

SOIL HORIZON

your newsletter from

DES MOINES COUNTY SOIL CONSERVATION DISTRICT
Room 230, Federal Building, Burlington, IA 52601
Telephone 319/753-6221



Assisted by Soil Conservation Service
May-June, 1986

SOIL STEWARDSHIP WEEK, MAY 4 - 11

USDA CAUTIONS

Farmers planning to plant corn or soybeans this spring on highly erodible grassland or woodland may want to reconsider, USDA officials say. They also caution farmers who plan to drain wetlands for crop production.

The reason: the 1985 Farm Bill included "sodbuster" and "swampbuster" provisions that could make a farmer ineligible for other USDA benefits for 1986 and future years if he converts wetlands or highly erodible grassland to woodland or cropland.

"The sodbuster and swampbuster provisions of the Farm Bill went into effect last December 23, when the President signed the bill into law as the Food Security Act of 1985," says Mike Nethery, State Conservationist for the Soil Conservation Service in Iowa.

"There hasn't been much publicity about the details of how the provisions will be administered because USDA has been struggling to get feed grain, conservation reserve, and other programs running," Nethery says.

"They just haven't been able to get the rules in place. But the law is there, and anyone who converts highly erodible land or wetlands to cropland after December 23, 1985, could be subject to forfeiting USDA program benefits for 1986 and beyond," he says.



However, if the highly erodible land is farmed under a soil conservation plan and soil losses are adequately controlled, the farmer would be eligible for other USDA programs.

Nethery says detailed USDA rules and regulations on the provisions should be published by mid-May. "Since we don't know the rules, such as the exact definition of highly erodible land, we can't give specific information to a farmer on what would make him ineligible for benefits under the law," he says.

"But farmers need to know the law is in effect, and that they cannot expect to get USDA benefits if they carelessly break out established vegetative cover such as pastures, grassland, shrubs or trees for corn, soybeans, or other annual crops," Nethery says.

He encourages farmers who are considering converting steep land or wetlands from grass to rowcrops to contact their local Soil Conservation Service office.

For centuries men and women have offered humble thanks to God for the priceless gifts of soil, water, air and sunshine which make all living things possible. This gratitude by religious people has been expressed in many ways over the years but in all its forms there has been a continuing thread of emphasis on the wondrous powers of the Almighty to create and to heal.

There has been stress, too, on the universal dependence on His grace for salvation and for all good things.

The world as we know it could not exist without a fruitful agriculture. A regular harvest is a critical matter. But nature, like man, is erratic. There are times when the very elements seem to conspire against a yield.

Bad weather, fires and earthquakes brought crop failures and widespread hunger in Europe more than 1,500 years ago. The people responded and implored God for help in their suffering and privation. Rogation Days were established on an annual basis by the end of the eighth century.

In our own country, the decision to set aside a week each year to acknowledge before God our gratitude for His gifts of soil and all the bountiful resources associated with it has met an evident need of a great many people. The week--now known as Soil Stewardship Week--has become a special time to remind all people that these gifts of the

Creator warrant their best in creative conservation and considerate management.

The Soil Stewardship Week observance, by its very nature, is one to be joined in by everyone who shares a sense of personal responsibility under God for the care of soil, water and the other vital elements making up our environment. The prime concern of conservation districts, along with thousands of involved clergymen and laymen, is to encourage an ever-growing participation by Americans in this annual recognition of the continuing importance of thoughtful stewardship.

"Where there is no vision, the people perish."

Proverbs 29:18

SOIL STEWARDSHIP

Land was the Biblical inheritance of the human race. Ownership even today embraces an obligation to preserve and improve. Those who follow are entitled to a heritage whose fertility has been preserved and whose productive capacity is intact. To find out how you can help contact your Soil Conservation District and observe Soil and Water Stewardship Week, **May 4 to 11.**

Des Moines County Soil Conservation District
300 N. Main St.
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Assistant Commissioner Harold Linder jots a note at Commissioners meeting

GRASSED BACKSLOPE TERRACES A POTENTIAL FOR WILDLIFE

By Harold Linder

One of the problems in wildlife management is providing adequate nesting cover for pheasants and other ground nesting birds. Roadside intensive farming has eliminated the fence rows which were the only cover left in many areas. In areas where terraces are needed, the grassed backslope terrace could provide travel lanes and nesting sites.

If the terrace grass strip were made wider, it would be more advantageous for nesting sites as it would provide more undisturbed areas which would be less susceptible to predators. These permanent grassed strips could also be used as set aside strips. The loss of productive land would be offset by the benefit of insect control with predator insects, birds and shrews.

If the grass strip was planted to stiff stemmed prairie grasses, it could provide some winter cover especially where terrace slopes face south or east.

There is also the possibility of using a seed producing perennial plant as a food crop along with the prairie grasses. There are native forbs that are compatible with prairie grasses that will provide a winter food source for game and song birds.

Perhaps it is not practical or profitable to use land for anything other than the production of grain, but from all indications our all out production has a price we can't afford either. If we are going to practice continuous row crops on sloping land, we need more terraces and the cost difference between broad base and the grassed backslope terraces will justify the cost of leaving a grass strip to be used for wildlife cover.

Pheasants and quail may not have a direct economic value, but very few farmers would deny them the grain they eat or a place to live. A farm without a place for wildlife, especially our avian friends, is missing something.

Another advantage of grassed backslope terraces is that in the event of excessive rain, the terrace will not be damaged by the overflow of water if the terrace outlet cannot handle it.

Terraces are more effective in floods if there is a strip of grass on the inside slope because it will give more protection in the event of over topping. Any good grass with a creeping rhizomatous root system will work, but the greatest benefit for wildlife management would be bluestem grasses, Indian grass or switchgrass or a native grass with seeds. There is a word of caution--there are undesirable grasses, but there are some that produce seeds that hang on into winter that could provide an emergency food supply.

Along with grassed backslope terraces, some odd corners planted to native grasses, trees and shrubs would provide emergency shelter for the protection of wildlife during winter storms.



MULTIFLORA ROSE COST SHARING

Seventy-five percent cost sharing is still available at your district soil conservation office on chemicals to Kill the Rose.

NO TILL CASH PAYMENTS AVAILABLE!

The Des Moines County Soil Conservation District commissioners have set aside nearly \$5,000 of State Cost-Share funds to be paid to Des Moines County farmers who will no till some of their crops in 1986. The District will pay \$10 per acre up to 25 acres to farmers who no till into undisturbed corn stalks or sod cover. There will be no cost share on crops no tilled into soybean stubble as there is often no more than 25 percent residue cover following soybeans and the land may still be subject to erosion even if no tilled. The fields must be predominately "B" slopes or greater (approximately two percent slope on up). It is allowable to knife in anhydrous ammonia prior to no till planting as long as no till coulters are used on the anhydrous applicator. Though it is not recommended, it will be allowable to pasture the stalks or sod prior to no till planting as long 50 percent of the soil surface remains covered with residue at planting time and the field is not "unduly torn up" by the livestock. Farmers will be allowed to drag harrow or chop stalks prior to no till planting, with the warning to be made clear that this may cause the ground to dry out slower in the spring and force a later planting. The crops should be no tilled on the contour for maximum benefit, however, this is not a requirement to participate in this program. Farmers may cultivate their crops after they come up, if they so desire. The final date to sign up is May 31, 1986. Sign up must be made prior to planting. Apply at the Soil Conservation Service office, Room 230, Federal Building, Burlington. RS

FEWER TERRACES ELIGIBLE FOR COST-SHARE \$

As of March 19 the Des Moines County Soil Conservation District will be more restrictive about cost-share dollars for terraces. Henceforth, the only terraces eligible for cost-share money and technical assistance are terraces which will be built on the contour and which will be built on land with less than 5% slopes.



The SCD adopted this policy change for several good reasons, mainly: 1) Terraces not installed on the contour have no significant effect on sheet erosion; 2) Terraces built on land steeper than 5% slope have no significant effect on sheet erosion; 3) Grassed waterways control erosion as well and are much cheaper. In the past, terraces have been seen as the answer to almost all erosion problems, but not anymore.

The SCD feels that its cost-share money is more effectively used building grassed waterways and convincing farmers to alter the management of their farm.

Many terraces the SCD has already helped build, would never have been needed if the land would have been contoured farmed, farmed with hay in the rotation, or had reduced tillage. Some farmers see grassed waterways as more of a nuisance than anything else. To convince farmers to change their thinking, the SCD is putting their money where their mouth is by cost-sharing more dollars in the future on waterways and incentives to get farmers to experiment with management changes which reduce erosion.

The SCD is happy to help farmers who are losing soil and care about it, so don't be afraid to come in and see about cost-share money, or just for advice. But don't have your heart set on a terrace. There will still be available cost-share money for structures which stabilize the outlets of waterways making them successful where they may have washed out before.

The Des Moines County Soil Conservation District Commissioners have been entrusted with your tax dollars. They have been elected to public office by you. They feel it is their obligation to spend those dollars in a manner that will save the most tons of soil per dollar spent. They want to take the responsibility to put some efficiency back into government programs. Therefore they have taken the bull by the horns and brought about these policy changes.

If you have any other ideas or suggestions to improve the efficiency of Soil Conservation District Programs call 753-6221 or stop in the SCS office or attend an SCD meeting.

Remember if you erode your own land or allow your tenant to erode your land you are only cheating yourself. JD



PRIORITY RATING OF COST-SHARE APPLICATIONS

Have you wondered what is the criteria used to determine whether state cost sharing would be approved by the soil conservation district commissioners? Commissioners and SCS staff consider the following items in making their decision (providing there are sufficient funds available):

	Possible Points
1. Severity of erosion that will be corrected by the proposed structure.	0 - 20
2. Willingness to use component practices that bring soil losses down to tolerable loss limits.	0 - 20
3. Is there a conservation plan completed for the entire farm?	0-20
4. Is landowner using "no-till" practices on majority of crop land?	0 - 20
5. Maintenance level of present structures installed with cost-share money.	0 - 20
6. Will system be installed as we recommend it?	0 - 20
7. Is this a priority watershed?	0 - 10
8. Cost benefit ratio. Cost divided by acres benefitted as follows:	0 - 20

< \$349	20 points
\$350-\$449	15 points
\$450-\$549	10 points
\$550-\$649	5 points
> \$650	0 points

POSSIBLE POINTS 150

NOTE: Minimum of 75 out of 150 points have to be scored to be considered for cost sharing. This will prevent low priority applicants being approved in times of low competition for cost-share funds.

CONSERVATION TILLAGE IN IOWA

Iowa farmers lead the nation in acres of cropland planted with soil-saving conservation tillage methods, according to a national survey of tillage practices.

The survey shows more than 12 million acres of Iowa land were planted with conservation tillage in 1985. The figure is for all crops including corn, soybeans, small grains and forage crops, and represents a 20 percent increase from 1984 and 1983.

"We know there's been a steady increase in the use of conservation tillage by Iowa farmers, and we're happy to see they have the distinction of being number one," says Mike Nethery, state conservationist for the USDA Soil Conservation Service (SCS). The SCS works with the Extension Service, ASCS and soil conservation districts to make the survey annually with the National Conservation Tillage Information Center in Ft. Wayne, Indiana.

Conservation tillage is defined as any method of tillage that leaves at least 30 percent of the ground covered by the previous year's crop residue after the new crop is planted.

"Conservation tillage can save time, fuel, labor, and soil," Nethery says. "We expect the trend to reduced tillage will increase—especially the no-till and ridge-till methods, because they offer the most potential for savings."

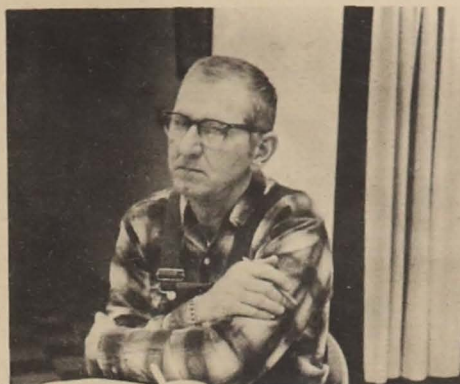
No-till corn and soybean acreage in Iowa has increased by more than 30 percent of the last three years. In 1985, there were 822,000 acres of no-till, eight times the acreage in 1980.

More than a quarter of a million acres are now ridge-tilled, a practice growing in popularity in north-central Iowa because planting on a ridge reduces wetness and other problems. The 277,000 acres of ridge-till in 1985 was a 22 percent increase from 1984.

Mulch tillage, a practice where discs, chisels or other tillage implements disturb the entire soil surface in preparation for planting, showed an increase of 2.2 million acres from 1984. The mulch tillage method accounts for the bulk of conservation tillage acreage in Iowa, with 10.9 million acres in 1985. Most of those acres (9.9 million acres) was on corn and soybean land. There was an 18 percent increase in mulch-till acreage on corn and beans from 1984.

"Nearly half of Iowa's corn and soybean acreage is now being planted with methods that help save topsoil," SCS Agronomist Bob Dayton says. "The survey shows that each year, more farmers are reducing the amount of tillage on their cropland. The crop residue they leave on the surface protects the soil from erosion, and the cover offers some wildlife benefits, too," he says.

"There are many benefits to conservation tillage," Dayton says, "and while the pace of adoption has been fast, there is still plenty of room to expand its use in Iowa."



Clyde Scherer, a farmer with an opinion

PROFITABLE FARMING NOW

Clyde Scherer is a farmer south of Burlington who owns 170 acres and rents out 110 acres.

Clyde says that he has made just as much in the last two years as he ever has. He's a farmer who learns from experience and pays attention to his net profits. Over the years, he has figured out a way that works for him.

First of all, Clyde believes that a farmer must be diversified and have some crops, livestock, hay and pasture land. His rotation is not the monotonous soil depleting one of corn and soybeans, but he has gone to more clover and wheat. With his corn-bean-wheat rotation, Clyde thinks he is building a better soil especially with the mammoth clover mixed in with the wheat. "Mammoth clover, in the short run is better than alfalfa, but alfalfa is better in the long run for soil building," he says.

On his field trial last year with Martin Culik, who is now with the Extension Service in Wisconsin, Clyde found that he could save \$10-15 per acre by not applying more than 50 lbs. of N per acre. This year he figures he will save another \$15-20 per acre by not applying P and K on those soils that are already testing high.

The mammoth clover puts 10 lbs. of N in the ground for every inch of growth, or in other words, about 150 lbs. of N.

When asked if he thought there was a difference in commercial N and green manure N, he said, "Definitely!" He has recorded a 41 bushel difference in a dry year where corn followed alfalfa and orchard grass versus a field that had corn and beans the years before. He says this difference will always show up in adverse weather years. He's convinced that there is a difference in availability and release of N that is put there by legumes versus commercial fertilizer. He definitely believes the green manure crops are superior to commercial products.

Another point Clyde brings out is that it is a waste of time to apply fertilizer to beans the same year that they are grown. He notices some difference if they are fertilized the year before. The only thing that will help beans in his opinion is lime. "P and K doesn't make any difference," he said.

"With the price of legumes, you can't afford NOT to use them today. Mammoth clover at 80 cents per lb. or \$5.60 per acre at seven lbs. per acre is a real bargain."

Clyde says he also cuts back on his seed corn costs and gets good yields from less expensive hybrids. He claims that his yields are just as good as the high priced stuff.

Clyde's rotation and fertility program are not the only reason for his success. He says that a good woman is a necessary component of a good farm operation. Clyde claims his wife, Kay, has made more by saving than what he has earned. "She can throw out more through the backdoor than I can bring in through the front door," he jokingly proclaims.

"A farmer can have a decent income off a 160-200 acre farm and own a good house and equipment," Clyde believes. "You can't go to South America on vacation but you can live decent."

Some interesting quotes from Clyde follow: "Don't buy anything you don't need. Try not to buy things you can't use on more than one thing or operation. Don't buy luxuries. Raise hogs and cattle. Don't build a confinement, just use a bucket and scoop shovel. You can make a decent living on a farm cause I've done it!" HB



"If he wants some exercise, I have plenty of work he could do."



YEAR OF THE TREE

April 25 was Arbor Day in Iowa. Planting trees on Arbor Day has been a tradition for many years and it insures trees for the future. Aldo Leopold said, "When some remote ancestor of ours invented the shovel, he became a giver: he could plant a tree. And when the axe was invented, he became a taker: he could chop it down. Whoever owns land has thus assumed, whether he knows it or not the divine functions of creating and destroying plants."

In recognition of the many important roles that trees play in the lives of Iowans, Governor Terry Branstad has declared 1986 the Year of the Tree. The Year of the Tree signals the beginning of efforts to inform the public and to involve individuals, organizations, agencies and clubs in a cooperative venture to plant and maintain trees for the future. DD

Des Moines County Soil Conservation District commissioners gave a tree to each 3rd grade student in the county to take home to plant. The program was started last year when a tree was given to 3rd graders in the Burlington schools. The program was so well received that the district decided to expand the program this year. District representatives visited the classrooms of all the schools in the county and distributed nearly 700 White Pine seedlings. DD

RESEARCH

Chisel plows bury more than 80 percent of soybean residue according to a four-year study conducted by the Agricultural Research Service at Iowa State University.

The study, conducted to determine the effects of different tillage implements on corn and soybean residue, also showed that field cultivators and some planters can uncover crop residue buried by a previous tillage operation. This resulted in increased surface residue of up to 60 percent.

In addition, researchers concluded that soybean residue is more easily buried than corn residue and that in general, the greatest amount of residue is buried during the first tillage operation after harvest.

For more information, contact Thomas S. Colvin, USDA-ARS, 213 Davidson Hall, Iowa State University, Ames, Iowa 50011 (515/294-5723).



"Just how large a loan did you have in mind?"

ELECTION

The terms of two Des Moines County Soil Conservation District Commissioners, Wayne L. Ertzinger, Burlington, Union Twp. and Leonard L. Lane, Mediapolis, Yellow Springs Twp., will expire at noon on January 2, 1987. Successors will be elected at the general election on November 4.

Any qualified elector residing in Des Moines County including cities and towns, is eligible for the office of commissioner, except that no more than one commissioner may be a resident of any one township. Incumbent commissioners are Sherman A. Smith, Burlington, Burlington Twp., Keith Renner, Danville, Danville Twp., and Donald W. Mathews, Danville, Pleasant Grove Twp.; therefore, residents of these townships would not be eligible for office at this time.

Prospective candidates seeking the office of soil conservation district commissioner must file nomination petitions in the same manner as for other elective positions at the general election. The office is a nonpartisan position. Nomination petitions are obtained from the County Auditor at the Courthouse. A candidate may circulate his own nomination petition and must have 25 signatures of eligible electors. The deadline for filing is 5 p.m., September 10, 1986.

Individuals elected in November 1986 will serve a term of six years starting January 2, 1987. Soil conservation district commissioners set policy and guide the overall soil and water conservation program in the county.

The Des Moines County Soil Conservation District office will welcome any inquiries concerning the duties, responsibilities and challenges of a soil conservation district commissioner position. Any of the soil district commissioners will also be happy to discuss further questions. DD

NEW APPOINTMENTS

Des Moines County Soil Conservation District commissioners recently appointed three additional assistant commissioners. James "Sam" Jennison will accept duties pertaining to legislative affairs, Barbara Bonnett, education and Arlyn Musselman, research, alternative crops and education. These appointments are in addition to Bill Walker, Roger Gay and Harold Linder. Assistant commissioners accept responsibility for certain tasks to further the objectives of the soil conservation district. Their appointment extends through the current calendar year. DD

COMMISSIONERS

Sherman A. Smith, Chairman
Leonard L. Lane, Vice Chairman
Wayne "Bud" Ertzinger
Donald W. Mathews
Keith B. Renner

ASSISTANT COMMISSIONERS

William "Bill" Walker
Roger Gay
Harold Linder
James "Sam" Jennison
Barbara A. Bonnett
Arlyn Musselman
Horace Sutton, Treasurer

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Howard Bright, Dist. Conservationist
Rick L. Shafer, Soil Conservationist
Diane D. Reed, Soil Conservationist
Mark E. Fehseke, Cons. Technician
Dorothy Davis, District Clerk, Sec.

SCS VOLUNTEERS

Jamie Dehner, Surveyor
Kevin Michaels, Drafting
Larry Nuss, Research
Roger Darby, Office Assistant
Max Hopkins, Office Assistant

PUT A **LITTLE LIFE** IN YOUR FUTURE
PLANT A TREE!