa Soil 2000 conservation folders have been developed and distributed to landowners of more than 1,000,000 of the state's most critically eroding acres," Gulliford said. "These farms were selected by soil conservation district commissioners as being the most fragile or excessively eroding areas within their counties."

Gulliford says the conservation folders are individually designed. They show farmers the nature of the soil erosion likely to be occurring on the major soil types of their land, suggest management and structural alternatives to treat the erosion and describe the technical and financial assistance available to them through the soil conservation district office.

"The principal goals of the folders are to initiate contact with all farmers, to generate awareness of the erosion problem they face and to encourage planning and development of a soil conservation system to treat each farm," Gulliford said. "While these are ambitious goals, the importance of the preservation of Iowa's soil resource justifies the effort made."

For more information about participation in the Iowa Soil 2000 program, contact your district soil commissioner.

SHORT-RUN PRINTING in a jiffy now at The Tama News-Herald.

Soil erosion is not always visible

What farmers can't see can hurt them when it comes to soil erosion.

Heavy rains in Iowa this past spring caused some of the worst soil erosion ever in the state, and most of the erosion was quite visible. USDA Soil Conservation Service (SCS) officials estimated about 4 million acres lost 20 tons or more soil per acre. Quite often, however, the average loss of soil can go unnoticed. Sheet erosion, for example, removes such a thin layer in one year that it's hard for farmers to see its loss and add up its progressive damage.

Union Grove Lake receives EPA funds

Union Grove Lake near Gladbrook has received \$391,000 in the form of a matching funds grant from the Environmental Protection Agency.

Four years ago the EPA had a clean lakes program. At this time they asked the Iowa Conservation Commission to establish a priority list of the 107 most important public lakes in Iowa.

This priority list took into consideration: location, siltation rate, number of watershed acres to one surface acre of water, as well as recreational value. Union Grove Lake came to the top of the priority list.

A feasibility study was done on the problems of the lake and possible solutions to the problems. Funds for this study were provided by the EPA, the Conservation Commission, and the Lake and Park Holding Corporation.

With the feasibility study completed, the Conservation Commission applied for grant money from the EPA to do the actual work. In June, 1984, Union Grove Lake was awarded \$387,000 and then a supplemental grant of \$204,000 was also awarded.

Approximately \$250,000 of the grant money will be used for soil conservation work in the watershed. The EPA matching funds grant money will provide 50% of the cost and the Department of Soil Conservation will provide 25%, with the other 25% to be furnished by the landowner. The grant money will be handled through the Soil Conservation District.

appearance, according to Mike Nethery, state conservationist for SCS.

He points out that the average annual loss of soil in Iowa is 9.4 tons per acre. Those in charge of the land, primarily farmers, need to try to visualize this average yearly soil loss, he said. "If they can't visualize it, they won't understand why soil conservation practices are so important."

One way to conceptualize the average yearly soil loss is to spread the lost 9.4 tons over an entire acre. Spread evenly, the cumulative soil

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loss would be about one-sixteenth of an inch deep.

"If you take that loss for 16 years, you have lost 1 inch of topsoil," Nethery said. "If the loss occurs over 100 years, you've lost 6 inches of topsoil."

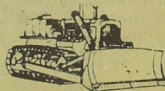
"When you consider that 100 years ago there were 14 to 15 inches of topsoil in places where there are now only 6 to 8 inches of topsoil, the fact that we lose one-sixteenth of an inch per year or 1 inch every 16 years becomes even more realistic."

The SCS and Iowa State University are currently conducting erosion-productivity studies to determine how long-term soil losses on different soils across the state will affect yields.

But before any corrective action can be taken, Nethery is convinced farmers and others involved in agricultural policy must first believe that erosion — visible or not — is a problem.

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Like putting money in the bank. . .



SOIL CONSERVATION

is something you do today to insure a better tomorrow

With all the industrialization of recent years, LAND is still the greatest asset of Iowa and our nation!

Conservation practices employed by Tama county farmers, stop the erosion of our precious top soil — and preserve the land for future generations.

We congratulate our farm friends for their conservation practices and urge them to keep up the good work.

We intend to help in every way a good bank can.

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High-Tensile Fence System:



VERSATILE FENCING FOR PASTURES, FEEDLOTS, GRAIN FIELDS AND EVEN ORCHARDS

Using pressure-treated posts and smooth high-tensile wire, the adaptable Koppers HTF™ System can handle many agricultural problems. It can contain livestock or control predators; it can be electrified; it can be used as temporary fencing; it can be installed in 3- to 12-wire arrangements; it's even being used to guide the growth of vines and trees.

The system features Max-Ten™ 200 wire from U.S. Steel Corporation strung on posts pressure-treated by Koppers Company. Together they provide long spans, minimal hide damage, extended service life and low maintenance.

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Spahn & Rose Lumber Co.

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Let us show you how easy it is to...

Ridge plant using your planter!

FOR MOUNTED, OR SEMI-MOUNTED PLANTERS simply add Hinkler's new Econ-O-Till 3000 Tillage Units and 3-point hitch to your planter's toolbar.

Wing deflector "grades" a level 16" seedbed and scrapes disc clean.

Gauge wheel cuts residue and stabilizes unit on the ridge.

Horizontal Rotating Disc cleans ridge, moves material to row middle.

FOR FULL-TYPE PLANTERS add "3000" Tillage Gangs and Hinkler's new Econ-O-Till 3500 Hitch.

- (A) Steered toolbar turns with the tractor...
- (B) ...keeping tillage units on the ridges at all times.
- (C) Planter follows tillage unit for row splitting precision planting.



DOWN-TO-EARTH IDEAS!

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Congratulations

To our Tama County farmers on their conservation practices

Iowa leads the nation in soil conservation — and Tama County ranks in the top ten counties in Iowa. Iowa was the first state to provide financial assistance for soil conservation and Tama County also provides funds. There are 1,400,000 lineal feet of terracing in the county,

6,000 acres of grass waterways and other soil conservation practices are rapidly being adopted. But we still have a long way to go. So we urge you, our farm friends, to keep up the good work.

THE FUTURE OF THE SOIL IS IN YOUR HANDS.

WE SUPPORT SOIL CONSERVATION IN TAMA COUNTY

COUNTY AUDITOR Alvin Ohrt — WEED COMMISSIONER Howard Clough
TAMA COUNTY CONSERVATION BOARD: Harley Jewell, Richard Hoskey, Richard Beecher, Charles Pleff, Ed Hix Jr., Robert Etzel

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