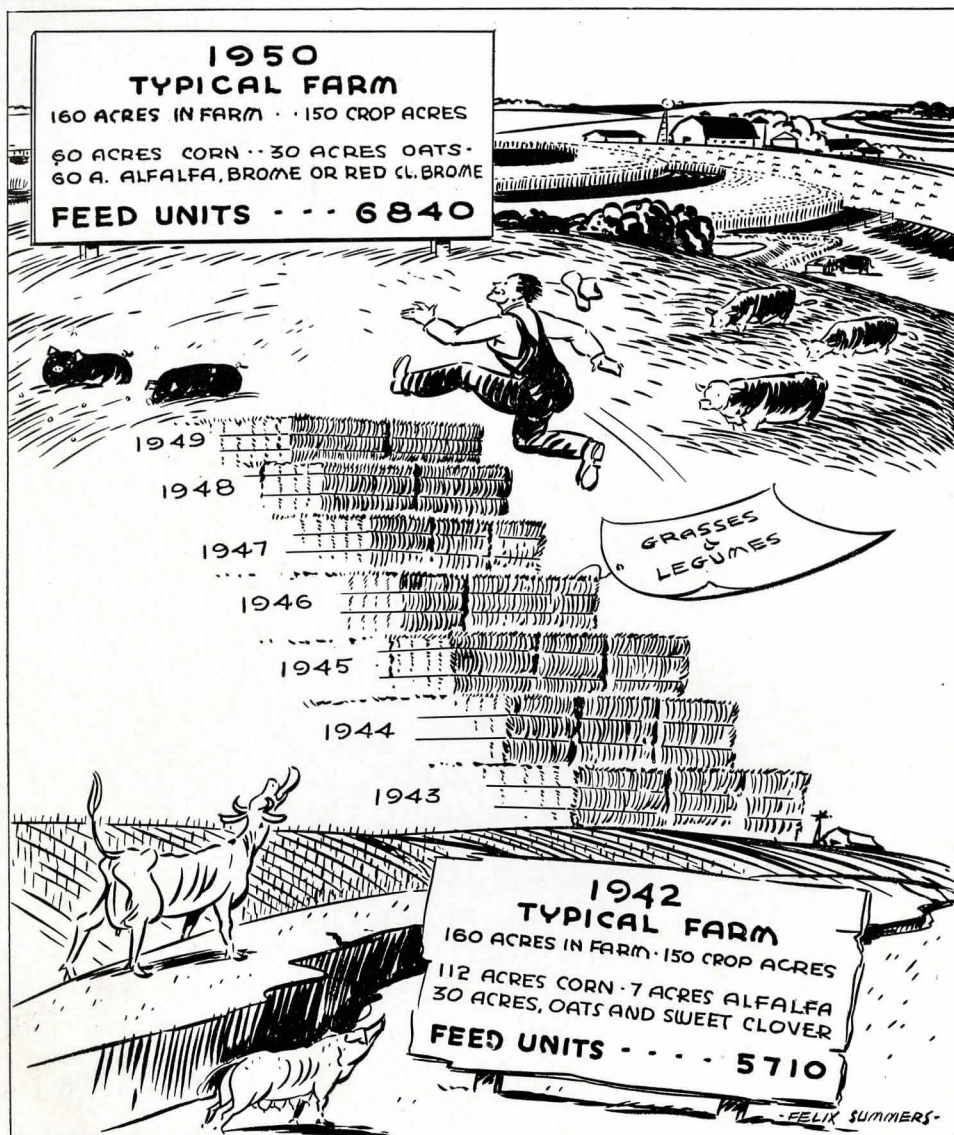


THE PAY OFF



TENTH ANNUAL REPORT

Mills County

Soil Conservation District

Mills County, Iowa

December 31, 1950

Our Cover Drawing
by Felix D. Summers



Felix is located at the Regional Office, Soil Conservation Service, Milwaukee, Wis. When Felix was back in his home county for Christmas vacation he saw the compilation of our 1950 survey and made this cover drawing to present our results.

THE PAY OFF



TENTH ANNUAL REPORT

Mills County

Soil Conservation District

Mills County, Iowa

December 31, 1950

District Commissioners



J. F. Wearin, Jr., Chairman
Hastings, Iowa

J. M. Steele
Malvern, Iowa

D. N. McGrew
Emerson, Iowa

Richard S. Goos, Secretary
Malvern, Iowa

Lillian A. Campbell, Treasurer
Malvern, Iowa

T. J. Powell, District Conservationist
Shenandoah, Iowa



A S S I S T E D B Y

Ray W. Jones, Unit Conservationist
B. Jack Wederquist, Conservation Aid
Gerald I. Bower, Conservation Aid
Lee R. Sowers, Technical Assistant

THE PAY OFF



Once again we, Commissioners of the Mills County Soil Conservation District, report to the people and the assisting agencies on the conservation progress of the past year. This time, however, we intend to cover the progress we have made in the last ten years instead of just the one; since this is our tenth annual report. Our first year was one of organization so that we have really only had nine full years of operation. The four of us who have been with this thing from the start find it interesting to compare our ideas of ten years ago with the actual events which have taken place since we were organized.

One of the first jobs of a new district organized at the time we were was to formulate and write a program and a work plan to be its guide in the future. It is to these two records that we turn then to find what our ideas were at that time. There we find real justification for the district. There was grave concern over the increase in soil losses we were having and over the apparent lack of interest and knowledge about it on the part of the public. It was felt that one of the more important jobs ahead was the education of the public about the need for conserving what we have. In the district program we explore a number of possible ways to get at that educational job. Another leading item for concern was the intensity of the rotations which were in general use at the time. While we were of the opinion that an improvement in the land use program in the county was of primary importance if the soil was to be saved, it appeared to be the one thing least likely to change. Fortunately for the good of the county we were mistaken about this as subsequent events proved.

A great many factors entered in to cause so many farmers to change their ideas about what rotation they should use. Among them were the war and the following period of prosperity, the long period of better than

average rainfall and consequent good crop seasons, the P.M.A. program with its emphasis on good land use, and our own efforts to point the way toward more grass and less corn. We shall discuss the changes in land use that have occurred as we develop the theme of our report.

We do not mean to imply, by the statements just above, that we are feeling at all smug about the way things are going on our farms. We are the first to acknowledge that there is still a great deal of room for improvement in the way in which some of the land is being handled. However, there have been definite changes for the better made by many of the operators and there is an ever increasing awareness on their part of the importance of saving the soil. To illustrate, let us look back to some of the problems of ten years ago as listed in the **District Program**, written August 26, 1941, and see how they have resolved as of now. Quote "1. Burning of crop residue was frowned upon as being the number one problem."

We can safely say that there is 75% less burning of corn stalks and stubble fields as compared with 1940. Here again our educational program has had a helping hand from the weather man. Crop residues admittedly rot better when wet than when dry; but we hope that we never see a return of the habit. We are of the opinion that when a field has successfully had all crop residues returned for a period of years there are increased numbers of bacteria in that soil to cope with future residues in short order. In other words, even though we enter a dry cycle, our soils should be in a good position to handle all residue.

Quote "2. Farmers generally do not understand or use good crop rotations." As we shall show later, this is not now applicable to nearly so many farmers as formerly.

Quote "3. Farmers are not making full use of barn yard and green manures or commercial fertilizers."

There is definitely a change in the use of commercial fertilizer, from practically none to a great deal; and

there is a great deal of green clover and other hays turned under every spring now. The latter practice has improved in that we are more careful to see that each field has its proper share; however, we wonder if most of the manure is not still hauled to the fields handiest to the feed lot.

Quote "4. There are still big losses by sheet erosion in the county, and a need exists to acquaint farmers with the value of contouring, terraces, and strip cropping as a means to slow up these losses."

We have made our largest progress with this problem. We have a terrific number of acres protected by the so called mechanical practices as compared with before. For several years we concentrated on this aspect of conservation and we feel that the results on the farms in the county justify our action. We still have some ground to gain in this regard, but it is one which is being worked on with great regularity by the crew in the S.C.S. office.

Quote "5. Inasmuch as the State of Iowa and Mills County are large land owners in the county, they should take a more active stand in a good land use program. The county spends considerable money every year for the maintenance of road ditches, culverts, and bridges that could be somewhat lessened if they could encourage good land use programs along their right of ways."

The problem of getting the State of Iowa and the County government interested in a good land use program on their land within the county, has had a happy partial solution. The Glenwood State School Farm is under an excellent conservation program, worked out between the local S.C.S. and the State Board of Control, as is the County Farm. Progress has been made in getting proper road-side slopes established so that conserving grasses can grow in the place of weeds and gullies. These are the first five of the 18 major problems that we listed in the District Program when the district was formed 10 years ago.

From these examples it is apparent that the situation has changed considerably — and for the better.

While we do not claim responsibility for nearly all of the improvements, we like to think that we were able to give them a big boost by having been in operation over the period.

While we hope that our title "The Pay Off" will not open us to investigation on criminal charges, we think that it aptly describes the results that are being obtained by farmers who have been following recommended conservation practices. 1950 had two examples of ways in which the thing is paying off. One is the way in which soil losses are held down by proper rotations, and the other is the exceptionally large yields of corn obtained by some cooperators. An illustration of the first is the 7.75" and 4.48" recorded rainfall of May 8th, which did material damage to unprotected fields and to some new terraces which had not had time to settle. However, established systems with good land use were not hurt at all. District cooperator, Warren Gregory's 117.5 bu. per acre average for his entire acreage of corn, double the county average this year, should be considered quite satisfactory returns for all his efforts toward conservation. His farm is very well protected by the supporting practices which accompany his good rotation; all of which well integrated program is paying dividends.

In 1942 and again in 1950 a survey was made of 85% of the farms in the district to determine the land use practices. The first year of the study was unusual because of the war effort, so far as crop acreages were concerned. In spite of this we feel that the results of the survey are worthy of considering, because considerable change has taken place in cropping practices.

For example in the earlier year one-half of the farms had 60% or more of their crop acres in corn, whereas in 1950 only 10% of the farms had so much corn. There was also a striking difference in the number of farms which had 40% of the crop acres in corn on a five year rotation. In 1942 only 10% of the farms had this rotation, which we now consider standard for the county, but in 1950, 42% of the farms were using this system.

LAND USE PATTERN

<i>Land Use by Percentage of Crop Acres Planted to Corn</i>	<i>Average Yields per acre per year for 8 years</i>	Percent of Farms Operated Under Each Percentage of Use	
		1942	1950
60 % or more	43	50 %	10 %
50 %	51	30 %	27 %
40 %	62	10 %	42 %
30 %	71	8 %	12 %
25 %	80	2 %	9 %

It is from these studies that we got the figures for our two typical farms as depicted on the cover of the report. Let us look at the change in number of feed units — a feed unit being equal to one bushel of corn. The change of feed units produced from 5710 to 6840 is an increase of 19.7%. Which increase is the same as adding one 160 acre farm of the old productivity for each five farms which go under a complete soil and water conservation program. In order to make this growth more realistic let us divide the 264,758 farm acres of the county by our 160 acre farm, which shows that there are 1654 tracts of that size in the county. Now, were all of those to practice good land use programs we could expect an increase in production equal to that which we should obtain from **330 more** farms. One-fifth more wealth brought into the county each year is certainly worth striving for; especially when by the same efforts we greatly prolong the productive expectancy of the land.

In connection with this same theme we gave a number of prominent agriculturists a preview of our figures resulting from these surveys and a summary of work done. We asked them if they would place a dollar value on the work we had done — a task which we knew to be quite difficult. We list here quotations from the replies we received which speak for themselves:

Louis Bromfield, Farmer - Author — "The value of land is in one sense the same value as any other capital investment. It is determined by the return on the investment and from the statement of Mills County Soil Conservation District it is evident that under proper land management the average value of land in the area must have increased from forty per cent upward. Of course under the changing program, with greater emphasis upon grass and legumes, the land values in terms of production and soil stability are certain to continue upward. It is encouraging to see the cultivation of corn falling into its proper place. One of the most destructive factors in the erosion and depletion of our middle western soils has been the over-emphasis upon the production of corn and the common belief that it is indispensable to a profitable agriculture. Fortunately we are learning that this is not true and as we are learning, farm profits are rising and the bank of topsoil and productive fertility is steadily increasing."

Everett T. Winter, Vice Pres., Mississippi Valley Association — "It would take an enormous factory located in Mills County to create increased purchasing power of the people living within Mills County equal to that which the program of the Mills County Soil Conservation District has already created."

D. Howard Doane, President, Doane Agricultural Service — "We have found from long experience in our own business that we can make no claims to doing a superior farm management job until both the assets and liabilities are carefully and completely weighed. Practically all farm management practices cost something. They have their good and their bad sides and until these are weighed one against the other no net balance can be obtained."

H. G. E. Fick, Regional Manager, Doane Agricultural Service — "In our opinion, the farm would have an increase value of about 10% due to conservation practices."

Paul Stewart, Agronomist, J. C. Robinson Seed Company — "The real measure of value on the acres of a

well conserved farm as compared to an eroded one is their relative productiveness, the costs of operation, their permanency to the farm family, the net profit to the operator and owner, and the satisfaction that is derived from doing a good job and conserving the fields that God gave us for our homes."

N. C. Kinnick, Supervisor, Association Service Division, Federal Land Bank of Omaha — "The best argument for the expansion of the soil conservation program is that it pays off in profits. Higher yields per acre and greater production per farm. Who can afford not to follow the improved land use pattern of soil conservation."

F. L. Duley, Project Supervisor, Nebraska College of Agriculture — "It seems to me, however, that you have done much more than simply raise the total feed units on the farms where this program is being put into operation. You have set up a new cropping system that should go far towards solving your erosion problems. There is probably little question among your farmers that you are losing less soil by erosion than was true under similar conditions before this program went into effect. Just how much this is worth in dollars and cents is a little difficult to state."

Chester C. Davis, President, Federal Reserve Bank of St. Louis — "We have been convinced for sometime here at the Federal Reserve Bank that soundly planned soil and water management programs balanced with the proper crop and livestock production pays off handsomely in dollars and cents returns. We found that in the average county if about one-third of the farmers carried out improvement programs that an additional million dollars of income would be derived from the farms. We also have found that farmers have received during the period that the improvement programs have been placed on the farms from \$2.00 to \$2.50 return for every dollar spent on improvement. In addition, we have found that not only does the farmer get this increased current income but that the value of the farm has increased by an amount greater than the cost of the capital improvements."

We did not have any one outstanding activity during 1950. It was rather calm and quiet in our department, with considerable progress being made toward the big goal. For a detailed summary of district activities see the end of the report. Of interest here is the summary of accomplishments for the entire life of the district since its inception in 1941:

Farm Conservation Plans	264 farms	59,223 Acres
Starting Practice Plans	262 farms	49,880 Acres
Total Cooperators	526	109,103 Acres
Percentage of total farm acres cooperating with		
District		39%
Contouring, supervised, Acres		59,638
Standard terraces, laid out and constructed,		
Miles		1512
Drainage, surveyed and constructed, Acres		9384
Open Ditch, Miles		57
Sod Waterways, laid out and constructed, Miles		97
Diversion Terraces, laid out and constructed,		
Miles		19

Financially the district continues in good shape. We were able to make good use of all the money available by hiring men to help apply conservation to the land. Since it has been our long-time policy to get as much conservation on the land as possible we were pleased to get more funds.

This year we received money from three sources — (1) the district's own program of service charges, rental of equipment and incidentals; (2) the state program of aid to districts and; (3) the P.M.A. program of financial assistance. This latter one was available and made use of for the first time this year. The purpose of this program was to pay men to work for the district in laying out conservation practices. The program did not begin until July and during that time we employed three different men for a total of 233 man days of assistance. In addition the P.M.A. funds paid the expenses of 5,738 miles of car travel on the job. This aid coupled with the state aid made a big difference in the amount of money we had available and we hope that it is beginning to show up in increased conservation.

Another interesting feature of our year is the form used jointly by the two agencies for taking applications from farmers for technical conservation practices. It meant that S.C.S. knew just what farmers intended to do in the way of terracing etc., for the coming year as soon as P.M.A. spring sign-up was completed. This made S.C.S. work plans for the year more efficient and saved the individual farmer the necessity of a second application. The applications were held by the S.C.S. until the work was completed at which time the work was certified as being complete, as listed by the S.C.S. technician on the job. The form was then returned to P.M.A. where it was approved for payment. Since P.M.A. has not paid on technical practices without S.C.S. approval for a number of years, this new form is merely an aid to the continuation of the practice. (See page 12).

We continued to have good cooperation from all the other agencies. Rather than to go into all the detailed listing of other years, suffice it to say that such cooperation has been of big help to us.

1950 was a year of favorable weather and good crops. It was also a year which brought about considerable interest in grass silage. A number of feeders and dairy men put up grass silage for the first time, most of it going into trench silos newly dug for the purpose. Alfalfa-brome and red-clover brome and oats and clover all are being used and all produce a high quality feed, when successfully ensiled. It is encouraging to have so many farmers experimenting with ways to utilize the grasses and legumes which we are advocating. In view of the fact that according to an Illinois study the cost of raising corn was \$45.92 per acre in 1948, the necessity for increased use of grasses becomes apparent. The more grasses we can use the better off our soil will be, productivity wise, and the better off our finances will be for having worked on fewer acres of corn. That is, within reasonable limits, of course, but we know now that it is reasonable to use far fewer acres of corn than we thought possible ten years ago.

Mills County Production
and Marketing Administration
Committee

Mills County
Soil Conservation District
Commissioners

APPLICATION FOR LAYOUT AND CERTIFICATION of TECHNICAL CONSERVATION PRACTICES

Application is here made to Mills County Production and Marketing Administration Committee and to Mills County Soil Conservation District Commissioners for the technical layout of the below listed practices:

PRACTICE	INTENTIONS		CERTIFICATION	
	Spring 1951 Amounts	Fall 1951 Amounts	Amount Completed	Date and Initial
TERRACES , lin feet (Estimate 5000 feet for each 10 acres to be terraced)				
DIVERSION TERRACES , cu. yds. (Estimate 1½ cu. yd. per lin. foot)				
DRAINAGE , cu. yds. (Estimate 1000 cu. yds. for each 10 acres to be drained — or estimate of Engineer)				
SOD WATERWAYS , A—(Average 50 sq. feet per lin. ft.) A — 1000 Sq. Ft.				
B—(Average 2 cu. yds. per lin. ft.) B — Cu. Yds.				

Farm is Located

Sec.-----, Township-----, Farm Number-----

P. M. A. County Committee	Owner
Date	Address
	Operator

Certified that practices are complete as listed under
"Amount Completed."

Soil Conservation Service Technician

SUMMARY OF WORK LOAD

	<i>Unit</i>	<i>Total Work Load</i>	<i>Goal For 1951</i>
Farm Plans	Number	120	80
Follow Up	Number	35	25
New Contouring	Acre	6480	4800
Terraces	Mile	324	162
Diversion Terrace	Mile	12	5
Farm Drainage	Acre	3072	2048
Waterways	Mile	45	30
Establish Field Boundaries .	Rod	9600	6400

**SUMMARY OF WORK ACCOMPLISHED**

	1950	<i>Total To Date</i>
Farm Conservation Plans, Number	54	264
Acres	13357	59323
Starting Practice Plans, Number .	27	262
Acres	5377	49880
Contouring Supervised, Acres . .	5395	59638
Terraces Constructed, Miles . .	193	1512
Drainage Completed, Acres . .	2293	9384
Open Ditch, Miles	15	57
Sod Waterway Constructed, Miles	38	97
Diversion Terraces Constructed, Miles	9	21
Lime Applied to Cropland, Acres .	1721	17549
Group Demonstrations on Farms, Number	3	102
Attendance	26	1406
Conservation Information Meet- ings, Number	14	123
Attendance	400	6119
Conservation Contests, Number .	0	5
Attendance	0	33748
News Articles Released, Number .	8	178
Commissioners Meetings, Number .	6	81

RECEIPTS

Balance on hand January 1, 1950	\$ 3395.82
Service Charges—	
Terraces	\$841.59
Drainage	263.50
Other	126.61
Total	1231.70
Tractor	3042.06
State	5763.92
P. M. A. Agreement	2605.90
Donations	160.00
TOTAL	\$16199.40

**DISBURSEMENTS**

Rodmen—	
State	\$3258.01
P. M. A.	2605.90
District	65.44
Total	\$ 5,929.35
Clerical—	
State	1675.34
District	210.75
Total	1,886.09
TD-18 Tractor Repairs	
District	2584.63
Total	2,584.63

District Operation—

State	830.57	
District	1344.07	
Office Supplies	\$168.14	
Postage	54.80	
Fuel & Utilities	575.58	
Dues & Subscriptions to Organizations	68.46	
Field Supplies	137.93	
Printing	268.76	
Photographic Supplies .	61.77	
Office Furniture	131.10	
Office Equipment	708.10	
Total		2,174.64
Totals		12,574.71
Balance Cash Dec. 31, 1950		3,624.69
TOTAL		\$16,199.40



February 20, 1951

By J. F. Wearin Jr.
Chairman
District Commissioners

The signing of this Annual Report was authorized by a resolution of the District Commissioners, adopted at the regular meeting on Feb. 20th, 1951.

By Richard D. Goos,
Secretary
District Commissioners

PLAN YOUR FARM



FARM YOUR PLAN

