THIRD ANNUAL REPORT OF COMMISSIONERS

of

MILLS COUNTY SOIL CONSERVATION DISTRICT

Iowa S.C.D. #9

Mills County, Iowa

Dec. 31, 1943

****

DISTRICT COMMISSIONERS

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

J. M. Steele- - - - - - - - - - - Malvern, Iowa

D. N. McGrew - - - - - - - - - - - Emerson, Iowa

John H. Longstreet, Secretary - - Malvern, Iowa

12-31-1943

THIRD ANNUAL REPORT OF COMMISSIONERS
of
MILLS COUNTY SOIL CONSERVATION DISTRICT
Ia. S. C. D. #9

1943, our second year of action as a District, was marked by greatly increased activity in soil conservation in Mills County. The response of farmers and the public generally to the efforts of those connected with the district has been most gratifying. People seem interested in our plans and hopes for the agriculture of the county, and more noteworthy, seem to understand what we are talking about. More and more farmers are coming to us with their problems asking us for advice and assistance, realizing apparently that we have a program which is for their benefit.

The Commissioners sponsored a high school course in conservation, a series of field experiments on grains and grasses and a terrace building contest, in addition to continued cooperation with our S.C.S. technicians. These features, the highlights of the year, resulted from the following policy adopted by the group early in the year. In view of the necessity for increased farm production, we decided to set aside our long-time farm planning program in favor of widespread adoption of a few basic conservation practices. We feel that the year's results have proven us correct in our assumption that we could materially increase production in the county by emphasizing contouring, terrace construction on adapted fields, grassed waterway establishment and plowing under of green manure crops. We have to show for the year's efforts an estimated 31,500 acres of contoured corn and soybeans, 52.5 miles of terraces constructed during 1943 on 54 different farms. This figure amounts to more than one fourth of the total miles of terraces existing in the county, and we also have 20 new waterways and 21 acres of grass seed increase and observational plots. While at first glance, this program appears to be solely one of expediency, upon closer observation it proves to be a sound basis on which to build a better land use program in the not to distant future. Our observations are proving our point and we anticipate a rush of farm planning as soon as the coming peace makes such action a practical venture for the average farmer.

In order to relieve our scant technical staff of an overwhelming job of laying out contour base lines, we sponsored a conservation short course in eight of the high schools in the county. The object was to give those students who were interested an idea of what conservation was all about; then to give them specific instruction, in the classroom and in the field, on laying out contour base lines. The idea met with the fullest cooperation from the various school superintendents, and the two local technicians who taught the twelve week course did excellent work. Of the 142 who took the course, 82 were adjudged sufficiently informed to be able to lay out contour base lines and were given diplomas by the Commissioners. The District procurred hand levels which were sold at cost to the graduates of the course. Results of a mid-summer check up showed that 65% of the graduates had actually laid out lines for neighboring farmers, establishing base lines on 3970 acres of corn land. As a practical result the local

technicians were relieved of some of the strain at planting time, but more important was the introduction to soil conservation that the 142 students received. We believe that by teaching the children the necessity for conservation, we are establishing a secure foundation for the future stability of our local agricultural economy. Conservation studies in our rural schools have been encouraged by our County Superintendent, and we hope to continue these programs as facilities permit.

1943 saw the results of some of the efforts made by the commissioners in 1942. We had long been much interested in obtaining more pertinent information on small grains and grasses than we were able to get from experiments at any of the established experimental stations in the state, our contention being that our weather and soil conditions were peculiar to us alone. Finally, in cooperation with the state extension service, we did succeed in establishing test plots which were well started this year. While they were not as extensive as we had at first hoped to obtain, we are confident that over a period of years, we will be able to get much information on small grains and grasses which will benefit this county. There are problems of varieties and methods and dates of seeding which are of much interest to us currently. For example, we have an immediate problem of what to recommend for a rotation having three or four years meadow in such farm plans as we do make. We think now that alfalfa-brome is the answer, but then comes the problem of date and method of seeding to best fit into established customs of seeding in the county.

At any rate, to date we have set up in cooperation with the County Extension Director and the Extension Service and the Soils Technicians and the Soil Conservation Service, the following experimental plots:

In the fall of 1942,
One plot consisting of:
2 acres of crested wheat and
2 acres of bromegrass.

In the spring of 1943,
3- 2 acre plots of crested wheat.
2- 2 acre plots of Canadian Wild Rye.
4- 1 acre plots containing 5 varieties of brome and 1 of orchard grass. These plots are for the purpose of studying tillage practices, fertilizers and mulching as well as adaptibility of the various varieties.
An oat test plot with 10 varieties.

In the fall of 1943,
4- 2 acre plots of certified Fisher brome for seed increase. The District to receive by agreement with the growers 25% of the first two seed crops harvested.

We feel that many of our problems will be answered from the results of these plots and it is the intention of the commissioners to enlarge this experimental program as time goes on. We hope to see an improvement in our pasture situation as a result of these efforts, because our pastures here are notably poor, especially since the drouth years of '34 and '36.

As mentioned above, contouring of all intertilled crops was a primary objective for the year. We encouraged and helped the technicians in increasing the acreage of contouring. The short course mentioned was specifically for this purpose, as were several news releases in the local press. All together, there were some 18 news articles in the local papers and 8 in farm magazines and daily papers during the year, all pertaining to the problems in hand.

A record April flood on the Missouri River resulted in appeals to the Commissioners for assistance in drainage surveys in that area. Our technician made a reconnaissance survey in July recommending that, "In the absence of direct requests from any organized group, it is recommended that a complete survey be made of drainage problems in the District. It is further recommended that a correlated drainage plan be developed and submitted to the various interested groups, as a contribution to our production program." As yet nothing has been accomplished along this line. There have been five private drainage projects laid out by the technicians and constructed by local dirt contractors.

An important feature of the year's work was the progress made in waterway construction. A local S.C.S. technician, Mr. R. W. Jones, developed a method of "plowing-in" ditches so that they are flat bottomed waterways, ready for seeding. This system, known as the "Mills County Method of Waterway Construction", is essentially the same as that used in terrace construction with the ordinary moldboard plow and farm tractor. Interest in waterways has increased greatly as a result of this innovation, for heretofore, farmers had thought that heavy equipment was necessary to do such a job. In fact, there have been some 20 waterways constructed this year. Inasmuch as the soil of our area is of loessal origin and is free from rocks, this method is very practical. We are pushing the development of grassed waterways quite hard as they go hand in glove with conservation farming. A smooth waterway makes an excellent turning place for the sharper corners in contoured corn and is a great timesaver because it makes larger field units possible. It is much quicker to lift a lister or cultivator and go on across to the rows on the other side than it is to turn around and return on the same land, being careful to keep out of a bad gully all the while. Not only from a mechanical point of view are they advisable, but also they are a source of hay or winter pasture when established to a good stand of brome. The waterway construction demonstration held in conjunction with the terrace building contest was of much interest to the spectators. This new idea apparently has much appeal to farmers generally, and a large number of ditches, both big and small will no doubt be converted to useful areas in the next few years.

This year saw a tremendous increase in terrace construction. Most significant is the fact that few farmers built a great number of terraces but that many farmers built a few. The plow terrace building contest we held in the fall of 1942 was a big factor in this increased interest. We consider that as a direct result of that event, many farmers who otherwise would not have been terrace minded were prompted to build terraces on their farms. It was conclusively demonstrated there that nearly all farmers had the necessary equipment for building terraces, namely, a tractor and a two bottom moldboard plow. It upset the old idea that large, expensive dirt moving equipment was necessary. All that remained was for the farmer to

take the initiative about getting the necessary technicial assistance in laying out the terrace system and a few hours of assistance in building the first terrace.

This year we sponsored an even bigger and better event, having learned much from our first attempt. We decided to enlarge our program by having a display depicting all the various phases of soil conservation, emphasizing the fact that terracing is but one of many related mechanical practices which when coupled with good rotations make good land use. We also had the demonstration of ditch filling or waterway construction mentioned above.

With eight contestants from five southwest Iowa counties deployed over the hillside, the 600 spectators had a great deal to watch. Each man had two hours and thirty minutes to completely build a 400 foot section of terrace. The lands had been laid out in advance so that all were as nearly identical for slope and confirmation as the field permitted. It might be added here, that these sections were parts of terraces, which when tied together after the contest made an excellent terrace system on the hill. As a result, Mr. Harry Evans, on whose farm the contest was held, received some material benefit for his generosity in furnishing the contest site. Each of the eight men used a slightly different method of construction. Two even used three bottom plows. However, all were related to one or the other of two accepted methods of plow terrace building, namely the Pittenger and the Mills County methods. They are similar in that they each begin with an unplowed island under the main body of the terrace. The object of the event was to build the most uniform broad base terrace judged from a cross-sectional point of view of height, capacity and uniformity of slopes. Fuel economy and time were not of material importance. We laymen use a term of our own when talking about the cross-section of a terrace, that is it's "farmability". By that we mean the way the slopes involved lend themselves to tillage by the usual power farm implements we use here. We insist upon being able to farm terraces with our regular implements in conjunction with the rest of the field. Good plow terraces achieve this desired result as well if not better than those built by any other method.

Contest judges were Mr. Paul Taylor, Montgomery County District Commissioner, Mr. Frank McArthur, East Pottawattamie County District Commissioner, and Mr. Don Struthers of the Ag. Engineering Department of Iowa State College.

First place winner was Mr. George K. Welty, Fremont County; second place to Mr. Harry Bashaw, Montgomery County; third place to Mr. John Stroburg of Taylor County. Local merchants and friends of conservation donated prizes of merchandise and War Bonds so that all eight men received ample material rewards for their efforts. Other contestants in the order of placing are as follows: W. A. Buffington of Mills County, Galen Boles of Mills County, Harold Stroburg of Taylor County, Raymond Varner of Mills County, and Paul Flowers of Adams County.

Our main interest being to sell a little conservation to our local farmers, we were much gratified at the number of them attending. The

majority of the spectators were farmers. We were pleased to have representatives of nearly all the major implement companies in attendance. We felt honored to have present: Mr. R. H. Musser of the Regional S.C.S. Office in Milwaukee, Mr. R. E. Uhland with the S.C.S. in Washington, D. C., Mr. Clark Huntley of the Iowa State Soil Conservation Committee, Mr. Frank Mendell, S.C.S. State Conservationist of Iowa, and Mr. Lester Clapp of the Extension Service of Ames. The press was represented by Mr. Homer Hush, Wallace's Farmer; Mr. Glennon Lloyd, S.C.S. and Successful Farming; and Mr. Carlyle Hodgkin, Omaha World Herald. Radio stations KMA, Shenandoah and WOI, Ames made transcriptions of the affair which were subsequently used. The event received very good publicity throughout this area as a result of the efforts of these men.

We held an election for District Commissioner to serve a six year term, in conjunction with the contest. Mr. D. N. McGrew of Emerson, who had served a two year term had been nominated and received the majority of ballots cast. He was declared elected by Mr. Clark Huntley who certified the results of the balloting. At the September 27, 1943 meeting, of the Commissioners, the group suspended work and reorganized, re-electing J. F. Wearin, Jr., Chairman and John H. Longstreet, Secretary-Treasurer, for the next two year period.

As we mentioned at the outset of this report, it is a healthy situation for a Conservation District to have people coming to it for information and advice, rather than to have to get out and sell everything that is accomplished. The close of the year saw a spurt in interest in farm planning over anything we had known before. In the last two weeks of the year, our technicians received requests for plans from fourteen newly and for the most part unexpectedly interested parties. It is our sincere hope that in the near future, interest in per acre yields will so over-shadow the old number of acres criterion of production that we will witness widespread application of good land use practices. As long as the war demands constantly increasing acreages of grain crops, this desired situation cannot be achieved. About all we as District Commissioners can do is to encourage the continued wide spread adoption of such conservation practices as will most effectively increase immediate production. Coupled with the mechanical practices, we should encourage the seeding with all small grains of those legumes which most quickly furnish a nitrogen increase. In our case, sweet clover to be plowed under as green manure the following spring, would most satisfactorily answer this need.

Even though we are of necessity prevented from continuing our long range program toward better land use, we should at all times keep that matter foremost in our thinking. Certainly we should take advantage of this opportunity to make serious studies on the long-time problems; so that when this war is concluded we will be in a strong position regarding answers to the problems. For example, our grass plots must be continued in spite of all difficulties. We must know how to advise and plan a rehabilitation of the depleted fertility of our soil; so that this war will not put the skids of erosion under it as did World War I. We attribute much of the erosion problem we have today to the increased acreage in crops resulting from the demands of that war. The responsibility for preventing a recurrence of that tragedy rests squarely on the commissioners of the many soil conservation districts of the nation.

SUMMARY

Work Accomplished January 1, 1943 to December 31, 1943

No. of farms visited by Technicians, on request ---------- 521.
No. of farms on which new practices were established as a result of visits---------- 359.
No. of farms on which contour base-lines were laid out or supervised---------- 251.
Acres of contouring laid out on above farms----------15,060.
Estimated total acres contoured corn & beans - Mills County 1943-31,500.
No. of meetings with farm groups---------- 19.
Attendance at meetings----------270.

No. of group demonstrations on farms---------- 33.
Attendance at demonstrations----------116.

Terraces constructed Spring and Fall 1943, - miles----------52.5.
No. of farm terraces constructed---------- 54.
Total amount terraces in Mills County - miles----------199.5.
No. of private drainage plans developed---------- 5.
Length of drainage ditches laid out - lin. feet----------7,800.
No. of farms with District plans---------- 16.
No. of waterways constructed---------- 20.
Sq. feet of waterways constructed----------574,000.

No. of grass increase and observational plots ---------- 10.
Acreage of above plots - acres---------- 21.
Plow Terrace Contest - attendance----------600.
Conservation Short Course:
Number of High Schools---------- 8.
Students enrolling ----------142.
Students completing course---------- 82.

News articles released or arranged interviews for -
Local papers - articles ---------- 18.
Farm magazines or daily's---------- 8.

Exhibits displayed throughout District ---------- 4.
Photos obtained of practices (Mostly Plow Terrace Contest)----- 54.

Drainage Surveys.
Reconnaissance Survey - July 1943.----------64,000 acres.
Individual drainage surveys for plans---------- 1,800 acres.
Requests on file for individual drainage surveys----4 - 1560 acres.

Other Surveys --------- Completed.
Gully Control - 2 jobs - ---------- 560 acres.
Terraces under construction this date---------- 26,000 lin. ft.

MILLS COUNTY SOIL CONSERVATION DISTRICT

BY S/ J. F. Wearin, Jr.
J. F. Wearin, Jr.
Chairman, District Commissioners

Date: January 7, 1944.

The signing of this 3rd Annual Report was authorized by a resolution of the District Commissioners adopted at a meeting on January 7, 1944.

BY S/ John H. Longstreet
John H. Longstreet
Secretary, District Commissioners